

Rare Diseases Clinical Research Network (RDCRN) Publications

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RDCRN Data Management and Coordinating Center Publications

[DMCC Publications](#)

RDCRN Descriptive Publications

[RDCRN Publications](#)

RDCRN Publications, Current Grant Cycle Consortia

[Advancing Research & Treatment for Frontotemporal Lobar Degeneration](#)

[Autonomic Rare Disease Clinical Research Consortium](#)

[Brain Vascular Malformations Consortium](#)

[Brittle Bone Disorders Consortium](#)

[Clinical Research in ALS & Related Disorders for Therapeutic Development](#)

[Consortium of Eosinophilic Gastrointestinal Disease Researchers](#)

[Developmental Synaptopathies Consortium](#)

[Dystonia Coalition](#)

[Genetic Disorders of Mucociliary Clearance](#)

[Inherited Neuropathies Consortium](#)

[Lysosomal Disease Network](#)

[Nephrotic Syndrome Rare Disease Clinical Research Network](#)

[North American Mitochondrial Diseases Consortium](#)

[Porphyrias Consortium](#)

[Primary Immune Deficiency Treatment Consortium](#)

[Rare Kidney Stone Consortium](#)

[Rare Lung Diseases Consortium](#)

[Rett Syndrome, MECP2 Duplications, and Rett-related Disorders Consortium](#)

[Sterol and Isoprenoid Diseases Consortium](#)

[Urea Cycle Disorders Consortium](#)

[Vasculitis Clinical Research Consortium](#)

RDCRN Publications, Previous Grant Cycle Consortia

[Angelman, Rett, and Prader-Willi Syndromes Consortium](#)

[Bone Marrow Failure Consortium](#)

[Cholestatic Liver Disease Consortium](#)

[Chronic Graft Versus Host Disease Consortium](#)

[Clinical Research Consortium for Spinocerebellar Ataxias](#)

[Consortium for Clinical Investigation of Neurologic Channelopathies](#)

[Rare Genetic Steroid Disorders](#)

[Rare Thrombotic Diseases](#)

[Salivary Gland Carcinomas Consortium](#)

RDCRN Data Management and Coordinating Center Publications

Book Chapters

1. Krischer JP. Clinical trials for rare lung diseases. In: McCormack FX, Panos RJ, Trapnell BC, eds. *Molecular Basis of Pulmonary Disease*. 1st ed: Springer; 2010.
2. Richesson R, Vehik K. Patient Registries: Utility, Validity and Inference. In: (ed) IPMGS, ed. *Rare Diseases Epidemiology, 1st edn*: Springer, The Netherlands; 2010.
3. Richesson R, Andrews J. Clinical Research Informatics: Springer-Verlag; London; 2010.

Abstracts Presented at Conferences & Conference Proceedings

1. Krischer J. Data collection and analysis from multiple research sites: The Rare Diseases Clinical Research Network. Paper presented at: International Conference on Rare Diseases & Orphan Drugs; February 16, 2005; Stockholm, Sweden.
2. Richesson R, Young K, Malloy J, Lloyd J, Krischer J. A contact registry for persons with rare diseases: a tool for recruiting and retaining participants in a clinical research network. Paper presented at: Inventory and Evaluation of Clinical Research Networks; May 31, 2006; Washington, DC.
3. Malloy J, Richesson R, Krischer J. The Adverse Event Management System for the Rare Disease Clinical Research Network. Paper presented at: Inventory and Evaluation of Clinical Research Networks; May 31, 2006; Washington, D.C.
4. Richesson R. Identifying and evaluating health data standards. Paper presented at: American Public Health Association; November 4-8, 2006; Boston, MA.
5. Richesson R, Young K, Malloy J, Guillette H, Krischer J. A contact registry for persons with rare diseases: a tool for recruiting and retaining. Paper presented at: Clinical Trials Expo, Annual Symposium of the American Medical Informatics Association; November 13, 2006; Washington, DC.
6. Krischer PJ. Clinical trial design issues and options for study of rare diseases. Presented at: RDCRN Conference on Clinical Research for Rare Diseases. 2007. Washington, DC.
7. Lee HS. Data presentation and study action item discussion. Urea Cycle Disease Consortium Meeting. Spring and Fall 2007, 2008.
8. Richesson RL, Young K, Lloyd J, Adams T, Guillette H, Malloy J, Krischer JP. An automated communication system in a Contact Registry for persons with rare diseases: tools for retaining potential clinical research participants. *AMIA. Annu. Symp. Proc.* 2007:1094. PMID: 18694191
9. Richesson R. Best practices for collaborative development of terminology and standards. Paper presented at: First Annual NHLBI Community Forum on Data Standards and Terminology; May 29-30, 2007; Bethesda, MD.
10. Richesson R, Smith S, Malloy J, Krischer J. Achieving standardized medication data in clinical research studies: two approaches and applications for implementing RxNorm. Paper presented at: AMIA (American Medical Informatics Association), Spring Congress; May 22-24, 2007; Orlando, FL.

- 11.** Niland J, Dorr D, El Saadawi G, Embi P, Richesson R, Sim I, Martin R. Knowledge representation of eligibility criteria in clinical trials. Paper presented at: American Medical Informatics Association Annual Symposium; November, 2007; Chicago, IL.
- 12.** Richesson R, Lee H, Cuthbertson D, Lloyd J, Young K, Krischer J. An automated contact registry for persons with rare diseases: scalable tools for identifying and communicating with clinical research participants. Paper presented at: International Conference on Rare Diseases and Orphan Drugs (ICORD); May 20-22, 2008; Washington, DC.
- 13.** Jeffrey Krischer. The Rare Diseases Clinical Research Network's (RDCRN) Data Management and Coordination Center, J.P. Krischer, University of South Florida, Tampa, FL. Molecular Genetics and Metabolism. Volume 99, Issue 2, 2010, Page S24, ISSN 1096-7192, <https://doi.org/10.1016/j.ymgme.2009.10.094>.
(<http://www.sciencedirect.com/science/article/pii/S1096719209003783>)
- 14.** Krischer PJ. Clinical trial design issues and options for study of rare diseases. Presented at: RDCRN Conference on Clinical Research for Rare Diseases. 2010. Washington, DC.
- 15.** Lee HS, Krischer JP, Young L and McCormack FX. (2011) Categorization of VEGF-D in response to sirolimus therapy or prognosis of disease progression: MILES Trial. Poster presentation at the LAM Foundation/ International Research Conference (First Prize in poster section), Cincinnati, OH. (<http://www.thelamfoundation.org/images/pdfs/scientificprogram2011.pdf>)
- 16.** Lee HS, McCormack FX, Young L and Krischer JP. (2011) Regression approach to examine sirolimus effect on the correlation between FEV1 and VEGF-D: MILES Trial. Platform presentation at the International Society for Clinical Biostatistics (ISCB), Ottawa, CA. (http://www.iscb2011.info/00-welcome_e.shtml)
- 17.** Oster-Granite ML, Parisi MA, Abbeduto L, Berlin DS, Bodine C, Bynum D, Capone G, Collier E, Hall D, Kaeser L, Kaufmann P, Krischer J, Livingston M, McCabe LL, Pace J, Pfenninger K, Rasmussen SA, Reeves RH, Rubinstein Y, Sherman S, Terry SF, Whitten MS, Williams S, McCabe ER, Maddox YT. Down syndrome: National conference on patient registries, research databases, and biobanks. *Mol Genet Metab*. 2011;104(1):13-22. PMID: 21835664, PMCID: PMC3171614
- 18.** Clowse M, Richesson R, Pieper C, Merkel PA, Consortium VCR. Pregnancy in Men and Women with Vasculitis. Paper presented at: American College of Rheumatology Annual Scientific Meeting; November 5-9, 2011; Chicago, IL.
- 19.** Clowse M, Richesson R, Pieper C, Merkel PA, Consortium VCR. Infertility Among Patients with Vasculitis. Paper presented at: American College of Rheumatology Annual Meeting; November 5-9, 2011; Chicago, IL.
- 20.** Ashizawa T, Perlman S, Gomez C, Wilmot G, Schmahmann J, Ying S, Zesiewicz T, Paulson H, Shakkottai VG, Bushara K, Mazzoni P, Kuo S, Pulst S, Figueroa K, Xia G, Krischer J, Cuthbertson D, Holbert AR, Ferguson J, Galpern W, Subramony SH. Clinical Characteristics of Spinocerebellar Ataxias 1, 2, 3 and 6. Paper presented at: American Academy of Neurology 64th Annual Meeting; April 21-28, 2012; New Orleans, LA.
- 21.** Diethelm-Okita B, Utz J, Eichler FS, Ziegler RS, Leduc RL, Whitley CB. A Natural History of Hexosaminidase Deficiency. Paper presented at: Molecular Genetics and Metabolism. 2012.
- 22.** Leigh M, Shapiro AJ, Pittman JE, Davis SD, Lee H, Krischer J, Ferkol TW, Atkinson JJ, Sagel SD, Rosenfeld M, Dell SD, Milla C, Olivier KN, Knowles M. Definition of clinical criteria for diagnosis

- of primary ciliary dyskinesia. Paper presented at: American Journal of Respiratory and Critical Care Medicine. 2012.
23. Richesson R, Shreff D, Sutphen R, Guillette H, Paulus K, Merkel PA, Clowse M, Harris J, Cuthbertson D, Leduc R, Krischer JP. Patient Registries to Support Research in Rare Diseases – Experience from the Rare Diseases Clinical Research Network. Paper presented at: Lysosomal Disease Network, 8th Annual World Symposium 2012; San Diego, CA.
24. Richesson R, Shreff D, Sutphen R, et al. Patient Registries to Support Research in Rare Diseases – Experience from the Rare Diseases Clinical Research Network. *Mol Genet Metab*. 2012;105(2):S54.
25. Guillette H, Shreff D, Andrews JE, Spisla CM, Albarracin N, Konicek D, Richesson RL. PRISM: A shared resource for global data standards in patient registries. Poster presented at the 2012 International Conference on Rare Diseases & Orphan Drugs. February 2012. Tokyo, Japan.
26. Graves T, Cha Y, Hahn A, Barohn RJ, Amato A, Griggs R, Bundy B, Jen JC, Baloh R, Hanna M. Episodic ataxia type 1: Characterization of the disease and its effect on quality of life. Paper presented at: American Academy of Neurology; April 21-28, 2012; New Orleans.
27. Graves T, Fialho D, Smith S, Cha Y, Amato A, Griggs R, Bundy B, Jen JC, Baloh R, Hanna M. EEG abnormalities in the episodic ataxias. Paper presented at: American Academy of Neurology; April 21-28, 2012; New Orleans, LA.
28. Richesson R, Shreff D, Lloyd J, Young K, Guillette H, Paulus K, Harris J, Cuthbertson D, Krischer J, Rare Diseases Clinical Research Network. RDCRN Contact Registry to Support Research in Rare Diseases. Poster presented at: Yale Center for Clinical Investigation. 5th Annual Clinical Research Management Workshop; June 4-5, 2012; New Haven, CT.
29. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shreff D, Richesson R, Fraenkel L, Merkel PA. Illness perceptions among patients with different forms of vasculitis. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.
30. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shreff D, Richesson R, Fraenkel L, Merkel PA. Assessing fatigue in systemic vasculitis from the patient's perspective. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.
31. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shreff D, Richesson R, Fraenkel L, Merkel PA. Causal beliefs of disease among patients with systemic vasculitis. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.
32. Krischer PJ. Clinical trial design issues and options for study of rare diseases. Presented at: RDCRN Conference on Clinical Research for Rare Diseases. 2012. Washington, DC.
33. Hall CA, Bacon CJ, Shy ME, Inherited Neuropathies Consortium, Rare Diseases Clinical Research Network Data Management and Coordinating Center. The Rare Diseases Clinical Research Network Contact Registry for the Inherited Neuropathies Consortium. *Charcot-Marie-Tooth Association, 5th International CMT Consortium Meeting*. Antwerp, Belgium2013.

- 34.** Leduc R, Hall C, Shreff D, Lloyd J, Young K, Guillette H, Harris J, Gandolfo L, Cuthbertson D, Krischer J. An Overview of the Rare Diseases Clinical Research Network. Paper presented at: Lysosomal Disease Network, 9th Annual WORLD Symposium; Feb. 12-15, 2013; Orlando, FL.
- 35.** Lee HS. (2013, 2016). Poster presentation and roundtable discussion. LAM Meeting.
- 36.** Richesson R. Strategies to harmonize data collection: a perspective from the RDCRN Data Management & Coordinating Center. Paper presented at: Pediatric Academic Societies Annual Meeting; May 4-7, 2013; Washington, DC.
- 37.** Lee HS. (2014). Protocol development and roundtable discussion. LAM Biomarker Innovation Summit
- 38.** Holbert A. Clinical Research Compliance in the Field: What really works? Paper presented at: Society of Research Administrators International Meeting; October 21. 2014; San Diego, CA.
- 39.** Tamura RN. (2015). A sequential multiple assignment randomized Phase 2 trial for rare diseases. ASA Biopharmaceutical Section Statistics Workshop. Washington DC
- 40.** Krischer PJ. Clinical trial design issues and options for study of rare diseases. Presented at: RDCRN Conference on Clinical Research for Rare Diseases. 2016. Washington, DC.
- 41.** Lee HS, (2016) A Phase II Clinical Trial of an Aromatase Inhibitor for Postmenopausal Women with Lymphangioleiomyomatosis. Poster presentation at the LAM Foundation/International Research Conference, Cincinnati, OH.
- 42.** Tamura RN. (2016). A journey through clinical trials in the past 25 years. 75th Anniversary Conference of Department of Statistics. North Carolina State University. Raleigh, NC
- 43.** Tamura RN. (2016). A small n sequential multiple assignment randomized trial design for use in rare disease research. Joint Statistical Meetings. Chicago, IL
- 44.** Chen YC, Tamura RN. (2017). Innovative designs for rare disease studies. Duke-FDA Rare Disease Think Tank. Washington DC. and DIA Clinical Research Community Webcast.
- 45.** Hainline C, Rizzo D, Shy ME, Inherited Neuropathies Consortium, Rare Diseases Clinical Research Network Data Management and Coordinating Center. Enhancements to the RDCRN Contact Registry for the Inherited Neuropathies Consortium. Poster presented at Peripheral Nerve Society Annual Meeting; Jul. 8-12, 2017; Sitges, Spain.
- 46.** Tamura RN, Kidwell KM, Wei B, Braun TM. (2017). The use of small n sequential multiple assignment randomized trials (SnSMART) in rare disease research. Joint Statistical Meeting. Baltimore, MD.
- 47.** Williams M, Krischer J. Enhancements to the Rare Diseases Clinical Research Network Contact Registry, Poster presented at: Lysosomal Disease Network, 14th Annual WORLD Symposium; Feb. 5-9, 2018; San Diego, CA. <https://doi.org/10.1016/j.ymgme.2017.12.410>
- 48.** Tamura RN. SMART clinical trial design for large and small samples (Proposal submitted for Workshop in 2019). Society of Clinical Trials. New Orleans, LA

Journal Articles

- Merkel PA, Seo P, Aries P, Neogi T, Villa-Forte A, Boers M, Cuthbertson D, Felson DT, Hellmich B, Hoffman GS, Jayne DR, Kallenberg CG, Krischer J, Mahr A, Matteson EL, Specks U, Luqmani R, Stone J. Current status of outcome measures in vasculitis: focus on Wegener's granulomatosis

- and microscopic polyangiitis. Report from OMERACT 7. *J. Rheumatol.* Dec 2005;32(12):2488-2495. PMID: 16331794
2. Richesson R, Young K, Guillette H, Tuttle M, Abbondondolo M, Krischer J. Standard terminology on demand: facilitating distributed and real-time use of SNOMED CT during the clinical research process. *AMIA. Annu. Symp. Proc.* 2006:1076. PMID: 17238695, PMCID: PMC1839627
 3. Richesson RL, Andrews JE, Krischer JP. Use of SNOMED CT to represent clinical research data: a semantic characterization of data items on case report forms in vasculitis research. *J. Am. Med. Inform. Assoc.* Sep-Oct 2006;13(5):536-546. PMID: 16799121, PMCID: PMC1561787
 4. Richesson R, Syed A, Guillette H, Tuttle MS, Krischer J. A web-based SNOMED CT browser: distributed and real-time use of SNOMED CT during the clinical research process. *Stud. Health Technol. Inform.* 2007;129(Pt 1):631-635. PMID: 17911793
 5. Andrews JE, Richesson RL, Krischer J. Variation of SNOMED CT coding of clinical research concepts among coding experts. *J. Am. Med. Inform. Assoc.* Jul-Aug 2007;14(4):497-506. PMID: 17460128, PMCID: PMC2244907
 6. Richesson RL, Krischer J. Data standards in clinical research: gaps, overlaps, challenges and future directions. *J. Am. Med. Inform. Assoc.* Nov-Dec 2007;14(6):687-696. PMID: 17712081, PMCID: PMC2213488
 7. Richesson RL, Malloy JF, Paulus K, Cuthbertson D, Krischer JP. An automated standardized system for managing adverse events in clinical research networks. *Drug Saf.* 2008;31(10):807-822. PMID: 18759506
 8. Moyers S, Richesson R, Krischer J. Trans-Atlantic data harmonization in the classification of medicines and dietary supplements: a challenge for epidemiologic study and clinical research. *Int J Med Inform.* Jan 2008;77(1):58-67. PMID: 17289429, PMCID: PMC2259273
 9. Tuchman M, Lee B, Licherter-Konecki U, Summar ML, Yudkoff M, Cederbaum SD, Kerr DS, Diaz GA, Seashore MR, Lee HS, McCarter RJ, Krischer JP, Batshaw ML. Cross-sectional multicenter study of patients with urea cycle disorders in the United States. *Mol. Genet. Metab.* Aug 2008;94(4):397-402. PMID: 18562231, PMCID: PMC2640937
 10. Richesson RL, Fung KW, Krischer JP. Heterogeneous but "standard" coding systems for adverse events: Issues in achieving interoperability between apples and oranges. *Contemp. Clin. Trials.* Sep 2008;29(5):635-645. PMID: 18406213, PMCID: PMC2575842
 11. Andrews JE, Patrick TB, Richesson RL, Brown H, Krischer JP. Comparing heterogeneous SNOMED CT coding of clinical research concepts by examining normalized expressions. *J. Biomed. Inform.* Dec 2008;41(6):1062-1069. PMID: 18328789, PMCID: PMC2605270
 12. Richesson RL, Lee HS, Cuthbertson D, Lloyd J, Young K, Krischer JP. An automated communication system in a contact registry for persons with rare diseases: scalable tools for identifying and recruiting clinical research participants. *Contemp. Clin. Trials.* Jan 2009;30(1):55-62. PMID: 18804556, PMCID: PMC2640948
 13. Griggs RC, Batshaw M, Dunkle M, Gopal-Srivastava R, Kaye E, Krischer J, Nguyen T, Paulus K, Merkel PA. Clinical research for rare disease: opportunities, challenges, and solutions. *Mol. Genet. Metab.* Jan 2009;96(1):20-26. PMID: 19013090 , PMCID: PMC3134795

- 14.** Richesson R, Shreff D, Andrews J. [RD] PRISM Library: Patient Registry Item Specifications and Metadata for Rare Diseases. *Journal of library metadata*. 2010;10(2-3):119-135. PMID: 21057650, PMCID: PMC2967796
- 15.** Seminara J, Tuchman M, Krivitzky L, Krischer J, Lee HS, Lemons C, Baumgartner M, Cederbaum S, Diaz GA, Feigenbaum A, Gallagher RC, Harding CO, Kerr DS, Lanpher B, Lee B, Lichter-Konecki U, McCandless SE, Merritt JL, Oster-Granite ML, Seashore MR, Stricker T, Summar M, Waisbren S, Yudkoff M, Batshaw ML. Establishing a consortium for the study of rare diseases: The Urea Cycle Disorders Consortium. *Mol. Genet. Metab.* 2010;100 Suppl 1:S97-105. PMID: 20188616, PMCID: PMC2858794
- 16.** Glaze DG, Percy AK, Skinner S, Motil KJ, Neul JL, Barrish JO, Lane JB, Geerts SP, Annese F, Graham J, McNair L, Lee HS. Epilepsy and the natural history of Rett syndrome. *Neurology*. Mar 16 2010;74(11):909-912. PMID: 20231667 , PMCID: PMC2836870
- 17.** Percy AK, Lee HS, Neul JL, Lane JB, Skinner SA, Geerts SP, Annese F, Graham J, McNair L, Motil KJ, Barrish JO, Glaze DG. Profiling scoliosis in Rett syndrome. *Pediatr. Res.* Apr 2010;67(4):435-439. PMID: 20032810, PMCID: PMC2852102
- 18.** Weng C, Tu SW, Sim I, Richesson R. Formal representation of eligibility criteria: a literature review. *J. Biomed. Inform.* Jun 2010;43(3):451-467. PMID: 20034594, PMCID: PMC2878905
- 19.** Richesson RL, Smith SB, Malloy J, Krischer JP. Achieving standardized medication data in clinical research studies: two approaches and applications for implementing RxNorm. *J. Med. Syst.* Aug 2010;34(4):651-657. PMID: 20703919, PMCID: PMC2977947
- 20.** Gentile JK, Tan WH, Horowitz LT, Bacino CA, Skinner SA, Barbieri-Welge R, Bauer-Carlin A, Beaudet AL, Bichell TJ, Lee HS, Sahoo T, Waisbren SE, Bird LM, Peters SU. A neurodevelopmental survey of Angelman syndrome with genotype-phenotype correlations. *J. Dev. Behav. Pediatr.* Sep 2010;31(7):592-601. PMID: 20729760, PMCID: PMC2997715
- 21.** Percy AK, Neul JL, Glaze DG, Motil KJ, Skinner SA, Khwaja O, Lee HS, Lane JB, Barrish JO, Annese F, McNair L, Graham J, Barnes K. Rett syndrome diagnostic criteria: lessons from the Natural History Study. *Ann. Neurol.* Dec 2010;68(6):951-955. PMID: 21104896, PMCID: PMC3021984
- 22.** Statland JM, Wang Y, Richesson R, Bundy B, Herbelin L, Gomes J, Trivedi J, Venance S, Amato A, Hanna M, Griggs R, Barohn RJ, The CINCH Consortium. An interactive voice response diary for patients with non-dystrophic myotonia. *Muscle Nerve*. 2011;44(1):30-35. PMID: 21674518, PMCID: PMC3233757
- 23.** McCormack FX, Inoue Y, Moss J, et al. Efficacy and safety of sirolimus in lymphangioleiomyomatosis. *N. Engl. J. Med.* Apr 28 2011;364(17):1595-1606. PMID: 21410393, PMCID: PMC3118601
- 24.** Richesson RL, Nadkarni P. Data standards for clinical research data collection forms: current status and challenges. *J. Am. Med. Inform. Assoc.* May 1 2011;18(3):341-346. PMID: 21486890 , PMCID: PMC3078665
- 25.** Lane JB, Lee HS, Smith LW, et al. Clinical severity and quality of life in children and adolescents with Rett syndrome. *Neurology*. Nov 15 2011;77(20):1812-1818. PMID: 22013176, PMCID: PMC3233210

- 26.** Lee HS, Paik MC, Rundek T, Sacco RL, Dong C, Krischer JP. Heritability Estimation using Regression Models for Correlation. *J Biom Biostat*. Nov 15 2011;2(119). PMID: 22457844, PMCID: PMC3312250
- 27.** Monach PA, Tomasson G, Specks U, Stone JH, Cuthbertson D, Krischer J, Ding L, Fervenza FC, Fessler BJ, Hoffman GS, Ikle D, Kallenberg CG, Langford CA, Mueller M, Seo P, St Clair EW, Spiera R, Tchao N, Ytterberg SR, Gu YZ, Snyder RD, Merkel PA. Circulating markers of vascular injury and angiogenesis in antineutrophil cytoplasmic antibody-associated vasculitis. *Arthritis Rheum*. Dec 2011;63(12):3988-3997. PMID: 21953143, PMCID: PMC3227746
- 28.** Kelley JM, Monach PA, Ji C, Zhou Y, Wu J, Tanaka S, Mahr AD, Johnson S, McAlear C, Cuthbertson D, Carette S, Davis JC, Jr., Dellaripa PF, Hoffman GS, Khalidi N, Langford CA, Seo P, St Clair EW, Specks U, Stone JH, Spiera RF, Ytterberg SR, Merkel PA, Edberg JC, Kimberly RP. IgA and IgG antineutrophil cytoplasmic antibody engagement of Fc receptor genetic variants influences granulomatosis with polyangiitis. *Proc. Natl. Acad. Sci. U. S. A.* Dec 20 2011;108(51):20736-20741. PMID: 22147912, PMCID: PMC3251158
- 29.** Monach PA, Kumpers P, Lukasz A, Tomasson G, Specks U, Stone JH, Cuthbertson D, Krischer J, Carette S, Ding L, Hoffman GS, Ikle D, Kallenberg CG, Khalidi NA, Langford CA, Seo P, St Clair EW, Spiera R, Tchao N, Ytterberg SR, Haubitz M, Merkel PA. Circulating angiopoietin-2 as a biomarker in ANCA-associated vasculitis. *PLoS ONE*. 2012;7(1):e30197. PMID: 22279570, PMCID: PMC3261176
- 30.** Shurin S, Krischer J, Groft SC. Clinical trials In BMT: ensuring that rare diseases and rarer therapies are well done. *Biol. Blood Marrow Transplant*. Jan 2012;18(1 Suppl):S8-11. PMID: 22226117
- 31.** Tomasson G, Boers M, Walsh M, LaValley M, Cuthbertson D, Carette S, Davis JC, Hoffman GS, Khalidi NA, Langford CA, McAlear CA, McCune WJ, Monach PA, Seo P, Specks U, Spiera R, St Clair EW, Stone JH, Ytterberg SR, Merkel PA. Assessment of health-related quality of life as an outcome measure in granulomatosis with polyangiitis (Wegener's). *Arthritis Care Res (Hoboken)*. Feb 2012;64(2):273-279. PMID: 21954229, PMCID: PMC3250569
- 32.** Grayson PC, Tomasson G, Cuthbertson D, Carette S, Hoffman GS, Khalidi NA, Langford CA, McAlear CA, Monach PA, Seo P, Warrington KJ, Ytterberg SR, Merkel PA. Association of vascular physical examination findings and arteriographic lesions in large vessel vasculitis. *J. Rheumatol*. Feb 2012;39(2):303-309. PMID: 22174204, PMCID: PMC3729730
- 33.** Nyland SB, Krissinger DJ, Clemente MJ, Irby RB, Baab KT, Jarbadan NR, Sokol L, Schaefer E, Liao J, Cuthbertson D, Epling-Burnette P, Paquette R, List AF, Maciejewski JP, Loughran TP, Jr. Seroreactivity to LGL leukemia-specific epitopes in aplastic anemia, myelodysplastic syndrome and paroxysmal nocturnal hemoglobinuria: Results of a bone marrow failure consortium study. *Leuk. Res*. Mar 1 2012. PMID: 22386729, PMCID: PMC3312981
- 34.** Richesson RL, Sutphen R, Shereff D, Krischer JP. The Rare Diseases Clinical Research Network Contact Registry update: features and functionality. *Contemp. Clin. Trials*. Jul 2012;33(4):647-656. PMID: 22405970, PMCID: PMC3652679
- 35.** Grayson PC, Maksimowicz-McKinnon K, Clark TM, Tomasson G, Cuthbertson D, Carette S, Khalidi NA, Langford CA, Monach PA, Seo P, Warrington KJ, Ytterberg SR, Hoffman GS, Merkel PA. Distribution of arterial lesions in Takayasu's arteritis and giant cell arteritis. *Ann. Rheum. Dis*. Aug 2012;71(8):1329-1334. PMID: 22328740, PMCID: PMC3729734

- 36.** Motil KJ, Caeg E, Barrish JO, Geerts S, Lane JB, Percy AK, Annese F, McNair L, Skinner SA, Lee HS, Neul JL, Glaze DG. Gastrointestinal and nutritional problems occur frequently throughout life in girls and women with rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Sep 2012;55(3):292-298. PMID: 22331013, PMCID: PMC3393805
- 37.** Couluris M, Kinder BW, Xu P, Gross-King M, Krischer J, Panos RJ. Treatment of idiopathic pulmonary fibrosis with losartan: a pilot project. *Lung.* Oct 2012;190(5):523-527. PMID: 22810758, PMCID: PMC4620709
- 38.** Statland JM, Bundy BN, Wang Y, Trivedi JR, Raja Rayan D, Herbelin L, Donlan M, McLin R, Eichinger KJ, Findlater K, Dewar L, Pandya S, Martens WB, Venance SL, Matthews E, Amato AA, Hanna MG, Griggs RC, Barohn RJ. A quantitative measure of handgrip myotonia in non-dystrophic myotonia. *Muscle Nerve.* Oct 2012;46(4):482-489. PMID: 22987687, PMCID: PMC3564214
- 39.** Statland JM, Bundy BN, Wang Y, Rayan DR, Trivedi JR, Sansone VA, Salajegheh MK, Venance SL, Ciafaloni E, Matthews E, Meola G, Herbelin L, Griggs RC, Barohn RJ, Hanna MG. Mexiletine for symptoms and signs of myotonia in nondystrophic myotonia: a randomized controlled trial. *JAMA.* Oct 3 2012;308(13):1357-1365. PMID: 23032552, PMCID: PMC3564227
- 40.** Tarquinio DC, Motil KJ, Hou W, Lee HS, Glaze DG, Skinner SA, Neul JL, Annese F, McNair L, Barrish JO, Geerts SP, Lane JB, Percy AK. Growth failure and outcome in Rett syndrome: specific growth references. *Neurology.* Oct 16 2012;79(16):1653-1661. PMID: 23035069, PMCID: PMC3468773
- 41.** Akers A, Ball KL, Clancy M, Comi A, Faughnan ME, Gopal-Srivastava R, Jacobs TP, Kim H, Krischer J, Marchuk DA, McCulloch CE, Morrison L, Moses MA, Pawlikowska L, Young WL, the Brain Vascular Malformation Consortium. Brain Vascular Malformation Consortium: overview, progress, and future directions. *The Journal of Rare Disorders.* April 2013;1(1). NIHMSID: NIH476897, PMID: 25221778, PMCID: PMC4160161
- 42.** Lieberthal JG, Cuthbertson D, Carette S, et al. urinary biomarkers in relapsing antineutrophil cytoplasmic antibody-associated vasculitis. *J. Rheumatol.* May 2013;40(5):674-683. PMID: 23547217, PMCID: PMC4505819
- 43.** Trivedi JR, Bundy B, Statland J, Salajegheh M, Rayan DR, Venance SL, Wang Y, Fialho D, Matthews E, Cleland J, Gorham N, Herbelin L, Cannon S, Amato A, Griggs RC, Hanna MG, Barohn RJ; CINCH Consortium. Non-Dystrophic Myotonia: Prospective Study of Objective and Patient Reported Outcomes. *Brain.* July 2013; 136(Pt 7): 2189-200. PMID: 23771340, PMCID: PMC3692030
- 44.** Grayson PC, Amudala NA, McAlear CA, et al. Illness perceptions and fatigue in systemic vasculitis. *Arthritis Care Res (Hoboken).* Jul 16 2013. PMID: 23861259, PMCID: PMC3962511
- 45.** Clowse ME, Richeson RL, Pieper C, Merkel PA. Pregnancy outcomes among patients with vasculitis. *Arthritis Care Res (Hoboken).* Aug 2013;65(8):1370-1374. PMID: 23401494, PMCID: PMC4366137
- 46.** Monach PA, Warner RL, Tomasson G, et al. Serum proteins reflecting inflammation, injury and repair as biomarkers of disease activity in ANCA-associated vasculitis. *Ann. Rheum. Dis.* Aug 2013;72(8):1342-1350. PMID: 22975753, PMCID: PMC4982463

- 47.** Grayson PC, Cuthbertson D, Carette S, et al. New features of disease after diagnosis in 6 forms of systemic vasculitis. *J. Rheumatol.* Nov 2013;40(11):1905-1912. PMID: 23908447, PMCID: PMC4292850
- 48.** Ashizawa T, Figueroa KP, Perlman SL, et al. Clinical characteristics of patients with spinocerebellar ataxias 1, 2, 3 and 6 in the US; a prospective observational study. *Orphanet J. Rare Dis.* Nov 13 2013;8(1):177. PMID: 24225362, PMCID: PMC3843578
- 49.** Leigh MW, Hazucha MJ, Chawla KK, et al. Standardizing nasal nitric oxide measurement as a test for primary ciliary dyskinesia. *Annals of the American Thoracic Society.* Dec 2013;10(6):574-581. PMID: 24024753, PMCID: PMC3960971
- 50.** Langford CA, Monach PA, Specks U, et al. An open-label trial of abatacept (CTLA4-IG) in non-severe relapsing granulomatosis with polyangiitis (Wegener's). *Ann. Rheum. Dis.* Dec 9 2013. PMID: 24323392, PMCID: PMC4149903
- 51.** Griffith LM, Cowan MJ, Notarangelo LD, et al. Primary Immune Deficiency Treatment Consortium (PIDTC) report. *J. Allergy Clin. Immunol.* Feb 2014;133(2):335-347. PMID: 24139498, PMCID: PMC3960312
- 52.** Haddad E, Allakhverdi Z, Griffith LM, Cowan MJ, Notarangelo LD. Survey on retransplantation criteria for patients with severe combined immunodeficiency. *J. Allergy Clin. Immunol.* Feb 2014;133(2):597-599. PMID: 24331379, PMCID: PMC3960313
- 53.** Knowles MR, Ostrowski LE, Leigh MW, et al. Mutations in RSPH1 cause primary ciliary dyskinesia with a unique clinical and ciliary phenotype. *Am. J. Respir. Crit. Care Med.* Mar 15 2014;189(6):707-717. PMID: 24568568, PMCID: PMC3983840
- 54.** Shearer WT, Dunn E, Notarangelo LD, et al. Establishing diagnostic criteria for severe combined immunodeficiency disease (SCID), leaky SCID, and Omenn syndrome: the Primary Immune Deficiency Treatment Consortium experience. *J. Allergy Clin. Immunol.* Apr 2014;133(4):1092-1098. PMID: 24290292, PMCID: PMC3972266
- 55.** Batshaw ML, Groft SC, Krischer JP. Research into rare diseases of childhood. *JAMA.* May 7 2014;311(17):1729-1730. PMID: 24794360, PMCID: PMC6441966
- 56.** Grayson PC, Amudala NA, McAlear CA, et al. Causal Attributions about Disease Onset and Relapse in Patients with Systemic Vasculitis. *J. Rheumatol.* May 2014;41(5):923-930. PMID: 24634202, PMCID: PMC4008683
- 57.** Krischer JP, Gopal-Srivastava R, Groft SC, Eckstein DJ. The Rare Diseases Clinical Research Network's Organization and Approach to Observational Research and Health Outcomes Research. *J. Gen. Intern. Med.* Aug 2014;29 Suppl 3:739-744. PMID: 25029976, PMCID: PMC4124127
- 58.** Mooney J, Spalding N, Poland F, et al. The informational needs of patients with ANCA-associated vasculitis-development of an informational needs questionnaire. *Rheumatology.* Aug 2014;53(8):1414-1421. PMID: 24625507, PMCID: PMC4103516
- 59.** Kwan A, Abraham RS, Currier R, et al. Newborn screening for severe combined immunodeficiency in 11 screening programs in the United States. *JAMA.* Aug 20 2014;312(7):729-738. PMID: 25138334, PMCID: PMC4492158

- 60.** Burrage LC, Jain M, Gandolfo L, Lee BH, Nagamani SC. Sodium phenylbutyrate decreases plasma branched-chain amino acids in patients with urea cycle disorders. *Mol. Genet. Metab.* Sep-Oct 2014;113(1-2):131-135. PMID: 25042691, PMCID: PMC4177960
- 61.** Johnson NE, Heatwole CR, Dilek N, et al. Quality-of-life in Charcot-Marie-Tooth disease: The patient's perspective. *Neuromuscul. Disord.* Nov 2014;24(11):1018-1023. PMID: 25092060, PMCID: PMC4253871
- 62.** Grayson PC, Monach PA, Pagnoux C, et al. Value of commonly measured laboratory tests as biomarkers of disease activity and predictors of relapse in eosinophilic granulomatosis with polyangiitis. *Rheumatology*. Nov 17 2014. PMID: 25406357, PMCID: PMC4502335
- 63.** Dejaco C, Oppl B, Monach P, et al. Serum biomarkers in patients with relapsing eosinophilic granulomatosis with polyangiitis (churg-strauss). *PLoS ONE*. 2015;10(3):e0121737. PMID: 25812008, PMCID: PMC4374913
- 64.** Davis SD, Ferkol TW, Rosenfeld M, et al. Clinical features of childhood primary ciliary dyskinesia by genotype and ultrastructural phenotype. *Am. J. Respir. Crit. Care Med.* Feb 1 2015;191(3):316-324. PMID: 25493340, PMCID: PMC4351577
- 65.** Renauer PA, Saruhan-Direskeneli G, Coit P, et al. Identification of Susceptibility Loci in IL6, RPS9/LILRB3, and an Intergenic Locus on Chromosome 21q22 in Takayasu Arteritis in a Genome-Wide Association Study. *Arthritis & rheumatology* (Hoboken, N.J.). May 2015;67(5):1361-1368. PMID: 25604533, PMCID: PMC4414813
- 66.** Carmona FD, Mackie SL, Martin JE, et al. A Large-Scale Genetic Analysis Reveals a Strong Contribution of the HLA Class II Region to Giant Cell Arteritis Susceptibility. *Am. J. Hum. Genet.* Apr 2 2015;96(4):565-580. PMID: 25817017, PMCID: PMC4385191
- 67.** Kermani TA, Warrington KJ, Cuthbertson D, et al. Disease Relapses among Patients with Giant Cell Arteritis: A Prospective, Longitudinal Cohort Study. *J. Rheumatol.* Jul 2015;42(7):1213-1217. PMID: 25877501, PMCID: PMC4505815
- 68.** Friedman V, Bundy B, Reilly MM, et al. CMT subtypes and disease burden in patients enrolled in the Inherited Neuropathies Consortium natural history study: a cross-sectional analysis. *J. Neurol. Neurosurg. Psychiatry*. Aug 2015;86(8):873-878. PMID: 25430934, PMCID: PMC4516002
- 69.** Argula RG, Kokosi M, Lo P, et al. A Novel Quantitative Computed Tomographic Analysis Suggests How Sirolimus Stabilizes Progressive Air Trapping in Lymphangioleiomyomatosis. *Annals of the American Thoracic Society*. 2016;13(3):342-349. PMID: 26799509, PMCID: PMC5015717
- 70.** Bellur S, Jain M, Cuthbertson D, et al. Cesarean delivery is not associated with decreased at-birth fracture rates in osteogenesis imperfecta. *Genet. Med.* 2016;18(6):570-576. PMID: 26426884, PMCID: PMC4818203
- 71.** Karaa A, Kriger J, Grier J, et al. Mitochondrial disease patients' perception of dietary supplements' use. *Mol Genet Metab*. 2016;119(1-2):100-108. PMID: 27444792, PMCID: PMC5031526

- 72.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 73.** Kermani TA, Cuthbertson D, Carette S, et al. The Birmingham Vasculitis Activity Score as a Measure of Disease Activity in Patients with Giant Cell Arteritis. *J Rheumatol.* 2016;43(6):1078-1084. PMID: 27036388, PMCID: PMC4891218
- 74.** Killian JT, Jr., Lane JB, Lee HS, et al. Caretaker Quality of Life in Rett Syndrome: Disorder Features and Psychological Predictors. *Pediatr. Neurol.* Jan 11 2016. PMID: 26995066, PMCID: PMC4899118
- 75.** Tamura RN, Krischer JP, Pagnoux C, et al. A small n sequential multiple assignment randomized trial design for use in rare disease research. *Contemp. Clin. Trials.* Jan 2016;46:48-51. PMID: 26586608, PMCID: PMC4695231
- 76.** Leigh MW, Ferkol TW, Davis SD, et al. Clinical Features and Associated Likelihood of Primary Ciliary Dyskinesia in Children and Adolescents. *Annals of the American Thoracic Society.* Apr 12 2016. PMID: 27070726, PMCID: PMC5021075
- 77.** Cheng K, Gupta SK, Kantor S, et al. Creating a multi-center rare disease consortium - the Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR). *Translational science of rare diseases.* 2017;2(3-4):141-155. PMID: 29333363, PMCID: PMC5757645
- 78.** Killian JT, Lane JB, Lee HS, et al. Scoliosis in Rett Syndrome: Progression, Comorbidities, and Predictors. *Pediatr Neurol.* 2017;70:20-25. PMID: 28347601, PMCID: PMC5461984
- 79.** Krischer J, Cronholm PF, Burroughs C, et al. Experience With Direct-to-Patient Recruitment for Enrollment Into a Clinical Trial in a Rare Disease: A Web-Based Study. *J Med Internet Res.* 2017;19(2):e50. PMID: 28246067, PMCID: PMC5350442
- 80.** Langford CA, Cuthbertson D, Ytterberg SR, et al. A Randomized, Double-Blind Trial of Abatacept (CTLA-4Ig) for the Treatment of Giant Cell Arteritis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(4):837-845. PMID: 28133925, PMCID: PMC5378642
- 81.** Langford CA, Cuthbertson D, Ytterberg SR, et al. A Randomized, Double-Blind Trial of Abatacept (CTLA-4Ig) for the Treatment of Takayasu Arteritis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(4):846-853. PMID: 28133931, PMCID: PMC5378643
- 82.** Merkel PA, Xie G, Monach PA, et al. Identification of Functional and Expression Polymorphisms Associated With Risk for Antineutrophil Cytoplasmic Autoantibody-Associated Vasculitis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(5):1054-1066. PMID: 28029757, PMCID: PMC5434905
- 83.** Miller JL, Tamura R, Butler MG, et al. Oxytocin treatment in children with Prader-Willi syndrome: A double-blind, placebo-controlled, crossover study. *Am J Med Genet A.* 2017;173(5):1243-1250. PMID: 28371242, PMCID: PMC5828021
- 84.** Oommen E, Hummel A, Allmannsberger L, et al. IgA antibodies to myeloperoxidase in patients with eosinophilic granulomatosis with polyangiitis (Churg-Strauss). *Clin Exp Rheumatol.* 2017;35 Suppl 103(1):98-101. PMID: 28281453, PMCID: PMC5514423
- 85.** Robson JC, Tomasson G, Milman N, et al. OMERACT Endorsement of Patient-reported Outcome Instruments in Antineutrophil Cytoplasmic Antibody-associated Vasculitis. *J Rheumatol.* 2017. PMID: 28864650, PMCID: PMC5951181

- 86.** Aceves SS, King E, Collins MH, Yang GY, Capocelli KE, Abonia JP, Atkins D, Bonis PA, Carpenter CL, Dellon ES, Eby MD, Falk GW, Gonsalves N, Gupta SK, Hirano I, Kocher K, Krischer JP, Leung J, Lipscomb J, Menard-Katcher P, Mukkada VA, Pan Z, Spergel JM, Sun Q, Wershil BK, Rothenberg ME, Furuta GT; Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR). Alignment of parent- and child-reported outcomes and histology in eosinophilic esophagitis across multiple CEGIR sites. *J Allergy Clin Immunol*. 2018;142(1):130-138.e131. PMID: 29852258, PMCID: PMC6035777
- 87.** Conklin LS, Merkel PA, Pachman LM, Parikh H, Tawalbeh S, Damsker JM, Cuthbertson DD, Morgan GA, Monach PA, Hathout Y, Nagaraju K, van den Anker J, McAlear CA, Hoffman EP. Serum biomarkers of glucocorticoid response and safety in anti-neutrophil cytoplasmic antibody-associated vasculitis and juvenile dermatomyositis. *Steroids*. 2018;140:159-166. PMID: 30352204
- 88.** Barra L, Borchin RL, Burroughs C, et al. Impact of vasculitis on employment and income. *Clin Exp Rheumatol*. 2018. PMID: 29352849, PMCID: PMC6003628
- 89.** Grayson PC, Eddy S, Taroni JN, et al. Metabolic pathways and immunometabolism in rare kidney diseases. *Ann Rheum Dis*. 2018. PMID: 29724730, PMCID: PMC6045442
- 90.** Jain M, Tam A, Shapiro JR, et al. Growth characteristics in individuals with osteogenesis imperfecta in North America: results from a multicenter study. *Genet Med*. 2018. PMID: 29970925, PMCID: PMC6320321
- 91.** Kermani TA, Diab S, Sreih AG, et al. Arterial lesions in giant cell arteritis: A longitudinal study. *Semin Arthritis Rheum*. 2018. PMID: 29880442, PMCID: PMC6226363
- 92.** Kermani TA, Sreih AG, Cuthbertson D, et al. Evaluation of damage in giant cell arteritis. *Rheumatology (Oxford)*. 2018;57(2):322-328. PMID: 29112740, PMCID: PMC5850105
- 93.** Panosyan FB, Kirk CA, Marking D, et al. Carpal tunnel syndrome in inherited neuropathies: A retrospective survey. *Muscle Nerve*. 2018;57(3):388-394. PMID: 28692128, PMCID: PMC5762426
- 94.** Rhee RL, Holweg CTJ, Wong K, Cuthbertson D, Carette S, Khalidi NA, Koening CL, Langford CA, McAlear CA, Monach PA, Moreland LW, Pagnoux C, Seo P, Specks U, Sreih AG, Ytterberg SR, Merkel PA; Vasculitis Clinical Research Consortium. Serum periostin as a biomarker in eosinophilic granulomatosis with polyangiitis. *PLoS ONE*. 2018;13(10):e0205768. PMID: 30308057, PMCID: PMC6181402
- 95.** Shoda T, Wen T, Aceves SS, et al. Eosinophilic oesophagitis endotype classification by molecular, clinical, and histopathological analyses: a cross-sectional study. *The lancet Gastroenterology & hepatology*. 2018. PMID: 29730081, PMCID: PMC5997568
- 96.** Springer JM, Monach P, Cuthbertson D, et al. Serum S100 Proteins as a Marker of Disease Activity in Large Vessel Vasculitis. *J Clin Rheumatol*. 2018. PMID: 29470262, PMCID: PMC6105726
- 97.** Tam A, Chen S, Schauer E, Grafe I, Bandi V, Shapiro JR, Steiner RD, Smith PA, Bober MB, Hart T, Cuthbertson D, Krischer J, Mullins M, Byers PH, Sandhaus RA, Durigova M, Glorieux FH, Rauch F, Reid Sutton V, Lee B; Members of the Brittle Bone Disorders Consortium, Rush ET, Nagamani SCS. A multicenter study to evaluate pulmonary function in osteogenesis imperfecta. *Clin Genet*. 2018. PMID: 30152014, PMCID: PMC6235719

- 98.** Waisbren SE, Cuthbertson D, Burgard P, Holbert A, McCarter R, Cederbaum S. Biochemical markers and neuropsychological functioning in distal urea cycle disorders. *J Inher Metab Dis.* 2018. PMID: 29423830, PMCID: PMC6041144
- 99.** Zolkopli-Cunningham Z, Xiao R, Stoddart A, McCormick EM, Holberts A, Burrill N, McCormack S, Williams L, Wang X, Thompson JLP, Falk MJ. Mitochondrial disease patient motivations and barriers to participate in clinical trials. *PLoS ONE.* 2018;13(5):e0197513. PMID: 29771953, PMCID: PMC5957366
- 100.** Tao F, Beecham GW, Rebello AP, Svaren J, Blanton SH, Moran JJ, Lopez-Anido C, Morrow JM, Abreu L, Rizzo D, Kirk CA, Wu X, Feely S, Verhamme C, Saporta MA, Herrmann DN, Day JW, Sumner CJ, Lloyd TE, Li J, Yum SW, Taroni F, Baas F, Choi BO, Pareyson D, Scherer SS, Reilly MM, Shy ME, Züchner S; Inherited Neuropathy Consortium. Variation in SIPA1L2 is correlated with phenotype modification in Charcot- Marie- Tooth disease type 1A. *Ann Neurol.* 2019;85(3):316-330. PMID: 30706531
- 101.** Tomasson G, Farrar JT, Cuthbertson D, et al. Feasibility and Construct Validation of the Patient Reported Outcomes Measurement Information System (PROMIS) in Systemic Vasculitis. *J Rheumatol.* 2019. PMID: 30824648
- 102.** Tosi LL, Floor MK, Dollar CM, Gillies AP; Members of the Brittle Bone Disease Consortium, Hart TS, Cuthbertson DD, Sutton VR, Krischer JP. Assessing disease experience across the life span for individuals with osteogenesis imperfecta: challenges and opportunities for patient-reported outcomes (PROs) measurement: a pilot study. *Orphanet J Rare Dis.* 2019;14(1):23. PMID: 30696467, PMCID: PMC6350324

RDCRN Descriptive Publications

Conference Proceedings

1. Leduc R, Hall C, Shreff D, et al. An Overview of the Rare Diseases Clinical Research Network. Lysosomal Disease Network, 9th Annual WORLD Symposium; Feb. 12-15, 2013; Orlando, FL.

Journal Articles

1. McDonald J. NIH launches clinical studies nationwide to investigate rare diseases. *NIH News2006.*
2. Hampton T. Rare disease research gets boost. *JAMA.* Jun 28 2006;295(24):2836-2838. PMID: 16804140
3. Richesson RL, Young K, Lloyd J, Adams T, Guillette H, Malloy J, Krischer JP. An automated communication system in a Contact Registry for persons with rare diseases: tools for retaining potential clinical research participants. *AMIA. Annu. Symp. Proc.* 2007:1094. PMID: 18694191
4. Thomson P. On the trail of rare disease: investigators and advocates hunt for collaboration and smart funding. *New Physician.* 2007;56(8):20-25.
5. Griggs RC, Batshaw M, Dunkle M, Gopal-Srivastava R, Kaye E, Krischer J, Nguyen T, Paulus K, Merkel PA. Clinical research for rare disease: opportunities, challenges, and solutions. *Mol. Genet. Metab.* Jan 2009;96(1):20-26. PMID: 19013090 , PMCID: PMC3134795

6. Richesson RL, Lee HS, Cuthbertson D, Lloyd J, Young K, Krischer JP. An automated communication system in a contact registry for persons with rare diseases: scalable tools for identifying and recruiting clinical research participants. *Contemp. Clin. Trials.* Jan 2009;30(1):55-62. PMID: 18804556, PMCID: PMC2640948
7. Rubinstein YR, Groft SC, Bartek R, Brown K, Christensen RA, Collier E, Farber A, Farmer J, Ferguson JH, Forrest CB, Lockhart NC, McCurdy KR, Moore H, Pollen GB, Richesson R, Miller VR, Hull S, Vaught J. Creating a global rare disease patient registry linked to a rare diseases biorepository database: Rare Disease-HUB (RD-HUB). *Contemp. Clin. Trials.* Sep 2010;31(5):394-404. PMID: 20609392, PMCID: PMC2930109
8. Richesson RL, Sutphen R, Shreff D, Krischer JP. The Rare Diseases Clinical Research Network Contact Registry update: features and functionality. *Contemp. Clin. Trials.* Jul 2012;33(4):647-656. PMID: 22405970, PMCID: PMC3652679
9. Groft SC, Gopal-Srivastava R. A model for collaborative clinical research in rare diseases: experience from the Rare Disease Clinical Research Network program. *J Clin Invest.* 2013;3(11):1015-21
10. Batshaw ML, Groft SC, Krischer JP. Research into rare diseases of childhood. *JAMA.* 2014;311(17):1729-1730. PMID: 24794360
11. Krischer JP, Gopal-Srivastava R, Groft SC, Eckstein DJ. The Rare Diseases Clinical Research Network's Organization and Approach to Observational Research and Health Outcomes Research. *J. Gen. Intern. Med.* Aug 2014;29 Suppl 3:739-744. PMID: 25029976, PMCID: PMC4124127
12. Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
13. Cheng K, Gupta SK, Kantor S, et al. Creating a multi-center rare disease consortium - the Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR). *Translational science of rare diseases.* 2017;2(3-4):141-155. PMID: 29333363, PMCID: PMC5757645

Advancing Research & Treatment for Frontotemporal Lobar Degeneration

Journal Articles

1. Lee SE, Khazenzon AM, Trujillo AJ, et al. Altered network connectivity in frontotemporal dementia with C9orf72 hexanucleotide repeat expansion. *Brain.* Nov 2014;137(Pt 11):3047-3060. PMID: 25273996, PMCID: PMC4208465
2. Sha SJ, Ghosh PM, Lee SE, et al. Predicting amyloid status in corticobasal syndrome using modified clinical criteria, magnetic resonance imaging and fluorodeoxyglucose positron emission tomography. *Alzheimers Res. Ther.* 2015;7(1):8. PMID: 25733984, PMCID: PMC4346122

3. Finger EC, MacKinley J, Blair M, et al. Oxytocin for frontotemporal dementia: a randomized dose-finding study of safety and tolerability. *Neurology*. Jan 13 2015;84(2):174-181. PMID: 25503617, PMCID: PMC4336088
4. Fiandaca MS, Kapogiannis D, Mapstone M, et al. Identification of preclinical Alzheimer's disease by a profile of pathogenic proteins in neurally derived blood exosomes: A case-control study. *Alzheimer's & dementia : the journal of the Alzheimer's Association*. Jun 2015;11(6):600-607 e601. PMID: 25130657, PMCID: PMC4329112
5. Iglesias JE, Van Leemput K, Bhatt P, et al. Bayesian segmentation of brainstem structures in MRI. *Neuroimage*. Jun 2015;113:184-195. PMID: 25776214, PMCID: PMC4434226
6. Block NR, Sha SJ, Karydas AM, et al. Frontotemporal Dementia and Psychiatric Illness: Emerging Clinical and Biological Links in Gene Carriers. *Am. J. Geriatr. Psychiatry*. Jun 21 2015. PMID: 26324540, PMCID: PMC4686378
7. McCarter SJ, Tippmann-Peikert M, Sandness DJ, et al. Neuroimaging-evident lesional pathology associated with REM sleep behavior disorder. *Sleep medicine*. Dec 2015;16(12):1502-1510. PMID: 26611948
8. Boman A, Svensson S, Boxer A, et al. Distinct Lysosomal Network Protein Profiles in Parkinsonian Syndrome Cerebrospinal Fluid. *Journal of Parkinson's disease*. 2016;6(2):307-315. PMID: 27061067, PMCID: PMC4927933
9. Dutt S, Binney RJ, Heuer HW, et al. Progression of brain atrophy in PSP and CBS over 6 months and 1 year. *Neurology*. 2016;87(19):2016-2025. PMID: 27742814, PMCID: PMC5109951
10. Espay AJ, Bonato P, Nahab FB, et al. Technology in Parkinson's disease: Challenges and opportunities. *Mov Disord*. 2016;31(9):1272-1282. PMID: 27125836, PMCID: PMC5014594
11. Goetzl EJ, Kapogiannis D, Schwartz JB, et al. Decreased synaptic proteins in neuronal exosomes of frontotemporal dementia and Alzheimer's disease. *FASEB J.* 2016;30(12):4141-4148. PMID: 27601437, PMCID: PMC5102122
12. Hewer S, Varley S, Boxer AL, Paul E, Williams DR. Minimal clinically important worsening on the progressive supranuclear Palsy Rating Scale. *Mov Disord*. 2016;31(10):1574-1577. PMID: 27324431, PMCID: PMC5215805
13. Litvan I, Lees PS, Cunningham CR, et al. Environmental and occupational risk factors for progressive supranuclear palsy: Case-control study. *Mov Disord*. 2016;31(5):644-652. PMID: 26854325, PMCID: PMC4861658
14. Miller ZA, Sturm VE, Camsari GB, et al. Increased prevalence of autoimmune disease within C9 and FTD/MND cohorts: Completing the picture. *Neurology(R) neuroimmunology & neuroinflammation*. 2016;3(6):e301. PMID: 27844039, PMCID: PMC5087253
15. Nandipati S, Litvan I. Environmental Exposures and Parkinson's Disease. *Int J Environ Res Public Health*. 2016;13(9). PMID: 27598189, PMCID: PMC5036714
16. Onyike CU. Psychiatric Aspects of Dementia. *Continuum (Minneapolis, Minn)*. 2016;22(2 Dementia):600-614. PMID: 27042910, PMCID: PMC5390928

- 17.** Santos-Santos MA, Mandelli ML, Binney RJ, et al. Features of Patients With Nonfluent/Agrammatic Primary Progressive Aphasia With Underlying Progressive Supranuclear Palsy Pathology or Corticobasal Degeneration. *JAMA neurology*. 2016;73(6):733-742. PMID: 27111692, PMCID: PMC4924620
- 18.** Stamelou M, Schope J, Wagenfeil S, et al. Power calculations and placebo effect for future clinical trials in progressive supranuclear palsy. *Mov Disord*. 2016;31(5):742-747. PMID: 26948290, PMCID: PMC5289149
- 19.** Tsai RM, Boxer AL. Therapy and clinical trials in frontotemporal dementia: past, present, and future. *J Neurochem*. 2016;138 Suppl 1:211-221. PMID: 27306957, PMCID: PMC5217534
- 20.** Walsh CM, Ruoff L, Varbel J, et al. Rest-activity rhythm disruption in progressive supranuclear palsy. *Sleep medicine*. 2016;22:50-56. PMID: 27544836, PMCID: PMC4996365
- 21.** Zhang Y, Walter R, Ng P, et al. Progression of Microstructural Degeneration in Progressive Supranuclear Palsy and Corticobasal Syndrome: A Longitudinal Diffusion Tensor Imaging Study. *PLoS ONE*. 2016;11(6):e0157218. PMID: 27310132, PMCID: PMC4911077
- 22.** Rojas JC, Boxer AL. Neurodegenerative disease in 2015: Targeting tauopathies for therapeutic translation. *Nature reviews. Neurology*. Feb 2016;12(2):74-76. PMID: 26794651, PMCID: PMC5221610
- 23.** Bang J, Lobach IV, Lang AE, et al. Predicting disease progression in progressive supranuclear palsy in multicenter clinical trials. *Parkinsonism Relat. Disord*. Apr 18 2016. PMID: 27172829, PMCID: PMC4914418
- 24.** Tsai RM, Lobach I, Bang J, et al. Clinical correlates of longitudinal brain atrophy in progressive supranuclear palsy. *Parkinsonism Relat. Disord*. Apr 24 2016. PMID: 27132501, PMCID: PMC4914401
- 25.** Besser LM, Litvan I, Monsell SE, et al. Mild cognitive impairment in Parkinson's disease versus Alzheimer's disease. *Parkinsonism Relat Disord*. Jun 2016;27:54-60. PMID: 27089852, PMCID: PMC4887313
- 26.** Bejanin A, Schonhaut DR, La Joie R, et al. Tau pathology and neurodegeneration contribute to cognitive impairment in Alzheimer's disease. *Brain*. 2017;140(12):3286-3300. PMID: 29053874
- 27.** Brown JA, Hua AY, Trujillo A, et al. Advancing functional dysconnectivity and atrophy in progressive supranuclear palsy. *NeuroImage Clinical*. 2017;16:564-574. PMID: 28951832, PMCID: PMC5605489
- 28.** Chen J, Yu JT, Wojta K, et al. Genome-wide association study identifies MAPT locus influencing human plasma tau levels. *Neurology*. 2017;88(7):669-676. PMID: 28100725, PMCID: PMC5317386
- 29.** Elahi FM, Marx G, Cobigo Y, et al. Longitudinal white matter change in frontotemporal dementia subtypes and sporadic late onset Alzheimer's disease. *NeuroImage Clinical*. 2017;16:595-603. PMID: 28975068, PMCID: PMC5614750

- 30.** Fernandez-Fournier M, Perry DC, Tartaglia MC, et al. Precipitous Deterioration of Motor Function, Cognition, and Behavior. *JAMA neurology*. 2017;74(5):591-596. PMID: 28264087, PMCID: PMC5600817
- 31.** Gendron TF, Chew J, Stankowski JN, et al. Poly(GP) proteins are a useful pharmacodynamic marker for C9ORF72-associated amyotrophic lateral sclerosis. *Sci Transl Med*. 2017;9(383). PMID: 28356511, PMCID: PMC5576451
- 32.** Gerstenecker A, Roberson ED, Schellenberg GD, et al. Genetic influences on cognition in progressive supranuclear palsy. *Mov Disord*. 2017;32(12):1764-1771. PMID: 29076559, PMCID: PMC5818145
- 33.** Hoglinger GU, Respondek G, Stamelou M, et al. Clinical diagnosis of progressive supranuclear palsy: The movement disorder society criteria. *Mov Disord*. 2017. PMID: 28467028, PMCID: PMC5516529
- 34.** Hoglinger GU, Schope J, Stamelou M, et al. Longitudinal magnetic resonance imaging in progressive supranuclear palsy: A new combined score for clinical trials. *Mov Disord*. 2017. PMID: 28436538, PMCID: PMC5808453
- 35.** Lapid MI, Kuntz KM, Mason SS, et al. Efficacy, Safety, and Tolerability of Armodafinil Therapy for Hypersomnia Associated with Dementia with Lewy Bodies: A Pilot Study. *Dement Geriatr Cogn Disord*. 2017;43(5-6):269-280. PMID: 28448998, PMCID: PMC5503747
- 36.** Lopez A, Lee SE, Wojta K, et al. A152T tau allele causes neurodegeneration that can be ameliorated in a zebrafish model by autophagy induction. *Brain*. 2017;140(4):1128-1146. PMID: 28334843, PMCID: PMC5382950
- 37.** Perry DC, Brown JA, Possin KL, et al. Clinicopathological correlations in behavioural variant frontotemporal dementia. *Brain*. 2017;140(12):3329-3345. PMID: 29053860
- 38.** Respondek G, Kurz C, Arzberger T, et al. Which ante mortem clinical features predict progressive supranuclear palsy pathology? *Mov Disord*. 2017;32(7):995-1005. PMID: 28500752, PMCID: PMC5543934
- 39.** Roe CM, Barco PP, Head DM, et al. Amyloid Imaging, Cerebrospinal Fluid Biomarkers Predict Driving Performance Among Cognitively Normal Individuals. *Alzheimer Dis Assoc Disord*. 2017;31(1):69-72. PMID: 27128959, PMCID: PMC5085874
- 40.** Scherling CS, Zakrzewski J, Datta S, et al. Mistakes, Too Few to Mention? Impaired Self-conscious Emotional Processing of Errors in the Behavioral Variant of Frontotemporal Dementia. *Frontiers in behavioral neuroscience*. 2017;11:189. PMID: 29089874, PMCID: PMC5651000
- 41.** Schonhaut DR, McMillan CT, Spina S, et al. 18 F-flortaucipir tau positron emission tomography distinguishes established progressive supranuclear palsy from controls and Parkinson disease: A multicenter study. *Ann Neurol*. 2017;82(4):622-634. PMID: 28980714, PMCID: PMC5665658
- 42.** Seo SW, Ayakta N, Grinberg LT, et al. Regional correlations between [(11)C]PIB PET and post-mortem burden of amyloid-beta pathology in a diverse neuropathological cohort. *NeuroImage Clinical*. 2017;13:130-137. PMID: 27981028, PMCID: PMC5144753

- 43.** Sha SJ, Miller ZA, Min SW, et al. An 8-week, open-label, dose-finding study of nimodipine for the treatment of progranulin insufficiency from GRN gene mutations. *Alzheimer's & dementia (New York, N Y)*. 2017;3(4):507-512. PMID: 29124108, PMCID: PMC5671622
- 44.** Spina S, Schonhaut DR, Boeve BF, et al. Frontotemporal dementia with the V337M MAPT mutation: Tau-PET and pathology correlations. *Neurology*. 2017;88(8):758-766. PMID: 28130473, PMCID: PMC5344079
- 45.** Spinelli EG, Mandelli ML, Miller ZA, et al. Typical and atypical pathology in primary progressive aphasia variants. *Ann Neurol*. 2017;81(3):430-443. PMID: 28133816, PMCID: PMC5421819
- 46.** Whitwell JL, Hoglinger GU, Antonini A, et al. Radiological biomarkers for diagnosis in PSP: Where are we and where do we need to be? *Mov Disord*. 2017;32(7):955-971. PMID: 28500751, PMCID: PMC5511762
- 47.** Yokoyama JS, Karch CM, Fan CC, et al. Shared genetic risk between corticobasal degeneration, progressive supranuclear palsy, and frontotemporal dementia. *Acta Neuropathol*. 2017;133(5):825-837. PMID: 28271184, PMCID: PMC5429027
- 48.** Bjorkhem I, Patra K, Boxer AL, Svenningsson P. 24S-Hydroxycholesterol Correlates With Tau and Is Increased in Cerebrospinal Fluid in Parkinson's Disease and Corticobasal Syndrome. *Frontiers in neurology*. 2018;9:756. PMID: 30245667, PMCID: PMC6137204
- 49.** Chen JA, Chen Z, Won H, et al. Joint genome-wide association study of progressive supranuclear palsy identifies novel susceptibility loci and genetic correlation to neurodegenerative diseases. *Mol Neurodegener*. 2018;13(1):41. PMID: 30089514, PMCID: PMC6083608
- 50.** Iaccarino L, Tammewar G, Ayakta N, et al. Local and distant relationships between amyloid, tau and neurodegeneration in Alzheimer's Disease. *NeuroImage Clinical*. 2018;17:452-464. PMID: 29159058, PMCID: PMC5684433
- 51.** Ljubenkov PA, Staffaroni AM, Rojas JC, et al. Cerebrospinal fluid biomarkers predict frontotemporal dementia trajectory. *Annals of clinical and translational neurology*. 2018;5(10):1250-1263. PMID: 30349860, PMCID: PMC6186942
- 52.** McKeever PM, Schneider R, Taghdiri F, et al. MicroRNA Expression Levels Are Altered in the Cerebrospinal Fluid of Patients with Young-Onset Alzheimer's Disease. *Mol Neurobiol*. 2018;55(12):8826-8841. PMID: 29603092, PMCID: PMC6208843
- 53.** Ossenkoppele R, Rabinovici GD, Smith R, et al. Discriminative Accuracy of [18F]flortaucipir Positron Emission Tomography for Alzheimer Disease vs Other Neurodegenerative Disorders. *JAMA*. 2018;320(11):1151-1162. PMID: 30326496
- 54.** Pottier C, Zhou X, Perkerson RB, 3rd, et al. Potential genetic modifiers of disease risk and age at onset in patients with frontotemporal lobar degeneration and GRN mutations: a genome-wide association study. *Lancet Neurol*. 2018;17(6):548-558. PMID: 29724592, PMCID: PMC6237181
- 55.** Shoeibi A, Litvan I. Prominent tongue and jaw tremor in a patient with probable Progressive Supranuclear Palsy. *Movement disorders clinical practice*. 2018;5(1):99-100. PMID: 30271811, PMCID: PMC6159909

56. Zetterberg H, van Swieten JC, Boxer AL, Rohrer JD. Fluid biomarkers for frontotemporal dementias. *Neuropathol Appl Neurobiol*. 2018; 30422329
57. Duff K, McDermott D, Luong D, Randolph C, Boxer AL. Cognitive deficits in progressive supranuclear palsy on the Repeatable Battery for the Assessment of Neuropsychological Status. *J Clin Exp Neuropsychol*. 2019;1-7. PMID: 30712468
58. Tsai RM, Bejanin A, Lesman-Segev O, et al. (18)F-flortaucipir (AV-1451) tau PET in frontotemporal dementia syndromes. *Alzheimers Res Ther*. 2019;11(1):13. PMID: 30704514

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Book Chapters

1. Biaggioni I. Postural hypotension. In: Lebovitz H, ed. *Therapy of Diabetes Mellitus and Related Disorders*. 5 ed. Alexandria, VA: American Diabetes Association, Inc.; 2009.
2. Biaggioni I, Kaufmann H. Postural Hypotension. In: Chaudhuri R, Tolosa E, Shapira A, Poewe W, eds. *Non-Motor Symptoms of Parkinson's Disease*. New York, NY: Oxford University Press; 2009.
3. Biaggioni I, Robertson D. Adrenoceptor agonists and sympathomimetics drugs. In: Katzung B, ed. *Basic and Clinical Pharmacology*. 11 ed. New York, NY: Lang Basic Science; 2009.
4. Robertson D, Biaggioni I. Adrenoceptor antagonist drugs. In: Katzung B, ed. *Basic and Clinical Pharmacology*. 11 ed. New York, NY: Lange Basic Science; 2009.
5. Kaufmann H, Biaggioni I. Disorders of the autonomic nervous system. In: Filit H, Rockwood K, Woodhouse K, eds. *Brocklehurst's textbook of geriatric medicine and gerontology*. Philadelphia, PA: Saunders Elsevier; 2010.
6. Arnold AC, Diz D. Renin-Angiotensin. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
7. Gamboa A. Nitric Oxide and Autonomic Regulation. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
8. Garland EM. Dopamine Beta-Hydroxylase Deficiency. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
9. Gibbons CH, Freeman R. Cutaneous Autonomic Innervation: Assessment by Skin Biopsy. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
10. Gibbons CH, Freeman R. Delayed Orthostatic Hypotension. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
11. Gilden JL. Midodrine, Adrenergic Agonists and Antagonists. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.

- 12.** Goldstein DS. Noradrenergic Neurotransmission. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 13.** Goldstein DS. Clinical Sympathetic Imaging. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 14.** Hahn MK. Antidepressant-Sensitive Norepinephrine Transporters: Structure and Regulation. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 15.** Hahn MK. Norepinephrine Transporter Deficiency. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 16.** Joos KM, Melson MR. Control of the Pupil. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 17.** Kaufmann H. Droxidopa (L-DOPS). In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 18.** Kaufmann H, Norcliffe-Kaufmann L, Axelrod F. Familial Dysautonomia (Riley-Day Syndrome). In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 19.** Kaufmann H, Schatz I. Pure Autonomic Failure. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 20.** Low PA. Sweating. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 21.** Low PA, McLeod JG. Guillain-Barré Syndrome. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 22.** Low PA, Sandroni P. Postural Tachycardia Syndrome (POTS). In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 23.** Okamoto LE, Raj SR, Biaggioni I. Chronic Fatigue Syndrome and the Autonomic Nervous System. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 24.** Peltier AC. Diagnostic Workup of Peripheral Neuropathies with Dysautonomia. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 25.** Peltier AC, Davis SN. Diagnostic Workup of Peripheral Neuropathies with Dysautonomia. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 26.** Raj SR. Neurally Mediated Syncope. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 27.** Raj SR. Tilt Table Studies. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 28.** Raj SR. Mechanisms of Postural Tachycardia. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.

- 29.** Robertson D. Orthostatic Hypertension. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 30.** Robertson D, Gilman S. Multiple System Atrophy. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 31.** Robertson D, Robertson RM. Fludrocortisone. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 32.** Robertson D, Sato K. Stress Cardiomyopathy and Takotsubo Syndrome. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 33.** Sandroni P. Clinical Evaluation of Autonomic Disorders. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 34.** Sato T, Diedrich A, Sunagawa K. Bionic Baroreflex. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 35.** Shibao C. Obesity-Associated Hypertension. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 36.** Shibao C. Acarbose. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 37.** Shibao C, Okamoto LE. Agents Potentiating Sympathetic Tone. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 38.** Stein CM. Beta-Adrenergic Receptors. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 39.** Vernino S, Low P. Autoimmune Autonomic Ganglionopathy. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2011.
- 40.** Biaggioni I. Adenosine Receptors and Autonomic Regulation. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2012.
- 41.** Biaggioni I. Genetic Determinants of Baroreflex Function. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2012.
- 42.** Biaggioni I. Erythropoietin in Autonomic Failure. In: Robertson D, Biaggioni I, Burnstock G, Low PA, Paton JFR, eds. *Primer on the Autonomic Nervous System*. 3rd ed: Academic Press; 2012.
- 43.** Biaggioni I, Robertson D. Adrenoceptor agonists and sympathomimetics drugs. In: Katzung B, ed. *Basic and Clinical Pharmacology*. 12 ed. New York, NY: Lange Basic Science; 2012.
- 44.** Freeman R. Autonomic Peripheral Neuropathy. In: Donofrio P, ed. *Textbook of Peripheral Neuropathy*. New York: Demos Medical; 2012:421-438.

45. Freeman R. Pharmacotherapy of Neuropathic Pain. In: Simpson D, McArthur J, Dworkin R, eds. *Neuropathic Pain: Mechanisms and Management*. New York, NY: Oxford University Press; 2012.
46. Robertson D, Biaggioni I. Adrenoceptor antagonist drugs. In: Katzung B, ed. *Basic and Clinical Pharmacology*. 12 ed. New York, NY: Lange Basic Science; 2012.
47. Robertson D, Biaggioni I, Burstock G, Low P, Paton J. *Primer on the Autonomic Nervous System*. 3 ed. Oxford: Elsevier Academic Press; 2012.

Journal Articles

1. Goldstein DS, Eldadah BA, Holmes C, Pechnik S, Moak J, Saleem A, Sharabi Y. Neurocirculatory abnormalities in Parkinson disease with orthostatic hypotension: independence from levodopa treatment. *Hypertension*. Dec 2005;46(6):1333-1339. PMID: 16216982
2. Goldstein DS. Orthostatic hypotension as an early finding in Parkinson's disease. *Clin. Auton. Res.* Feb 2006;16(1):46-54. PMID: 16477495
3. Goldstein DS. Cardiac denervation in patients with Parkinson disease. *Cleve. Clin. J. Med.* Feb 2007;74 Suppl 1:S91-94. PMID: 17455553
4. Goldstein DS, Holmes C, Sato T, Bernson M, Mizrahi N, Imrich R, Carmona G, Sharabi Y, Vormeyer AO. Central dopamine deficiency in pure autonomic failure. *Clin. Auton. Res.* Apr 2008;18(2):58-65. PMID: 18363034
5. Goldstein DS, Holmes C, Bentho O, Sato T, Moak J, Sharabi Y, Imrich R, Conant S, Eldadah BA. Biomarkers to detect central dopamine deficiency and distinguish Parkinson disease from multiple system atrophy. *Parkinsonism Relat. Disord.* Dec 2008;14(8):600-607. PMID: 18325818, PMCID: PMC2650101
6. Goldstein DS, Sharabi Y. Neurogenic orthostatic hypotension: a pathophysiological approach. *Circulation*. Jan 6 2009;119(1):139-146. PMID: 19124673, PMCID: PMC4182314
7. Okamoto LE, Gamboa A, Shibao C, Black BK, Diedrich A, Raj SR, Robertson D, Biaggioni I. Nocturnal blood pressure dipping in the hypertension of autonomic failure. *Hypertension*. Feb 2009;53(2):363-369. PMID: 19047577, PMCID: PMC2665259
8. Raj V, Haman KL, Raj SR, Byrne D, Blakely RD, Biaggioni I, Robertson D, Shelton RC. Psychiatric profile and attention deficits in postural tachycardia syndrome. *J. Neurol. Neurosurg. Psychiatry*. Mar 2009;80(3):339-344. PMID: 18977825, PMCID: PMC2758320
9. Goldstein DS, Sewell L. Olfactory dysfunction in pure autonomic failure: Implications for the pathogenesis of Lewy body diseases. *Parkinsonism Relat. Disord.* Aug 2009;15(7):516-520. PMID: 19201246, PMCID: PMC4164391
10. Raj SR, Black BK, Biaggioni I, Paranjape SY, Ramirez M, Dupont WD, Robertson D. Propranolol decreases tachycardia and improves symptoms in the postural tachycardia syndrome: less is more. *Circulation*. Sep 1 2009;120(9):725-734. PMID: 9687359, PMCID: PMC2758650
11. Garland EM, Gamboa A, Okamoto L, Raj SR, Black BK, Davis TL, Biaggioni I, Robertson D. Renal impairment of pure autonomic failure. *Hypertension*. Nov 2009;54(5):1057-1061. PMID: 19738158, PMCID: PMC2796115

- 12.** Tellez MJ, Norcliffe-Kaufmann LJ, Lenina S, Voustianiouk A, Kaufmann H. Usefulness of tilt-induced heart rate changes in the differential diagnosis of vasovagal syncope and chronic autonomic failure. *Clin. Auton. Res.* Dec 2009;19(6):375-380. PMID: 19834645
- 13.** Goldstein DS, Sewell L, Holmes C. Association of anosmia with autonomic failure in Parkinson disease. *Neurology*. Jan 19 2010;74(3):245-251. PMID: 20083801, PMCID: PMC2809034
- 14.** Kaufmann H, Goldstein DS. Pure autonomic failure: a restricted Lewy body synucleinopathy or early Parkinson disease? *Neurology*. Feb 16 2010;74(7):536-537. PMID: 20157156
- 15.** Peltier AC, Black BK, Raj SR, Donofrio P, Robertson D, Biaggioni I. Coexistent autoimmune autonomic ganglionopathy and myasthenia gravis associated with non-small-cell lung cancer. *Muscle Nerve*. Mar 2010;41(3):416-419. PMID: 19882640, PMCID: PMC3925506
- 16.** Mustafa HI, Robertson D. Beyond postural tachycardia syndrome. *J. Neurol. Neurosurg. Psychiatry*. Mar 2010;81(3):237-238. PMID: 20185461, PMCID: PMC3848708
- 17.** Peltier AC, Garland E, Raj SR, Sato K, Black B, Song Y, Wang L, Biaggioni I, Diedrich A, Robertson D. Distal sudomotor findings in postural tachycardia syndrome. *Clin. Auton. Res.* Apr 2010;20(2):93-99. PMID: 20035362, PMCID: PMC3089763
- 18.** Figueira JJ, Basford JR, Low PA. Preventing and treating orthostatic hypotension: As easy as A, B, C. *Cleve. Clin. J. Med.* May 2010;77(5):298-306. PMID: 20439562, PMCID: PMC2888469
- 19.** Martinez JM, Garakani A, Kaufmann H, Aaronson CJ, Gorman JM. Heart rate and blood pressure changes during autonomic nervous system challenge in panic disorder patients. *Psychosom. Med.* Jun 2010;72(5):442-449. PMID: 20368476
- 20.** McHugh J, Keller NR, Appalsamy M, Thomas SA, Raj SR, Diedrich A, Biaggioni I, Jordan J, Robertson D. Portal osmopressor mechanism linked to transient receptor potential vanilloid 4 and blood pressure control. *Hypertension*. Jun 2010;55(6):1438-1443. PMID: 20385965, PMCID: PMC2965336
- 21.** Kimpinski K, Iodice V, Low PA. Postural Tachycardia Syndrome associated with peripartum cardiomyopathy. *Auton. Neurosci.* Jun 24 2010;155(1-2):130-131. PMID: 20167544, PMCID: PMC2878873
- 22.** Kimpinski K, Iodice V, Sandroni P, Low PA. Effect of pregnancy on postural tachycardia syndrome. *Mayo Clin. Proc.* Jul 2010;85(7):639-644. PMID: 20516426, PMCID: PMC2894719
- 23.** Norcliffe-Kaufmann L, Gonzalez-Duarte A, Martinez J, Kaufmann H. Tachyarrhythmias with elevated cardiac enzymes in Munchausen syndrome. *Clin. Auton. Res.* Aug 2010;20(4):259-261. PMID: 20424883
- 24.** Rekhtman Y, Bomback AS, Nash MA, et al. Renal transplantation in familial dysautonomia: report of two cases and review of the literature. *Clin. J. Am. Soc. Nephrol.* Sep 2010;5(9):1676-1680. PMID: 20558564, PMCID: PMC2974411
- 25.** Shibao C, Okamoto LE, Gamboa A, et al. Comparative efficacy of yohimbine against pyridostigmine for the treatment of orthostatic hypotension in autonomic failure. *Hypertension*. Nov 2010;56(5):847-851. PMID: 20837887, PMCID: PMC2959129
- 26.** Norcliffe-Kaufmann L, Axelrod F, Kaufmann H. Afferent baroreflex failure in familial dysautonomia. *Neurology*. Nov 23 2010;75(21):1904-1911. PMID: 21098405, PMCID: PMC2995385

- 27.** Gruber JJ, Sherman FT, Kaufmann H, Kolodny EH, Sathe S. Vitamin B12-responsive severe leukoencephalopathy and autonomic dysfunction in a patient with "normal" serum B12 levels. *J. Neurol. Neurosurg. Psychiatry*. Dec 2010;81(12):1369-1371. PMID: 20587489
- 28.** Shibao C, Biaggioni I. Orthostatic hypotension and cardiovascular risk. *Hypertension*. Dec 2010;56(6):1042-1044. PMID: 21059992, PMCID: PMC3752681
- 29.** Sletten DM, Kimpinski K, Weigand SD, Low PA. Comparison of a gel versus solution-based vehicle for the delivery of acetylcholine in QSART. *Auton. Neurosci*. Dec 8 2010;158(1-2):123-126. PMID: 20547476, PMCID: PMC2976794
- 30.** Norcliffe-Kaufmann LJ, Reynolds HR. Afferent baroreflex failure and tako-tsubo cardiomyopathy. *Clin. Auton. Res*. Feb 2011;21(1):1-2. PMID: 21240537
- 31.** Garland EM, Raj SR, Peltier AC, Robertson D, Biaggioni I. A cross-sectional study contrasting olfactory function in autonomic disorders. *Neurology*. Feb 1 2011;76(5):456-460. PMID: 21282592, PMCID: PMC3034411
- 32.** Hollenbeck R, Black BK, Peltier AC, Biaggioni I, Robertson D, Winton EF, Raj SR. Long-term treatment with rituximab of autoimmune autonomic ganglionopathy in a patient with lymphoma. *Arch. Neurol*. Mar 2011;68(3):372-375. PMID: 21059985, PMCID: PMC3725638
- 33.** Mustafa HI, Garland EM, Biaggioni I, Black BK, Dupont WD, Robertson D, Raj SR. Abnormalities of angiotensin regulation in postural tachycardia syndrome. *Heart Rhythm*. Mar 2011;8(3):422-428. PMID: 21266211, PMCID: PMC3050076
- 34.** Kim CH, Leung A, Huh YH, Yang E, Kim DJ, Leblanc P, Ryu H, Kim K, Kim DW, Garland EM, Raj SR, Biaggioni I, Robertson D, Kim KS. Norepinephrine deficiency is caused by combined abnormal mRNA processing and defective protein trafficking of dopamine beta-hydroxylase. *J. Biol. Chem*. Mar 18 2011;286(11):9196-9204. PMID: 21209083, PMCID: PMC3059068
- 35.** Smith BA, Clayton EW, Robertson D. Experimental arrest of cerebral blood flow in human subjects: the red wing studies revisited. *Perspect. Biol. Med.* Spring 2011;54(2):121-131. PMID: 21532128, PMCID: PMC3848716
- 36.** Freeman R, Wieling W, Axelrod FB, et al. Consensus statement on the definition of orthostatic hypotension, neurally mediated syncope and the postural tachycardia syndrome. *Clin. Auton. Res*. Apr 2011;21(2):69-72. PMID: 21431947
- 37.** Wang N, Gibbons CH, Freeman R. Novel immunohistochemical techniques using discrete signal amplification systems for human cutaneous peripheral nerve fiber imaging. *J. Histochem. Cytochem*. Apr 2011;59(4):382-390. PMID: 21411809, PMCID: PMC3201146
- 38.** Bagai K, Song Y, Ling JF, Malow B, Black BK, Biaggioni I, Robertson D, Raj SR. Sleep disturbances and diminished quality of life in postural tachycardia syndrome. *J. Clin. Sleep Med*. Apr 15 2011;7(2):204-210. PMID: 21509337, PMCID: PMC3077350
- 39.** Chow DC, Wood R, Choi J, Grandinetti A, Gershenson M, Sriratanaviriyakul N, Nakamoto B, Shikuma C, Low P. Cardiovagal autonomic function in HIV-infected patients with unsuppressed HIV viremia. *HIV Clin. Trials*. May-Jun 2011;12(3):141-150. PMID: 21684854, PMCID: 3175027
- 40.** Spallone V, Ziegler D, Freeman R, et al. Cardiovascular autonomic neuropathy in diabetes: clinical impact, assessment, diagnosis, and management. *Diabetes Metab. Res. Rev*. Jun 22 2011. PMID: 21695768

- 41.** Gonzalez-Duarte A, Norcliffe-Kaufmann L, Martinez J, et al. Cardiovascular and neuroendocrine features of Panayiotopoulos syndrome in three siblings. *Epilepsy Behav*. Jul 2011;21(3):296-300. PMID: 21474385
- 42.** Jepma M, Deinum J, Asplund CL, Rombouts SA, Tamsma JT, Tjeerdema N, Spape MM, Garland EM, Robertson D, Lenders JW, Nieuwenhuis S. Neurocognitive function in dopamine-beta-hydroxylase deficiency. *Neuropsychopharmacology*. Jul 2011;36(8):1608-1619. PMID: 21471955, PMCID: PMC3138665
- 43.** Kempler P, Amarenco G, Freeman R, et al. Gastrointestinal autonomic neuropathy, erectile-, bladder- and sudomotor dysfunction in patients with diabetes mellitus: clinical impact, assessment, diagnosis, and management. *Diabetes Metab. Res. Rev.* Jul 11 2011. PMID: 21748841
- 44.** Halbig TD, Creighton J, Assuras S, Borod JC, Tse W, Gracies JM, Foldi NS, Kaufmann H, Olanow CW, Voustianiouk A. Preserved emotional modulation of motor response time despite psychomotor slowing in young-old adults. *Int. J. Neurosci.* Aug 2011;121(8):430-436. PMID: 21574890
- 45.** Wan DW, Levy J, Ginsburg HB, Kaufmann H, Axelrod FB. Complicated peptic ulcer disease in three patients with familial dysautonomia. *J. Clin. Gastroenterol.* Aug 2011;45(7):611-613. PMID: 20930641
- 46.** Pavly-Le Traon A, Amarenco G, Duerr S, et al. The Movement Disorders task force review of dysautonomia rating scales in Parkinson's disease with regard to symptoms of orthostatic hypotension. *Mov. Disord.* Sep 2011;26(11):1985-1992. PMID: 21547951
- 47.** Miglis MG, Racela R, Kaufmann H. Seropositive myasthenia and autoimmune autonomic ganglionopathy: cross reactivity or subclinical disease? *Auton. Neurosci.* Oct 28 2011;164(1-2):87-88. PMID: 21745762
- 48.** Macefield VG, Norcliffe-Kaufmann L, Gutierrez J, Axelrod FB, Kaufmann H. Can loss of muscle spindle afferents explain the ataxic gait in Riley-Day syndrome? *Brain.* Nov 2011;134(Pt 11):3198-3208. PMID: 22075519, PMCID: PMC3212710
- 49.** Axelrod FB, Liebes L, Gold-Von Simson G, Mendoza S, Mull J, Leyne M, Norcliffe-Kaufmann L, Kaufmann H, Slaugenhaupt SA. Kinetin improves IKBKAP mRNA splicing in patients with familial dysautonomia. *Pediatr. Res.* Nov 2011;70(5):480-483. PMID: 21775922, PMCID: PMC3189334
- 50.** Ubhi K, Low P, Masliah E. Multiple system atrophy: a clinical and neuropathological perspective. *Trends Neurosci.* Nov 2011;34(11):581-590. PMID: 21962754, PMCID: PMC3200496
- 51.** Mustafa HI, Fessel JP, Barwise J, Shannon JR, Raj SR, Diedrich A, Biaggioni I, Robertson D. Dysautonomia: perioperative implications. *Anesthesiology.* Jan 2012;116(1):205-215. PMID: 22143168, PMCID: PMC3296831
- 52.** Brewster JA, Garland EM, Biaggioni I, Black BK, Ling JF, Shibao CA, Robertson D, Raj SR. Diurnal variability in orthostatic tachycardia: implications for the postural tachycardia syndrome. *Clinical science (London, England : 1979).* Jan 2012;122(1):25-31. PMID: 21751966, PMCID: PMC3172399
- 53.** Biaggioni I. Interventional approaches to reduce sympathetic activity in resistant hypertension: to ablate or stimulate? *Hypertension.* Feb 2012;59(2):194-195. PMID: 22184323

- 54.** Singer W, Sletten DM, Opfer-Gehrking TL, Brands CK, Fischer PR, Low PA. Postural tachycardia in children and adolescents: what is abnormal? *J. Pediatr.* Feb 2012;160(2):222-226. PMID: 21996154, PMCID: PMC3258321
- 55.** Okamoto LE, Raj SR, Peltier A, Gamboa A, Shabao C, Diedrich A, Black BK, Robertson D, Biaggioni I. Neurohumoral and haemodynamic profile in postural tachycardia and chronic fatigue syndromes. *Clinical science (London, England : 1979)*. Feb 2012;122(4):183-192. PMID: 21906029, PMCID: PMC3203411
- 56.** Mustafa HI, Raj SR, Diedrich A, Black BK, Paranjape SY, Dupont WD, Williams GH, Biaggioni I, Robertson D. Altered systemic hemodynamic and baroreflex response to angiotensin II in postural tachycardia syndrome. *Circ. Arrhythm. Electrophysiol.* Feb 1 2012;5(1):173-180. PMID: 22247480, PMCID: PMC3577936
- 57.** Wang Y, Shi M, Chung KA, et al. Phosphorylated alpha-synuclein in Parkinson's disease. *Sci Transl Med.* Feb 15 2012;4(121):121ra120. PMID: 22344688, PMCID: PMC3302662
- 58.** Mendoza-Santiesteban CE, Hedges TR, 3rd, Norcliffe-Kaufmann L, Warren F, Reddy S, Axelrod FB, Kaufmann H. Clinical neuro-ophthalmic findings in familial dysautonomia. *J. Neuroophthalmol.* Mar 2012;32(1):23-26. PMID: 21918475
- 59.** Okamoto LE, Shabao C, Gamboa A, Choi L, Diedrich A, Raj SR, Black BK, Robertson D, Biaggioni I. Synergistic effect of norepinephrine transporter blockade and alpha-2 antagonism on blood pressure in autonomic failure. *Hypertension.* Mar 2012;59(3):650-656. PMID: 22311903, PMCID: PMC3312003
- 60.** Figueroa JJ, Dyck PJ, Laughlin RS, Mercado JA, Massie R, Sandroni P, Low PA. Autonomic dysfunction in chronic inflammatory demyelinating polyradiculoneuropathy. *Neurology.* Mar 6 2012;78(10):702-708. PMID: 22357716, PMCID: PMC3306161
- 61.** Kaufmann H, Malamut R, Norcliffe-Kaufmann L, Rosa K, Freeman R. The Orthostatic Hypotension Questionnaire (OHQ): validation of a novel symptom assessment scale. *Clin. Auton. Res.* Apr 2012;22(2):79-90. PMID: 22045363
- 62.** Gamboa A, Okamoto LE, Diedrich A, et al. Sympathetic activation and nitric oxide function in early hypertension. *Am. J. Physiol. Heart Circ. Physiol.* Apr 1 2012;302(7):H1438-1443. PMID: 22287587, PMCID: PMC3330790
- 63.** Iodice V, Lipp A, Ahlskog JE, Sandroni P, Fealey RD, Parisi JE, Matsumoto JY, Benarroch EE, Kimpinski K, Singer W, Gehrking TL, Gehrking JA, Sletten DM, Schmeichel AM, Bower JH, Gilman S, Figueroa J, Low PA. Autopsy confirmed multiple system atrophy cases: Mayo experience and role of autonomic function tests. *J. Neurol. Neurosurg. Psychiatry.* Apr 2012;83(4):453-459. PMID: 22228725, PMCID: PMC3454474
- 64.** Gibbons CH, Centi J, Vernino S, Freeman R. Autoimmune autonomic ganglionopathy with reversible cognitive impairment. *Arch. Neurol.* Apr 2012;69(4):461-466. PMID: 22158721, PMCID: PMC3359761
- 65.** Kaufmann H, Malamut R, Norcliffe-Kaufmann L, Rosa K, Freeman R. The Orthostatic Hypotension Questionnaire (OHQ): validation of a novel symptom assessment scale. *Clin. Auton. Res.* Apr 2012;22(2):79-90. PMID: 22045363

- 66.** Muppudi S, Scribner M, Gibbons CH, Adams-Huet B, Spaeth EB, Vernino S. A Unique Manifestation of Pupillary Fatigue in Autoimmune Autonomic Ganglionopathy. *Arch. Neurol.* May 2012;69(5):644-648. PMID: 22232207, PMCID: PMC3433577
- 67.** Shibao C, Buchowski MS, Chen KY, Yu C, Biaggioni I. Chronic sympathetic attenuation and energy metabolism in autonomic failure. *Hypertension*. May 2012;59(5):985-990. PMID: 22469621, PMCID: PMC3383057
- 68.** Coffin ST, Black BK, Biaggioni I, Paranjape SY, Orozco C, Black PW, Dupont WD, Robertson D, Raj SR. Desmopressin acutely decreases tachycardia and improves symptoms in the postural tachycardia syndrome. *Heart Rhythm*. May 3 2012. PMID: 22561596, PMCID: PMC3419341
- 69.** Goldstein DS, Holmes C, Sharabi Y. Cerebrospinal fluid biomarkers of central catecholamine deficiency in Parkinson's disease and other synucleinopathies. *Brain*. Jun 2012;135(Pt 6):1900-1913. PMID: 22451506, PMCID: PMC3359749
- 70.** Jain S, Goldstein DS. Cardiovascular dysautonomia in Parkinson disease: from pathophysiology to pathogenesis. *Neurobiol. Dis.* Jun 2012;46(3):572-580. PMID: 22094370, PMCID: PMC3299874
- 71.** Shibao C, Okamoto L, Biaggioni I. Pharmacotherapy of autonomic failure. *Pharmacol. Ther.* Jun 2012;134(3):279-286. PMID: 21664375, PMCID: PMC3358114
- 72.** Kimpinski K, Iodice V, Sandroni P, Fealey RD, Vernino S, Low PA. Sudomotor dysfunction in autoimmune autonomic ganglionopathy: a follow-up study. *Clin. Auton. Res.* Jun 2012;22(3):131-136. PMID: 22127477, PMCID: PMC3469317
- 73.** Kimpinski K, Iodice V, Burton DD, Camilleri M, Mullan BP, Lipp A, Sandroni P, Gehrking TL, Sletten DM, Ahlskog JE, Fealey RD, Singer W, Low PA. The role of autonomic testing in the differentiation of Parkinson's disease from multiple system atrophy. *J. Neurol. Sci.* Jun 15 2012;317(1-2):92-96. PMID: 22421352, PMCID: PMC3340456
- 74.** Goldstein DS. Stress, allostatic load, catecholamines, and other neurotransmitters in neurodegenerative diseases. *Cell. Mol. Neurobiol.* Jul 2012;32(5):661-666. PMID: 22297542, PMCID: PMC4900164
- 75.** Lin X, Parisiadou L, Sgobio C, et al. Conditional expression of Parkinson's disease-related mutant alpha-synuclein in the midbrain dopaminergic neurons causes progressive neurodegeneration and degradation of transcription factor nuclear receptor related 1. *J. Neurosci.* Jul 4 2012;32(27):9248-9264. PMID: 22764233, PMCID: PMC3417246
- 76.** Kimpinski K, Figueroa JJ, Singer W, Sletten DM, Iodice V, Sandroni P, Fischer PR, Opfer-Gehrking TL, Gehrking JA, Low PA. A Prospective, 1-Year Follow-up Study of Postural Tachycardia Syndrome. *Mayo Clin. Proc.* Aug 2012;87(8):746-752. PMID: 22795533, PMCID: PMC3538485
- 77.** Swami SK, Liesinger JT, Shah N, Baddour LM, Banerjee R. Incidence of antibiotic-resistant Escherichia coli bacteriuria according to age and location of onset: a population-based study from Olmsted County, Minnesota. *Mayo Clin. Proc.* Aug 2012;87(8):753-759. PMID: 22795635, PMCID: PMC3538489
- 78.** Haddad MR, Macri CJ, Holmes CS, et al. In utero copper treatment for Menkes disease associated with a severe ATP7A mutation. *Mol. Genet. Metab.* Sep 2012;107(1-2):222-228. PMID: 22695177, PMCID: PMC3444639

- 79.** Kim JS, Oh YS, Lee KS, Kim YI, Yang DW, Goldstein DS. Association of cognitive dysfunction with neurocirculatory abnormalities in early Parkinson disease. *Neurology*. Sep 25 2012;79(13):1323-1331. PMID: 22972639, PMCID: PMC3448741
- 80.** Siepmann T, Gibbons CH, Illigens BM, Lafo JA, Brown CM, Freeman R. Quantitative pilomotor axon reflex test: a novel test of pilomotor function. *Arch. Neurol.* Nov 2012;69(11):1488-1492. PMID: 22868966, PMCID: PMC3563419
- 81.** Arnold AC, Biaggioni I. Management approaches to hypertension in autonomic failure. *Curr. Opin. Nephrol. Hypertens.* Sep 2012;21(5):481-485. PMID: 22801444, PMCID: PMC3732047
- 82.** Parsaik A, Allison TG, Singer W, Sletten DM, Joyner MJ, Benarroch EE, Low PA, Sandroni P. Deconditioning in patients with orthostatic intolerance. *Neurology*. Oct 2 2012;79(14):1435-1439. PMID: 22993288, PMCID: PMC3525293
- 83.** Axelrod FB, Rolnitzky L, Gold von Simson G, Berlin D, Kaufmann H. A rating scale for the functional assessment of patients with familial dysautonomia (Riley Day syndrome). *J. Pediatr.* Dec 2012;161(6):1160-1165. PMID: 22727867, PMCID: PMC3534733
- 84.** Goldstein DS, Sewell L, Holmes C, Pechnik S, Diedrich A, Robertson D. Temporary elimination of orthostatic hypotension by norepinephrine infusion. *Clin. Auton. Res.* Dec 2012;22(6):303-306. PMID: 22983778, PMCID: PMC4118053
- 85.** Sletten DM, Suarez GA, Low PA, Mandrekar J, Singer W. COMPASS 31: a refined and abbreviated Composite Autonomic Symptom Score. *Mayo Clin. Proc.* Dec 2012;87(12):1196-1201. PMID: 23218087, PMCID: PMC3541923
- 86.** Jordan J, Biaggioni I. Genetic influences on human baroreflex regulation. *Auton. Neurosci.* Dec 24 2012;172(1-2):23-25. PMID: 23167991
- 87.** Norcliffe-Kaufmann L, Kaufmann H. Familial dysautonomia (Riley-Day syndrome): when baroreceptor feedback fails. *Auton. Neurosci.* Dec 24 2012;172(1-2):26-30. PMID: 23178195
- 88.** Kaufmann H, Goldstein DS. Autonomic dysfunction in Parkinson disease. *Handbook of clinical neurology*. 2013;117:259-278. PMID: 24095131
- 89.** Low PA, Tomalia VA, Park KJ. Autonomic function tests: some clinical applications. *Journal of clinical neurology (Seoul, Korea)*. Jan 2013;9(1):1-8. PMID: 23346153, PMCID: PMC3543903
- 90.** Plash WB, Diedrich A, Biaggioni I, Garland EM, Paranjape SY, Black BK, Dupont WD, Raj SR. Diagnosing postural tachycardia syndrome: comparison of tilt testing compared with standing haemodynamics. *Clinical science (London, England : 1979)*. Jan 2013;124(2):109-114. PMID: 22931296, PMCID: PMC3478101
- 91.** Norcliffe-Kaufmann L, Axelrod FB, Kaufmann H. Developmental abnormalities, blood pressure variability and renal disease in Riley Day syndrome. *J. Hum. Hypertens.* Jan 2013;27(1):51-55. PMID: 22129610, PMCID: PMC3318957
- 92.** Tijero B, Gomez-Esteban JC, Lezcano E, et al. Cardiac sympathetic denervation in symptomatic and asymptomatic carriers of the E46K mutation in the alpha synuclein gene. *Parkinsonism Relat. Disord.* Jan 2013;19(1):95-100. PMID: 23000061
- 93.** Gamboa A, Okamoto LE, Raj SR, Diedrich A, Shiba CA, Robertson D, Biaggioni I. Nitric oxide and regulation of heart rate in patients with postural tachycardia syndrome and healthy subjects. *Hypertension*. Feb 2013;61(2):376-381. PMID: 23283362, PMCID: PMC3621717

- 94.** Norcliffe-Kaufmann LJ, Axelrod FB, Kaufmann H. Cyclic vomiting associated with excessive dopamine in Riley-day syndrome. *J. Clin. Gastroenterol.* Feb 2013;47(2):136-138. PMID: 22739220
- 95.** Nwazue VC, Raj SR. Confounders of vasovagal syncope: postural tachycardia syndrome. *Cardiol. Clin.* Feb 2013;31(1):101-109. PMID: 23217691, PMCID: PMC3522867
- 96.** Nwazue VC, Raj SR. Confounders of vasovagal syncope: orthostatic hypotension. *Cardiol. Clin.* Feb 2013;31(1):89-100. PMID: 23217690, PMCID: PMC3589989
- 97.** Macefield VG, Norcliffe-Kaufmann L, Axelrod FB, Kaufmann H. Cardiac-locked bursts of muscle sympathetic nerve activity are absent in familial dysautonomia. *J. Physiol.* Feb 1 2013;591(Pt 3):689-700. PMID: 23165765, PMCID: PMC3577542
- 98.** Arnold AC, Okamoto LE, Gamboa A, Shibao C, Raj SR, Robertson D, Biaggioni I. Angiotensin II, independent of plasma renin activity, contributes to the hypertension of autonomic failure. *Hypertension.* Mar 2013;61(3):701-706. PMID: 23266540, PMCID: PMC3573256
- 99.** Bagai K, Wakwe CI, Malow B, Black BK, Biaggioni I, Paranjape SY, Orozco C, Raj SR. Estimation of sleep disturbances using wrist actigraphy in patients with postural tachycardia syndrome. *Auton. Neurosci.* Mar 25 2013. PMID: 23538032, PMCID: PMC3700681
- 100.** Norcliffe-Kaufmann L, Martinez J, Axelrod F, Kaufmann H. Hyperdopaminergic crises in familial dysautonomia: a randomized trial of carbidopa. *Neurology.* Apr 23 2013;80(17):1611-1617. PMID: 23553478, PMCID: PMC3662326
- 101.** Garland EM, Cesar TS, Lonce S, Ferguson MC, Robertson D. An increase in renal dopamine does not stimulate natriuresis after fava bean ingestion. *Am. J. Clin. Nutr.* May 2013;97(5):1144-1150. PMID: 23553159, PMCID: PMC3628380
- 102.** Arnold AC, Okamoto LE, Diedrich A, et al. Low-dose propranolol and exercise capacity in postural tachycardia syndrome: a randomized study. *Neurology.* May 21 2013;80(21):1927-1933. PMID: 3616163, PMCID: PMC3716342
- 103.** Macefield VG, Norcliffe-Kaufmann LJ, Axelrod FB, Kaufmann H. Relationship between proprioception at the knee joint and gait ataxia in HSAN III. *Mov. Disord.* Jun 2013;28(6):823-827. PMID: 23681701, PMCID: PMC3694996
- 104.** Raj SR. Postural tachycardia syndrome (POTS). *Circulation.* Jun 11 2013;127(23):2336-2342. PMID: 23753844, PMCID: PMC3756553
- 105.** Shibao C, Lipsitz LA, Biaggioni I. Evaluation and treatment of orthostatic hypotension. *Journal of the American Society of Hypertension : JASH.* Jul-Aug 2013;7(4):317-324. PMID: 23721882, PMCID: PMC3769179
- 106.** Park KJ, Singer W, Sletten DM, Low PA, Bharucha AE. Gastric emptying in postural tachycardia syndrome: a preliminary report. *Clin. Auton. Res.* Aug 2013;23(4):163-167. PMID: 23708963, PMCID: PMC3737368

- 107.** Parsaik AK, Singer W, Allison TG, et al. Orthostatic intolerance without postural tachycardia: how much dysautonomia? *Clin. Auton. Res.* Aug 2013;23(4):181-188. PMID: 23729158, PMCID: PMC3902804
- 108.** Parsaik AK, Ahlskog JE, Singer W, et al. Central hyperadrenergic state after lightning strike. *Clin. Auton. Res.* Aug 2013;23(4):169-173. PMID: 23761114, PMCID: PMC3737249
- 109.** Phillips L, Robertson D, Melson MR, Garland EM, Joos KM. Pediatric ptosis as a sign of treatable autonomic dysfunction. *Am. J. Ophthalmol.* Aug 2013;156(2):370-374 e372. PMID: 23622564, PMCID: PMC3720787
- 110.** Schroeder C, Jordan J, Kaufmann H. Management of neurogenic orthostatic hypotension in patients with autonomic failure. *Drugs.* Aug 2013;73(12):1267-1279. PMID: 23857549
- 111.** Green EA, Raj V, Shiba CA, et al. Effects of norepinephrine reuptake inhibition on postural tachycardia syndrome. *Journal of the American Heart Association.* Oct 2013;2(5):e000395. PMID: 24002370, PMCID: PMC3835251
- 112.** Shiba C, Grijalva CG, Lipsitz LA, Biaggioni I, Griffin MR. Early discontinuation of treatment in patients with orthostatic hypotension. *Auton. Neurosci.* Oct 2013;177(2):291-296. PMID: 24008021, PMCID: PMC3988581
- 113.** Wang N, Gibbons CH, Lafo J, Freeman R. α -Synuclein in cutaneous autonomic nerves. *Neurology.* Oct 29 2013;81(18):1604-1610. PMID: 24089386, PMCID: PMC3806913
- 114.** Li H, Yu X, Liles C, et al. Autoimmune basis for postural tachycardia syndrome. *Journal of the American Heart Association.* 2014;3(1):e000755. PMID: 24572257, PMCID: PMC3959717
- 115.** Nwazue VC, Paranjape SY, Black BK, et al. Postural tachycardia syndrome and inappropriate sinus tachycardia: role of autonomic modulation and sinus node automaticity. *Journal of the American Heart Association.* 2014;3(2):e000700. PMID: 24721800, PMCID: PMC4187519
- 116.** Palma JA, Kaufmann H. Autonomic disorders predicting Parkinson's disease. *Parkinsonism Relat. Disord.* Jan 2014;20 Suppl 1:S94-98. PMID: 24262198, PMCID: PMC4122262
- 117.** Wada N, Singer W, Gehrking TL, et al. Determination of vagal baroreflex sensitivity in normal subjects. *Muscle Nerve.* Jan 29 2014. PMID: 24477673, PMCID: PMC4115054
- 118.** Green EA, Black BK, Biaggioni I, et al. Melatonin reduces tachycardia in Postural Tachycardia Syndrome (POTS): A Randomized, Crossover Trial. *Cardiovascular therapeutics.* Feb 4 2014. PMID: 24495468, PMCID: PMC3999238
- 119.** Raj Md Msci SR. Highlights in clinical autonomic neurosciences: Insights into the roles of the carotid body and carotid baroreceptor. *Auton. Neurosci.* Feb 20 2014. PMID: 24650802, PMCID: PMC4058374
- 120.** Low PA, Robertson D, Gilman S, et al. Efficacy and safety of rifampicin for multiple system atrophy: a randomised, double-blind, placebo-controlled trial. *Lancet Neurol.* Mar 2014;13(3):268-275. PMID: 24507091, PMCID: PMC4030757

- 121.** Mendoza-Santesteban CE, Hedges Iii TR, Norcliffe-Kaufmann L, Axelrod F, Kaufmann H. Selective retinal ganglion cell loss in familial dysautonomia. *J. Neurol.* Apr 2014;261(4):702-709. PMID: 24487827
- 122.** Mai TH, Wu J, Diedrich A, Garland EM, Robertson D. Calcitonin gene-related peptide (CGRP) in autonomic cardiovascular regulation and vascular structure. *Journal of the American Society of Hypertension : JASH.* May 2014;8(5):286-296. PMID: 24746612, PMCID: PMC4072204
- 123.** Nwazue VC, Arnold AC, Raj V, et al. Understanding the placebo effect in clinical trials for postural tachycardia syndrome. *Clin. Exp. Pharmacol. Physiol.* May 2014;41(5):325-330. PMID: 24606242, PMCID: PMC4005784
- 124.** Roncevic D, Palma JA, Martinez J, Goulding N, Norcliffe-Kaufmann L, Kaufmann H. Cerebellar and parkinsonian phenotypes in multiple system atrophy: similarities, differences and survival. *J. Neural Transm.* May 2014;121(5):507-512. PMID: 24337696, PMCID: PMC4134009
- 125.** Pandey AK, Kanagasundaram A, Raj SR. Deglutition syncope: does fluid temperature matter? *J. Am. Coll. Cardiol.* May 27 2014;63(20):e55. PMID: 24703921, PMCID: PMC4059494
- 126.** Stankovic I, Krismer F, Jesic A, et al. Cognitive impairment in multiple system atrophy: a position statement by the Neuropsychology Task Force of the MDS Multiple System Atrophy (MODIMSA) study group. *Mov. Disord.* Jun 2014;29(7):857-867. PMID: 24753321, PMCID: PMC4175376
- 127.** Macefield VG, Norcliffe-Kaufmann L, Loken L, Axelrod FB, Kaufmann H. Disturbances in affective touch in hereditary sensory & autonomic neuropathy type III. *Int. J. Psychophysiol.* Jul 2014;93(1):56-61. PMID: 24726998, PMCID: PMC4078239
- 128.** Gamboa A, Okamoto LE, Arnold AC, et al. Autonomic Blockade Improves Insulin Sensitivity in Obese Subjects. *Hypertension.* Jul 7 2014. PMID: 25001269, PMCID: PMC4162826
- 129.** Arnold AC, Haman K, Garland EM, et al. Cognitive Dysfunction in Postural Tachycardia Syndrome. *Clinical science (London, England : 1979).* Jul 8 2014. PMID: 25001527, PMCID: PMC4161607
- 130.** Kaufmann H, Freeman R, Biaggioni I, et al. Droxidopa for neurogenic orthostatic hypotension: A randomized, placebo-controlled, phase 3 trial. *Neurology.* Jul 22 2014;83(4):328-335. PMID: 24944260
- 131.** Figueroa JJ, Singer W, Parsaik A, et al. Multiple system atrophy: prognostic indicators of survival. *Mov. Disord.* Aug 2014;29(9):1151-1157. PMID: 24909319, PMCID: PMC4139446
- 132.** Coffin ST, Raj SR. Non-invasive management of vasovagal syncope. *Auton. Neurosci.* Sep 2014;184:27-32. PMID: 24996861, PMCID: PMC4151906
- 133.** Raj SR. How did the simple faint get so complicated? Syncope in 2014. *Auton. Neurosci.* Sep 2014;184:1-2. PMID: 25042646, PMCID: PMC4151883
- 134.** Wada N, Singer W, Gehrking TL, Sletten DM, Schmelzer JD, Low PA. Comparison of baroreflex sensitivity with a fall and rise in blood pressure induced by the Valsalva manoeuvre. *Clinical*

science (London, England: 1979). Sep 2014;127(5):307-313. PMID: 24597842, PMCID: PMC4024078

- 135.** Figueroa RA, Arnold AC, Nwazue VC, et al. Acute volume loading and exercise capacity in postural tachycardia syndrome. *Journal of applied physiology* (Bethesda, Md. : 1985). Sep 15 2014;117(6):663-668. PMID: 25059240, PMCID: PMC4157162
- 136.** Figueroa JJ, Bott-Kitslaar DM, Mercado JA, et al. Decreased orthostatic adrenergic reactivity in non-dipping postural tachycardia syndrome. *Auton. Neurosci.* Oct 2014;185:107-111. PMID: 25033770, PMCID: PMC4165658
- 137.** Biaggioni I. New developments in the management of neurogenic orthostatic hypotension. *Curr. Cardiol. Rep.* Nov 2014;16(11):542. PMID: 25303896
- 138.** Kpaeyeh J, Jr., Mar PL, Raj V, et al. Hemodynamic profiles and tolerability of modafinil in the treatment of postural tachycardia syndrome: a randomized, placebo-controlled trial. *J. Clin. Psychopharmacol.* Dec 2014;34(6):738-741. PMID: 25222185, PMCID: PMC4239166
- 139.** Okamoto LE, Gamboa A, Shibao CA, et al. Nebivolol, but not metoprolol, lowers blood pressure in nitric oxide-sensitive human hypertension. *Hypertension*. Dec 2014;64(6):1241-1247. PMID: 25267802, PMCID: PMC4230998
- 140.** Palma JA, Norcliffe-Kaufmann L, Fuente-Mora C, Percival L, Mendoza-Santiesteban C, Kaufmann H. Current treatments in familial dysautonomia. *Expert Opin. Pharmacother.* Dec 2014;15(18):2653-2671. PMID: 25323828, PMCID: PMC4236240
- 141.** Ramirez CE, Okamoto LE, Arnold AC, et al. Efficacy of atomoxetine versus midodrine for the treatment of orthostatic hypotension in autonomic failure. *Hypertension*. Dec 2014;64(6):1235-1240. PMID: 25185131, PMCID: PMC4231172
- 142.** Celedonio JE, Arnold AC, Dupont WD, et al. Residual sympathetic tone is associated with reduced insulin sensitivity in patients with autonomic failure. *Clin. Auton. Res.* 2015;25(5):309-315. PMID: 26359268, PMCID: PMC4785595
- 143.** Marinos A, Celedonio JE, Ramirez CE, et al. Time-Course Analysis of Flow Mediated Dilatation for the Evaluation of Endothelial Function After a High-Fat Meal in African Americans. *Journal of the American Heart Association*. 2015;4(11). PMID: 26541392, PMCID: PMC4845211
- 144.** Loavenbruck A, Iturrino J, Singer W, et al. Disturbances of gastrointestinal transit and autonomic functions in postural orthostatic tachycardia syndrome. *Neurogastroenterol. Motil.* Jan 2015;27(1):92-98. PMID: 25483980, PMCID: PMC4286289
- 145.** Jelani QU, Norcliffe-Kaufmann L, Kaufmann H, Katz SD. Vascular endothelial function and blood pressure regulation in afferent autonomic failure. *Am. J. Hypertens.* Feb 2015;28(2):166-172. PMID: 25128693, PMCID: PMC4357802
- 146.** Norcliffe-Kaufmann L, Palma JA, Krismer F. Multiple system atrophy: the case for an international collaborative effort. *Clin. Auton. Res.* Feb 2015;25(1):81-83. PMID: 25862257, PMCID: PMC4497581

- 147.** Figueroa JJ, Singer W, Sandroni P, et al. Effects of patient-controlled abdominal compression on standing systolic blood pressure in adults with orthostatic hypotension. *Arch. Phys. Med. Rehabil.* Mar 2015;96(3):505-510. PMID: 25448247, PMCID: PMC4339489
- 148.** Gutierrez JV, Norcliffe-Kaufmann L, Kaufmann H. Brainstem reflexes in patients with familial dysautonomia. *Clin. Neurophysiol.* Mar 2015;126(3):626-633. PMID: 25082092
- 149.** Palma JA, Gomez-Esteban JC, Norcliffe-Kaufmann L, et al. Orthostatic hypotension in Parkinson disease: how much you fall or how low you go? *Mov. Disord.* Apr 15 2015;30(5):639-645. PMID: 25678194, PMCID: PMC4397106
- 150.** Norcliffe-Kaufmann L, Katz SD, Axelrod F, Kaufmann H. Norepinephrine deficiency with normal blood pressure control in congenital insensitivity to pain with anhidrosis. *Ann. Neurol.* May 2015;77(5):743-752. PMID: 25627679, PMCID: PMC5074379
- 151.** Piccione EA, Sletten DM, Staff NP, Low PA. Autonomic system and amyotrophic lateral sclerosis. *Muscle Nerve.* May 2015;51(5):676-679. PMID: 25211238, PMCID: PMC4362936
- 152.** Gamboa A, Paranjape SY, Black BK, et al. Inspiratory resistance improves postural tachycardia: a randomized study. *Circ. Arrhythm. Electrophysiol.* Jun 2015;8(3):651-658. PMID: 25792354, PMCID: PMC4472504
- 153.** Kaufmann H, Norcliffe-Kaufmann L, Palma JA. Droxidopa in neurogenic orthostatic hypotension. *Expert Rev. Cardiovasc. Ther.* Jun 19 2015;1-17. PMID: 26092297, PMCID: PMC4509799
- 154.** Mar PL, Shibao CA, Garland EM, et al. Neurogenic hyperadrenergic orthostatic hypotension: a newly recognized variant of orthostatic hypotension in older adults with elevated norepinephrine (noradrenaline). *Clinical science (London, England : 1979).* Jul 2015;129(2):107-116. PMID: 25706983, PMCID: PMC4417057
- 155.** Cykowski MD, Coon EA, Powell SZ, et al. Expanding the spectrum of neuronal pathology in multiple system atrophy. *Brain.* Aug 2015;138(Pt 8):2293-2309. PMID: 25981961, PMCID: PMC4840945
- 156.** Garland EM, Celedonio JE, Raj SR. Postural Tachycardia Syndrome: Beyond Orthostatic Intolerance. *Curr. Neurol. Neurosci. Rep.* Sep 2015;15(9):60. PMID: 26198889, PMCID: PMC4664448
- 157.** Mendoza-Santiesteban CE, Palma JA, Martinez J, Norcliffe-Kaufmann L, Hedges TR, 3rd, Kaufmann H. Progressive retinal structure abnormalities in multiple system atrophy. *Mov. Disord.* Sep 11 2015. PMID: 26359930, PMCID: PMC4568758
- 158.** Arnold AC, Robertson D. Defective Wnt Signaling: A Potential Contributor to Cardiometabolic Disease? *Diabetes.* Oct 2015;64(10):3342-3344. PMID: 26405272, PMCID: PMC4587636
- 159.** Palma JA, Roda R, Norcliffe-Kaufmann L, Kaufmann H. Increased frequency of rhabdomyolysis in familial dysautonomia. *Muscle Nerve.* Nov 2015;52(5):887-890. PMID: 26202308, PMCID: PMC4596763

- 160.** Coon EA, Sletten DM, Suarez MD, et al. Clinical features and autonomic testing predict survival in multiple system atrophy. *Brain*. Dec 2015;138(Pt 12):3623-3631. PMID: 26369944, PMCID: PMC4840547
- 161.** Labbe C, Heckman MG, Lorenzo-Betancor O, et al. MAPT haplotype diversity in multiple system atrophy. *Parkinsonism Relat. Disord.* 2016. PMID: 27374978, PMCID: PMC5007155
- 162.** Loavenbruck AJ, Singer W, Mauermann ML, et al. Transthyretin amyloid neuropathy has earlier neural involvement but better prognosis than primary amyloid counterpart: an answer to the paradox? *Ann. Neurol.* 2016. PMID: 27422051, PMCID: PMC5016242
- 163.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 164.** Okamoto LE, Diedrich A, Baudenbacher FJ, et al. Efficacy of Servo-Controlled Splanchnic Venous Compression in the Treatment of Orthostatic Hypotension: A Randomized Comparison With Midodrine. *Hypertension*. 2016;68(2):418-426. PMID: 27271310, PMCID: PMC4945429
- 165.** Norcliffe-Kaufmann L, Kaufmann H, Martinez J, Katz SD, Tully L, Reynolds HR. Autonomic Findings in Takotsubo Cardiomyopathy. *Am. J. Cardiol.* Jan 15 2016;117(2):206-213. PMID: 26743349
- 166.** Arnold AC, Okamoto LE, Gamboa A, et al. Mineralocorticoid Receptor Activation Contributes to the Supine Hypertension of Autonomic Failure. *Hypertension*. Feb 2016;67(2):424-429. PMID: 26644241, PMCID: PMC4748950
- 167.** Bajaj S, Krismer F, Palma JA, et al. Diffusion-weighted MRI distinguishes Parkinson disease from the parkinsonian variant of multiple system atrophy: A systematic review and meta-analysis. *PLoS ONE*. 2017;12(12):e0189897. PMID: 29287113, PMCID: PMC5747439
- 168.** Coon EA, Fealey RD, Sletten DM, et al. Anhidrosis in multiple system atrophy involves pre- and postganglionic sudomotor dysfunction. *Mov Disord.* 2017;32(3):397-404. PMID: 27859565, PMCID: PMC5483990
- 169.** Coon EA, Low PA. Pure autonomic failure without alpha-synuclein pathology: an evolving understanding of a heterogeneous disease. *Clin Auton Res.* 2017;27(2):67-68. PMID: 28236005, PMCID: PMC5390280
- 170.** Dillon RC, Palma JA, Spalink CL, et al. Dexmedetomidine for refractory adrenergic crisis in familial dysautonomia. *Clin Auton Res.* 2017;27(1):7-15. PMID: 27752785, PMCID: PMC5292083
- 171.** Gibbons CH, Schmidt P, Biaggioni I, et al. The recommendations of a consensus panel for the screening, diagnosis, and treatment of neurogenic orthostatic hypotension and associated supine hypertension. *J Neurol.* 2017;264(8):1567-1582. PMID: 28050656, PMCID: PMC5533816

- 172.** Gibbons CH, Wang N, Freeman R. Cutaneous Alpha-Synuclein From Paraffin Embedded Autopsy Specimens in Parkinson's Disease. *Journal of Parkinson's disease*. 2017;7(3):503-509. PMID: 28582870, PMCID: PMC5909847
- 173.** Grijalva CG, Biaggioni I, Griffin MR, Shibao CA. Fludrocortisone Is Associated With a Higher Risk of All-Cause Hospitalizations Compared With Midodrine in Patients With Orthostatic Hypotension. *Journal of the American Heart Association*. 2017;6(10). PMID: 29025750, PMCID: PMC5721876
- 174.** Kaufmann H, Norcliffe-Kaufmann L, Palma JA. Pure autonomic failure vs. manifest CNS synucleinopathy: Relevance of stridor and autonomic biomarkers. *Ann Neurol*. 2017. PMID: 28472861, PMCID: PMC5499678
- 175.** Kaufmann H, Norcliffe-Kaufmann L, Palma JA, et al. Natural history of pure autonomic failure: A United States prospective cohort. *Ann Neurol*. 2017;81(2):287-297. PMID: 28093795, PMCID: PMC5323269
- 176.** Kaufmann H, Palma JA. Neurogenic orthostatic hypotension: the very basics. *Clin Auton Res*. 2017;27(Suppl 1):39-43. PMID: 28620715, PMCID: PMC5524853
- 177.** Mendoza-Santiesteban CE, Gabilondo I, Palma JA, Norcliffe-Kaufmann L, Kaufmann H. The Retina in Multiple System Atrophy: Systematic Review and Meta-Analysis. *Frontiers in neurology*. 2017;8:206. PMID: 28596752, PMCID: PMC5443142
- 178.** Mendoza-Santiesteban CE, Palma JA, Hedges TR, 3rd, et al. Pathological Confirmation of Optic Neuropathy in Familial Dysautonomia. *J Neuropathol Exp Neurol*. 2017;76(3):238-244. PMID: 28395083, PMCID: PMC5409127
- 179.** Mendoza-Santiesteban CE, Palma JA, Ortuno-Lizaran I, Cuenca N, Kaufmann H. Pathologic confirmation of retinal ganglion cell loss in multiple system atrophy. *Neurology*. 2017. PMID: 28490649, PMCID: PMC5467953
- 180.** Palma JA, Kaufmann H. Epidemiology, Diagnosis, and Management of Neurogenic Orthostatic Hypotension. *Movement disorders clinical practice*. 2017;4(3):298-308. PMID: 28713844, PMCID: PMC5506688
- 181.** Palma JA, Norcliffe-Kaufmann L, Perez MA, Spalink CL, Kaufmann H. Sudden Unexpected Death during Sleep in Familial Dysautonomia: A case-control study. *Sleep*. 2017. PMID: 28521050, PMCID: PMC5806542
- 182.** Palma JA, Spalink C, Barnes EP, Norcliffe-Kaufmann L, Kaufmann H. Neurogenic dysphagia with undigested macaroni and megaesophagus in familial dysautonomia. *Clin Auton Res*. 2017. PMID: 29196937, PMCID: PMC5807189
- 183.** Shibao CA, Kaufmann H. Pharmacotherapy of Cardiovascular Autonomic Dysfunction in Parkinson Disease. *CNS drugs*. 2017;31(11):975-989. PMID: 29076058, PMCID: PMC5809001
- 184.** Spalink CL, Barnes E, Palma JA, Norcliffe-Kaufmann L, Kaufmann H. Intranasal dexmedetomidine for adrenergic crisis in familial dysautonomia. *Clin Auton Res*. 2017;27(4):279-282. PMID: 28674865, PMCID: PMC5555081

- 185.** Wallach AI, Park H, Rucker JC, Kaufmann H. Supranuclear gaze palsy and horizontal ocular oscillations in Creutzfeldt-Jakob disease. *Neurology*. 2017;89(7):749. PMID: 28808164, PMCID: PMC5562964
- 186.** Aluma BB, Norcliffe-Kaufmann L, Sarouk I, et al. Resting Energy Expenditure in Patients with Familial Dysautonomia: A Preliminary Study. *J Pediatr Gastroenterol Nutr*. 2018. PMID: 30334929
- 187.** Bar-Aluma BE, Efrati O, Kaufmann H, Palma JA, Norcliffe-Kaufmann L. A Controlled Trial of Inhaled Bronchodilators in Familial Dysautonomia. *Lung*. 2018;196(1):93-101. PMID: 29234869
- 188.** Farrell MC, Brenner AS, Shibao CA. Diagnostic treatment dilemma: baroreflex failure or autoimmune autonomic ganglionopathy? *Clin Auton Res*. 2018. PMID: 30151691
- 189.** Kazachkov M, Palma JA, Norcliffe-Kaufmann L, et al. Respiratory care in familial dysautonomia: Systematic review and expert consensus recommendations. *Respir Med*. 2018;141:37-46. PMID: 30053970, PMCID: PMC6084453
- 190.** Kaufmann H, Jordan J. The Clinical Autonomic Research journal 2017 and onward. *Clin Auton Res*. 2017;27(1):1-2. PMID: 28124174, PMCID: PMC5488329
- 191.** Coon EA, Ahlskog JE, Silber MH, et al. Do selective serotonin reuptake inhibitors improve survival in multiple system atrophy? *Parkinsonism Relat Disord*. 2018;48:51-53. PMID: 29254663, PMCID: PMC5826868
- 192.** Cutsforth-Gregory JK, McKeon A, Coon EA, et al. Ganglionic Antibody Level as a Predictor of Severity of Autonomic Failure. *Mayo Clin Proc*. 2018;93(10):1440-1447. PMID: 30170741, PMCID: PMC6173625
- 193.** Gutierrez JV, Kaufmann H, Palma JA, Mendoza-Santiesteban C, Macefield VG, Norcliffe-Kaufmann L. Founder mutation in IKBKAP gene causes vestibular impairment in familial dysautonomia. *Clin Neurophysiol*. 2018;129(2):390-396. PMID: 29289840
- 194.** McKay JH, Cheshire WP. First symptoms in multiple system atrophy. *Clin Auton Res*. 2018. PMID: 29313153, PMCID: PMC5859695
- 195.** Mehr SE, Barbul A, Shibao CA. Gastrointestinal symptoms in postural tachycardia syndrome: a systematic review. *Clin Auton Res*. 2018. PMID: 29549458
- 196.** Norcliffe-Kaufmann L, Kaufmann H, Palma JA, et al. Orthostatic Heart Rate Changes in Patients with Autonomic Failure caused by Neurodegenerative Synucleinopathies. *Ann Neurol*. 2018. PMID: 29405350, PMCID: PMC5867255
- 197.** Palma JA. Autonomic dysfunction in Parkinson's disease and other synucleinopathies: Introduction to the series. *Mov Disord*. 2018;33(3):347-348. PMID: 29436737, PMCID: PMC5840012
- 198.** Palma JA, Kaufmann H. Treatment of autonomic dysfunction in Parkinson disease and other synucleinopathies. *Mov Disord*. 2018;33(3):372-390. PMID: 29508455, PMCID: PMC5844369

- 199.** Palma JA, Norcliffe-Kaufmann L, Kaufmann H. Diagnosis of multiple system atrophy. *Auton Neurosci*. 2018;211:15-25. PMID: 29111419, PMCID: PMC5869112
- 200.** Raj SR, Robertson D. Moving from the present to the future of Postural Tachycardia Syndrome - What we need. *Auton Neurosci*. 2018;215:126-128. PMID: 30539785, PMCID: PMC6293980
- 201.** Singh K, Palma JA, Kaufmann H, et al. Prevalence and characteristics of sleep-disordered breathing in familial dysautonomia. *Sleep medicine*. 2018;45:33-38. PMID: 29680425, PMCID: PMC5918267
- 202.** Wenning G, Trojanowski JQ, Kaufmann H, Wisniewski T, Rocca WA, Low PA. Is multiple system atrophy an infectious disease? *Ann Neurol*. 2018. PMID: 29293269, PMCID: PMC5876125
- 203.** Kaufmann H, Norcliffe-Kaufmann L, Palma JA. Improvement of daytime hypercapnia with nocturnal non-invasive ventilation in familial dysautonomia. *Clin Auton Res*. 2019. PMID: 30637592
- 204.** Palma JA, Gileles-Hillel A, Norcliffe-Kaufmann L, Kaufmann H. Chemoreflex failure and sleep-disordered breathing in familial dysautonomia: Implications for sudden death during sleep. *Auton Neurosci*. 2019;218:10-15. PMID: 30890343, PMCID: PMC6428199
- 205.** Riboldi GM, Palma JA, Cortes E, et al. Early-onset pathologically proven multiple system atrophy with LRRK2 G2019S mutation. *Mov Disord*. 2019. PMID: 31077434
- 206.** Won E, Palma JA, Kaufmann H, et al. Quantitative magnetic resonance evaluation of the trigeminal nerve in familial dysautonomia. *Clin Auton Res*. 2019. PMID: 30783821

Brain Vascular Malformation Consortium

Book Chapters

1. Morrison L, Akers A. Cerebral Cavernous Malformation, Familial. In: Pagon RA, Adam MP, Bird TD, et al., eds. GeneReviews(R). Seattle WA: University of Washington, Seattle; 2003 (Updated 2011 May 31).
2. Kim H, Pawlikowska L, Young WL. Molecular and genetic aspects of brain vascular malformation. In: Mohr JP, Wolf PA, Grotta JC, Moskowitz MA, Mayberg M, Von Kummer R, eds. *Stroke: Pathophysiology, diagnosis, and Management*. Philadelphia: Churchill Livingstone Elsevier; 2010.
3. Kim H, Pawlikowska L, Young W. Genetics and vascular biology of brain vascular malformations. In: Mohr J, Wolf P, Grotta J, Moskowitz M, Mayberg M, vonKummer R, eds. *Stroke: Pathophysiology, Diagnosis, and Management*. Philadelphia, PA: Churchill Livingstone Elsevier; 2011:169-186.

4. Morrison L. Familial cavernous malformations: a historical survey In: Rigamonti D, ed. Cavernous Malformations of the Nervous System. Cambridge: Cambridge University Press; 2011:15-20.
5. Morrison L. Genetic counseling In: Rigamonti D, ed. Cavernous Malformations of the Nervous System. Cambridge: Cambridge University Press; 2011:181-184.

Abstracted Presented at Conferences

1. Khan Y, Hart B, Morrison L. CCM in Hispanic children in New Mexico Paper presented at: 2nd Conference on Clinical Research for Rare Diseases; September 21, 2010; Washington, DC.
2. Khan Y, Kim H, Hart B, Morrison L. CCM in Hispanic children in New Mexico. Paper presented at: 39th Annual Meeting of the Child Neurology Society; October 13-16, 2010; Providence, RI.
3. Morrison L. CCM in Hispanic children Paper presented at: 39th Annual Meeting of the Child Neurology Society; October 13-16, 2010; Providence, RI.
4. Gonzales N, Gonzales J, Baca B, Morrison L. Finding the founder of CCM1 in New Mexico. Paper presented at: 6th Annual Pathobiology of CCM Scientific Meeting; November 1-2, 2010; Washington, DC.
5. Morrison L. Clinical characteristics in CCM1 Paper presented at: 6th Annual Pathobiology of CCM Scientific Meeting; November 1-2, 2010; Washington, DC.
6. Khan Y, Kim H, Hart B, Morrison L. CCM in Hispanic children in New Mexico Paper presented at: 6th Annual Pathobiology of CCM Scientific Meeting; November 1-2, 2010; Washington, DC
7. Morrison L. CCM in Hispanic children Paper presented at: Radiologic Society of North America 96th Scientific Assembly and Annual Meeting; November 28 - December 3, 2010; Chicago, IL.
8. Choquet H, Nelson J, Pawlikowska L, et al. Clinical factors associated with lesion count in familial cerebral cavernous malformation type 1 patients with the common Hispanic mutation. Paper presented at: RDCRN 3rd Conference on Clinical Research for Rare Diseases; October 2, 2012; Washington, DC.
9. Lance E, Lanier K, A Z, Comi A. Stimulant use in patients with Sturge-Weber Syndrome: safety and efficacy. Paper presented at: Child Neurology Society 41st Annual Meeting; October 31 - November 3, 2012; Huntington Beach, CA.
10. Sreenivasan A, Curatolo A, Connors S, Moses M, Comi A. Angiogenesis factors as urine biomarkers in Sturge-Weber Syndrome. Paper presented at: Child Neurology Society 41st Annual Meeting; October 31 - November 3, 2012; Huntington Beach, CA.
11. Choquet H, Nelson J, Pawlikowska L, et al. Clinical factors associated with lesion count in familial cerebral cavernous malformation type 1 patients with the common Hispanic mutation

Paper presented at: 8th Annual CCM Scientific Meeting; November 15-16, 2012; Washington, DC.

- 12.** Morrison L, Wegele A, Baca B. Cutaneous features of CCM1-CHM cohort Paper presented at: 8th Annual CCM Scientific Meeting; November 15-16, 2012; Washington, DC.
- 13.** Baca B, Hart B, Kim H, Morrison L. Lesion burden, location, and clinical characteristics in a genetically unique cohort of patients with cerebral cavernous malformations. Paper presented at: Radiologic Society of North America 96th Scientific Assembly and Annual Meeting; November 25-30, 2012; Chicago, IL.
- 14.** Choquet H, Pawlikowska L, Nelson J, et al. Association of variants in inflammatory genes with lesion burden in familial CCM1. Paper presented at: 10th HHT Scientific Conference; June 12-15, 2013; Cork, Ireland.
- 15.** Morrison L, Hart B, Baca B, et al. A comparison of hemorrhage and nonhemorrhage in patients with CCM1 common Hispanic mutation Paper presented at: 10th HHT Scientific Conference; June 12-15, 2013; Cork, Ireland.
- 16.** Choquet H, Pawlikowska L, Nelson J, et al. Association of variants in inflammatory genes with disease severity in familial cerebral cavernous malformations type 1. Paper presented at: American Society of Human Genetics 63rd Annual Meeting; October 22-26, 2013; Boston, MA.
- 17.** Choquet H, Nelson J, Pawlikowska L, et al. Association of common variants in immune response genes with severity of familiar cerebral cavernous malformation type 1. Paper presented at: 9th Annual CCM Scientific Meeting; November 7-8, 2013; Washington, DC.
- 18.** Morrison L, Hart B, Nelson J, et al. Predictors of functional outcome in patients with CCM1 common Hispanic mutation Paper presented at: 9th Annual CCM Scientific Meeting; November 7-8, 2013; Washington, DC.

Conference Proceedings

- 1.** Gallione C, Qin Y, Chu P, Akers A, Young W, Marchuk D. Re-examination of the two-hit hypothesis for HHT pathogenesis Paper presented at: 8th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; May 27-31, 2009; Spain.
- 2.** Choquet H, Nelson J, Pawlikowska L, et al. Clinical factors associated with lesion count in familial cerebral cavernous malformation Type 1 patients with the common Hispanic mutation Paper presented at: International Stroke Conference; February 5-8, 2013; Honolulu, HI.
- 3.** Gossage J, Kim H, Faughnan M, BrainVascularMalformationConsortium. Female sex and ENG mutation are associated with an increased risk of PAVM in patients with definite HHT Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.

4. Latino G, Faughnan M, Kim H, Young W, BrainVascularMalformationConsortium. A hereditary hemorrhagic telangiectasia severity score Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.
5. Lin D, Zessler A, Young W, Faughnan M, BrainVascularMalformationConsortium. Age of presentation in HHT: Brain AVM diagnosis vs. epistaxis Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.
6. Montifar M, Kasthuri R, Kim H, Young W, BrainVascularMalformationConsortium. Anemia is an important clinical problem in HHT. Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.
7. Nishida T, terBrugge K, Krings T, Henderson K, White R. Micro brain vascular malformations associated with hereditary hemorrhagic telangiectasia: arteriovenous malformations and capillary malformations. Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.
8. terBrugge K, T N, Krings T. Coincidental and acquired neurovascular malformations and shunts associated with HHT disorder Paper presented at: 10th International Hereditary Hemorrhagic Telangiectasia Scientific Conference; June 12-15, 2013; Cork, Ireland.
9. Choquet H, Nelson J, Pawlikowska L, et al. Association of common variants in immune response genes with severity of familial cerebral cavernous malformation type 1. Paper presented at: International Stroke Conference February 12-14, 2014; San Diego, CA.
10. Kim H, Nelson J, Krings T, terBrugge K, Young W, Faughnan M. Hemorrhage rates from brain arteriovenous malformations in HHT patients. Paper presented at: International Stroke Conference February 12-14, 2014; San Diego, CA.

Journal Articles

1. Ewen JB, Kossoff EH, Crone NE, Lin DD, Lakshmanan BM, Ferenc LM, Comi AM. Use of quantitative EEG in infants with port-wine birthmark to assess for Sturge-Weber brain involvement. *Clin. Neurophysiol.* Aug 2009;120(8):1433-1440. PMID: 19589723, PMCID: PMC2754702
2. Kossoff EH, Ferenc L, Comi AM. An infantile-onset, severe, yet sporadic seizure pattern is common in Sturge-Weber syndrome. *Epilepsia.* Sep 2009;50(9):2154-2157. PMID: 19389148
3. Leblanc GG, Golanov E, Awad IA, Young WL. Biology of vascular malformations of the brain. *Stroke.* Dec 2009;40(12):e694-702. PMID: 19834013, PMCID: PMC2810509
4. Zabel TA, Reesman J, Wodka EL, Gray R, Suskauer SJ, Turin E, Ferenc LM, Lin DD, Kossoff EH, Comi AM. Neuropsychological features and risk factors in children with Sturge-Weber syndrome: four case reports. *Clin Neuropsychol.* 2010;24(5):841-859. PMID: 20560093
5. Petersen TA, Morrison LA, Schrader RM, Hart BL. Familial versus sporadic cavernous malformations: differences in developmental venous anomaly association and lesion

- phenotype. *AJNR Am. J. Neuroradiol.* Feb 2010;31(2):377-382. PMID: 19833796, PMCID: PMC4455949
6. Arulrajah S, Ertan G, A MC, Tekes A, Lin DL, Huisman TA. MRI with diffusion-weighted imaging in children and young adults with simultaneous supra- and infratentorial manifestations of Sturge-Weber syndrome. *J. Neuroradiol.* Mar 2010;37(1):51-59. PMID: 19570579
 7. Suskauer SJ, Trovato MK, Zabel TA, Comi AM. Physiatric findings in individuals with Sturge-Weber syndrome. *Am. J. Phys. Med. Rehabil.* Apr 2010;89(4):323-330. PMID: 20068437, PMCID: PMC3189450
 8. Bharatha A, Faughnan ME, Kim H, Pourmohamad T, Krings T, Bayrak-Toydemir P, Pawlikowska L, McCulloch CE, Lawton MT, Dowd CF, Young WL, Terbrugge KG. Brain arteriovenous malformation multiplicity predicts the diagnosis of hereditary hemorrhagic telangiectasia: quantitative assessment. *Stroke.* Jan 2012;43(1):72-78. PMID: 22034007, PMCID: PMC3727386
 9. Lo W, Marchuk DA, Ball KL, Juhasz C, Jordan LC, Ewen JB, Comi A. Updates and future horizons on the understanding, diagnosis, and treatment of Sturge-Weber syndrome brain involvement. *Dev. Med. Child Neurol.* Mar 2012;54(3):214-223. PMID: 22191476, PMCID: PMC3805257
 10. Kadam SD, Gucek M, Cole RN, Watkins PA, Comi AM. Cell proliferation and oxidative stress pathways are modified in fibroblasts from Sturge-Weber syndrome patients. *Arch. Dermatol. Res.* Apr 2012;304(3):229-235. PMID: 22402795, PMCID: PMC4943026
 11. Lance EI, Sreenivasan AK, Zabel TA, Kossoff EH, Comi AM. Aspirin use in Sturge-Weber syndrome: side effects and clinical outcomes. *J. Child Neurol.* Feb 2013;28(2):213-218. PMID: 23112247, PMCID: PMC4373084
 12. Nishida T, Faughnan ME, Krings T, Chakinala M, Gossage JR, Young WL, Kim H, Pourmohamad T, Henderson KJ, Schrum SD, James M, Quinnine N, Bharatha A, Terbrugge KG, White RI, Jr. Brain arteriovenous malformations associated with hereditary hemorrhagic telangiectasia: gene-phenotype correlations. *Am. J. Med. Genet. A.* Nov 2012;158A(11):2829-2834. PMID: 22991266, PMCID: PMC3610331
 13. Siddique L, Sreenivasan A, Comi AM, Germain-Lee EL. Importance of utilizing a sensitive free thyroxine assay in Sturge-Weber syndrome. *J. Child Neurol.* Feb 2013;28(2):269-274. PMID: 23112245
 14. Akers A, Ball KL, Clancy M, et al. Brain Vascular Malformation Consortium: overview, progress, and future directions. *The Journal of Rare Disorders.* April 2013;1(1):1-15. PMID: 25221778, PMCID: PMC4160161
 15. Lopez J, Yeom KW, Comi A, Van Haren K. Case report of subdural hematoma in a patient with Sturge-Weber syndrome and literature review: questions and implications for therapy. *J. Child Neurol.* May 2013;28(5):672-675. PMID: 22805242
 16. Shirley MD, Tang H, Gallione CJ, Baugher JD, Frelin LP, Cohen B, North PE, Marchuk DA, Comi AM, Pevsner J. Sturge-Weber syndrome and port-wine stains caused by somatic mutation in GNAQ. *N. Engl. J. Med.* May 23 2013;368(21):1971-1979. PMID: 23656586, PMCID: PMC3749068
 17. Sreenivasan AK, Bachur CD, Lanier KE, et al. Urine vascular biomarkers in Sturge-Weber syndrome. *Vasc. Med.* Jun 2013;18(3):122-128. PMID: 23720035

- 18.** Vlachou PA, Colak E, Koculym A, et al. Improvement of ischemic cholangiopathy in three patients with hereditary hemorrhagic telangiectasia following treatment with bevacizumab. *J. Hepatol.* Jul 2013;59(1):186-189. PMID: 23439260
- 19.** Arora KS, Quigley HA, Comi AM, Miller RB, Jampel HD. Increased choroidal thickness in patients with Sturge-Weber syndrome. *JAMA ophthalmology*. Sep 2013;131(9):1216-1219. PMID: 23828561
- 20.** Bachur CD, Comi AM. Sturge-weber syndrome. *Curr. Treat. Options Neurol.* Oct 2013;15(5):607-617. PMID: 23907585, PMCID: PMC4487908
- 21.** Hart BL, Taheri S, Rosenberg GA, Morrison LA. Dynamic contrast-enhanced MRI evaluation of cerebral cavernous malformations. *Translational stroke research*. Oct 2013;4(5):500-506. PMID: 24323376, PMCID: PMC3939060
- 22.** Comi AM, Marchuk DA, Pevsner J. A needle in a haystack: sturge-weber syndrome gene discovery. *Pediatr. Neurol.* Dec 2013;49(6):391-392. PMID: 24075845
- 23.** Choquet H, Nelson J, Pawlikowska L, et al. Association of cardiovascular risk factors with disease severity in cerebral cavernous malformation type 1 subjects with the common Hispanic mutation. *Cerebrovasc. Dis.* 2014;37(1):57-63. PMID: 24401931, PMCID: PMC3995158
- 24.** Choquet H, Pawlikowska L, Nelson J, et al. Polymorphisms in inflammatory and immune response genes associated with cerebral cavernous malformation type 1 severity. *Cerebrovasc. Dis.* 2014;38(6):433-440. PMID: 25472749, PMCID: PMC4297571
- 25.** Cheng KH, Mariampillai A, Lee KK, et al. Histogram flow mapping with optical coherence tomography for in vivo skin angiography of hereditary hemorrhagic telangiectasia. *J. Biomed. Opt.* Aug 2014;19(8):086015. PMID: 25140883, PMCID: PMC4407667
- 26.** Latino GA, Kim H, Nelson J, Pawlikowska L, Young W, Faughnan ME. Severity score for hereditary hemorrhagic telangiectasia. *Orphanet J. Rare Dis.* 2014;9:188. PMID: 25928712, PMCID: PMC4302697
- 27.** Lance EI, Lanier KE, Zabel TA, Comi AM. Stimulant use in patients with sturge-weber syndrome: safety and efficacy. *Pediatr. Neurol.* Nov 2014;51(5):675-680. PMID: 25439578, PMCID: PMC4392725
- 28.** Reidy TG, Suskauer SJ, Bachur CD, McCulloch CE, Comi AM. Preliminary reliability and validity of a battery for assessing functional skills in children with Sturge-Weber syndrome. *Childs Nerv. Syst.* Dec 2014;30(12):2027-2036. PMID: 25344741, PMCID: PMC4276129
- 29.** Choquet H, Pawlikowska L, Lawton MT, Kim H. Genetics of cerebral cavernous malformations: current status and future prospects. *J. Neurosurg. Sci.* 2015;59(3):211-220. PMID: 25900426, PMCID: PMC4461471
- 30.** Comi A. Current Therapeutic Options in Sturge-Weber Syndrome. *Semin Pediatr Neurol.* 2015;22(4):295-301. PMID: 26706016, PMCID: PMC4943027
- 31.** Golden M, Saeidi S, Liem B, Marchand E, Morrison L, Hart B. Sensitivity of patients with familial cerebral cavernous malformations to therapeutic radiation. *J. Med. Imaging Radiat. Oncol.* Feb 2015;59(1):134-136. PMID: 25565562, PMCID: PMC4437719
- 32.** Golden MJ, Morrison LA, Kim H, Hart BL. Increased number of white matter lesions in patients with familial cerebral cavernous malformations. *AJNR Am. J. Neuroradiol.* May 2015;36(5):899-903. PMID: 25556204, PMCID: PMC4433814

- 33.** Kim H, Nelson J, Krings T, et al. Hemorrhage rates from brain arteriovenous malformation in patients with hereditary hemorrhagic telangiectasia. *Stroke*. May 2015;46(5):1362-1364. PMID: 25858236, PMCID: PMC4415515
- 34.** Krings T, Kim H, Power S, et al. Neurovascular manifestations in hereditary hemorrhagic telangiectasia: imaging features and genotype-phenotype correlations. *AJNR Am. J. Neuroradiol*. May 2015;36(5):863-870. PMID: 25572952, PMCID: PMC4433843
- 35.** Kavanaugh B, Sreenivasan A, Bachur C, Papazoglou A, Comi A, Zabel TA. Intellectual and adaptive functioning in Sturge-Weber Syndrome. *Child neuropsychology : a journal on normal and abnormal development in childhood and adolescence*. May 8 2015:1-14. PMID: 25952468, PMCID: PMC4868126
- 36.** Pawlikowska L, Nelson J, Guo DE, et al. The ACVRL1 c.314-35A>G polymorphism is associated with organ vascular malformations in hereditary hemorrhagic telangiectasia patients with ENG mutations, but not in patients with ACVRL1 mutations. *Am. J. Med. Genet. A*. Jun 2015;167(6):1262-1267. PMID: 25847705, PMCID: PMC4449292
- 37.** Choquet H, Trapani E, Goitre L, et al. Cytochrome P450 and matrix metalloproteinase genetic modifiers of disease severity in Cerebral Cavernous Malformation type 1. *Free Radic Biol Med*. 2016;92:100-109. PMID: 26795600, PMCID: PMC4774945
- 38.** Comi AM, Sahin M, Hammill A, et al. Leveraging a Sturge-Weber Gene Discovery: An Agenda for Future Research. *Pediatr Neurol*. 2016;58:12-24. PMID: 27268758, PMCID: PMC5509161
- 39.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis*. 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 40.** Walcott BP, Choudhri O, Lawton MT. Brainstem cavernous malformations: Natural history versus surgical management. *J. Clin. Neurosci*. 2016. PMID: 27320373, PMCID: PMC5011020
- 41.** Walcott BP, Winkler EA, Rouleau GA, Lawton MT. Molecular, Cellular, and Genetic Determinants of Sporadic Brain Arteriovenous Malformations. *Neurosurgery*. 2016;63 Suppl 1:37-42. PMID: 27399362, PMCID: PMC4941635
- 42.** Kaplan EH, Kossoff EH, Bachur CD, et al. Anticonvulsant Efficacy in Sturge-Weber Syndrome. *Pediatr. Neurol*. Jan 11 2016. PMID: 26997037, PMCID: PMC4943018
- 43.** Lo WD, Kumar R. Arterial Ischemic Stroke in Children and Young Adults. *Continuum (Minneapolis, Minn)*. 2017;23(1, Cerebrovascular Disease):158-180. PMID: 28157749
- 44.** Meybodi AT, Kim H, Nelson J, et al. Surgical Treatment vs Nonsurgical Treatment for Brain Arteriovenous Malformations in Patients with Hereditary Hemorrhagic Telangiectasia: A Retrospective Multicenter Consortium Study. *Neurosurgery*. 2017. PMID: 28973426, PMCID: PMC5732039
- 45.** Offermann EA, Sreenivasan A, DeJong MR, et al. Reliability and Clinical Correlation of Transcranial Doppler Ultrasound in Sturge-Weber Syndrome. *Pediatr Neurol*. 2017;74:15-23.e15. PMID: 28757309
- 46.** Pilli VK, Chugani HT, Juhasz C. Enlargement of deep medullary veins during the early clinical course of Sturge-Weber syndrome. *Neurology*. 2017;88(1):103-105. PMID: 27864521, PMCID: PMC5200860

- 47.** Strickland CD, Eberhardt SC, Bartlett MR, et al. Familial Cerebral Cavernous Malformations Are Associated with Adrenal Calcifications on CT Scans: An Imaging Biomarker for a Hereditary Cerebrovascular Condition. *Radiology*. 2017;284(2):443-450. PMID: 28318403, PMCID: PMC5519414
- 48.** Zou X, Hart BL, Mabray M, et al. Automated algorithm for counting microbleeds in patients with familial cerebral cavernous malformations. *Neuroradiology*. 2017;59(7):685-690. PMID: 28534135, PMCID: PMC5501247
- 49.** De la Torre AJ, Luat AF, Juhasz C, et al. A Multidisciplinary Consensus for Clinical Care and Research Needs for Sturge-Weber Syndrome. *Pediatr Neurol*. 2018;84:11-20. PMID: 29803545, PMCID: PMC6317878
- 50.** Morrison MA, Payabvash S, Chen Y, et al. A user-guided tool for semi-automated cerebral microbleed detection and volume segmentation: Evaluating vascular injury and data labelling for machine learning. *NeuroImage Clinical*. 2018;20:498-505. PMID: 30140608, PMCID: PMC6104340
- 51.** Pawlikowska L, Nelson J, Guo DE, et al. Association of common candidate variants with vascular malformations and intracranial hemorrhage in hereditary hemorrhagic telangiectasia. *Molecular genetics & genomic medicine*. 2018;6(3):350-356. PMID: 29932521, PMCID: PMC6014448
- 52.** Walcott BP, Winkler EA, Zhou S, et al. Identification of a rare BMP pathway mutation in a non-syndromic human brain arteriovenous malformation via exome sequencing. *Human genome variation*. 2018;5:18001. PMID: 29844917, PMCID: PMC5966745
- 53.** Wellman RJ, Cho SB, Singh P, Tune M, Pardo CA, Comi AM. Galphaq and hyper-phosphorylated ERK expression in Sturge-Weber syndrome leptomeningeal blood vessel endothelial cells. *Vasc Med*. 2019;24(1):72-75. PMID: 30112971

Brittle Bone Disorders Consortium

Abstracts

- 1.** Tosi L FM, Holland R, Goerlich C, Hart T, Cuthbertson, D, Sutton V, Krischer JP. Web-based Surveys using Patient Reported Outcome Measurement Information System (PROMIS) instruments allow documentation of important components of the disease experience among individuals with Osteogenesis Imperfecta. *Bone Abstracts* 2017.

Journal Articles

- 1.** Lietman CD, Marom R, Munivez E, et al. A transgenic mouse model of OI type V supports a neomorphic mechanism of the IFITM5 mutation. *J. Bone Miner. Res.* Mar 2015;30(3):489-498. PMID: 25251575, PMCID: PMC4333000
- 2.** Bellur S, Jain M, Cuthbertson D, et al. Cesarean delivery is not associated with decreased at-birth fracture rates in osteogenesis imperfecta. *Genet. Med.* 2016;18(6):570-576. PMID: 26426884, PMCID: PMC4818203

3. Grafe I, Alexander S, Yang T, et al. Sclerostin Antibody Treatment Improves the Bone Phenotype of Crtap(-/-) Mice, a Model of Recessive Osteogenesis Imperfecta. *J Bone Miner Res.* 2016;31(5):1030-1040. PMID: 26716893, PMCID: PMC4862916
4. Lim J, Grafe I, Alexander S, Lee B. Genetic causes and mechanisms of Osteogenesis Imperfecta. *Bone.* 2017;102:40-49. PMID: 28232077, PMCID: PMC5607741
5. Lietman CD, Lim J, Grafe I, et al. Fkbp10 Deletion in Osteoblasts Leads to Qualitative Defects in Bone. *J Bone Miner Res.* 2017;32(6):1354-1367. PMID: 28206698, PMCID: PMC5466482
6. Alhamdi S, Lee YC, Chowdhury S, et al. Heterozygous WNT1 variant causing a variable bone phenotype. *Am J Med Genet A.* 2018. PMID: 30246918
7. Dagdeviren D, Tamimi F, Lee B, Sutton R, Rauch F, Retrouvey JM. Dental and craniofacial characteristics caused by the p.Ser40Leu mutation in IFITM5. *Am J Med Genet A.* 2018. PMID: 30289614
8. Jain M, Tam A, Shapiro JR, et al. Growth characteristics in individuals with osteogenesis imperfecta in North America: results from a multicenter study. *Genet Med.* 2018. PMID: 29970925
9. Najirad M, Ma MS, Rauch F, et al. Oral health-related quality of life in children and adolescents with osteogenesis imperfecta: cross-sectional study. *Orphanet J Rare Dis.* 2018;13(1):187. PMID: 30359278, PMCID: PMC6202869
10. Tam A, Chen S, Schauer E, et al. A multicenter study to evaluate pulmonary function in osteogenesis imperfecta. *Clin Genet.* 2018. PMID: 30152014
11. Ma MS, Najirad M, Taqi D, et al. Caries prevalence and experience in individuals with osteogenesis imperfecta: A cross-sectional multicenter study. *Spec Care Dentist.* 2019;39(2):214-219. PMID: 30758072, PMCID: PMC6402806
12. Tosi LL, Floor MK, Dollar CM, Gillies AP; Members of the Brittle Bone Disease Consortium, Hart TS, Cuthbertson DD, Sutton VR, Krischer JP. Assessing disease experience across the life span for individuals with osteogenesis imperfecta: challenges and opportunities for patient-reported outcomes (PROs) measurement: a pilot study. *Orphanet J Rare Dis.* 2019;14(1):23. PMID: 30696467

Clinical Research in ALS & Related Disorders for Therapeutic Development

Journal Articles

1. Turner MR, Benatar M. Ensuring continued progress in biomarkers for amyotrophic lateral sclerosis. *Muscle Nerve.* Jan 2015;51(1):14-18. PMID: 25288265, PMCID: PMC4270289
2. Rossor AM, Oates EC, Salter HK, et al. Phenotypic and molecular insights into spinal muscular atrophy due to mutations in BICD2. *Brain.* Feb 2015;138(Pt 2):293-310. PMID: 25497877, PMCID: PMC4306822

3. Gendron TF, van Blitterswijk M, Bieniek KF, et al. Cerebellar c9RAN proteins associate with clinical and neuropathological characteristics of C9ORF72 repeat expansion carriers. *Acta Neuropathol.* Oct 2015;130(4):559-573. PMID: 26350237, PMCID: PMC4575385
4. van Blitterswijk M, Gendron TF, Baker MC, et al. Novel clinical associations with specific C9ORF72 transcripts in patients with repeat expansions in C9ORF72. *Acta Neuropathol.* Oct 5 2015. PMID: 26437865, PMCID: PMC4655160
5. van Blitterswijk M, Rademakers R. Neurodegenerative disease: C9orf72 repeats compromise nucleocytoplasmic transport. *Nature reviews. Neurology.* Dec 2015;11(12):670-672. PMID: 26526532
6. Liu Y, Pattamatta A, Zu T, et al. C9orf72 BAC Mouse Model with Motor Deficits and Neurodegenerative Features of ALS/FTD. *Neuron.* 2016;90(3):521-534. PMID: 27112499
7. Murdock BJ, Bender DE, Kashlan SR, et al. Increased ratio of circulating neutrophils to monocytes in amyotrophic lateral sclerosis. *Neurology(R) neuroimmunology & neuroinflammation.* 2016;3(4):e242. PMID: 27308304, PMCID: PMC4897983
8. Benatar M, Boylan K, Jeromin A, et al. ALS biomarkers for therapy development: State of the field and future directions. *Muscle Nerve.* Feb 2016;53(2):169-182. PMID: 26574709, PMCID: PMC4718795
9. Esanov R, Belle KC, van Blitterswijk M, et al. C9orf72 promoter hypermethylation is reduced while hydroxymethylation is acquired during reprogramming of ALS patient cells. *Exp. Neurol.* Mar 2016;277:171-177. PMID: 26746986, PMCID: PMC4761318
10. Capturing clinical data to advance ALS research.
<https://galaxy.epic.com/Redirect.aspx?DocumentID=3701881&Version=Epic 2017, EpicCare Ambulatory, 2017>
11. DeJesus-Hernandez M, Finch NA, Wang X, et al. In-depth clinico-pathological examination of RNA foci in a large cohort of C9ORF72 expansion carriers. *Acta Neuropathol.* 2017;134(2):255-269. PMID: 28508101, PMCID: PMC5508036
12. Esanov R, Cabrera GT, Andrade NS, et al. A C9ORF72 BAC mouse model recapitulates key epigenetic perturbations of ALS/FTD. *Mol Neurodegener.* 2017;12(1):46. PMID: 28606110, PMCID: PMC5468954
13. Finch NA, Wang X, Baker MC, et al. Abnormal expression of homeobox genes and transthyretin in C9ORF72 expansion carriers. *Neurology Genetics.* 2017;3(4):e161. PMID: 28660252, PMCID: PMC5479438
14. Gendron TF, Chew J, Stankowski JN, et al. Poly(GP) proteins are a useful pharmacodynamic marker for C9ORF72-associated amyotrophic lateral sclerosis. *Sci Transl Med.* 2017;9(383). PMID: 28356511, PMCID: PMC5576451
15. Gendron TF, Daugherty LM, Heckman MG, et al. Phosphorylated neurofilament heavy chain: A biomarker of survival for C9ORF72-associated amyotrophic lateral sclerosis. *Ann Neurol.* 2017;82(1):139-146. PMID: 28628244, PMCID: PMC5676468

- 16.** Jacquier A, Delorme C, Belotti E, et al. Cryptic amyloidogenic elements in mutant NEFH causing Charcot-Marie-Tooth 2 trigger aggresome formation and neuronal death. *Acta neuropathologica communications*. 2017;5(1):55. PMID: 28709447, PMCID: PMC5513089
- 17.** Mackenzie IR, Nicholson AM, Sarkar M, et al. TIA1 Mutations in Amyotrophic Lateral Sclerosis and Frontotemporal Dementia Promote Phase Separation and Alter Stress Granule Dynamics. *Neuron*. 2017;95(4):808-816.e809. PMID: 28817800, PMCID: PMC5576574
- 18.** Murdock BJ, Zhou T, Kashlan SR, Little RJ, Goutman SA, Feldman EL. Correlation of Peripheral Immunity With Rapid Amyotrophic Lateral Sclerosis Progression. *JAMA neurology*. 2017. PMID: 28973548, PMCID: PMC5822195
- 19.** Prudencio M, Gonzales PK, Cook CN, et al. Repetitive element transcripts are elevated in the brain of C9orf72 ALS/FTLD patients. *Hum Mol Genet*. 2017;26(17):3421-3431. PMID: 28637276
- 20.** Schols L, Rattay TW, Martus P, et al. Hereditary spastic paraparesis type 5: natural history, biomarkers and a randomized controlled trial. *Brain*. 2017;140(12):3112-3127. PMID: 29126212, PMCID: PMC5841036
- 21.** Shepheard SR, Wuu J, Cardoso M, et al. Urinary p75ECD: A prognostic, disease progression, and pharmacodynamic biomarker in ALS. *Neurology*. 2017;88(12):1137-1143. PMID: 28228570, PMCID: PMC5373786
- 22.** Strong MJ, Abrahams S, Goldstein LH, et al. Amyotrophic lateral sclerosis - frontotemporal spectrum disorder (ALS-FTSD): Revised diagnostic criteria. *Amyotrophic lateral sclerosis & frontotemporal degeneration*. 2017;18(3-4):153-174. PMID: 28054827
- 23.** Chen J, Kostenko V, Pioro EP, Trapp BD. MR Imaging-based Estimation of Upper Motor Neuron Density in Patients with Amyotrophic Lateral Sclerosis: A Feasibility Study. *Radiology*. 2018;162967. PMID: 29361242
- 24.** Farhan SMK, Howrigan DP, Abbott L, et al. Enrichment of rare protein truncating variants in amyotrophic lateral sclerosis patients. *bioRxiv*. 2018.
- 25.** Karanevich AG, Weisbrod LJ, Jawdat O, et al. Using automated electronic medical record data extraction to model ALS survival and progression. *BMC Neurol*. 2018;18(1):205. PMID: 30547800, PMCID: PMC6295028
- 26.** Lassuthova P, Rebelo AP, Ravenscroft G, et al. Mutations in ATP1A1 Cause Dominant Charcot-Marie-Tooth Type 2. *Am J Hum Genet*. 2018;102(3):505-514. PMID: 29499166, PMCID: PMC5985288
- 27.** Moens TG, Mizielinska S, Niccoli T, et al. Sense and antisense RNA are not toxic in Drosophila models of C9orf72-associated ALS/FTD. *Acta Neuropathol*. 2018;135(3):445-457. PMID: 29380049
- 28.** Nicolas A, Kenna KP, Renton AE, et al. Genome-wide Analyses Identify KIF5A as a Novel ALS Gene. *Neuron*. 2018;97(6):1268-1283.e1266. PMID: 29566793, PMCID: PMC5867896

- 29.** Pottier C, Rampersaud E, Baker M, et al. Identification of compound heterozygous variants in OPTN in an ALS-FTD patient from the CReATE consortium: a case report. *Amyotrophic lateral sclerosis & frontotemporal degeneration*. 2018;1-3. PMID: 29558868
- 30.** Simone R, Balendra R, Moens TG, et al. G-quadruplex-binding small molecules ameliorate C9orf72 FTD/ALS pathology in vitro and in vivo. *EMBO Mol Med*. 2018;10(1):22-31. PMID: 29113975, PMCID: PMC5760849
- 31.** Wilke C, Rattay TW, Hengel H, et al. Serum neurofilament light chain is increased in hereditary spastic paraplegias. *Annals of clinical and translational neurology*. 2018;5(7):876-882. PMID: 30009206, PMCID: PMC6043776
- 32.** Aladesuyi Arogundade O, Stauffer JE, Saberi S, et al. Antisense RNA foci are associated with nucleoli and TDP-43 mislocalization in C9orf72-ALS/FTD: a quantitative study. *Acta Neuropathol*. 2019. PMID: 30666413
- 33.** Placek K, Baer GM, Elman L, et al. UNC13A polymorphism contributes to frontotemporal disease in sporadic amyotrophic lateral sclerosis. *Neurobiol Aging*. 2019;73:190-199. PMID: 30368160, PMCID: PMC6251755

Consortium of Eosinophilic Gastrointestinal Disease Researchers

Abstracts

- 1.** Pesek RD, Reed CC, Muir AB, et al. Demographic Features of Eosinophilic Gastritis, Enteritis and Colitis using 10 years of Retrospective Data from a Multi-Center Consortium. Paper presented at: Digestive Disease Week 2018; Washington, DC, USA.
- 2.** Pesek RD, Reed CC, Muir AB, et al. Treatment patterns for eosinophilic gastritis, enteritis and colitis vary across sites and patient age in a multi-center consortium. Paper presented at: Digestive Disease Week 2018; Washington, DC, USA.
- 3.** Reed CC, Pesek RD, Muir AB, et al. Histologic Characterization of a Multi-Center Retrospective Cohort of Patients with Eosinophilic Gastrointestinal Disorders. Paper presented at: Digestive Disease Week 2018; Washington, DC, USA.

Book Chapters

- 1.** Strandburg KJ, Bechtold S. The Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR): An Emerging Knowledge Commons. In: Frischmann BM, Strandburg KJ, Madison MJ, eds. *Governing Medical Knowledge Commons*. Cambridge: Cambridge University Press; 2017:390-420.

Journal Articles

- 1.** Cianferoni A, Spergel JM. From genetics to treatment of eosinophilic esophagitis. *Curr. Opin. Allergy Clin. Immunol.* 2015;15(5):417-425. PMID: 26258919, PMCID: PMC4910818
- 2.** Cianferoni A, Spergel JM, Muir A. Recent advances in the pathological understanding of eosinophilic esophagitis. *Expert review of gastroenterology & hepatology*. 2015;9(12):1501-1510. PMID: 26470602, PMCID: PMC4943572

3. Nguyen N, Furuta GT, Menard-Katcher C. Recognition and Assessment of Eosinophilic Esophagitis: The Development of New Clinical Outcome Metrics. *Gastroenterology & hepatology*. 2015;11(10):670-674. PMID: 27330494, PMCID: PMC4849519
4. Rawson R, Anilkumar A, Newbury RO, et al. The TGFbeta1 Promoter SNP C-509T and Food Sensitization Promote Esophageal Remodeling in Pediatric Eosinophilic Esophagitis. *PLoS ONE*. 2015;10(12):e0144651. PMID: 26656423, PMCID: PMC4678166
5. Rothenberg ME. Molecular, genetic, and cellular bases for treating eosinophilic esophagitis. *Gastroenterology*. May 2015;148(6):1143-1157. PMID: 25666870, PMCID: PMC4409569
6. Eluri S, Dellon ES. Proton pump inhibitor-responsive oesophageal eosinophilia and eosinophilic oesophagitis: more similarities than differences. *Current opinion in gastroenterology*. Jul 2015;31(4):309-315. PMID: 26039722, PMCID: PMC4586084
7. Kia L, Hirano I. Distinguishing GERD from eosinophilic oesophagitis: concepts and controversies. *Nature reviews. Gastroenterology & hepatology*. Jul 2015;12(7):379-386. PMID: 25986303, PMCID: PMC4948861
8. Rajan J, Newbury RO, Anilkumar A, Dohil R, Broide DH, Aceves SS. Long-term assessment of esophageal remodeling in patients with pediatric eosinophilic esophagitis treated with topical corticosteroids. *J. Allergy Clin. Immunol.* Jul 30 2015. PMID: 26233926, PMCID: PMC4715736
9. Mehta P, Furuta GT. Eosinophils in Gastrointestinal Disorders: Eosinophilic Gastrointestinal Diseases, Celiac Disease, Inflammatory Bowel Diseases, and Parasitic Infections. *Immunol. Allergy Clin. North Am.* Aug 2015;35(3):413-437. PMID: 26209893, PMCID: PMC4515563
10. Kocher B, Dellon ES. Management of proton pump inhibitor responsive-esophageal eosinophilia and eosinophilic esophagitis: controversies in treatment approaches. *Expert review of gastroenterology & hepatology*. Sep 12 2015:1-11. PMID: 26365201, PMCID: PMC4644096
11. Jensen ET, Dellon ES. Environmental and infectious factors in eosinophilic esophagitis. *Best Pract. Res. Clin. Gastroenterol.* Oct 2015;29(5):721-729. PMID: 26552771, PMCID: PMC4641821
12. Leung J, Beukema KR, Shen AH. Allergic mechanisms of Eosinophilic oesophagitis. *Best Pract. Res. Clin. Gastroenterol.* Oct 2015;29(5):709-720. PMID: 26552770, PMCID: PMC4919901
13. Sodikoff J, Hirano I. Therapeutic strategies in eosinophilic esophagitis: Induction, maintenance and refractory disease. *Best Pract. Res. Clin. Gastroenterol.* Oct 2015;29(5):829-839. PMID: 26552781, PMCID: PMC4946566
14. Spergel JM. An allergist's perspective to the evaluation of Eosinophilic Esophagitis. *Best Pract. Res. Clin. Gastroenterol.* Oct 2015;29(5):771-781. PMID: 26552776, PMCID: PMC4641822
15. Tkachenko E, Rawson R, La E, et al. Rigid substrate induces esophageal smooth muscle hypertrophy and eosinophilic esophagitis fibrotic gene expression. *J. Allergy Clin. Immunol.* Nov 2 2015. PMID: 26542032, PMCID: PMC4826849

- 16.** Kliewer KL, Venter C, Cassin AM, et al. Should wheat, barley, rye, and/or gluten be avoided in a 6-food elimination diet? *J. Allergy Clin. Immunol.* Dec 24 2015. PMID: 26725190, PMCID: PMC4826834
- 17.** Carlson DA, Hirano I. Narrow-caliber esophagus of eosinophilic esophagitis: difficult to define, resistant to remedy. *Gastrointest Endosc.* 2016;83(6):1149-1150. PMID: 27206583, PMCID: PMC4942129
- 18.** Davis BP, Rothenberg ME. Mechanisms of Disease of Eosinophilic Esophagitis. *Annu Rev Pathol.* 2016;11:365-393. PMID: 26925500, PMCID: PMC4918086
- 19.** Dellon ES, Collins MH, Bonis PA, et al. Substantial Variability in Biopsy Practice Patterns Among Gastroenterologists for Suspected Eosinophilic Gastrointestinal Disorders. *Clin Gastroenterol Hepatol.* 2016;14(12):1842-1844. PMID: 27112108, PMCID: PMC5075280
- 20.** Hill DA, Spergel JM. The Immunologic Mechanisms of Eosinophilic Esophagitis. *Curr. Allergy Asthma Rep.* 2016;16(2):9. PMID: 26758862 , PMCID: PMC4913464
- 21.** Mehta P, Sundaram S, Furuta GT, Pan Z, Atkins D, Markowitz S. Propofol Use in Pediatric Patients With Food Allergy and Eosinophilic Esophagitis. *J. Pediatr. Gastroenterol. Nutr.* 2016. PMID: 27276432, PMCID: PMC5145772
- 22.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 23.** Muir AB, Benitez AJ, Dods K, Spergel JM, Fillon SA. Microbiome and its impact on gastrointestinal atopy. *Allergy.* 2016;71(9):1256-1263. PMID: 27240281, PMCID: PMC4976690
- 24.** Muir AB, Dods K, Henry SJ, et al. Eosinophilic Esophagitis-Associated Chemical and Mechanical Microenvironment Shapes Esophageal Fibroblast Behavior. *J Pediatr Gastroenterol Nutr.* 2016;63(2):200-209. PMID: 26727658, PMCID: PMC4929044
- 25.** Nguyen N, Furuta GT, Masterson JC. Deeper Than the Epithelium: Role of Matrix and Fibroblasts in Pediatric and Adult Eosinophilic Esophagitis. *J. Pediatr. Gastroenterol. Nutr.* 2016;63(2):168-169. PMID: 27457777, PMCID: PMC4965178
- 26.** Ruffner MA, Spergel JM. Non-IgE-mediated food allergy syndromes. *Ann Allergy Asthma Immunol.* 2016;117(5):452-454. PMID: 27788868, PMCID: PMC5116302
- 27.** Venter C, Fleischer DM. Diets for diagnosis and management of food allergy: The role of the dietitian in eosinophilic esophagitis in adults and children. *Ann Allergy Asthma Immunol.* 2016;117(5):468-471. PMID: 27592143
- 28.** Rajan J, Newbury RO, Anilkumar A, Dohil R, Broide DH, Aceves SS. Long-term assessment of esophageal remodeling in patients with pediatric eosinophilic esophagitis treated with topical corticosteroids. *J. Allergy Clin. Immunol.* Jan 2016;137(1):147-156 e148. PMID: 26233926, PMCID: PMC4715736
- 29.** Collins MH, Martin LJ, Alexander ES, et al. Newly developed and validated eosinophilic esophagitis histology scoring system and evidence that it outperforms peak eosinophil count

for disease diagnosis and monitoring. *Dis. Esophagus*. Feb 9 2016. PMID: 26857345, PMCID: PMC5373936

30. Molina-Infante J, Bredenoord AJ, Cheng E, et al. Proton pump inhibitor-responsive oesophageal eosinophilia: an entity challenging current diagnostic criteria for eosinophilic oesophagitis. *Gut*. Mar 2016;65(3):524-531. PMID: 26685124, PMCID: PMC4753110
31. Rawson R, Yang T, Newbury RO, et al. TGF-beta1-induced PAI-1 contributes to a profibrotic network in patients with eosinophilic esophagitis. *J. Allergy Clin. Immunol.* Apr 8 2016. PMID: 27212082, PMCID: PMC5014565
32. Morris DW, Stucke EM, Martin LJ, et al. Eosinophil progenitor levels are increased in patients with active pediatric eosinophilic esophagitis. *J. Allergy Clin. Immunol.* May 4 2016. PMID: 27199214, PMCID: PMC5014709
33. Imam T, Gupta SK. Topical glucocorticoid vs. diet therapy in eosinophilic esophagitis: the need for better treatment options. *Expert review of clinical immunology*. May 20 2016. PMID: 27206496, PMCID: PMC4947010
34. Atkins D. Aeroallergens in Eosinophilic Esophagitis: Significant Triggers or Noise in the System? *J Pediatr Gastroenterol Nutr.* 2017;64(1):1-2. PMID: 27253663, PMCID: PMC5135654
35. Atkins D, Furuta GT, Liacouras CA, Spergel JM. Eosinophilic Oesophagitis phenotypes: Ready for primetime? *Pediatr Allergy Immunol.* 2017. PMID: 28339136, PMCID: PMC5479411
36. Caldwell JM, Paul M, Rothenberg ME. Novel immunologic mechanisms in eosinophilic esophagitis. *Curr Opin Immunol.* 2017;48:114-121. PMID: 28965008, PMCID: PMC5682192
37. Case C, Furuta GT, Atkins D, Pan Z, Robinson J. Diet and Stress in Pediatric Eosinophilic Esophagitis. *J Pediatr Gastroenterol Nutr.* 2017;65(3):281-284. PMID: 27906799, PMCID: PMC5449262
38. Cheng K, Gupta SK, Kantor S, et al. Creating a multi-center rare disease consortium - the Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR). *Translational science of rare diseases*. 2017;2(3-4):141-155. PMID: 29333363, PMCID: PMC5757645
39. Eluri S, Book WM, Kodroff E, et al. Lack of Knowledge and Low Readiness for Health Care Transition in Eosinophilic Esophagitis and Eosinophilic Gastroenteritis. *J Pediatr Gastroenterol Nutr.* 2017;65(1):53-57. PMID: 28644350, PMCID: PMC5360549
40. Eluri S, Dellon ES. Toward More Efficient Dietary Elimination Therapy for Eosinophilic Esophagitis: The Fantastic 4? *Clin Gastroenterol Hepatol.* 2017;15(11):1668-1670. PMID: 28756058
41. Ferguson AE, Mukkada VA, Fulkerson PC. Pediatric Eosinophilic Esophagitis Endotypes: Are We Closer to Predicting Treatment Response? *Clin Rev Allergy Immunol.* 2017. PMID: 29270819
42. Furuta GT, Aceves SS. The National Biome Initiative: An allergy perspective. *J Allergy Clin Immunol.* 2017;139(4):1131-1134. PMID: 28257973

- 43.** Hill DA, Dudley JW, Spergel JM. The Prevalence of Eosinophilic Esophagitis in Pediatric Patients with IgE-Mediated Food Allergy. *The journal of allergy and clinical immunology In practice*. 2017;5(2):369-375. PMID: 28042003, PMCID: PMC5346349
- 44.** Menard-Katcher C, Benitez AJ, Pan Z, et al. Influence of Age and Eosinophilic Esophagitis on Esophageal Distensibility in a Pediatric Cohort. *Am J Gastroenterol*. 2017;112(9):1466-1473. PMID: 28508868, PMCID: PMC5601317
- 45.** Molina-Infante J, Hirano I, Spechler SJ. Clarifying misunderstandings and misinterpretations about proton pump inhibitor-responsive oesophageal eosinophilia. *Gut*. 2017;66(6):1173-1174. PMID: 27624888
- 46.** Nguyen N, Furuta GT, Menard-Katcher C. Sticky Steroids: In Search of an Approved Treatment for Eosinophilic Esophagitis. *J Pediatr Gastroenterol Nutr*. 2017;64(2):172-173. PMID: 27367789, PMCID: PMC5201455
- 47.** O'Shea KM, Aceves SS, Dellow ES, et al. Pathophysiology of Eosinophilic Esophagitis. *Gastroenterology*. 2017. PMID: 28757265, PMCID: PMC5787048
- 48.** Philpott H, Dellon ES. The role of maintenance therapy in eosinophilic esophagitis: who, why, and how? *J Gastroenterol*. 2017. PMID: 29018965, PMCID: PMC5794528
- 49.** Ruffner MA, Brown-Whitehorn TF, Verma R, et al. Clinical tolerance in eosinophilic esophagitis. *The journal of allergy and clinical immunology In practice*. 2017. PMID: 28811175, PMCID: PMC5809321
- 50.** Wen T, Rothenberg ME. Clinical Applications of the Eosinophilic Esophagitis Diagnostic Panel. *Frontiers in medicine*. 2017;4:108. PMID: 28770203, PMCID: PMC5509802
- 51.** Whelan KA, Merves JF, Giroux V, et al. Autophagy mediates epithelial cytoprotection in eosinophilic oesophagitis. *Gut*. 2017;66(7):1197-1207. PMID: 26884425, PMCID: PMC4987278
- 52.** Aceves SS, King E, Collins MH, Yang GY, Capocelli KE, Abonia JP, Atkins D, Bonis PA, Carpenter CL, Dellon ES, Eby MD, Falk GW, Gonsalves N, Gupta SK, Hirano I, Kocher K, Krischer JP, Leung J, Lipscomb J, Menard-Katcher P, Mukkada VA, Pan Z, Spergel JM, Sun Q, Wershil BK, Rothenberg ME, Furuta GT; Consortium of Eosinophilic Gastrointestinal Disease Researchers (CEGIR). Alignment of parent- and child-reported outcomes and histology in eosinophilic esophagitis across multiple CEGIR sites. *J Allergy Clin Immunol*. 2018;142(1):130-138.e131. PMID: 29852258, PMCID: PMC6035777
- 53.** Dellon ES, Hirano I. Epidemiology and Natural History of Eosinophilic Esophagitis. *Gastroenterology*. 2018;154(2):319-332.e313. PMID: 28774845, PMCID: PMC5794619
- 54.** Dellon ES, Liacouras CA, Molina-Infante J, et al. Updated International Consensus Diagnostic Criteria for Eosinophilic Esophagitis: Proceedings of the AGREE Conference. *Gastroenterology*. 2018;155(4):1022-1033.e1010. PMID: 30009819, PMCID: PMC6174113
- 55.** Durran SR, Mukkada VA, Guilbert TW. Eosinophilic Esophagitis: an Important Comorbid Condition of Asthma? *Clin Rev Allergy Immunol*. 2018. PMID: 29455359

- 56.** Egan M, Atkins D. What Is the Relationship Between Eosinophilic Esophagitis (EoE) and Aeroallergens? Implications for Allergen Immunotherapy. *Curr Allergy Asthma Rep.* 2018;18(8):43. PMID: 29909507
- 57.** Furuta GT, Katzka DA. Eosinophilic Esophagitis. *N Engl J Med.* 2015;373(17):1640-1648. PMID: 26488694, PMCID: PMC4905697
- 58.** Gupta SK, Falk GW, Aceves SS, et al. Consortium for Eosinophilic Researchers (CEGIR): Advancing the Field of Eosinophilic GI Disorders Through Collaboration. *Gastroenterology.* 2018. PMID: 30452923
- 59.** Hill DA, Spergel JM. The atopic march: Critical evidence and clinical relevance. *Ann Allergy Asthma Immunol.* 2018;120(2):131-137. PMID: 29413336, PMCID: PMC5806141
- 60.** Hill DA, Spergel JM. Is eosinophilic esophagitis a member of the atopic march? *Ann Allergy Asthma Immunol.* 2018;120(2):113-114. PMID: 29413330
- 61.** Hirano I, Spechler S, Furuta G, Dellon ES. White Paper AGA: Drug Development for Eosinophilic Esophagitis. *Clin Gastroenterol Hepatol.* 2017;15(8):1173-1183. PMID: 28342955, PMCID: PMC5522639
- 62.** Hiremath G, Kodroff E, Strobel MJ, et al. Individuals affected by eosinophilic gastrointestinal disorders have complex unmet needs and frequently experience unique barriers to care. *Clinics and research in hepatology and gastroenterology.* 2018;42(5):483-493. PMID: 29615329, PMCID: PMC6167209
- 63.** Hiremath G, Vaezi MF, Gupta SK, Acra S, Dellon ES. Management of Esophageal Food Impaction Varies Among Gastroenterologists and Affects Identification of Eosinophilic Esophagitis. *Dig Dis Sci.* 2018. PMID: 29460159
- 64.** Kasagi Y, Chandramouleeswaran PM, Whelan KA, et al. The Esophageal Organoid System Reveals Functional Interplay Between Notch and Cytokines in Reactive Epithelial Changes. *Cellular and molecular gastroenterology and hepatology.* 2018;5(3):333-352. PMID: 29552622, PMCID: PMC5852293
- 65.** Khoury P, Akuthota P, Ackerman SJ, et al. Revisiting the NIH Taskforce on the Research needs of Eosinophil-Associated Diseases (RE-TREAD). *J Leukoc Biol.* 2018;104(1):69-83. PMID: 29672914, PMCID: PMC6171343
- 66.** Kottryan L, Spergel JM, Cianferoni A. Immunology of the Ancestral Differences in Eosinophilic Esophagitis. *Ann Allergy Asthma Immunol.* 2018. PMID: 30414468
- 67.** Mark J, Fernando SD, Masterson JC, et al. Clinical Implications of Pediatric Colonic Eosinophilia. *J Pediatr Gastroenterol Nutr.* 2018;66(5):760-766. PMID: 29095349, PMCID: PMC5916023
- 68.** Muir AB, Jensen E, Wechsler J, et al. Overestimation of the prevalence of eosinophilic colitis with reliance on a single billing code. *bioRxiv.* 2018:414557.
- 69.** Muir A, Moore H, Spergel J. To treat or not to treat: The minimally symptomatic EoE patient. *Ann Allergy Asthma Immunol.* 2018. PMID: 30296478

- 70.** Muir AB, Wang JX, Nakagawa H. Epithelial-stromal crosstalk and fibrosis in eosinophilic esophagitis. *J Gastroenterol*. 2018. PMID: 30101408
- 71.** Nguyen N, Fernando SD, Biette KA, et al. TGF-beta1 alters esophageal epithelial barrier function by attenuation of claudin-7 in eosinophilic esophagitis. *Mucosal Immunol*. 2018;11(2):415-426. PMID: 28832026, PMCID: PMC5825237
- 72.** Patel RV, Hirano I. New Developments in the Diagnosis, Therapy, and Monitoring of Eosinophilic Esophagitis. *Current treatment options in gastroenterology*. 2018. PMID: 29357016, PMCID: PMC5843552
- 73.** Pesek RD, Gupta SK. Emerging drugs for eosinophilic esophagitis. *Expert Opin Emerg Drugs*. 2018;23(2):173-183. PMID: 29848130
- 74.** Pesek RD, Reed CC, Muir AB, Fulkerson PC, Menard-Katcher C, Falk GW, Kuhl J, Magier AZ, Ahmed F, DeMarshall M, Gupta A, Gross J, Ashorobi T, Carpenter CL, Krischer JP, Gonsalves N, Spergel JM, Gupta SK, Furuta GT, Rothenberg ME, Dellon ES. Increasing Rates of Diagnosis, Substantial Co-occurrence, and Variable Treatment Patterns of Eosinophilic Gastritis, Gastroenteritis and Colitis Based on 10 Year Data Across a Multi-Center Consortium. *bioRxiv* 413583 [Preprint]. September 12, 2018 [cited 2018 Sept 28]. Available from: <http://dx.doi.org/10.1101/413583>.
- 75.** Philpott H, Dellon E. Histologic improvement after 6 weeks of dietary elimination for eosinophilic esophagitis may be insufficient to determine efficacy. *Asia Pacific allergy*. 2018;8(2):e20. PMID: 29732296, PMCID: PMC5931927
- 76.** Reed CC, Pesek R, Muir AB, Fulkerson PC, Menard- Katcher CD, Falk GW, Kuhl J, Ahmed FN, DeMarshall M, Carpenter C, Krischer J, Spergel J, Gupta SK, Furuta G, Rothenberg ME, Collins MH, Capocelli K, Yang G-Y, Gupta A, Gross J, Ashorobi T, Magier AZ, Dellon ES. Sa1123 - Histologic Characterization of a Multi-Center Retrospective Cohort of Patients with Eosinophilic Gastrointestinal Disorders. *Gastroenterology* 2018;154:S-248-S-249
- 77.** Shoda T, Wen T, Aceves SS, et al. Eosinophilic oesophagitis endotype classification by molecular, clinical, and histopathological analyses: a cross-sectional study. *The lancet Gastroenterology & hepatology*. 2018. PMID: 29730081
- 78.** Spergel J, Aceves SS. Allergic components of eosinophilic esophagitis. *J Allergy Clin Immunol*. 2018;142(1):1-8. PMID: 29980277, PMCID: PMC6083871
- 79.** Spergel JM, Aceves SS, Kliewer K, et al. New developments in patients with eosinophilic gastrointestinal diseases presented at the CEGIR/TIGERS Symposium at the 2018 American Academy of Allergy, Asthma & Immunology Meeting. *J Allergy Clin Immunol*. 2018;142(1):48-53. PMID: 29803797, PMCID: PMC6129859
- 80.** Spergel JM, Dellon ES, Liacouras CA, et al. Summary of the updated international consensus diagnostic criteria for eosinophilic esophagitis: AGREE conference. *Ann Allergy Asthma Immunol*. 2018;121(3):281-284. PMID: 30030146, PMCID: PMC6139263
- 81.** Steinbach EC, Hernandez M, Dellon ES. Eosinophilic Esophagitis and the Eosinophilic Gastrointestinal Diseases: Approach to Diagnosis and Management. *The journal of allergy and clinical immunology In practice*. 2018;6(5):1483-1495. PMID: 30201096, PMCID: PMC6134874

- 82.** Wang R, Hirano I, Doerfler B, Zalewski A, Gonsalves N, Taft T. Assessing Adherence and Barriers to Long-Term Elimination Diet Therapy in Adults with Eosinophilic Esophagitis. *Dig Dis Sci*. 2018;63(7):1756-1762. PMID: 29611076
- 83.** Zevit N, Furuta GT. Eosinophilic Gastroenteritis and Colitis - Not Yet Ready For the Big Leagues. *J Pediatr Gastroenterol Nutr*. 2018. PMID: 29620603
- 84.** Azouz NP, Rothenberg ME. Mechanisms of gastrointestinal allergic disorders. *J Clin Invest*. 2019;130. PMID: 30855279
- 85.** Dellon ES. Editorial: the evolving epidemiology of EoE-up, up, and away? *Aliment Pharmacol Ther*. 2019;49(11):1448-1449. PMID: 31074899, PMCID: PMC6512851
- 86.** Hiremath G, Rogers E, Kennedy E, Hemler J, Acra S. A Comparative Analysis of Eating Behavior of School-Aged Children with Eosinophilic Esophagitis and Their Caregivers' Quality of Life: Perspectives of Caregivers. *Dysphagia*. 2019. PMID: 30712065

Developmental Synaptopathies Consortium

Journal Articles

- 1.** Lipton JO, Sahin M. The Neurology of mTOR. *Neuron*. Oct 22 2014;84(2):275-291. PMID: 25374355, PMCID: PMC4223653
- 2.** Ebrahimi-Fakhari D, Sahin M. Autism and the synapse: emerging mechanisms and mechanism-based therapies. *Curr. Opin. Neurol*. Apr 2015;28(2):91-102. PMID: 25695134
- 3.** Baumer FM, Song JW, Mitchell PD, et al. Longitudinal changes in diffusion properties in white matter pathways of children with tuberous sclerosis complex. *Pediatr. Neurol*. Jun 2015;52(6):615-623. PMID: 25817702, PMCID: PMC4442035
- 4.** Davis PE, Peters JM, Krueger DA, Sahin M. Tuberous Sclerosis: A New Frontier in Targeted Treatment of Autism. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*. Jul 2015;12(3):572-583. PMID: 25986747, PMCID: PMC4489948
- 5.** Neul JL, Sahin M. Therapeutic Advances in Autism and Other Neurodevelopmental Disorders. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*. Jul 2015;12(3):519-520. PMID: 26076992, PMCID: PMC4489958
- 6.** Tilot AK, Frazier TW, Eng C. Balancing Proliferation and Connectivity in PTEN-associated Autism Spectrum Disorder. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*. Jul 2015;12(3):609-619. PMID: 25916396, PMCID: PMC4489960
- 7.** Sundberg M, Sahin M. Cerebellar Development and Autism Spectrum Disorder in Tuberous Sclerosis Complex. *J. Child Neurol*. Aug 24 2015. PMID: 26303409, PMCID: PMC4644486
- 8.** Scherrer B, Schwartzman A, Taquet M, Sahin M, Prabhu SP, Warfield SK. Characterizing brain tissue by assessment of the distribution of anisotropic microstructural environments in diffusion-compartment imaging (DIAMOND). *Magn. Reson. Med*. Sep 12 2015. PMID: 26362832, PMCID: PMC4788987

9. Sahin M, Sur M. Genes, circuits, and precision therapies for autism and related neurodevelopmental disorders. *Science*. Nov 20 2015;350(6263). PMID: 26472761, PMCID: PMC4739545
10. Taquet M, Scherrer B, Boumal N, Peters JM, Macq B, Warfield SK. Improved fidelity of brain microstructure mapping from single-shell diffusion MRI. *Med. Image Anal.* Dec 2015;26(1):268-286. PMID: 26529580, PMCID: PMC4679640
11. Costales J, Kolevzon A. The therapeutic potential of insulin-like growth factor-1 in central nervous system disorders. *Neurosci Biobehav Rev*. 2016;63:207-222. PMID: 26780584, PMCID: PMC4790729
12. Ebrahimi-Fakhari D, Saffari A, Wahlster L, et al. Congenital disorders of autophagy: an emerging novel class of inborn errors of neuro-metabolism. *Brain*. 2016;139(Pt 2):317-337. PMID: 26715604
13. Im K, Ahtam B, Haehn D, et al. Altered Structural Brain Networks in Tuberous Sclerosis Complex. *Cereb Cortex*. 2016;26(5):2046-2058. PMID: 25750257, PMCID: PMC4830286
14. Keppler-Noreuil KM, Parker VE, Darling TN, Martinez-Agosto JA. Somatic overgrowth disorders of the PI3K/AKT/mTOR pathway & therapeutic strategies. *Am J Med Genet C Semin Med Genet*. 2016;172(4):402-421. PMID: 27860216, PMCID: PMC5592089
15. Marami B, Scherrer B, Afacan O, Erem B, Warfield SK, Gholipour A. Motion-Robust Diffusion-Weighted Brain MRI Reconstruction Through Slice-Level Registration-Based Motion Tracking. *IEEE Trans Med Imaging*. 2016;35(10):2258-2269. PMID: 27834639, PMCID: PMC5108524
16. Sahin M, Henske EP, Manning BD, et al. Advances and Future Directions for Tuberous Sclerosis Complex Research: Recommendations From the 2015 Strategic Planning Conference. *Pediatr Neurol*. 2016;60:1-12. PMID: 27267556, PMCID: PMC4921275
17. Siper PM, Zemon V, Gordon J, et al. Rapid and Objective Assessment of Neural Function in Autism Spectrum Disorder Using Transient Visual Evoked Potentials. *PLoS ONE*. 2016;11(10):e0164422. PMID: 27716799, PMCID: PMC5055293
18. Frazier TW, Klingemier EW, Beukemann M, et al. Development of an Objective Autism Risk Index Using Remote Eye Tracking. *J. Am. Acad. Child Adolesc. Psychiatry*. Apr 2016;55(4):301-309. PMID: 27015721, PMCID: PMC4808563
19. Byrd V, Getz TM, Padmanabhan R, Arora H, Eng C. Microbiome in PTEN hamartoma tumor syndrome. *Endocr Relat Cancer*. 2017. PMID: 29233840, PMCID: PMC5799828
20. Capal JK, Bernardino-Cuesta B, Horn PS, et al. Influence of seizures on early development in tuberous sclerosis complex. *Epilepsy Behav*. 2017;70(Pt A):245-252. PMID: 28457992, PMCID: PMC5497719
21. Capal JK, Horn PS, Murray DS, et al. Utility of the Autism Observation Scale for Infants in Early Identification of Autism in Tuberous Sclerosis Complex. *Pediatr Neurol*. 2017;75:80-86. PMID: 28844798, PMCID: PMC5610103

- 22.** Davis PE, Filip-Dhima R, Sideridis G, et al. Presentation and Diagnosis of Tuberous Sclerosis Complex in Infants. *Pediatrics*. 2017;140(6). PMID: 29101226, PMCID: PMC5703775
- 23.** Frazier TW, Strauss M, Klingemier EW, et al. A Meta-Analysis of Gaze Differences to Social and Nonsocial Information Between Individuals With and Without Autism. *J Am Acad Child Adolesc Psychiatry*. 2017;56(7):546-555. PMID: 28647006, PMCID: PMC5578719
- 24.** Hussain SA, Mathern GW, Hung P, Weng J, Sankar R, Wu JY. Intraoperative fast ripples independently predict postsurgical epilepsy outcome: Comparison with other electrocorticographic phenomena. *Epilepsy Res*. 2017;135:79-86. PMID: 28644979, PMCID: PMC5568451
- 25.** Martin KR, Zhou W, Bowman MJ, et al. The genomic landscape of tuberous sclerosis complex. *Nature communications*. 2017;8:15816. PMID: 28643795, PMCID: PMC5481739
- 26.** Srivastava S, Sahin M. Autism spectrum disorder and epileptic encephalopathy: common causes, many questions. *J Neurodev Disord*. 2017;9:23. PMID: 28649286, PMCID: PMC5481888
- 27.** De Rubeis S, Siper PM, Durkin A, et al. Delineation of the genetic and clinical spectrum of Phelan-McDermid syndrome caused by SHANK3 point mutations. *Molecular autism*. 2018;9:31. PMID: 29719671, PMCID: PMC5921983
- 28.** de Vries PJ, Wilde L, de Vries MC, Moavero R, Pearson DA, Curatolo P. A clinical update on tuberous sclerosis complex-associated neuropsychiatric disorders (TAND). *Am J Med Genet C Semin Med Genet*. 2018. PMID: 30117265
- 29.** Frazier TW, Klingemier EW, Parikh S, et al. Development and Validation of Objective and Quantitative Eye Tracking-Based Measures of Autism Risk and Symptom Levels. *J Am Acad Child Adolesc Psychiatry*. 2018;57(11):858-866. PMID: 30392627, PMCID: PMC6220711
- 30.** Hussain SA, Schmid E, Peters JM, et al. High vigabatrin dosage is associated with lower risk of infantile spasms relapse among children with tuberous sclerosis complex. *Epilepsy Res*. 2018;148:1-7. PMID: 30296632, PMCID: PMC6347124
- 31.** Khan OI, Zhou X, Leon J, et al. Prospective longitudinal overnight video-EEG evaluation in Phelan-McDermid Syndrome. *Epilepsy Behav*. 2018;80:312-320. PMID: 29402632
- 32.** Marami B, Scherrer B, Khan S, et al. Motion-robust diffusion compartment imaging using simultaneous multi-slice acquisition. *Magn Reson Med*. 2018. PMID: 30443929
- 33.** Modi ME, Sahin M. The Way Forward for Mechanism-Based Therapeutics in Genetically Defined Neurodevelopmental Disorders. *Clin Pharmacol Ther*. 2018. PMID: 30101418
- 34.** Nariai H, Wu JY, Bernardo D, Fallah A, Sankar R, Hussain SA. Interrater reliability in visual identification of interictal high-frequency oscillations on electrocorticography and scalp EEG. *Epilepsia open*. 2018;3(Suppl Suppl 2):127-132. PMID: 30564771, PMCID: PMC6293061
- 35.** Peron A, Au KS, Northrup H. Genetics, genomics, and genotype-phenotype correlations of TSC: Insights for clinical practice. *Am J Med Genet C Semin Med Genet*. 2018. PMID: 30255984

- 36.** Peron A, Northrup H. Tuberous sclerosis complex. *Am J Med Genet C Semin Med Genet*. 2018;178(3):274-277. PMID: 30325570
- 37.** Peters JM, Prohl A, Kapur K, et al. Longitudinal Effects of Everolimus on White Matter Diffusion in Tuberous Sclerosis Complex. *Pediatr Neurol*. 2018. PMID: 30424962
- 38.** Rensonnet G, Scherrer B, Warfield SK, Macq B, Taquet M. Assessing the validity of the approximation of diffusion-weighted-MRI signals from crossing fascicles by sums of signals from single fascicles. *Magn Reson Med*. 2018;79(4):2332-2345. PMID: 28714064, PMCID: PMC5770244
- 39.** Srivastava S, Scherrer B, Prohl AK, et al. Volumetric Analysis of the Basal Ganglia and Cerebellar Structures in Patients with Phelan-McDermid Syndrome. *Pediatr Neurol*. 2018. PMID: 30396833
- 40.** Yehia L, Ngeow J, Eng C. PTENopathies: from biological insights to evidence-based precision medicine. *J Clin Invest*. 2019;129(2):452-464. PMID: 30614812, PMCID: PMC6355220

Dystonia Coalition

Abstracts Presented at Conferences

- 1.** LeDoux MS, Xiao J, Rudzinska M, Bastian RW, Van Gerpen JA, Wszolek ZK. Expansion of the Genotypic and Phenotypic Spectra of THAP1 Mutations. Poster presented at: 14th International Congress of Parkinson's Disease and Movement Disorders; June 13-17, 2010; Buenos Aires, Argentina.
- 2.** Xiao J, Zhao Y, Bastian RW, Perlmutter JS, Racette BA, Tabbal SD, Karimi M, Paniello RC, Wszolek ZK, Utti RJ, Van Gerpen JA, Simon DK, Tarsy K, Hedera P, Truong DD, Frei KP, Batish S. A rare sequence variant in Intron 1 of THAP1 is associated with primary dystonia. Paper presented at: 14th International Congress of Parkinson's Disease and Movement Disorders; June 13-17, 2010; Buenos Aires, Argentina.
- 3.** Puschmann A, Xiao J, Bastian RW, LeDoux MS, Wszolek ZK. Familial late-onset focal dystonia in an African-American family. Poster presented at: 135th American Neurological Association, 'Works in Progress'; September 12-15, 2010; San Francisco, CA.
- 4.** Rosen A, Jinnah HA. An innovative infrastructure for common consortium challenges. Poster presented at: Conference on Clinical Research for Rare Diseases; September 21, 2010; Bethesda, MD.
- 5.** Roze E. Preliminary results from healthy volunteers. *Human Brain Mapping Meeting*. Quebec City, Canada2011.
- 6.** LeDoux MS. Expansion of the Genotypic and Phenotypic Spectra of THAP1 Mutations. *15th International Congress of Parkinson's Disease and Movement Disorders*. Toronto, Canada2011.
- 7.** White L, Hapner E, Klein A, Delgaudio J, Hanfelt J, Jinnah HA, Johns M. Co-prevalence of tremor in patients with spasmodic dysphonia: a case-control study. Paper presented at: Combined Otolaryngological Spring Meetings; April/May, 2011; Chicago, IL.

8. Schmidt A, Jabusch H, Altenmueller E, et al. Phenotypic spectrum of musician's dystonia: A task-specific disorder? Paper presented at: 15th International Congress of Parkinson's Disease and Movement Disorders; June 4-9, 2011; Toronto, Canada
9. White L, Klein A, Hapner E, Delgaudio J, Hanfelt J, Jinnah HA, Johns M. Co-prevalence of anxiety and depression in patients with spasmodic dysphonia: a case-control study. Paper presented at: The Voice Foundation Annual Symposium: Care of the Professional Voice; June 5, 2011; Philadelphia, PA.
10. Defazio G, Abbruzzese G, Jinnah H, et al. Development and validation of clinical diagnostic guidelines for primary blepharospasm. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
11. Peterson D, Littlewort G, Orona A, Bartlett M, Martino D, Defazio G. Rating blepharospasm severity with computer-aided video processing. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
12. Prudente C, Pardo C, Jinnah H. Neuropathology of idiopathic cervical dystonia. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
13. Self M, Corriveau R, Rosen A, et al. Establishment of a biorepository for primary dystonias: Collaborative efforts of the NINDS human genetic resource center and the Dystonia Coalition. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
14. Rosen A, Perlmutter J, Comella C, et al. The Dystonia Coalition: Two years of progress. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
15. Yan L, Hicks M, Perlmutter J, Coalition D. Secured web-based video sharing for dystonia clinical research. Paper presented at: 5th International Dystonia Symposium; October 20-22, 2011; Barcelona, Spain.
16. Prudente C, Pardo C, Jinnah H. Neuropathology of idiopathic cervical dystonia. Paper presented at: 2011 Annual Society for Neuroscience; November 12-16, 2011; Washington, DC.
17. Prudente C, Pardo C, Jinnah H. Neuropathology of primary cervical dystonia. Paper presented at: Division Students Advisory Council (DSAC) Symposium2012; Atlanta, GA.
18. Lohmann K, Schmidt A, Hemmelmann C, et al. Identification of a genetic risk factor for musician's dystonia. Paper presented at: Musician's Summit of the Dystonia Medical Research Foundation; March 9-10, 2012; New York, NY.
19. Ferrazzano G, Cossu G, Fabbrini G, et al. Development and validation of clinical diagnostic guidelines for primary blepharospasm. Paper presented at: 16th International Congress of Parkinson's Disease and Movement Disorders; June 17-21, 2012; Dublin, Ireland.
20. Lohmann K, Schmidt A, Hemmelmann C, et al. Identification of a genetic risk factor for musician's dystonia. Paper presented at: 16th International Congress of Parkinson's Disease and Movement Disorders; June 17-21, 2012; Dublin, Ireland.
21. Prudente C, Pardo C, Jinnah H. Neuropathology of primary cervical dystonia. Paper presented at: 16th International Congress of Parkinson's Disease and Movement Disorders; June 17-21, 2012; Dublin, Ireland.

- 22.** Rosen A, Perlmutter J, Comella C, et al. Dystonia Coalition. Paper presented at: 16th International Congress of Parkinson's Disease and Movement Disorders; June 17-21, 2012; Dublin, Ireland.
- 23.** Peterson D, Zukas C, Littlewort G, et al. Automating objective, video-based evaluation of blepharospasm symptoms from multicenter clinical examinations. Paper presented at: 3rd Conference on Clinical Research for Rare Diseases; October 2, 2012; Rockville, MD.
- 24.** Rosen A, Perlmutter J, Comella C, et al. The Dystonia Coalition: Three years of progress. Paper presented at: 3rd Conference on Clinical Research for Rare Diseases; October 2, 2012; Rockville, MD.
- 25.** Deng H, Buetefisch C, Kimberley T. Effects of rTMS and sensorimotor retraining in focal hand dystonia. Paper presented at: 2012 Annual Meeting of the Society for Neuroscience; October 13-17, 2012; New Orleans, LA.
- 26.** Goodman E, Rosen A, Jinnah H. Reasons for failure of botulinum toxin treatments in cervical dystonia. Paper presented at: 3rd Conference on Clinical Research for Rare Diseases; October 2, 2012; Rockville, MD.
- 27.** Schmidt R, Chen M, Deng H, Buetefisch C, Kimberley T. Effect of rTMS and sensorimotor retraining in focal dystonia. Paper presented at: Center for Clinical Movement Science Symposium2013; Minneapolis, MN.
- 28.** Khashnoodi M, Factor S, Jinnah H. Secondary blepharospasm associated with structural lesions of the brain. Paper presented at: American Academy of Neurology 65th Annual Meeting; March 16-23, 2013; San Diego, CA.
- 29.** Frucht S. Developing a scale for musician's dystonia. *2nd International Congress on Treatment of Dystonia*. Hannover, Germany2013.
- 30.** Klein C. Genetic subtyping of dystonias. *2nd International Congress on Treatment of Dystonia*. Hannover, Germany2013.
- 31.** Berman B, Hallett M. Basal ganglia circuit disturbances and symptomatology in primary focal dystonia (PFD). Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.
- 32.** Comella C, Stebbins G, Zurowski M, et al. Development of a comprehensive cervical dystonia rating scale. Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.
- 33.** Patel N, Hanfelt J, Marsh L, Jankovic J. Sensory tricks (corrective maneuvers) in cervical dystonia. Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.
- 34.** Perlmutter J, Yan L, Jinnah H, et al. Dystonia Coalition: The first two years of a multicenter study. Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.
- 35.** Rosen A, Testa C, Jinnah H. Prevalence of tremor among subjects recruited by the Dystonia Coalition. Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.

- 36.** Rosen A, Yan L, Perlmutter J, Jinnah H. Family history reported in subjects recruited by the Dystonia Coalition. Paper presented at: 17th International Congress of Parkinson's Disease and Movement Disorders; June 16-20, 2013; Sydney, Australia.
- 37.** Rosen A, Perlmutter J, Comella C, et al. The Dystonia Coalition: Four years of progress. Paper presented at: 21st World Congress of Neurology; September 21-26, 2013; Vienna, Austria.
- 38.** Arkadir D. A link between corticostriatal plasticity and risk taking in humans. *Computational and Systems Neuroscience (Cosyne)*. Salt Lake City, Utah2014.
- 39.** Arkadir D. Increased risk-taking in DYT1 dystonia suggests a link between striatal LTP/LTD and decision making in humans. Paper presented at: 18th Annual Movement Disorder's Society International Congress of Parkinson's Disease and Movement Disorders2014; Stockholm, Sweden.
- 40.** Comella C, Perlmutter J, Jinnah H, et al. Convergent validity of the revised motor and psychiatric TWSTRS module of the Comprehensive Cervical Dystonia Rating Scale (CCDRS). Paper presented at: 18th Annual Movement Disorder's Society International Congress of Parkinson's Disease and Movement Disorders2014; Stockholm, Sweden.
- 41.** Prudente C, Stillia R, Buetefisch C, et al. Imaging neural controls of head movements in humans. Paper presented at: 18th Annual Movement Disorder's Society International Congress of Parkinson's Disease and Movement Disorders2014; Stockholm, Sweden.
- 42.** Rosen A, Goodman E, Jinnah H. Reasons for failure of botulinum toxin treatments in cervical dystonia. Paper presented at: 18th Annual Movement Disorder's Society International Congress of Parkinson's Disease and Movement Disorders2014; Stockholm, Sweden.
- 43.** Zurowski M, McDonald W, Comella C, et al. Reliability and validity of the revised TWSTRS psychiatric module (TWSTRS-Psych) of the Comprehensive Cervical Dystonia Rating Scale (CCDRS). Paper presented at: 18th Annual Movement Disorder's Society International Congress of Parkinson's Disease and Movement Disorders2014; Stockholm, Sweden.
- 44.** Pirio Richardson S, Tinaz S, Radigan M. Identification of optimal stimulation site for cervical dystonia symptoms: an exploratory study. *Translational Science Meeting*. Washington DC2014.
- 45.** Dunbar K, Johns MI, Jinnah H, Rosen A, White L, Wojno T. Why the Delay in Diagnosis? Increased Time from Symptom Onset to Diagnosis in Belpharospasm: A Prospective, Clinic-Based Study. Paper presented at: North American Neuro-Ophthalmology Society 41st Annual Meeting2015; San Diego, CA.

Journal Articles

- 1.** Cloud LJ, Jinnah HA. Treatment strategies for dystonia. *Expert Opin. Pharmacother.* Jan 2010;11(1):5-15. PMID: 20001425, PMCID: PMC3495548
- 2.** Xiao J, Zhao Y, Bastian RW, Perlmutter JS, Racette BA, Tabbal SD, Karimi M, Paniello RC, Wszolek ZK, Uitti RJ, Van Gerpen JA, Simon DK, Tarsy D, Hedera P, Truong DD, Frei KP, Dev Batish S, Blitzer A, Pfeiffer RF, Gong S, LeDoux MS. Novel THAP1 sequence variants in primary dystonia. *Neurology*. Jan 19 2010;74(3):229-238. PMID: 20083799, PMCID: PMC2809032
- 3.** Carbon M, Argyelan M, Habeck C, Ghilardi MF, Fitzpatrick T, Dhawan V, Pourfar M, Bressman SB, Eidelberg D. Increased sensorimotor network activity in DYT1 dystonia: a functional imaging study. *Brain*. Mar 2010;133(Pt 3):690-700. PMID: 20207699, PMCID: PMC2842516

4. Hess EJ, Jen JC, Jinnah HA, Benarroch EE. Neuronal voltage-gated calcium channels: brief overview of their function and clinical implications in neurology. *Neurology*. Sep 7 2010;75(10):937; author reply 937-938. PMID: 20820007
5. Jinnah HA. Needles in haystacks: the challenges of rare diseases. *Dev. Med. Child Neurol*. Jan 2011;53(1):6-7. PMID: 21171235, PMCID: PMC3059553
6. Ludlow CL. Spasmodic dysphonia: a laryngeal control disorder specific to speech. *J. Neurosci*. Jan 19 2011;31(3):793-797. PMID: 21248101, PMCID: PMC4940852
7. Xiao J, Zhao Y, Bastian RW, Perlmuter JS, Racette BA, Tabbal SD, Karimi M, Paniello RC, Wszolek ZK, Uitti RJ, Van Gerpen JA, Simon DK, Tarsy D, Hedera P, Truong DD, Frei KP, Blitzer A, Rudzinska M, Pfeiffer RF, Le C, LeDoux MS. The c.-237_236GA>TT THAP1 sequence variant does not increase risk for primary dystonia. *Mov. Disord*. Feb 15 2011;26(3):549-552. PMID: 21370264, PMCID: PMC3171986
8. LeDoux MS. Animal models of dystonia: Lessons from a mutant rat. *Neurobiol. Dis.* May 2011;42(2):152-161. PMID: 21081162, PMCID: PMC3171987
9. Neychev VK, Gross RE, Lehericy S, Hess EJ, Jinnah HA. The functional neuroanatomy of dystonia. *Neurobiol. Dis.* May 2011;42(2):185-201. PMID: 21303695, PMCID: PMC3478782
10. Puschmann A, Xiao J, Bastian RW, Searcy JA, LeDoux MS, Wszolek ZK. An African-American family with dystonia. *Parkinsonism Relat. Disord.* Aug 2011;17(7):547-550. PMID: 21601506, PMCID: PMC3137742
11. White LJ, Klein AM, Hapner ER, Delgaudio JM, Hanfelt JJ, Jinnah HA, Johns MM, 3rd. Coprevalence of tremor with spasmodic dysphonia: a case-control study. *Laryngoscope*. Aug 2011;121(8):1752-1755. PMID: 21792965, PMCID: PMC3146022
12. Jinnah HA, Hallett M. In the wink of an eye: nature and nurture in blepharospasm. *Neurology*. Aug 16 2011;77(7):616-617. PMID: 21775742
13. Shamim EA, Chu J, Scheider LH, Savitt J, Jinnah HA, Hallett M. Extreme task specificity in writer's cramp. *Mov. Disord*. Sep 2011;26(11):2107-2109. PMID: 21714006, PMCID: PMC3417074
14. Thompson VB, Jinnah HA, Hess EJ. Convergent mechanisms in etiologically-diverse dystonias. *Expert Opin. Ther. Targets*. Dec 2011;15(12):1387-1403. PMID: 22136648, PMCID: PMC3514401
15. Hedera P, Xiao J, Puschmann A, Momcilovic D, Wu SW, LeDoux MS. Novel PRRT2 mutation in an African-American family with paroxysmal kinesigenic dyskinesia. *BMC Neurol*. 2012;12:93. PMID: 22985072, PMCID: PMC3460747
16. LeDoux MS. The genetics of dystonias. *Adv. Genet*. 2012;79:35-85. PMID: 2989765
17. LeDoux MS. Dystonia: phenomenology. *Parkinsonism Relat. Disord*. Jan 2012;18 Suppl 1:S162-164. PMID: 22166421, PMCID: PMC4869992
18. Xiao J, Uitti RJ, Zhao Y, Vemula SR, Perlmuter JS, Wszolek ZK, Maraganore DM, Auburger G, Leube B, Lehnhoff K, LeDoux MS. Mutations in CIZ1 cause adult onset primary cervical dystonia. *Ann. Neurol*. Apr 2012;71(4):458-469. PMID: 22447717, PMCID: PMC3334472

- 19.** Revuelta GJ, Benatar M, Freeman A, et al. Clinical subtypes of anterocollis in parkinsonian syndromes. *J. Neurol. Sci.* Apr 15 2012;315(1-2):100-103. PMID: 22133481, PMCID: PMC3495550
- 20.** LeDoux MS, Xiao J, Rudzinska M, Bastian RW, Wszolek ZK, Van Gerpen JA, Puschmann A, Momcilovic D, Vemula SR, Zhao Y. Genotype-phenotype correlations in THAP1 dystonia: molecular foundations and description of new cases. *Parkinsonism Relat. Disord.* Jun 2012;18(5):414-425. PMID: 22377579, PMCID: PMC3358360
- 21.** Fleming BM, Schwab EL, Nouer SS, Wan JY, LeDoux MS. Prevalence, predictors, and perceived effectiveness of complementary, alternative and integrative medicine in adult-onset primary dystonia. *Parkinsonism Relat. Disord.* Sep 2012;18(8):936-940. PMID: 22633698, PMCID: PMC3430825
- 22.** White LJ, Hapner ER, Klein AM, et al. Coprevalence of anxiety and depression with spasmodic dysphonia: a case-control study. *J. Voice.* Sep 2012;26(5):667 e661-666. PMID: 22209056, PMCID: PMC3495551
- 23.** Ushe M, Perlmutter JS. Oromandibular and lingual dystonia associated with spinocerebellar ataxia type 8. *Mov. Disord.* Dec 2012;27(14):1741-1742. PMID: 23283653, PMCID: PMC3539208
- 24.** Popa T, Velayudhan B, Hubsch C, et al. Cerebellar processing of sensory inputs primes motor cortex plasticity. *Cereb. Cortex.* Feb 2013;23(2):305-314. PMID: 22351647, PMCID: PMC3539453
- 25.** Prudente CN, Pardo CA, Xiao J, Hanfelt J, Hess EJ, Ledoux MS, Jinnah HA. Neuropathology of cervical dystonia. *Exp. Neurol.* Mar 2013;241:95-104. PMID: 23195594, PMCID: PMC3570661
- 26.** Albanese A, Bhatia K, Bressman SB, et al. Phenomenology and classification of dystonia: a consensus update. *Mov. Disord.* Jun 15 2013;28(7):863-873. PMID: 23649720, PMCID: PMC3729880
- 27.** Albanese A, Sorbo FD, Comella C, et al. Dystonia rating scales: critique and recommendations. *Mov. Disord.* Jun 15 2013;28(7):874-883. PMID: 23893443, PMCID: PMC4207366
- 28.** Fung VS, Jinnah HA, Bhatia K, Vidailhet M. Assessment of patients with isolated or combined dystonia: an update on dystonia syndromes. *Mov. Disord.* Jun 15 2013;28(7):889-898. PMID: 23893445, PMCID: PMC4216675
- 29.** Jinnah HA, Berardelli A, Comella C, et al. The focal dystonias: current views and challenges for future research. *Mov. Disord.* Jun 15 2013;28(7):926-943. PMID: 23893450, PMCID: PMC3733486
- 30.** Jinnah HA, Delong MR, Hallett M. The dystonias: past, present, and future. *Mov. Disord.* Jun 15 2013;28(7):849-850. PMID: 23893441, PMCID: PMC3787865
- 31.** Mink JW. Special concerns in defining, studying, and treating dystonia in children. *Mov. Disord.* Jun 15 2013;28(7):921-925. PMID: 23893449, PMCID: PMC3806453
- 32.** Zurowski M, McDonald WM, Fox S, Marsh L. Psychiatric comorbidities in dystonia: emerging concepts. *Mov. Disord.* Jun 15 2013;28(7):914-920. PMID: 23893448, PMCID: PMC3842100
- 33.** Hubsch C, Roze E, Popa T, et al. Defective cerebellar control of cortical plasticity in writer's cramp. *Brain.* Jul 2013;136(Pt 7):2050-2062. PMID: 23801734, PMCID: PMC3692031

- 34.** Shaikh AG, Wong AL, Zee DS, Jinnah HA. Keeping your head on target. *J. Neurosci.* Jul 3 2013;33(27):11281-11295. PMID: 23825431, PMCID: PMC3718362
- 35.** Moscovich M, LeDoux MS, Xiao J, et al. Dystonia, facial dysmorphism, intellectual disability and breast cancer associated with a chromosome 13q34 duplication and overexpression of TFDP1: case report. *BMC medical genetics.* 2013;14:70. PMID: 23849371, PMCID: PMC3722009
- 36.** Defazio G, Hallett M, Jinnah HA, Berardelli A. Development and validation of a clinical guideline for diagnosing blepharospasm. *Neurology.* Jul 16 2013;81(3):236-240. PMID: 3771487, PMCID: PMC3770163
- 37.** Peterson DA, Berque P, Jabusch HC, Altenmuller E, Frucht SJ. Rating scales for musician's dystonia: the state of the art. *Neurology.* Aug 6 2013;81(6):589-598. PMID: 23884039, PMCID: PMC3775681
- 38.** Khooshnoodi MA, Factor SA, Jinnah HA. Secondary blepharospasm associated with structural lesions of the brain. *J. Neurol. Sci.* Aug 15 2013;331(1-2):98-101. PMID: 23747003, PMCID: PMC3732185
- 39.** Ceballos-Picot I, Auge F, Fu R, et al. Phenotypic variation among seven members of one family with deficiency of hypoxanthine-guanine phosphoribosyltransferase. *Mol. Genet. Metab.* Nov 2013;110(3):268-274. PMID: 24075303, PMCID: PMC3830450
- 40.** Galpern WR, Coffey CS, Albanese A, et al. Designing Clinical Trials for Dystonia. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics.* Nov 27 2013. PMID: 24282121, PMCID: PMC3899487
- 41.** Marsh L. Depression and Parkinson's disease: current knowledge. *Curr. Neurol. Neurosci. Rep.* Dec 2013;13(12):409. PMID: 24190780, PMCID: PMC4878671
- 42.** Tiderington E, Goodman EM, Rosen AR, et al. How long does it take to diagnose cervical dystonia? *J. Neurol. Sci.* Dec 15 2013;335(1-2):72-74. PMID: 24034410, PMCID: PMC3840082
- 43.** Comella CL. Treatment of restless legs syndrome. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics.* Jan 2014;11(1):177-187. PMID: 24363103, PMCID: PMC3899490
- 44.** Prudente CN, Hess EJ, Jinnah HA. Dystonia as a network disorder: What is the role of the cerebellum? *Neuroscience.* Feb 28 2014;260:23-35. PMID: 24333801, PMCID: PMC3928686
- 45.** Albanese A, Bhatia K, Bressman SB, et al. Reply: dystonia after severe head injuries. *Mov. Disord.* Apr 2014;29(4):578-579. PMID: 24590449
- 46.** Vemula SR, Xiao J, Bastian RW, Momcilovic D, Blitzer A, LeDoux MS. Pathogenic variants in TUBB4A are not found in primary dystonia. *Neurology.* Apr 8 2014;82(14):1227-1230. PMID: 24598712, PMCID: PMC4001202
- 47.** Vemula SR, Xiao J, Zhao Y, et al. A rare sequence variant in intron 1 of THAP1 is associated with primary dystonia. *Molecular genetics & genomic medicine.* May 2014;2(3):261-272. PMID: 24936516, PMCID: PMC4049367
- 48.** Gottle M, Prudente CN, Fu R, et al. Loss of dopamine phenotype among midbrain neurons in Lesch-Nyhan disease. *Ann. Neurol.* Jul 2014;76(1):95-107. PMID: 24891139, PMCID: PMC4827147

- 49.** Broccard FD, Mullen T, Chi YM, et al. Closed-loop brain-machine-body interfaces for noninvasive rehabilitation of movement disorders. *Ann. Biomed. Eng.* Aug 2014;42(8):1573-1593. PMID: 24833254, PMCID: PMC4099421
- 50.** Patel N, Hanfert J, Marsh L, Jankovic J. Alleviating manoeuvres (sensory tricks) in cervical dystonia. *J. Neurol. Neurosurg. Psychiatry.* Aug 2014;85(8):882-884. PMID: 24828895, PMCID: PMC4871143
- 51.** Xiao J, Vemula SR, LeDoux MS. Recent advances in the genetics of dystonia. *Curr. Neurol. Neurosci. Rep.* Aug 2014;14(8):462. PMID: 24952478, PMCID: PMC4886715
- 52.** Luciano AY, Jinnah HA, Pfeiffer RF, Truong DD, Nance MA, LeDoux MS. Treatment of myoclonus-dystonia syndrome with tetrabenazine. *Parkinsonism Relat. Disord.* Dec 2014;20(12):1423-1426. PMID: 25406829, PMCID: PMC4254189
- 53.** Jinnah HA, Albanese A. The New Classification System for the Dystonias: Why Was it Needed and How was it Developed? Movement disorders clinical practice (Hoboken, N.J.). Dec 1 2014;1(4):280-284. PMID: 25485288, PMCID: PMC4254809
- 54.** Comella CL, Fox SH, Bhatia KP, et al. Development of the Comprehensive Cervical Dystonia Rating Scale: Methodology. *Movement disorders clinical practice.* 2015;2(2):135-141. PMID: 27088112, PMCID: PMC4827152
- 55.** Jinnah HA, Factor SA. Diagnosis and treatment of dystonia. *Neurol. Clin.* Feb 2015;33(1):77-100. PMID: 25432724, PMCID: PMC4248237
- 56.** Schottlaender LV, Polke JM, Ling H, et al. Analysis of C9orf72 repeat expansions in a large series of clinically and pathologically diagnosed cases with atypical parkinsonism. *Neurobiol. Aging.* Feb 2015;36(2):1221 e1221-1226. PMID: 25308964, PMCID: PMC4321829
- 57.** Shaikh AG, Mewes K, DeLong MR, et al. Temporal profile of improvement of tardive dystonia after globus pallidus deep brain stimulation. *Parkinsonism Relat. Disord.* Feb 2015;21(2):116-119. PMID: 25465373, PMCID: PMC4879955
- 58.** Tanner CM, Comella CL. When brawn benefits brain: physical activity and Parkinson's disease risk. *Brain.* Feb 2015;138(Pt 2):238-239. PMID: 25627233, PMCID: PMC4394643
- 59.** Bruggemann N, Kuhn A, Schneider SA, et al. Short- and long-term outcome of chronic pallidal neurostimulation in monogenic isolated dystonia. *Neurology.* Mar 3 2015;84(9):895-903. PMID: 25653290
- 60.** Defazio G, Hallett M, Jinnah HA, et al. Development and validation of a clinical scale for rating the severity of blepharospasm. *Mov. Disord.* Apr 2015;30(4):525-530. PMID: 25847472, PMCID: PMC4878674
- 61.** Yan L, Hicks M, Winslow K, et al. Secured web-based video repository for multicenter studies. *Parkinsonism Relat. Disord.* Apr 2015;21(4):366-371. PMID: 25630890, PMCID: PMC4372455
- 62.** Shaikh AG, Zee DS, Jinnah HA. Oscillatory head movements in cervical dystonia: Dystonia, tremor, or both? *Mov. Disord.* May 2015;30(6):834-842. PMID: 25879911, PMCID: PMC4868362

- 63.** Ilarslan NE, Fitoz OS, Oztuna DG, Kucuk NO, Yalcinkaya FF. The role of tissue harmonic imaging ultrasound combined with power Doppler ultrasound in the diagnosis of childhood febrile urinary tract infections. *Turk pediatri Arsivi*. Jun 2015;50(2):90-95. PMID: 26265892, PMCID: PMC4523991
- 64.** Shaikh AG, Wong A, Zee DS, Jinnah HA. Why are voluntary head movements in cervical dystonia slow? *Parkinsonism Relat. Disord.* Jun 2015;21(6):561-566. PMID: 25818535, PMCID: PMC4441827
- 65.** Prudente CN, Stillia R, Buetefisch CM, et al. Neural Substrates for Head Movements in Humans: A Functional Magnetic Resonance Imaging Study. *J. Neurosci.* Jun 17 2015;35(24):9163-9172. PMID: 26085638, PMCID: PMC4469741
- 66.** Jinnah HA, Teller JK, Galpern WR. Recent developments in dystonia. *Curr. Opin. Neurol.* Aug 2015;28(4):400-405. PMID: 26110799, PMCID: PMC4539941
- 67.** Ludlow CL. Central Nervous System Control of Voice and Swallowing. *J. Clin. Neurophysiol.* Aug 2015;32(4):294-303. PMID: 26241238, PMCID: PMC4526113
- 68.** Ludlow CL. Laryngeal Reflexes: Physiology, Technique, and Clinical Use. *J. Clin. Neurophysiol.* Aug 2015;32(4):284-293. PMID: 26241237, PMCID: PMC4527097
- 69.** Creighton FX, Hapner E, Klein A, Rosen A, Jinnah HA, Johns MM. Diagnostic Delays in Spasmodic Dysphonia: A Call for Clinician Education. *J. Voice.* Sep 2015;29(5):592-594. PMID: 25873547, PMCID: PMC4868351
- 70.** Shaikh AG, Ghasia FF, DeLong MR, Jinnah HA, Freeman A, Factor SA. Ocular palatal tremor plus dystonia - new syndromic association. *Movement disorders clinical practice*. Sep 1 2015;2(3):267-270. PMID: 26889496, PMCID: PMC4753074
- 71.** Bologna M, Paparella G, Fabbrini A, et al. Effects of cerebellar theta-burst stimulation on arm and neck movement kinematics in patients with focal dystonia. *Clin Neurophysiol.* 2016;127(11):3472-3479. PMID: 27721106, PMCID: PMC5098212
- 72.** Jinnah HA. Locus Pocus. *Mov Disord.* 2016;31(11):1759-1760. PMID: 27548302, PMCID: PMC5115966
- 73.** Jinnah HA, Factor S. The role of polymyography in the treatment of cervical dystonia: the authors reply. *J. Neurol.* 2016;263(8):1665. PMID: 27393115, PMCID: PMC4972652
- 74.** Jinnah HA, Goodmann E, Rosen AR, Evatt M, Freeman A, Factor S. Botulinum toxin treatment failures in cervical dystonia: causes, management, and outcomes. *J Neurol.* 2016;263(6):1188-1194. PMID: 27113604, PMCID: PMC4904718
- 75.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 76.** Norris SA, Jinnah HA, Espay AJ, et al. Clinical and demographic characteristics related to onset site and spread of cervical dystonia. *Mov Disord.* 2016;31(12):1874-1882. PMID: 27753188, PMCID: PMC5154862
- 77.** Paudel R, Li A, Hardy J, Bhatia KP, Houlden H, Holton J. DYT6 Dystonia: A Neuropathological Study. *Neurodegener Dis.* 2016;16(3-4):273-278. PMID: 26610312

- 78.** Xiao J, Thompson MM, Vemula SR, LeDoux MS. Blepharospasm in a multiplex African-American pedigree. *J Neurol Sci*. 2016;362:299-303. PMID: 26944167, PMCID: PMC4779500
- 79.** Justicz N, Hapner ER, Josephs JS, Boone BC, Jinnah HA, Johns MM, 3rd. Comparative effectiveness of propranolol and botulinum for the treatment of essential voice tremor. *Laryngoscope*. Jan 2016;126(1):113-117. PMID: 26198384, PMCID: PMC4868360
- 80.** Comella CL, Perlmuter JS, Jinnah HA, et al. Clinimetric testing of the comprehensive cervical dystonia rating scale. *Mov Disord*. Mar 12 2016. PMID: 26971359, PMCID: PMC4833533
- 81.** Jinnah HA, Alterman R, Klein C, et al. Deep brain stimulation for dystonia: a novel perspective on the value of genetic testing. *Journal of neural transmission (Vienna, Austria : 1996)*. 2017;124(4):417-430. PMID: 28160152, PMCID: PMC5357445
- 82.** Jinnah HA, Comella CL, Perlmuter J, Lungu C, Hallett M. Longitudinal studies of botulinum toxin in cervical dystonia: Why do patients discontinue therapy? *Toxicon*. 2017. PMID: 28888929, PMCID: PMC5839920
- 83.** Jinnah HA, Hess EJ. Evolving concepts in the pathogenesis of dystonia. *Parkinsonism Relat Disord*. 2017. PMID: 28784298, PMCID: PMC5696051
- 84.** Jinnah HA, Neychev V, Hess EJ. The Anatomical Basis for Dystonia: The Motor Network Model. *Tremor and other hyperkinetic movements (New York, NY)*. 2017;7:506. PMID: 29123945, PMCID: PMC5673689
- 85.** Li Z, Prudente CN, Stillia R, Sathian K, Jinnah HA, Hu X. Alterations of resting-state fMRI measurements in individuals with cervical dystonia. *Hum Brain Mapp*. 2017. PMID: 28504361, PMCID: PMC5553075
- 86.** Sedov A, Popov V, Shabalov V, Raeva S, Jinnah HA, Shaikh AG. Physiology of midbrain head movement neurons in cervical dystonia. *Mov Disord*. 2017;32(6):904-912. PMID: 28218416, PMCID: PMC5466497
- 87.** Shakkottai VG, Batla A, Bhatia K, et al. Current Opinions and Areas of Consensus on the Role of the Cerebellum in Dystonia. *Cerebellum*. 2017;16(2):577-594. PMID: 27734238, PMCID: PMC5336511
- 88.** Kang S, Shaikh AG. Acquired pendular nystagmus. *J Neurol Sci*. Apr 2017;375:8-17. PMID: 28320194, PMCID: PMC5363284
- 89.** Conte A, Ferrazzano G, Defazio G, Fabbrini G, Hallett M, Berardelli A. INCREASED BLINKING MAY BE A PRECURSOR OF BLEPHAROSPASM: A LONGITUDINAL STUDY. *Movement disorders clinical practice*. 2017;4(5):733-736. PMID: 29082270, PMCID: PMC5654574
- 90.** George EB, Cotton AC, Shneyder N, Jinnah HA. A strategy for managing flu-like symptoms after botulinum toxin injections. *J Neurol*. 2018. PMID: 29926222
- 91.** Holden SK, Finseth T, Sillau SH, Berman BD. Progression of MDS-UPDRS Scores Over Five Years in De Novo Parkinson Disease from the Parkinson's Progression Markers Initiative Cohort. *Movement disorders clinical practice*. 2018;5(1):47-53. PMID: 29662921, PMCID: PMC5898442
- 92.** Mahajan A, Jankovic J, Marsh L, et al. Cervical dystonia and substance abuse. *J Neurol*. 2018;265(4):970-975. PMID: 29569175

93. Popa T, Hubsch C, James P, et al. Abnormal cerebellar processing of the neck proprioceptive information drives dysfunctions in cervical dystonia. *Scientific reports*. 2018;8(1):2263. PMID: 29396401, PMCID: PMC5797249
94. Scorr LM, Silver MR, Hanfelt J, et al. Pilot Single-Blind Trial of AbobotulinumtoxinA in Oromandibular Dystonia. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*. 2018;15(2):452-458. PMID: 29542022, PMCID: PMC5935649
95. Shi LL, Simpson CB, Hapner ER, Jinnah HA, Johns MM, 3rd. Pharyngeal Dystonia Mimicking Spasmodic Dysphonia. *J Voice*. 2018;32(2):234-238. PMID: 28651822, PMCID: PMC5931712
96. Merola A, Dwivedi AK, Shaikh AG, et al. Head tremor at disease onset: an ataxic phenotype of cervical dystonia. *J Neurol*. 2019. PMID: 31028543

Genetic Disorders of Mucociliary Clearance

Book Chapters

2. Knowles MR, Morillas HN, Leigh M, Zariwala M. Primary ciliary dyskinesia. In: Rounds S, ed. *Molecular Basis of Lung Disease, Insights from Rare Lung Disorders*. Totowa, NJ: Humana Press; 2010.

Abstracts Presented at Conferences

1. Olin J, Sagel S, Knowles M. Success (vs diagnostic yield?) of nasal scrape biopsies in diagnosing primary ciliary dyskinesia. Paper presented at: American Thoracic Society Conference; April, 2009; San Diego, CA.
2. Lie H, Zariwala M, Puffenberger E, Strauss K, Bowcock A, Carson J, Leigh M, Knowles M, Ferkol T. The genetic basis of primary ciliary dyskinesia in Amish communities. Paper presented at: American Thoracic Society Conference; April, 2009; San Diego, CA.
3. Dell S, Dupruis A, Knowles M, Quittner A, Leigh M. Impaired Health-Related, Quality of Life (HRQOL) in Children with Primary Ciliary Dyskinesia (PCD). Paper presented at: American Thoracic Society conference 2009; April, 2009; San Diego, CA.
4. Chawla K, Hazucha M, Dell S, Ferkol T, Sagel S, Rosenfeld M, Baker B, David S, Knowles M, Leigh M. A Multi-Center, Longitudinal Study of Nasal Nitric Oxide in Children with Primary Ciliary Dyskinesia. Paper presented at: American Thoracic Society2010; New Orleans, LA.
5. Radhakrishnan D, Leigh M, Knowles M, Carson J, Metijan H, Cutz E, Wilkes D, Dell S. A comparison of two methods to detect classic ciliary ultrastructural defects in a population of children and suspected primary ciliary dyskinesia. Paper presented at: American Thoracic Society2010; New Orleans, LA
6. Kureshi S, Nakhleh N, Seton M, Francis R, Chatterjee B, Sami I, Kuehl K, Olivier K, Jonas R, Tian X, Leigh M, Knowles M, Leatherbury L, Lo C. Nasal nitric oxide & ciliary function in patients with non-heterotaxy congenital heart disease. Paper presented at: American Thoracic Society2010; New Orleans, LA.
7. LaVange L, Stewart D, Thomashow B, Olivier K, Knowles M, Daley C, Barker A. The Bronchiectasis Research Registry: a resource for collaborative research in non-cystic fibrosis bronchiectasis. Paper presented at: American Thoracic Society2010; New Orleans, LA.

8. Olivier K, O'Connell M, Holland S, Knowles M. Mucosal defense abnormalities in idiopathic bronchiectasis associated with nontuberculous mycobacteria. Paper presented at: American Thoracic Society2010; New Orleans, LA.
9. Shapiro A, Davis S, Olivier K, Ferkol T, Dell S, Sagel S, Rosenfeld M, Milla C, Atkinson J, Knowles M, Leigh M. Clinical symptoms associated with primary ciliary dyskinesia-results of a multi-centered study. Paper presented at: American Thoracic Society; 2010, 2010; New Orleans, LA.
10. Pittman J. Bronchodilator responsiveness by infant pulmonary function testing. Paper presented at: American Thoracic Society International Conference; May, 2010; New Orleans.
11. Zariwala MA, Leigh M, Ostrowski LE, Davis SD, Berg J, Huang L, Yin W, Carson JL, Hazucha MJ, Turner EH, MacKenzie A, Bamshad M, Nickerson DA, Schendure J, Knowles M, Genetic Disorders of Mucociliary Clearance Consortium. Exome sequencing to identify genetic causes of primary ciliary dyskinesia with outer dynein arms defects. (Abstract 1071T). Paper presented at: 12th International Congress of Human Genetics/61st Annual Meeting of The American Society of Human Genetics; October 13, 2011; Montreal, Canada.
12. Leigh MW, Shapiro AJ, Pittman JE, Davis SD, Lee H, Krischer J, Ferkol TW, Atkinson JJ, Sagel SD, Rosenfield M, Dell SD, Milla C, Olivier KN, Knowles MR. Definition of clinical criteria for diagnosis of primary ciliary dyskinesia. Paper presented at: ATS (American Thoracic Society) 2012; May 18-23, 2012; San Francisco.

Journal Articles

1. Fliegauf M, Olbrich H, Horvath J, Wildhaber JH, Zariwala MA, Kennedy M, Knowles MR, Omran H. Mislocalization of DNAH5 and DNAH9 in respiratory cells from patients with primary ciliary dyskinesia. *Am. J. Respir. Crit. Care Med.* Jun 15 2005;171(12):1343-1349. PMID: 15750039, PMCID: PMC2718478
2. Kennedy MP, Omran H, Leigh MW, Dell S, Morgan L, Molina PL, Robinson BV, Minnix SL, Olbrich H, Severin T, Ahrens P, Lange L, Morillas HN, Noone PG, Zariwala MA, Knowles MR. Congenital heart disease and other heterotaxic defects in a large cohort of patients with primary ciliary dyskinesia. *Circulation.* Jun 5 2007;115(22):2814-2821. PMID: 17515466
3. Brown DE, Pittman JE, Leigh MW, Fordham L, Davis SD. Early lung disease in young children with primary ciliary dyskinesia. *Pediatr. Pulmonol.* May 2008;43(5):514-516. PMID: 18383332
4. Leigh MW, Zariwala MA, Knowles MR. Primary ciliary dyskinesia: improving the diagnostic approach. *Curr. Opin. Pediatr.* Jun 2009;21(3):320-325. PMID: 19300264, PMCID: PMC3665363
5. Leigh MW, Pittman JE, Carson JL, Ferkol TW, Dell SD, Davis SD, Knowles MR, Zariwala MA. Clinical and genetic aspects of primary ciliary dyskinesia/Kartagener syndrome. *Genet. Med.* Jul 2009;11(7):473-487. PMID: 19606528, PMCID: PMC3739704
6. Loges NT, Olbrich H, Becker-Heck A, Haffner K, Heer A, Reinhard C, Schmidts M, Kispert A, Zariwala MA, Leigh MW, Knowles MR, Zentgraf H, Seithe H, Nurnberg G, Nurnberg P, Reinhardt R, Omran H. Deletions and point mutations of LRRC50 cause primary ciliary dyskinesia due to dynein arm defects. *Am. J. Hum. Genet.* Dec 2009;85(6):883-889. PMID: 19944400, PMCID: PMC2795801
7. Lie H, Zariwala MA, Helms C, Bowcock AM, Carson JL, Brown DE, 3rd, Hazucha MJ, Forsen J, Molter D, Knowles MR, Leigh MW, Ferkol TW. Primary ciliary dyskinesia in Amish communities. *J. Pediatr.* Jun 2010;156(6):1023-1025. PMID: 20350728, PMCID: PMC2875274

8. Czaja C, Stewart D, Levin A, Aksamit T, LaVange L, O'Donnell A, Knowles M, Thomashow B, Daley C. Prevalence and clinical significance of mucoid *pseudomonas aeruginosa* infection in adults with non-cystic fibrosis bronchiectasis – results from the Bronchiectasis Research Registry. *Am. J. Respir. Crit. Care Med.* 2011;183.
9. Berg JS, Evans JP, Leigh MW, Omran H, Bizon C, Mane K, Knowles MR, Weck KE, Zariwala MA. Next generation massively parallel sequencing of targeted exomes to identify genetic mutations in primary ciliary dyskinesia: implications for application to clinical testing. *Genet. Med.* Mar 2011;13(3):218-229. PMID: 21270641, PMCID: PMC3755008
10. Olin JT, Burns K, Carson JL, et al. Diagnostic yield of nasal scrape biopsies in primary ciliary dyskinesia: a multicenter experience. *Pediatr. Pulmonol.* May 2011;46(5):483-488. PMID: 21284095, PMCID: PMC3875629
11. Leigh MW, O'Callaghan C, Knowles MR. The challenges of diagnosing primary ciliary dyskinesia. *Proc. Am. Thorac. Soc.* Sep 2011;8(5):434-437. PMID: 21926395, PMCID: PMC3209576
12. Zariwala MA, Omran H, Ferkol TW. The emerging genetics of primary ciliary dyskinesia. *Proc. Am. Thorac. Soc.* Sep 2011;8(5):430-433. PMID: 21926394, PMCID: PMC3209577
13. Sagel SD, Davis SD, Campisi P, Dell SD. Update of respiratory tract disease in children with primary ciliary dyskinesia. *Proc. Am. Thorac. Soc.* Sep 2011;8(5):438-443. PMID: 21926396, PMCID: PMC3209579
14. Davis SD, Knowles M, Leigh M. Introduction: primary ciliary dyskinesia and overlapping syndromes. *Proc. Am. Thorac. Soc.* Sep 2011;8(5):421-422. PMID: 21926392
15. Mateos-Corral D, Coombs R, Grasemann H, Ratjen F, Dell SD. Diagnostic value of nasal nitric oxide measured with non-velum closure techniques for children with primary ciliary dyskinesia. *J. Pediatr.* Sep 2011;159(3):420-424. PMID: 21514598
16. Ostrowski LE, Dutcher SK, Lo CW. Cilia and models for studying structure and function. *Proc. Am. Thorac. Soc.* Sep 2011;8(5):423-429. PMID: 21926393, PMCID: PMC3209580
17. Stillwell PC, Wartchow EP, Sagel SD. Primary Ciliary Dyskinesia in Children: A Review for Pediatricians, Allergists, and Pediatric Pulmonologists. *Pediatric allergy, immunology, and pulmonology.* Dec 2011;24(4):191-196. PMID: 22276227, PMCID: PMC3255511
18. Noone PJ, Olson CA, Zariwala MA, Baker BR, Burns KA, Omran H, Leigh M, Knowles M. Characterization of ciliary axonemal defects in PCD patients with biallelic mutations in 5 PCD-causing genes. *Am. J. Respir. Crit. Care Med.* 2012;185.
19. Leigh M, Chawla KK, Baker BR, Hazucha MJ, Brown DE, LaVange L, Horton BJ, Qaqish BF, Carson JL, Davis SD, Dell SD, Ferkol TW, Atkinson JJ, Olivier KN, Sagel SD, Rosenfeld C, Milla C, Zariwala MA, Knowles M. For the Genetic Diseases of Mucociliary Clearance Consortium. Standardization of nasal nitric oxide as screening test for primary ciliary dyskinesia. *Am. J. Respir. Crit. Care Med.* 2012;185. PMID: 21926395, PMCID: PMC3209576
20. Ferkol TW, Druley T, Horani M, Zariwala MA, Leigh M, Knowles M, Brody SL, Dutcher S. Whole-exome sequencing identifies a recessive HEATR2 mutation in Amish PCD patients. *Am. J. Respir. Crit. Care Med.* 2012;185.
21. Ferkol TW, Leigh MW. Ciliopathies: the central role of cilia in a spectrum of pediatric disorders. *J. Pediatr.* Mar 2012;160(3):366-371. PMID: 22177992, PMCID: PMC3282141

- 22.** Knowles MR, Leigh MW, Zariwala MA. Cutting edge genetic studies in primary ciliary dyskinesia. *Thorax*. May 2012;67(5):464; author reply 464. PMID: 22328589
- 23.** Knowles MR, Leigh MW, Carson JL, Davis SD, Dell SD, Ferkol TW, Olivier KN, Sagel SD, Rosenfeld M, Burns KA, Minnix SL, Armstrong MC, Lori A, Hazucha MJ, Loges NT, Olbrich H, Becker-Heck A, Schmidts M, Werner C, Omran H, Zariwala MA. Mutations of DNAH11 in patients with primary ciliary dyskinesia with normal ciliary ultrastructure. *Thorax*. May 2012;67(5):433-441. PMID: 22184204, PMCID: PMC3739700
- 24.** Horani A, Druley TE, Zariwala MA, Patel AC, Levinson BT, Van Arendonk LG, Thornton KC, Giacalone JC, Albee AJ, Wilson KS, Turner EH, Nickerson DA, Shendure J, Bayly PV, Leigh MW, Knowles MR, Brody SL, Dutcher SK, Ferkol TW. Whole-exome capture and sequencing identifies HEATR2 mutation as a cause of primary ciliary dyskinesia. *Am. J. Hum. Genet.* Oct 5 2012;91(4):685-693. PMID: 23040496, PMCID: PMC3484505
- 25.** Knowles MR, Leigh MW, Ostrowski LE, Huang L, Carson JL, Hazucha MJ, Yin W, Berg JS, Davis SD, Dell SD, Ferkol TW, Rosenfeld M, Sagel SD, Milla CE, Olivier KN, Turner EH, Lewis AP, Bamshad MJ, Nickerson DA, Shendure J, Zariwala MA. Exome sequencing identifies mutations in CCDC114 as a cause of primary ciliary dyskinesia. *Am. J. Hum. Genet.* Jan 10 2013;92(1):99-106. PMID: 23261302, PMCID: PMC3542458
- 26.** Sears PR, Thompson K, Knowles MR, Davis CW. Human airway ciliary dynamics. *Am. J. Physiol. Lung Cell. Mol. Physiol.* Feb 1 2013;304(3):L170-183. PMID: 23144323, PMCID: PMC3567369
- 27.** Antony D, Becker-Heck A, Zariwala MA, Schmidts M, Onoufriadiis A, Forouhan M, Wilson R, Taylor-Cox T, Dewar A, Jackson C, Goggin P, Loges NT, Olbrich H, Jaspers M, Jorissen M, Leigh MW, Wolf WE, Daniels ML, Noone PG, Ferkol TW, Sagel SD, Rosenfeld M, Rutman A, Dixit A, O'Callaghan C, Lucas JS, Hogg C, Scambler PJ, Emes RD, Uk10k, Chung EM, Shoemark A, Knowles MR, Omran H, Mitchison HM. Mutations in CCDC39 and CCDC40 are the Major Cause of Primary Ciliary Dyskinesia with Axonemal Disorganization and Absent Inner Dynein Arms. *Hum. Mutat.* Mar 2013;34(3):462-472. PMID: 23255504, PMCID: PMC3630464
- 28.** Fowler CJ, Olivier KN, Leung JM, et al. Abnormal nasal nitric oxide production, ciliary beat frequency, and Toll-like receptor response in pulmonary nontuberculous mycobacterial disease epithelium. *Am. J. Respir. Crit. Care Med.* Jun 15 2013;187(12):1374-1381. PMID: 23593951, PMCID: PMC3734613
- 29.** Ferkol TW, Puffenberger EG, Lie H, et al. Primary ciliary dyskinesia-causing mutations in Amish and Mennonite communities. *J. Pediatr.* Aug 2013;163(2):383-387. PMID: 23477994, PMCID: PMC3725203
- 30.** Hjeij R, Lindstrand A, Francis R, et al. ARMC4 mutations cause primary ciliary dyskinesia with randomization of left/right body asymmetry. *Am. J. Hum. Genet.* Aug 8 2013;93(2):357-367. PMID: 23849778, PMCID: PMC3738828
- 31.** Zariwala MA, Gee HY, Kurkowiak M, et al. ZMYND10 is mutated in primary ciliary dyskinesia and interacts with LRRC6. *Am. J. Hum. Genet.* Aug 8 2013;93(2):336-345. PMID: 23891469, PMCID: PMC3738827
- 32.** Tarkar A, Loges NT, Slagle CE, et al. DYX1C1 is required for axonemal dynein assembly and ciliary motility. *Nat. Genet.* Sep 2013;45(9):995-1003. PMID: 23872636, PMCID: PMC4000444

- 33.** Daniels ML, Leigh MW, Davis SD, et al. Founder mutation in RSPH4A identified in patients of Hispanic descent with primary ciliary dyskinesia. *Hum. Mutat.* Oct 2013;34(10):1352-1356. PMID: 23798057, PMCID: PMC3906677
- 34.** Knowles MR, Ostrowski LE, Loges NT, et al. Mutations in SPAG1 cause primary ciliary dyskinesia associated with defective outer and inner dynein arms. *Am. J. Hum. Genet.* Oct 3 2013;93(4):711-720. PMID: 24055112, PMCID: PMC3791252
- 35.** Knowles MR, Daniels LA, Davis SD, Zariwala MA, Leigh MW. Primary ciliary dyskinesia. Recent advances in diagnostics, genetics, and characterization of clinical disease. *Am. J. Respir. Crit. Care Med.* Oct 15 2013;188(8):913-922. PMID: 23796196, PMCID: PMC3826280
- 36.** Leigh MW, Hazucha MJ, Chawla KK, et al. Standardizing nasal nitric oxide measurement as a test for primary ciliary dyskinesia. *Annals of the American Thoracic Society.* Dec 2013;10(6):574-581. PMID: 24024753, PMCID: PMC3960971
- 37.** Lin J, Yin W, Smith MC, et al. Cryo-electron tomography reveals ciliary defects underlying human RSPH1 primary ciliary dyskinesia. *Nature communications.* 2014;5:5727. PMID: 25473808, PMCID: PMC4267722
- 38.** Teves ME, Sears PR, Li W, et al. Sperm-associated antigen 6 (SPAG6) deficiency and defects in ciliogenesis and cilia function: polarity, density, and beat. *PLoS ONE.* 2014;9(10):e107271. PMID: 25333478, PMCID: PMC4204823
- 39.** Horani A, Brody SL, Ferkol TW. Picking up speed: advances in the genetics of primary ciliary dyskinesia. *Pediatr. Res.* Jan 2014;75(1-2):158-164. PMID: 24192704, PMCID: PMC3946436
- 40.** Kim RH, D AH, Cutz E, et al. The role of molecular genetic analysis in the diagnosis of primary ciliary dyskinesia. *Annals of the American Thoracic Society.* Mar 2014;11(3):351-359. PMID: 24498942, PMCID: PMC4028737
- 41.** Knowles MR, Ostrowski LE, Leigh MW, et al. Mutations in RSPH1 cause primary ciliary dyskinesia with a unique clinical and ciliary phenotype. *Am. J. Respir. Crit. Care Med.* Mar 15 2014;189(6):707-717. PMID: 24568568, PMCID: PMC3983840
- 42.** Funkhouser WK, 3rd, Niethammer M, Carson JL, et al. A new tool improves diagnostic test performance for transmission electron evaluation of axonemal dynein arms. *Ultrastruct. Pathol.* Aug 2014;38(4):248-255. PMID: 23957500, PMCID: PMC3990650
- 43.** Prevots DR, Adjemian J, Fernandez AG, Knowles MR, Olivier KN. Environmental risks for nontuberculous mycobacteria. Individual exposures and climatic factors in the cystic fibrosis population. *Annals of the American Thoracic Society.* Sep 2014;11(7):1032-1038. PMID: 25068620, PMCID: PMC4214058
- 44.** Shapiro AJ, Weck KE, Chao KC, et al. Cri du chat syndrome and primary ciliary dyskinesia: a common genetic cause on chromosome 5p. *J. Pediatr.* Oct 2014;165(4):858-861. PMID: 25066065, PMCID: PMC4177261
- 45.** Shapiro AJ, Davis SD, Ferkol T, et al. Laterality defects other than situs inversus totalis in primary ciliary dyskinesia: insights into situs ambiguus and heterotaxy. *Chest.* Nov 2014;146(5):1176-1186. PMID: 24577564, PMCID: PMC4219335
- 46.** Mullowney T, Manson D, Kim R, Stephens D, Shah V, Dell S. Primary ciliary dyskinesia and neonatal respiratory distress. *Pediatrics.* Dec 2014;134(6):1160-1166. PMID: 25422025, PMCID: PMC4243067

- 47.** Daniels ML, Lowe JR, Roy P, et al. Standardization and validation of a novel and simple method to assess lumbar dural sac size. *Clin. Radiol.* Feb 2015;70(2):146-152. PMID: 25434773, PMCID: PMC4282821
- 48.** Davis SD, Ferkol TW, Rosenfeld M, et al. Clinical features of childhood primary ciliary dyskinesia by genotype and ultrastructural phenotype. *Am. J. Respir. Crit. Care Med.* Feb 1 2015;191(3):316-324. PMID: 25493340, PMCID: PMC4351577
- 49.** Daniels ML, Noone PG. Genetics, diagnosis, and future treatment strategies for primary ciliary dyskinesia. *Expert opinion on orphan drugs.* Mar 1 2015;3(1):31-44. PMID: 26998415, PMCID: PMC4794317
- 50.** Lobo J, Zariwala MA, Noone PG. Primary ciliary dyskinesia. *Semin. Respir. Crit. Care Med.* Apr 2015;36(2):169-179. PMID: 25826585, PMCID: PMC4873960
- 51.** Shapiro AJ, Tolleson-Rinehart S, Zariwala MA, Knowles MR, Leigh MW. The prevalence of clinical features associated with primary ciliary dyskinesia in a heterotaxy population: results of a web-based survey. *Cardiol. Young.* Apr 2015;25(4):752-759. PMID: 24905662, PMCID: PMC4369774
- 52.** Lucas JS, Behan L, Dunn Galvin A, et al. A quality-of-life measure for adults with primary ciliary dyskinesia: QOL-PCD. *Eur. Respir. J.* Aug 2015;46(2):375-383. PMID: 25976687, PMCID: PMC4522020
- 53.** Marshall CR, Scherer SW, Zariwala MA, et al. Whole-Exome Sequencing and Targeted Copy Number Analysis in Primary Ciliary Dyskinesia. *G3 (Bethesda, Md.).* Aug 2015;5(8):1775-1781. PMID: 26139845, PMCID: PMC4528333
- 54.** Szymanski EP, Leung JM, Fowler CJ, et al. Pulmonary Nontuberculous Mycobacterial Infection. A Multisystem, Multigenic Disease. *Am. J. Respir. Crit. Care Med.* Sep 1 2015;192(5):618-628. PMID: 26038974, PMCID: PMC4595692
- 55.** Daniels ML, Birchard KR, Lowe JR, Patrone MV, Noone PG, Knowles MR. Enlarged Dural Sac in Idiopathic Bronchiectasis Implicates Heritable Connective Tissue Gene Variants. *Annals of the American Thoracic Society.* 2016;13(10):1712-1720. PMID: 27409985, PMCID: PMC5122488
- 56.** Dell SD, Leigh MW, Lucas JS, et al. Primary Ciliary Dyskinesia: First Health-related Quality-of-Life Measures for Pediatric Patients. *Annals of the American Thoracic Society.* 2016;13(10):1726-1735. PMID: 27464304, PMCID: PMC5122491
- 57.** Knowles MR, Zariwala M, Leigh M. Primary Ciliary Dyskinesia. *Clin Chest Med.* 2016;37(3):449-461. PMID: 27514592, PMCID: PMC4988337
- 58.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 59.** Shapiro AJ, Zariwala MA, Ferkol T, et al. Diagnosis, monitoring, and treatment of primary ciliary dyskinesia: PCD foundation consensus recommendations based on state of the art review. *Pediatr. Pulmonol.* Feb 2016;51(2):115-132. PMID: 26418604, PMCID: PMC4912005
- 60.** Leigh MW, Ferkol TW, Davis SD, et al. Clinical Features and Associated Likelihood of Primary Ciliary Dyskinesia in Children and Adolescents. *Annals of the American Thoracic Society.* Apr 12 2016. PMID: 27070726, PMCID: PMC5021075

61. Milla CE. The evolving spectrum of ciliopathies and respiratory disease. *Curr. Opin. Pediatr.* Jun 2016;28(3):339-347. PMID: 27070443
62. Bustamante-Marin XM, Ostrowski LE. Cilia and Mucociliary Clearance. *Cold Spring Harbor perspectives in biology.* 2017;9(4). PMID: 27864314, PMCID: PMC5378048
63. Deschamp AR, Schornick L, Clem C, Hazucha M, Shapiro AJ, Davis SD. A comparison of nasal nitric oxide measurement modes. *Pediatr Pulmonol.* 2017. PMID: 28816018
64. Goutaki M, Halbeisen FS, Spycher BD, et al. Growth and nutritional status, and their association with lung function: a study from the international Primary Ciliary Dyskinesia Cohort. *Eur Respir J.* 2017;50(6). PMID: 29269581
65. Kristof AS, Petrof BJ, Hamid Q, et al. An Official American Thoracic Society Workshop Report: Translational Research in Rare Respiratory Diseases. *Annals of the American Thoracic Society.* 2017;14(8):1239-1247. PMID: 28763267
66. Leigh MW, Knowles MR. Assessment of Ciliary Beat Pattern: Variability in Healthy Control Subjects Has Implications for Use as Test for Primary Ciliary Dyskinesia. *Chest.* 2017;151(5):958-959. PMID: 28483130
67. Lucas JS, Barbato A, Collins SA, et al. European Respiratory Society guidelines for the diagnosis of primary ciliary dyskinesia. *Eur Respir J.* 2017;49(1). PMID: 27836958
68. Shapiro AJ, Josephson M, Rosenfeld M, et al. Accuracy of Nasal Nitric Oxide Measurement as a Diagnostic Test for Primary Ciliary Dyskinesia. A Systematic Review and Meta-analysis. *Annals of the American Thoracic Society.* 2017;14(7):1184-1196. PMID: 28481653
69. Shapiro AJ, Leigh MW. Value of transmission electron microscopy for primary ciliary dyskinesia diagnosis in the era of molecular medicine: Genetic defects with normal and non-diagnostic ciliary ultrastructure. *Ultrastruct Pathol.* 2017;41(6):373-385. PMID: 28915070
70. Metersky ML, Aksamit TR, Barker A, et al. The Prevalence and Significance of *Staphylococcus aureus* in Patients with Non-Cystic Fibrosis Bronchiectasis. *Annals of the American Thoracic Society.* 2018;15(3):365-370. PMID: 29345970, PMCID: PMC5946501
71. Rosenfeld M, Ostrowski LE, Zariwala MA. Primary ciliary dyskinesia: keep it on your radar. *Thorax.* 2018;73(2):101-102. PMID: 29133352, PMCID: PMC6040643
72. Zysman-Colman ZN, Kaspy KR, Alizadehfar R, et al. Nasal Nitric Oxide in Primary Immunodeficiency and Primary Ciliary Dyskinesia: Helping to Distinguish Between Clinically Similar Diseases. *J Clin Immunol.* 2019. PMID: 30911954

Inherited Neuropathies Consortium

Book Chapters

1. Scherer SS. Genes and Inherited Neuropathies. *Companion to Peripheral Neuropathy.* Philadelphia, PA: Saunders Elsevier; 2010:335-342.
2. Murphy SM, Reilly M. Hereditary amyloid neuropathy. *Autonomic Failure: a textbook of clinical disorders of the autonomic nervous system.* New York: Oxford University Press; 2012.

3. Scherer SS, Feltri ML, Wrabetz L. Genetic Mutations Affecting Myelin Formation. In: Kettenmann H, Ransom BR, eds. *Neuroglia*. New York, NY: Oxford University Press; 2012:798-808.
4. Shy M. Peripheral Neuropathies. *Goldman's Cecil Medicine: Expert Consult Premium Edition*. Philadelphia, PA: Elsevier; 2012:2396-2409.
5. Murphy SM, Laura M, Reilly MM. DNA testing in hereditary neuropathies. *Handbook of clinical neurology*. Vol 115. 2013/08/13 ed2013:213-232. PMID: 23931782
6. Rossor AR, MM. Charcot-Marie-Tooth Disease. In: Hilton-Jones D, Turner M, eds. *Oxford Textbook of Neuromuscular Disorders*. Oxford, UK: Oxford University Press; 2014:61-74.
7. Brennan K, Shy M. Hereditary Neuropathies in Late Childhood and Adolescence. In: Darras B, Jones H, Ryan M, De Vivo D, eds. *Neuromuscular Disorders of Infancy, Childhood and Adolescence: A Clinicians Approach*. 2nd ed: Elsevier Inc; 2015:319-339.
8. Saporta M, Shy M. Peripheral Neuropathies. In: Zigmond M, Coyle J, Rowland L, eds. *Neurobiology of Brain Disorders: Biological Basis of Neurological and Psychiatric Disorders*. 1st ed: Academic Press; 2015:167-188.
9. Brennan K, M., ME S. Genetic Peripheral Neuropathies. In: Swaiman KF, Ashwal, s., et al., eds. *Swaiman's Pediatric Neurology*, 6th ed: Elsevier, 2017: 1073-1080
10. Pisciotta C, Shy ME. Chapter 42 - Neuropathy. In: Geschwind DH, Paulson HL, Klein C, eds. *Handbook of Clinical Neurology*. Vol 148: Elsevier; 2018:653-665.

Abstracts Presented at Conferences

1. Hall CA, Bacon CJ, Shy ME, Inherited Neuropathies Consortium, Rare Diseases Clinical Research Network Data Management and Coordinating Center. The Rare Diseases Clinical Research Network Contact Registry for the Inherited Neuropathies Consortium. Paper presented at: Charcot-Marie-Tooth Association, 5th International CMT Consortium Meeting; Jun. 25-27, 2013; Antwerp, Belgium.
2. Hainline C, Rizzo D, Shy ME, Inherited Neuropathies Consortium, Rare Diseases Clinical Research Network Data Management and Coordinating Center. Enhancements to the RDCRN Contact Registry for the Inherited Neuropathies Consortium. Poster presented at Peripheral Nerve Society Annual Meeting; Jul. 8-12, 2017; Sitges, Spain.

Conference Proceedings

1. Sanmaneechai O, Feely S, Finkel R, et al. Natural History Baseline Phenotype and Genotype of Hereditary Motor Sensory Peripheral Neuropathies Caused by Mutation in the Myelin Protein Zero. Paper presented at: 2013 Peripheral Nerve Society Biennial Meeting; June 29–July 3, 2013; Saint-Malo, France.

Journal Articles

1. Dimos JT, Rodolfa KT, Niakan KK, Weisenthal LM, Mitsumoto H, Chung W, Croft GF, Saphier G, Leibel R, Goland R, Wichterle H, Henderson CE, Eggan K. Induced pluripotent stem cells generated from patients with ALS can be differentiated into motor neurons. *Science*. Aug 29 2008;321(5893):1218-1221. PMID: 18669821
2. Houlden H, Laura M, Ginsberg L, et al. The phenotype of Charcot-Marie-Tooth disease type 4C due to SH3TC2 mutations and possible predisposition to an inflammatory neuropathy. *Neuromuscul. Disord.* Apr 2009;19(4):264-269. PMID: 19272779
3. Siskind C, Feely SM, Bernes S, Shy ME, Garbern JY. Persistent CNS dysfunction in a boy with CMT1X. *J. Neurol. Sci.* Apr 15 2009;279(1-2):109-113. PMID: 19193385
4. Shy M. Ascorbic acid for treatment of CMT1A: the jury is still out. *Lancet Neurol.* Jun 2009;8(6):505-507. PMID: 19427270
5. Katona I, Wu X, Feely SM, et al. PMP22 expression in dermal nerve myelin from patients with CMT1A. *Brain*. Jul 2009;132(Pt 7):1734-1740. PMID: 19447823, PMCID: PMC2724915
6. Ramdharry GM, Day BL, Reilly MM, Marsden JF. Hip flexor fatigue limits walking in Charcot-Marie-Tooth disease. *Muscle Nerve*. Jul 2009;40(1):103-111. PMID: 19405092, PMCID: PMC3734534
7. Ramchandren S, Shy ME, Finkel RS. Quality of life in children with CMT type 1A. *Lancet Neurol.* Oct 2009;8(10):880-881; author reply 881. PMID: 19747650
8. Hedges DJ, Burges D, Powell E, Almonte C, Huang J, Young S, Boese B, Schmidt M, Pericak-Vance MA, Martin E, Zhang X, Harkins TT, Zuchner S. Exome sequencing of a multigenerational human pedigree. *PLoS ONE*. December 2009;4(12):e8232. PMID: 20011588, PMCID: PMC2788131
9. Reilly MM, Shy ME. Diagnosis and new treatments in genetic neuropathies. *J. Neurol. Neurosurg. Psychiatry*. Dec 2009;80(12):1304-1314. PMID: 19917815
10. Kennerson ML, Nicholson GA, Kaler SG, et al. Missense mutations in the copper transporter gene ATP7A cause X-linked distal hereditary motor neuropathy. *Am J Hum Genet.* 2010;86(3):343-352. PMID: 20170900, PMCID: PMC2833394
11. Burns J, Ryan MM, Ouvrier RA. Quality of life in children with Charcot-Marie-Tooth disease. *J. Child Neurol.* Mar 2010;25(3):343-347. PMID: 19713553
12. Huang J, Wu X, Montenegro G, et al. Copy number variations are a rare cause of non-CMT1A Charcot-Marie-Tooth disease. *J. Neurol.* May 2010;257(5):735-741. PMID: 19949810, PMCID: PMC2865568
13. Burns J, Ramchandren S, Ryan MM, Shy M, Ouvrier RA. Determinants of reduced health-related quality of life in pediatric inherited neuropathies. *Neurology*. Aug 24 2010;75(8):726-731. PMID: 20733147, PMCID: PMC2931653
14. Martin ER, Kinnamon DD, Schmidt MA, Powell EH, Zuchner S, Morris RW. SeqEM: an adaptive genotype-calling approach for next-generation sequencing studies. *Bioinformatics*. Nov 15 2010;26(22):2803-2810. PMID: 20861027, PMCID: PMC2971572

- 15.** Reilly MM, Shy ME, Muntoni F, Pareyson D. 168th ENMC International Workshop: outcome measures and clinical trials in Charcot-Marie-Tooth disease (CMT). *Neuromuscul. Disord.* Dec 2010;20(12):839-846. PMID: 20850975
- 16.** Guelly C, Zhu PP, Leonardis L, et al. Targeted high-throughput sequencing identifies mutations in atlastin-1 as a cause of hereditary sensory neuropathy type I. *Am J Hum Genet.* 2011;88(1):99-105. PMID: 21194679, PMCID: PMC3014370
- 17.** Saporta MA, Grskovic M, Dimos JT. Induced pluripotent stem cells in the study of neurological diseases. *Stem cell research & therapy.* 2011;2(5):37. PMID: 21936964, PMCID: PMC3308034
- 18.** Smith LJ, Murphy SM, Holmes P, Reilly MM, Reiniger L, Thom M, Lunn MP. A painful right leg. *BMJ.* 2011;342:d1009. PMID: 21411806
- 19.** Amato AA, Reilly MM. The death panel for Charcot-Marie-Tooth panels. *Ann. Neurol.* Jan 2011;69(1):1-4. PMID: 21280068
- 20.** Saporta AS, Sottile SL, Miller LJ, Feely SM, Siskind CE, Shy ME. Charcot-Marie-Tooth disease subtypes and genetic testing strategies. *Ann. Neurol.* Jan 2011;69(1):22-33. PMID: 21280073, PMCID: PMC3058597
- 21.** Patzko A, Shy ME. Update on Charcot-Marie-Tooth disease. *Curr. Neurol. Neurosci. Rep.* Feb 2011;11(1):78-88. PMID: 21080241, PMCID: PMC3685483
- 22.** Russo M, Laura M, Polke JM, et al. Variable phenotypes are associated with PMP22 missense mutations. *Neuromuscul. Disord.* Feb 2011;21(2):106-114. PMID: 21194947
- 23.** Zuchner S, Dallman J, Wen R, Beecham G, Naj A, Farooq A, Kohli MA, Whitehead PL, Hulme W, Konidari I, Edwards YJ, Cai G, Peter I, Seo D, Buxbaum JD, Haines JL, Blanton S, Young J, Alfonso E, Vance JM, Lam BL, Pericak-Vance MA. Whole-exome sequencing links a variant in DHDDS to retinitis pigmentosa. *Am. J. Hum. Genet.* Feb 11 2011;88(2):201-206. PMID: 21295283, PMCID: PMC3035708
- 24.** Montenegro G, Powell E, Huang J, Speziani F, Edwards YJ, Beecham G, Hulme W, Siskind C, Vance J, Shy M, Zuchner S. Exome sequencing allows for rapid gene identification in a Charcot-Marie-Tooth family. *Ann. Neurol.* Mar 2011;69(3):464-470. PMID: 21254193, PMCID: PMC3066289
- 25.** Murphy SM, Polke J, Manji H, Blake J, Reiniger L, Sweeney M, Houlden H, Brandner S, Reilly MM. A novel mutation in the nerve-specific 5'UTR of the GJB1 gene causes X-linked Charcot-Marie-Tooth disease. *J. Peripher. Nerv. Syst.* Mar 2011;16(1):65-70. PMID: 21504505
- 26.** Murphy SM, Laura M, Blake J, Polke J, Bremner F, Reilly MM. Conduction block and tonic pupils in Charcot-Marie-Tooth disease caused by a myelin protein zero p.Ile112Thr mutation. *Neuromuscul. Disord.* Mar 2011;21(3):223-226. PMID: 21256749
- 27.** Reilly MM, Murphy SM, Laura M. Charcot-Marie-Tooth disease. *J. Peripher. Nerv. Syst.* Mar 2011;16(1):1-14. PMID: 21504497
- 28.** Pareyson D, Reilly MM, Schenone A, et al. Ascorbic acid in Charcot-Marie-Tooth disease type 1A (CMT-TRIAAL and CMT-TRAUK): a double-blind randomised trial. *Lancet Neurol.* Apr 2011;10(4):320-328. PMID: 21393063, PMCID: PMC3154498
- 29.** Katona I, Zhang X, Bai Y, et al. Distinct pathogenic processes between Fig4-deficient motor and sensory neurons. *Eur. J. Neurosci.* Apr 2011;33(8):1401-1410. PMID: 21410794

- 30.** Shy ME. Inherited peripheral neuropathies. *Continuum (Minneapolis, Minn.)*. Apr 2011;17(2 Neurogenetics):294-315. PMID: 22810821
- 31.** Feely SM, Laura M, Siskind CE, Sottile S, Davis M, Gibbons VS, Reilly MM, Shy ME. MFN2 mutations cause severe phenotypes in most patients with CMT2A. *Neurology*. May 17 2011;76(20):1690-1696. PMID: 21508331, PMCID: PMC3100135
- 32.** Scherer SS. CMT2A: the name doesn't tell the whole story. *Neurology*. May 17 2011;76(20):1686-1687. PMID: 21508332
- 33.** Siskind CE, Murphy SM, Ovens R, Polke J, Reilly MM, Shy ME. Phenotype expression in women with CMT1X. *J. Peripher. Nerv. Syst.* Jun 2011;16(2):102-107. PMID: 21692908
- 34.** Saporta MA, Katona I, Zhang X, Roper HP, McClelland L, Macdonald F, Brueton L, Blake J, Suter U, Reilly MM, Shy ME, Li J. Neuropathy in a human without the PMP22 gene. *Arch. Neurol.* Jun 2011;68(6):814-821. PMID: 21670407, PMCID: PMC3711535
- 35.** McCorquodale DS, 3rd, Montenegro G, Peguero A, et al. Mutation screening of mitofusin 2 in Charcot-Marie-Tooth disease type 2. *J. Neurol.* Jul 2011;258(7):1234-1239. PMID: 21258814, PMCID: PMC3125445
- 36.** Polke JM, Laura M, Pareyson D, et al. Recessive axonal Charcot-Marie-Tooth disease due to compound heterozygous mitofusin 2 mutations. *Neurology*. Jul 12 2011;77(2):168-173. PMID: 21715711, PMCID: PMC3140074
- 37.** Almodovar JL, Ferguson M, McDermott MP, Lewis RA, Shy ME, Herrmann DN. In vivo confocal microscopy of Meissner corpuscles as a novel sensory measure in CMT1A. *J. Peripher. Nerv. Syst.* Sep 2011;16(3):169-174. PMID: 22003930
- 38.** Murphy SM, Herrmann DN, McDermott MP, Scherer SS, Shy ME, Reilly MM, Pareyson D. Reliability of the CMT neuropathy score (second version) in Charcot-Marie-Tooth disease. *J. Peripher. Nerv. Syst.* Sep 2011;16(3):191-198. PMID: 22003934, PMCID: PMC3754828
- 39.** Shy ME, Patzko A. Axonal Charcot-Marie-Tooth disease. *Curr. Opin. Neurol.* Oct 2011;24(5):475-483. PMID: 21892080
- 40.** Miller LJ, Saporta AS, Sottile SL, Siskind CE, Feely SM, Shy ME. Strategy for genetic testing in Charcot-Marie-disease. *Acta Myol.* Oct 2011;30(2):109-116. PMID: 22106713, PMCID: PMC3235845
- 41.** Siskind CE, Shy ME. Genetics of neuropathies. *Semin. Neurol.* Nov 2011;31(5):494-505. PMID: 22266887
- 42.** Hutton EJ, Carty L, Laura M, Houlden H, Lunn MP, Brandner S, Mirsky R, Jessen K, Reilly MM. c-Jun expression in human neuropathies: a pilot study. *J. Peripher. Nerv. Syst.* Dec 2011;16(4):295-303. PMID: 22176144
- 43.** Scherer SS. The debut of a rational treatment for an inherited neuropathy? *J. Clin. Invest.* Dec 2011;121(12):4624-4627. PMID: 22045569, PMCID: PMC3226011
- 44.** Holzbaur EL, Scherer SS. Microtubules, axonal transport, and neuropathy. *N. Engl. J. Med.* Dec 15 2011;365(24):2330-2332. PMID: 22168648, PMCID: PMC3776444

- 45.** Barwick KE, Wright J, Al-Turki S, et al. Defective presynaptic choline transport underlies hereditary motor neuropathy. *Am J Hum Genet*. 2012;91(6):1103-1107. PMID: 23141292, PMCID: PMC3516609
- 46.** Johnson JO, Gibbs JR, Megarbane A, et al. Exome sequencing reveals riboflavin transporter mutations as a cause of motor neuron disease. *Brain*. 2012;135(Pt 9):2875-2882. PMID: 22740598, PMCID: PMC3437022
- 47.** Rossor AM, Kalmar B, Greensmith L, Reilly MM. The distal hereditary motor neuropathies. *J Neurol. Neurosurg. Psychiatry*. Jan 2012;83(1):6-14. PMID: 22028385
- 48.** Sinclair CD, Morrow JM, Miranda MA, Davagnanam I, Cowley PC, Mehta H, Hanna MG, Koltzenburg M, Yousry TA, Reilly MM, Thornton JS. Skeletal muscle MRI magnetisation transfer ratio reflects clinical severity in peripheral neuropathies. *J. Neurol. Neurosurg. Psychiatry*. Jan 2012;83(1):29-32. PMID: 21613652
- 49.** McLaughlin HM, Sakaguchi R, Giblin W, et al. A recurrent loss-of-function alanyl-tRNA synthetase (AARS) mutation in patients with Charcot-Marie-Tooth disease type 2N (CMT2N). *Hum. Mutat*. Jan 2012;33(1):244-253. PMID: 22009580, PMCID: PMC3240693
- 50.** Murphy SM, Davidson GL, Brandner S, Houlden H, Reilly MM. Mutation in FAM134B causing severe hereditary sensory neuropathy. *J. Neurol. Neurosurg. Psychiatry*. Jan 2012;83(1):119-120. PMID: 21115472, PMCID: PMC3721196
- 51.** Patzko A, Shy ME. Charcot-Marie-Tooth disease and related genetic neuropathies. *Continuum (Minneapolis, Minn.)*. Feb 2012;18(1):39-59. PMID: 22810069
- 52.** Montenegro G, Rebelo AP, Connell J, et al. Mutations in the ER-shaping protein reticulon 2 cause the axon-degenerative disorder hereditary spastic paraparesis type 12. *J. Clin. Invest*. Feb 1 2012;122(2):538-544. PMID: 22232211, PMCID: PMC3266795
- 53.** Murphy SM, Khan U, Alifrangis C, Hazell S, Hrouda D, Blake J, Ball J, Gabriel C, Markarian P, Rees J, Karim A, Seckl MJ, Lunn MP, Reilly MM. Anti Ma2-associated myeloradiculopathy: expanding the phenotype of anti-Ma2 associated paraneoplastic syndromes. *J. Neurol. Neurosurg. Psychiatry*. Feb 2012;83(2):232-233. PMID: 21205983, PMCID: PMC3719382
- 54.** Davidson G, Murphy S, Polke J, et al. Frequency of mutations in the genes associated with hereditary sensory and autonomic neuropathy in a UK cohort. *J. Neurol*. Aug 2012;259(8):1673-1685. PMID: 22302274, PMCID: PMC3752368
- 55.** Morrow JM, D'Sa S, Page RA, Hilali MA, Lunn MP, Reilly MM. Rituximab responsive multiple radiculopathies and cranial nerve palsies in association with chronic lymphocytic leukaemia. *J. Neurol*. Mar 2012;259(3):571-573. PMID: 21887515
- 56.** Norton N, Robertson PD, Rieder MJ, Zuchner S, Rampersaud E, Martin E, Li D, Nickerson DA, Hershberger RE. Evaluating pathogenicity of rare variants from dilated cardiomyopathy in the exome era. *Circ. Cardiovasc. Genet*. Apr 1 2012;5(2):167-174. PMID: 22337857, PMCID: PMC3332064
- 57.** Lloyd TE, Machamer J, O'Hara K, et al. The p150(Glued) CAP-Gly domain regulates initiation of retrograde transport at synaptic termini. *Neuron*. Apr 26 2012;74(2):344-360. PMID: 22542187, PMCID: PMC3353876
- 58.** Burns J, Ouvrier R, Estilow T, Shy R, Laura M, Pallant JF, Lek M, Muntoni F, Reilly MM, Pareyson D, Acsadi G, Shy ME, Finkel RS. Validation of the Charcot-Marie-Tooth disease pediatric scale as

- an outcome measure of disability. *Ann. Neurol.* May 2012;71(5):642-652. PMID: 22522479, PMCID: PMC3335189
- 59.** Harms MB, Ori-McKenney KM, Scoto M, Tuck EP, Bell S, Ma D, Masi S, Allred P, Al-Lozi M, Reilly MM, Miller LJ, Jani-Acsadi A, Pestronk A, Shy ME, Muntoni F, Vallee RB, Baloh RH. Mutations in the tail domain of DYNC1H1 cause dominant spinal muscular atrophy. *Neurology*. May 29 2012;78(22):1714-1720. PMID: 22459677, PMCID: PMC359582
- 60.** Miller LJ, Patzko A, Lewis RA, Shy ME. Phenotypic presentation of the Ser63Del MPZ mutation. *J. Peripher. Nerv. Syst.* Jun 2012;17(2):197-200. PMID: 22734905, PMCID: PMC3731745
- 61.** Rossor AM, Davidson GL, Blake J, Polke JM, Murphy SM, Houlden H, Innes A, Kalmar B, Greensmith L, Reilly MM. A novel p.Glu175X premature stop mutation in the C-terminal end of HSP27 is a cause of CMT2. *J. Peripher. Nerv. Syst.* Jun 2012;17(2):201-205. PMID: 22734906
- 62.** Rossor AM, Murphy S, Reilly MM. Knee bobbing in Charcot-Marie-Tooth disease. *Practical neurology*. Jun 2012;12(3):182-183. PMID: 22661351, PMCID: PMC3736802
- 63.** Jaffer F, Murphy SM, Scoto M, Healy E, Rossor AM, Brandner S, Phadke R, Selcen D, Jungbluth H, Muntoni F, Reilly MM. BAG3 mutations: another cause of giant axonal neuropathy. *J. Peripher. Nerv. Syst.* Jun 2012;17(2):210-216. PMID: 22734908
- 64.** Voermans NC, Kleefstra T, Gabreels-Festen AA, et al. Severe Dejerine-Sottas disease with respiratory failure and dysmorphic features in association with a PMP22 point mutation and a 3q23 microdeletion. *J. Peripher. Nerv. Syst.* Jun 2012;17(2):223-225. PMID: 22734911
- 65.** Murphy SM, Laura M, Fawcett K, Pandraud A, Liu YT, Davidson GL, Rossor AM, Polke JM, Castleman V, Manji H, Lunn MP, Bull K, Ramdharry G, Davis M, Blake JC, Houlden H, Reilly MM. Charcot-Marie-Tooth disease: frequency of genetic subtypes and guidelines for genetic testing. *J. Neurol. Neurosurg. Psychiatry*. Jul 2012;83(7):706-710. PMID: 22577229, PMCID: PMC3736805
- 66.** Saporta MA, Shy BR, Patzko A, Bai Y, Pennuto M, Ferri C, Tinelli E, Saveri P, Kirschner D, Crowther M, Southwood C, Wu X, Gow A, Feltri ML, Wrabetz L, Shy ME. MpzR98C arrests Schwann cell development in a mouse model of early-onset Charcot-Marie-Tooth disease type 1B. *Brain*. Jul 2012;135(Pt 7):2032-2047. PMID: 22689911, PMCID: PMC3381724
- 67.** Arthur-Farraj PJ, Murphy SM, Laura M, Lunn MP, Manji H, Blake J, Ramdharry G, Fox Z, Reilly MM. Hand weakness in Charcot-Marie-Tooth disease 1X. *Neuromuscul. Disord.* Jul 2012;22(7):622-626. PMID: 22464564, PMCID: PMC3657175
- 68.** Murphy SM, Ovens R, Polke J, Siskind CE, Laura M, Bull K, Ramdharry G, Houlden H, Murphy RP, Shy ME, Reilly MM. X inactivation in females with X-linked Charcot-Marie-Tooth disease. *Neuromuscul. Disord.* Jul 2012;22(7):617-621. PMID: 22483671, PMCID: PMC3657177
- 69.** Osterloh JM, Yang J, Rooney TM, Fox AN, Adalbert R, Powell EH, Sheehan AE, Avery MA, Hackett R, Logan MA, MacDonald JM, Ziegenfuss JS, Milde S, Hou YJ, Nathan C, Ding A, Brown RH, Jr., Conforti L, Coleman M, Tessier-Lavigne M, Zuchner S, Freeman MR. dSarm/Sarm1 is required for activation of an injury-induced axon death pathway. *Science*. Jul 27 2012;337(6093):481-484. PMID: 22678360, PMCID: PMC5225956
- 70.** Abrams CK, Scherer SS. Gap junctions in inherited human disorders of the central nervous system. *Biochim. Biophys. Acta*. Aug 2012;1818(8):2030-2047. PMID: 21871435, PMCID: PMC3771870

- 71.** Shy ME. Lessons from London. *J. Neurol. Neurosurg. Psychiatry*. Aug 2012;83(8):767-768. PMID: 22696588, PMCID: PMC3721145
- 72.** Burns J, Ouvrier R, Estilow T, Shy R, Laura M, Eichinger K, Muntoni F, Reilly MM, Pareyson D, Acsadi G, Shy ME, Finkel RS. Symmetry of foot alignment and ankle flexibility in paediatric Charcot-Marie-Tooth disease. *Clin. Biomech.* Aug 2012;27(7):744-747. PMID: 22424781, PMCID: PMC3389135
- 73.** Davidson G, Murphy S, Polke J, Laura M, Salih M, Muntoni F, Blake J, Brandner S, Davies N, Horvath R, Price S, Donaghy M, Roberts M, Foulds N, Ramdharry G, Soler D, Lunn M, Manji H, Davis M, Houlden H, Reilly M. Frequency of mutations in the genes associated with hereditary sensory and autonomic neuropathy in a UK cohort. *J. Neurol.* Aug 2012;259(8):1673-1685. PMID: 22302274, PMCID: PMC3752368
- 74.** Michell AW, Gaitatzis A, Burge J, Reilly MM, Kapoor R, Koltzenburg M. Isolated motor conduction block associated with infliximab. *J. Neurol.* Aug 2012;259(8):1758-1760. PMID: 22349873, PMCID: PMC3125445
- 75.** Pitceathly RD, Murphy SM, Cottenie E, Chalasani A, Sweeney MG, Woodward C, Mudanohwo EE, Hargreaves I, Heales S, Land J, Holton JL, Houlden H, Blake J, Champion M, Flinter F, Robb SA, Page R, Rose M, Palace J, Crowe C, Longman C, Lunn MP, Rahman S, Reilly MM, Hanna MG. Genetic dysfunction of MT-ATP6 causes axonal Charcot-Marie-Tooth disease. *Neurology*. Sep 11 2012;79(11):1145-1154. PMID: 22933740, PMCID: PMC3525307
- 76.** Ramdharry GM, Day BL, Reilly MM, Marsden JF. Foot drop splints improve proximal as well as distal leg control during gait in Charcot-Marie-Tooth disease. *Muscle Nerve*. Oct 2012;46(4):512-519. PMID: 22987691
- 77.** Zimon M, Baets J, Almeida-Souza L, De Vriendt E, Nikodinovic J, Parman Y, Battaloglu E, Matur Z, Guergueltcheva V, Tournev I, Auer-Grumbach M, De Rijk P, Petersen BS, Muller T, Fransen E, Van Damme P, Loscher WN, Barisic N, Mitrovic Z, Previtali SC, Topaloglu H, Bernert G, Beleza-Miereles A, Todorovic S, Savic-Pavicevic D, Ishpekoval B, Lechner S, Peeters K, Ooms T, Hahn AF, Zuchner S, Timmerman V, Van Dijck P, Rasic VM, Janecke AR, De Jonghe P, Jordanova A. Loss-of-function mutations in HINT1 cause axonal neuropathy with neuromyotonia. *Nat. Genet.* Oct 2012;44(10):1080-1083. PMID: 22961002
- 78.** Scherer SS, Kleopa KA. X-linked Charcot-Marie-Tooth disease. *J. Peripher. Nerv. Syst.* Dec 2012;17 Suppl 3:9-13. PMID: 23279425, PMCID: PMC3779456
- 79.** Estilow T, Kozin SH, Glanzman AM, Burns J, Finkel RS. Flexor digitorum superficialis opposition tendon transfer improves hand function in children with Charcot-Marie-Tooth disease: case series. *Neuromuscul. Disord.* Dec 2012;22(12):1090-1095. PMID: 22944171, PMCID: PMC3883304
- 80.** Fawcett KA, Murphy SM, Polke JM, Wray S, Burchell VS, Manji H, Quinlivan RM, Zdebik AA, Reilly MM, Houlden H. Comprehensive analysis of the TRPV4 gene in a large series of inherited neuropathies and controls. *J. Neurol. Neurosurg. Psychiatry*. Dec 2012;83(12):1204-1209. PMID: 22851605
- 81.** Patzko A, Bai Y, Saporta MA, Katona I, Wu X, Vizzuso D, Feltri ML, Wang S, Dillon LM, Kamholz J, Kirschner D, Sarkar FH, Wrabetz L, Shy ME. Curcumin derivatives promote Schwann cell differentiation and improve neuropathy in R98C CMT1B mice. *Brain*. Dec 2012;135(Pt 12):3551-3566. PMID: 23250879, PMCID: PMC3577101

- 82.** Ramdharry GM, Thornhill A, Mein G, Reilly MM, Marsden JF. Exploring the experience of fatigue in people with Charcot-Marie-Tooth disease. *Neuromuscul. Disord.* Dec 2012;22 Suppl 3:S208-213. PMID: 23182641
- 83.** Kleopa KA, Abrams CK, Scherer SS. How do mutations in GJB1 cause X-linked Charcot-Marie-Tooth disease? *Brain Res.* Dec 3 2012;1487:198-205. PMID: 22771394, PMCID: PMC3488165
- 84.** Tesson C, Nawara M, Salih MA, et al. Alteration of fatty-acid-metabolizing enzymes affects mitochondrial form and function in hereditary spastic paraparesis. *Am. J. Hum. Genet.* Dec 7 2012;91(6):1051-1064. PMID: 23176821, PMCID: PMC3516610
- 85.** Saporta MA, Shy ME. Inherited peripheral neuropathies. *Neurol Clin.* 2013;31(2):597-619. PMID: 23642725, PMCID: PMC3646296
- 86.** Vester A, Velez-Ruiz G, McLaughlin HM, et al. A loss-of-function variant in the human histidyl-tRNA synthetase (HARS) gene is neurotoxic in vivo. *Hum. Mutat.* Jan 2013;34(1):191-199. PMID: 22930593, PMCID: PMC3535524
- 87.** Stevens JC, Murphy SM, Davagnanam I, Phadke R, Anderson G, Nethisinghe S, Bremner F, Giunti P, Reilly MM. The ARSACS phenotype can include supranuclear gaze palsy and skin lipofuscin deposits. *J. Neurol. Neurosurg. Psychiatry.* Jan 2013;84(1):114-116. PMID: 23123642
- 88.** Martin E, Schule R, Smets K, et al. Loss of function of glucocerebrosidase GBA2 is responsible for motor neuron defects in hereditary spastic paraparesis. *Am. J. Hum. Genet.* Feb 7 2013;92(2):238-244. PMID: 23332916, PMCID: PMC3567271
- 89.** Komyathy K, Neal S, Feely S, Miller LJ, Lewis RA, Trigge G, Siskind CE, Shy ME, Ramchandren S. Anterior tibialis CMAP amplitude correlations with impairment in CMT1A. *Muscle Nerve.* Apr 2013;47(4):493-496. PMID: 23456782, PMCID: PMC3608739
- 90.** Kennerson ML, Yiu EM, Chuang DT, et al. A new locus for X-linked dominant Charcot-Marie-Tooth disease (CMTX6) is caused by mutations in the pyruvate dehydrogenase kinase isoenzyme 3 (PDK3) gene. *Hum. Mol. Genet.* Apr 1 2013;22(7):1404-1416. PMID: 23297365, PMCID: PMC3596851
- 91.** Cottenie E, Menezes MP, Rossor AM, et al. Rapidly progressive asymmetrical weakness in Charcot-Marie-Tooth disease type 4J resembles chronic inflammatory demyelinating polyneuropathy. *Neuromuscul. Disord.* May 2013;23(5):399-403. PMID: 23489662
- 92.** Saporta MA, Shy ME. Inherited peripheral neuropathies. *Neurol. Clin.* May 2013;31(2):597-619. PMID: 23642725, PMCID: PMC3646296
- 93.** Burns J, Menezes M, Finkel RS, et al. Transitioning outcome measures: relationship between the CMTPedS and CMTNSv2 in children, adolescents, and young adults with Charcot-Marie-Tooth disease. *J. Peripher. Nerv. Syst.* Jun 2013;18(2):177-180. PMID: 23781965, PMCID: PMC3714225
- 94.** Murphy SM, Ernst D, Wei Y, et al. Hereditary sensory and autonomic neuropathy type 1 (HSANI) caused by a novel mutation in SPTLC2. *Neurology.* Jun 4 2013;80(23):2106-2111. PMID: 23658386, PMCID: PMC3716354
- 95.** Oates EC, Rossor AM, Hafezparast M, et al. Mutations in BICD2 cause dominant congenital spinal muscular atrophy and hereditary spastic paraparesis. *Am. J. Hum. Genet.* Jun 6 2013;92(6):965-973. PMID: 23664120, PMCID: PMC3675232

- 96.** Reilly MM. Obstructive sleep apnoea, restless leg syndrome and Charcot-Marie-Tooth disease type 1: important associations. *J. Neurol. Neurosurg. Psychiatry.* Jun 11 2013. PMID: 23757421
- 97.** Boukhris A, Schule R, Loureiro JL, et al. Alteration of ganglioside biosynthesis responsible for complex hereditary spastic paraparesis. *Am. J. Hum. Genet.* Jul 11 2013;93(1):118-123. PMID: 23746551, PMCID: PMC3710753
- 98.** Marquez-Infante C, Murphy SM, Mathew L, et al. Asymmetric sensory ganglionopathy: a case series. *Muscle Nerve.* Jul 2013;48(1):145-150. PMID: 23744601
- 99.** Hawke F, Chuter V, Burns J. Impact of nocturnal calf cramping on quality of sleep and health-related quality of life. *Qual. Life Res.* Aug 2013;22(6):1281-1286. PMID: 23011494
- 100.** Siskind CE, Panchal S, Smith CO, et al. A review of genetic counseling for Charcot Marie Tooth disease (CMT). *J. Genet. Couns.* Aug 2013;22(4):422-436. PMID: 23604902
- 101.** Lewis RA, McDermott MP, Herrmann DN, et al. High-Dosage Ascorbic Acid Treatment in Charcot-Marie-Tooth Disease Type 1A: Results of a Randomized, Double-Masked, Controlled Trial. *JAMA neurology.* Aug 1 2013;70(8):981-987. PMID: 23797954, PMCID: PMC3752369
- 102.** Tousignant R, Trepanier A, Shy ME, Siskind CE. Genetic testing practices for CMT1A. *Muscle Nerve.* Aug 20 2013. PMID: 23963961
- 103.** Johnson NE, Heatwole CR, Ferguson M, Sowden JE, Jeanat S, Herrmann DN. Patient Identification of the Symptomatic Impact of Charcot-Marie-Tooth Disease Type 1A. *Journal of clinical neuromuscular disease.* Sep 2013;15(1):19-23. PMID: 23965405, PMCID: PMC3752697
- 104.** Eschbach J, Sinniger J, Bouitbir J, et al. Dynein mutations associated with hereditary motor neuropathies impair mitochondrial morphology and function with age. *Neurobiol. Dis.* Oct 2013;58:220-230. PMID: 23742762, PMCID: PMC3748180
- 105.** Klein CJ, Duan X, Shy ME. Inherited neuropathies: clinical overview and update. *Muscle Nerve.* Oct 2013;48(4):604-622. PMID: 23801417, PMCID: PMC3918879
- 106.** Landoure G, Zhu PP, Lourenco CM, et al. Hereditary Spastic Paraparesis Type 43 (SPG43) is Caused by Mutation in C19orf12. *Hum. Mutat.* Oct 2013;34(10):1357-1360. PMID: 23857908, PMCID: PMC3819934
- 107.** Rossor AM, Polke JM, Houlden H, Reilly MM. Clinical implications of genetic advances in Charcot-Marie-Tooth disease. *Nature reviews. Neurology.* Oct 2013;9(10):562-571. PMID: 24018473
- 108.** Pareyson D, Piscosquito G, Moroni I, Salsano E, Zeviani M. Peripheral neuropathy in mitochondrial disorders. *Lancet Neurol.* Oct 2013;12(10):1011-1024. PMID: 24050734
- 109.** Sagnelli A, Piscosquito G, Pareyson D. Inherited neuropathies: an update. *J. Neurol.* Oct 2013;260(10):2684-2690. PMID: 24061768
- 110.** Pitceathly RD, Taanman JW, Rahman S, et al. COX10 Mutations Resulting in Complex Multisystem Mitochondrial Disease That Remains Stable Into Adulthood. *JAMA neurology.* Oct 7 2013. PMID: 24100867

- 111.** Gonzalez M, Nampoothiri S, Kornblum C, et al. Mutations in phospholipase DDHD2 cause autosomal recessive hereditary spastic paraplegia (SPG54). *Eur. J. Hum. Genet.* Nov 2013;21(11):1214-1218. PMID: 23486545, PMCID: PMC3798837
- 112.** Gonzalez M, McLaughlin H, Houlden H, et al. Exome sequencing identifies a significant variant in methionyl-tRNA synthetase (MARS) in a family with late-onset CMT2. *J. Neurol. Neurosurg. Psychiatry.* Nov 2013;84(11):1247-1249. PMID: 23729695, PMCID: PMC3796032
- 113.** Mandarakas M, Hiller CE, Rose KJ, Burns J. Measuring Ankle Instability in Pediatric Charcot-Marie-Tooth Disease. *J. Child Neurol.* Nov 2013;28(11):1456-1462. PMID: 23696628
- 114.** Sumner CJ, d'Ydewalle C, Wooley J, et al. A dominant mutation in FBXO38 causes distal spinal muscular atrophy with calf predominance. *Am. J. Hum. Genet.* Nov 7 2013;93(5):976-983. PMID: 24207122, PMCID: PMC3824115
- 115.** Bonifert T, Karle KN, Tonagel F, et al. Pure and syndromic optic atrophy explained by deep intronic OPA1 mutations and an intralocus modifier. *Brain.* 2014;137(Pt 8):2164-2177. PMID: 24970096, PMCID: PMC4107747
- 116.** Herrmann DN, Horvath R, Sowden JE, et al. Synaptotagmin 2 mutations cause an autosomal-dominant form of lambert-eaton myasthenic syndrome and nonprogressive motor neuropathy. *Am. J. Hum. Genet.* 2014;95(3):332-339. PMID: 25192047, PMCID: PMC4157148
- 117.** Lam BL, Zuchner SL, Dallman J, et al. Mutation K42E in dehydrodolichol diphosphate synthase (DHDDS) causes recessive retinitis pigmentosa. *Adv. Exp. Med. Biol.* 2014;801:165-170. PMID: 24664694
- 118.** Mannil M, Solari A, Leha A, et al. Selected items from the Charcot-Marie-Tooth (CMT) Neuropathy Score and secondary clinical outcome measures serve as sensitive clinical markers of disease severity in CMT1A patients. *Neuromuscul Disord.* 2014;24(11):1003-1017. PMID: 25085517
- 119.** Timmerman V, Strickland AV, Zuchner S. Genetics of Charcot-Marie-Tooth (CMT) Disease within the Frame of the Human Genome Project Success. *Genes.* 2014;5(1):13-32. PMID: 24705285, PMCID: PMC3978509
- 120.** Wen R, Dallman JE, Li Y, et al. Knock-down DHDDS expression induces photoreceptor degeneration in zebrafish. *Adv. Exp. Med. Biol.* 2014;801:543-550. PMID: 24664742
- 121.** Foley AR, Menezes MP, Pandraud A, et al. Treatable childhood neuronopathy caused by mutations in riboflavin transporter RFVT2. *Brain.* Jan 2014;137(Pt 1):44-56. PMID: 24253200, PMCID: PMC3891447
- 122.** Laura M, Hutton EJ, Blake J, et al. Pain and small fiber function in charcot-marie-tooth disease type 1A. *Muscle Nerve.* Jan 7 2014. PMID: 24395492
- 123.** Mudge AJ, Bau KV, Purcell LN, et al. Normative reference values for lower limb joint range, bone torsion, and alignment in children aged 4-16 years. *J. Pediatr. Orthop. B.* Jan 2014;23(1):15-25. PMID: 23852035

- 124.** Synofzik M, Gonzalez MA, Lourenco CM, et al. PNPLA6 mutations cause Boucher-Neuhäuser and Gordon Holmes syndromes as part of a broad neurodegenerative spectrum. *Brain*. Jan 2014;137(Pt 1):69-77. PMID: 24355708, PMCID: PMC3891450
- 125.** Esteves T, Durr A, Mundwiller E, et al. Loss of association of REEP2 with membranes leads to hereditary spastic paraplegia. *Am. J. Hum. Genet.* Feb 6 2014;94(2):268-277. PMID: 24388663, PMCID: PMC3928657
- 126.** Ramchandren S, Jaiswal M, Feldman E, Shy M. Effect of pain in pediatric inherited neuropathies. *Neurology*. Mar 4 2014;82(9):793-797. PMID: 24477108, PMCID: PMC3945655
- 127.** Fischmann A, Morrow JM, Sinclair CD, et al. Improved anatomical reproducibility in quantitative lower-limb muscle MRI. *J. Magn. Reson. Imaging*. Apr 2014;39(4):1033-1038. PMID: 24123788
- 128.** Liu YT, Hersheson J, Plagnol V, et al. Autosomal-recessive cerebellar ataxia caused by a novel ADCK3 mutation that elongates the protein: clinical, genetic and biochemical characterisation. *J. Neurol. Neurosurg. Psychiatry*. May 2014;85(5):493-498. PMID: 24218524, PMCID: PMC3995328
- 129.** Revuelta GJ, Montilla J, Benatar M, et al. An (1)(8)F-FDG PET study of cervical muscle in parkinsonian anterocollis. *J. Neurol. Sci.* May 15 2014;340(1-2):174-177. PMID: 24725739, PMCID: PMC4305331
- 130.** Parker B, Alexander R, Wu X, et al. Detection of Copy Number Variation by SNP-Allelotyping. *J. Neurogenet.* Jun 2 2014;1-5. PMID: 24830919, PMCID: PMC4254366
- 131.** Caballero Oteyza A, Battaloglu E, Ocek L, et al. Motor protein mutations cause a new form of hereditary spastic paraparesis. *Neurology*. Jun 3 2014;82(22):2007-2016. PMID: 24808017, PMCID: PMC4105256
- 132.** Morrow JM, Sinclair CD, Fischmann A, et al. Reproducibility, and age, body-weight and gender dependency of candidate skeletal muscle MRI outcome measures in healthy volunteers. *Eur. Radiol.* Jul 2014;24(7):1610-1620. PMID: 24748539, PMCID: PMC4046083
- 133.** Johnson NE, Sowden J, Dilek N, et al. Prospective Study of Muscle Cramps in Charcot-Marie-Tooth Disease. *Muscle Nerve*. Jul 5 2014. PMID: 25042364, PMCID: PMC4860275
- 134.** Fridman V, Oaklander AL, David WS, et al. Natural History and Biomarkers in Hereditary Sensory Neuropathy Type 1. *Muscle Nerve*. Jul 10 2014. PMID: 25042817, PMCID: PMC4484799
- 135.** Finkel RS, McDermott MP, Kaufmann P, et al. Observational study of spinal muscular atrophy type I and implications for clinical trials. *Neurology*. Aug 26 2014;83(9):810-817. PMID: 25080519, PMCID: PMC4155049
- 136.** Sadjadi R, Reilly MM, Shy ME, et al. Psychometrics evaluation of Charcot-Marie-Tooth Neuropathy Score (CMTNSv2) second version, using Rasch analysis. *J. Peripher. Nerv. Syst.* Sep 2014;19(3):192-196. PMID: 25400013, PMCID: PMC4303498

- 137.** Brewer MH, Ma KH, Beecham GW, et al. Haplotype-specific modulation of a SOX10/CREB response element at the Charcot-Marie-Tooth disease type 4C locus SH3TC2. *Hum. Mol. Genet.* Oct 1 2014;23(19):5171-5187. PMID: 24833716, PMCID: PMC4168306
- 138.** Hershey LA, Perlmutter JS. Smoking and Parkinson disease: where there is smoke there may not be fire. *Neurology*. Oct 14 2014;83(16):1392-1393. PMID: 25217061
- 139.** Dortch RD, Dethrage LM, Gore JC, Smith SA, Li J. Proximal nerve magnetization transfer MRI relates to disability in Charcot-Marie-Tooth diseases. *Neurology*. Oct 21 2014;83(17):1545-1553. PMID: 25253751, PMCID: PMC4222857
- 140.** Griffin LB, Sakaguchi R, McGuigan D, et al. Impaired function is a common feature of neuropathy-associated glycyl-tRNA synthetase mutations. *Hum. Mutat.* Nov 2014;35(11):1363-1371. PMID: 25168514, PMCID: PMC4213347
- 141.** Beutler AS, Kulkarni AA, Kanwar R, et al. Sequencing of Charcot-Marie-Tooth disease genes in a toxic polyneuropathy. *Ann. Neurol.* Nov 2014;76(5):727-737. PMID: 25164601, PMCID: PMC4388308
- 142.** Gonzalez MA, Feely SM, Speziani F, et al. A novel mutation in VCP causes Charcot-Marie-Tooth Type 2 disease. *Brain*. Nov 2014;137(Pt 11):2897-2902. PMID: 25125609, PMCID: PMC4208462
- 143.** Johnson NE, Heatwole CR, Dilek N, et al. Quality-of-life in Charcot-Marie-Tooth disease: The patient's perspective. *Neuromuscul. Disord.* Nov 2014;24(11):1018-1023. PMID: 25092060, PMCID: PMC4253871
- 144.** Cottenie E, Kochanski A, Jordanova A, et al. Truncating and missense mutations in IGHMBP2 cause Charcot-Marie Tooth disease type 2. *Am. J. Hum. Genet.* Nov 6 2014;95(5):590-601. PMID: 25439726, PMCID: PMC4225647
- 145.** Horga A, Pitceathly RD, Blake JC, et al. Peripheral neuropathy predicts nuclear gene defect in patients with mitochondrial ophthalmoplegia. *Brain*. Dec 2014;137(Pt 12):3200-3212. PMID: 25281868, PMCID: PMC4240292
- 146.** Brennan KM, Bai Y, Pisciotta C, et al. Absence of Dystrophin Related Protein-2 disrupts Cajal bands in a patient with Charcot-Marie-Tooth disease. *Neuromuscul. Disord.* 2015;25(10):786-793. PMID: 26227883, PMCID: PMC4920059
- 147.** Chen YC, Auer-Grumbach M, Matsukawa S, et al. Transcriptional regulator PRDM12 is essential for human pain perception. *Nat Genet.* 2015;47(7):803-808. PMID: 26005867
- 148.** Gutmann L, Shy M. Update on Charcot-Marie-Tooth disease. *Curr. Opin. Neurol.* 2015;28(5):462-467. PMID: 26263471
- 149.** Jerath NU, Crockett CD, Moore SA, et al. Rare Manifestation of a c.290 C>T, p.Gly97Glu VCP Mutation. *Case reports in genetics*. 2015;2015:239167. PMID: 25878907, PMCID: PMC4386706

- 150.** Nolano M, Manganelli F, Provitera V, et al. Small nerve fiber involvement in CMT1A. *Neurology*. 2015;84(4):407-414. PMID: 25540311, PMCID: PMC4336000
- 151.** Philippakis AA, Azzariti DR, Beltran S, et al. The Matchmaker Exchange: a platform for rare disease gene discovery. *Hum. Mutat.* 2015;36(10):915-921. PMID: 26295439, PMCID: PMC4610002
- 152.** Shy ME. Ultrasound: the future for evaluating the PNS in humans? *J Neurol Neurosurg Psychiatry*. 2015;86(4):362. PMID: 25246646
- 153.** Sman AD, Hackett D, Fiatarone Singh M, Fornusek C, Menezes MP, Burns J. Systematic review of exercise for Charcot-Marie-Tooth disease. *J Peripher Nerv Syst.* 2015;20(4):347-362. PMID: 26010435
- 154.** Thal DR, Zuchner S, Gierer S, et al. Abnormal Paraplegin Expression in Swollen Neurites, tau- and alpha-Synuclein Pathology in a Case of Hereditary Spastic Paraparesis SPG7 with an Ala510Val Mutation. *Int. J. Mol. Sci.* 2015;16(10):25050-25066. PMID: 26506339, PMCID: PMC4632789
- 155.** McColgan P, Viegas S, Gandhi S, et al. Oculoleptomeningeal Amyloidosis associated with transthyretin Leu12Pro in an African patient. *J. Neurol.* Jan 2015;262(1):228-234. PMID: 25488473, PMCID: PMC4289971
- 156.** Safka Brozkova D, Deconinck T, Griffin LB, et al. Loss of function mutations in HARS cause a spectrum of inherited peripheral neuropathies. *Brain*. 2015;138(Pt 8):2161-2172. PMID: 26072516, PMCID: PMC4840952
- 157.** Sanmaneechai O, Feely S, Scherer SS, et al. Genotype-phenotype characteristics and baseline natural history of heritable neuropathies caused by mutations in the MPZ gene. *Brain*. 2015;138(Pt 11):3180-3192. PMID: 26310628, PMCID: PMC4643641
- 158.** Schmidt WM, Rutledge SL, Schule R, et al. Disruptive SCYL1 Mutations Underlie a Syndrome Characterized by Recurrent Episodes of Liver Failure, Peripheral Neuropathy, Cerebellar Atrophy, and Ataxia. *Am. J. Hum. Genet.* 2015;97(6):855-861. PMID: 26581903, PMCID: PMC4678415
- 159.** Saporta MA, Dang V, Volfson D, et al. Axonal Charcot-Marie-Tooth disease patient-derived motor neurons demonstrate disease-specific phenotypes including abnormal electrophysiological properties. *Exp. Neurol.* Jan 2015;263:190-199. PMID: 25448007, PMCID: PMC4262589
- 160.** Zimon M, Battaloglu E, Parman Y, et al. Unraveling the genetic landscape of autosomal recessive Charcot-Marie-Tooth neuropathies using a homozygosity mapping approach. *Neurogenetics*. Jan 2015;16(1):33-42. PMID: 25231362, PMCID: PMC4917005
- 161.** Mead S, Reilly MM. A new prion disease: relationship with central and peripheral amyloidoses. *Nature reviews. Neurology*. Feb 2015;11(2):90-97. PMID: 25623792

- 162.** Scoto M, Rossor AM, Harms MB, et al. Novel mutations expand the clinical spectrum of DYNC1H1-associated spinal muscular atrophy. *Neurology*. Feb 17 2015;84(7):668-679. PMID: 25609763, PMCID: PMC4336105
- 163.** Ernst D, Murphy SM, Sathiyanaikan K, et al. Novel HSAN1 mutation in serine palmitoyltransferase resides at a putative phosphorylation site that is involved in regulating substrate specificity. *Neuromolecular Med*. Mar 2015;17(1):47-57. PMID: 25567748, PMCID: PMC4326654
- 164.** Baets J, Duan X, Wu Y, et al. Defects of mutant DNMT1 are linked to a spectrum of neurological disorders. *Brain*. Apr 2015;138(Pt 4):845-861. PMID: 25678562, PMCID: PMC5014076
- 165.** Jerath NU, Shy ME. Hereditary motor and sensory neuropathies: Understanding molecular pathogenesis could lead to future treatment strategies. *Biochim. Biophys. Acta*. Apr 2015;1852(4):667-678. PMID: 25108281
- 166.** Sanmaneechai O, Swenson A, Gerke AK, Moore SA, Shy ME. Inclusion body myositis and sarcoid myopathy: coincidental occurrence or associated diseases. *Neuromuscul. Disord*. Apr 2015;25(4):297-300. PMID: 25599912
- 167.** Pelayo-Negro AL, Carr AS, Laura M, Skorupinska M, Reilly MM. An observational study of asymmetry in CMT1A. *J. Neurol. Neurosurg. Psychiatry*. May 2015;86(5):589-590. PMID: 25313262, PMCID: PMC4413808
- 168.** Motley WW, Griffin LB, Mademan I, et al. A novel AARS mutation in a family with dominant myeloneuropathy. *Neurology*. May 19 2015;84(20):2040-2047. PMID: 25904691, PMCID: PMC4442103
- 169.** Carr AS, Polke JM, Wilson J, et al. MFN2 deletion of exons 7 and 8: founder mutation in the UK population. *J. Peripher. Nerv. Syst.* Jun 2015;20(2):67-71. PMID: 26114802
- 170.** Carr AS, Pelayo-Negro AL, Jaunmuktane Z, et al. Transthyretin V122I amyloidosis with clinical and histological evidence of amyloid neuropathy and myopathy. *Neuromuscul. Disord*. Jun 2015;25(6):511-515. PMID: 25819286
- 171.** Ramchandren S, Shy M, Feldman E, Carlos R, Siskind C. Defining disability: development and validation of a mobility-Disability Severity Index (mDSI) in Charcot-Marie-tooth disease. *J. Neurol. Neurosurg. Psychiatry*. Jun 2015;86(6):635-639. PMID: 25157034, PMCID: PMC4920058
- 172.** Rossor AM, Evans MR, Reilly MM. A practical approach to the genetic neuropathies. *Practical neurology*. Jun 2015;15(3):187-198. PMID: 25898997
- 173.** Tetreault M, Gonzalez M, Dicaire MJ, et al. Adult-onset painful axonal polyneuropathy caused by a dominant NAGLU mutation. *Brain*. Jun 2015;138(Pt 6):1477-1483. PMID: 25818867, PMCID: PMC4542621

- 174.** Pisciotta C, Bai Y, Brennan KM, et al. Reduced neurofilament expression in cutaneous nerve fibers of patients with CMT2E. *Neurology*. Jul 21 2015;85(3):228-234. PMID: 26109717, PMCID: PMC4516296
- 175.** Abrams AJ, Hufnagel RB, Rebelo A, et al. Mutations in SLC25A46, encoding a UGO1-like protein, cause an optic atrophy spectrum disorder. *Nat. Genet.* Aug 2015;47(8):926-932. PMID: 26168012, PMCID: PMC4520737
- 176.** Fridman V, Bundy B, Reilly MM, et al. CMT subtypes and disease burden in patients enrolled in the Inherited Neuropathies Consortium natural history study: a cross-sectional analysis. *J. Neurol. Neurosurg. Psychiatry*. Aug 2015;86(8):873-878. PMID: 25430934, PMCID: PMC4516002
- 177.** Gonzaga-Jauregui C, Harel T, Gambin T, et al. Exome Sequence Analysis Suggests that Genetic Burden Contributes to Phenotypic Variability and Complex Neuropathy. *Cell reports*. Aug 18 2015;12(7):1169-1183. PMID: 26257172, PMCID: PMC4545408
- 178.** Saifee TA, Parees I, Kassavetis P, et al. Tremor in Charcot-Marie-Tooth disease: No evidence of cerebellar dysfunction. *Clin. Neurophysiol.* Sep 2015;126(9):1817-1824. PMID: 25641441
- 179.** Strickland AV, Schabhattl M, Offenbacher H, et al. Mutation screen reveals novel variants and expands the phenotypes associated with DYNC1H1. *J. Neurol.* Sep 2015;262(9):2124-2134. PMID: 26100331, PMCID: PMC4573829
- 180.** Jerath NU, Kamholz J, Grider T, Harper A, Swenson A, Shy ME. Coexistence of a T118M PMP22 missense mutation and chromosome 17 (17p11.2-p12) deletion. *Muscle Nerve*. Nov 2015;52(5):905-908. PMID: 26012543, PMCID: PMC4596757
- 181.** Whittaker RG, Herrmann DN, Bansagi B, et al. Electrophysiologic features of SYT2 mutations causing a treatable neuromuscular syndrome. *Neurology*. Dec 1 2015;85(22):1964-1971. PMID: 26519543, PMCID: PMC4664120
- 182.** Albulym OM, Kennerson ML, Harms MB, et al. MORC2 mutations cause axonal Charcot-Marie-Tooth disease with pyramidal signs. *Ann. Neurol.* 2016;79(3):419-427. PMID: 26659848, PMCID: PMC4936275
- 183.** Auer-Grumbach M, Toegel S, Schabhattl M, et al. Rare Variants in MME, Encoding Metalloprotease Neprilysin, Are Linked to Late-Onset Autosomal-Dominant Axonal Polyneuropathies. *Am J Hum Genet.* 2016;99(3):607-623. PMID: 27588448, PMCID: PMC5011077
- 184.** Cornett KM, Menezes MP, Bray P, et al. Phenotypic Variability of Childhood Charcot-Marie-Tooth Disease. *JAMA neurology*. 2016;73(6):645-651. PMID: 27043305, PMCID: PMC4916861
- 185.** Horga A, Tomaselli PJ, Gonzalez MA, et al. SIGMAR1 mutation associated with autosomal recessive Silver-like syndrome. *Neurology*. 2016;87(15):1607-1612. PMID: 27629094, PMCID: PMC5067545

- 186.** Hu B, Arpag S, Zuchner S, Li J. A novel missense mutation of CMT2P alters transcription machinery. *Ann Neurol*. 2016;80(6):834-845. PMID: 27615052, PMCID: PMC5177458
- 187.** Jerath NU, Gutmann L, Reddy CG, Shy ME. Charcot-marie-tooth disease type 1X in women: Electrodiagnostic findings. *Muscle Nerve*. 2016;54(4):728-732. PMID: 26873881, PMCID: PMC5588147
- 188.** Lassuthova P, Safka Brozkova D, Krutova M, et al. Severe axonal Charcot-Marie-Tooth disease with proximal weakness caused by de novo mutation in the MORC2 gene. *Brain*. 2016;139(Pt 4):e26. PMID: 26912637
- 189.** Lunn MP, Ellis L, Hadden RD, Rajabally YA, Winer JB, Reilly MM. A proposed dosing algorithm for the individualized dosing of human immunoglobulin in chronic inflammatory neuropathies. *J Peripher Nerv Syst*. 2016;21(1):33-37. PMID: 26757367
- 190.** Mademan I, Harmuth F, Giordano I, et al. Multisystemic SYNE1 ataxia: confirming the high frequency and extending the mutational and phenotypic spectrum. *Brain*. 2016;139(Pt 8):e46. PMID: 27197992, PMCID: PMC4958896
- 191.** Manganelli F, Pisciotta C, Reilly MM, et al. Nerve conduction velocity in CMT1A: what else can we tell? *Eur J Neurol*. 2016;23(10):1566-1571. PMID: 27412484, PMCID: PMC5603914
- 192.** Manole A, Chelban V, Hardy NA, et al. Severe axonal neuropathy is a late manifestation of SPG11. *J Neurol*. 2016;263(11):2278-2286. PMID: 27544499, PMCID: PMC5065903
- 193.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis*. 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 194.** Morrow JM, Sinclair CD, Fischmann A, et al. MRI biomarker assessment of neuromuscular disease progression: a prospective observational cohort study. *Lancet Neurol*. 2016;15(1):65-77. PMID: 26549782, PMCID: PMC4672173
- 195.** Motley WW, Palaima P, Yum SW, et al. De novo PMP2 mutations in families with type 1 Charcot-Marie-Tooth disease. *Brain*. 2016;139(Pt 6):1649-1656. PMID: 27009151, PMCID: PMC4916861
- 196.** Panosyan FB, Mountain JM, Reilly MM, Shy ME, Herrmann DN. Rydel-Seiffer fork revisited: Beyond a simple case of black and white. *Neurology*. 2016;87(7):738-740. PMID: 27412138, PMCID: PMC4999169
- 197.** Perez-Siles G, Grant A, Ellis M, et al. Characterizing the molecular phenotype of an Atp7a(T985I) conditional knock in mouse model for X-linked distal hereditary motor neuropathy (dHMNX). *Metallomics : integrated biometal science*. 2016;8(9):981-992. PMID: 27293072, PMCID: PMC5586149
- 198.** Picosquito G, Saveri P, Magri S, et al. Screening for SH3TC2 gene mutations in a series of demyelinating recessive Charcot-Marie-Tooth disease (CMT4). *J Peripher Nerv Syst*. 2016;21(3):142-149. PMID: 27231023, PMCID: PMC5592964

- 199.** Rebelo AP, Abrams AJ, Cottenie E, et al. Cryptic Amyloidogenic Elements in the 3' UTRs of Neurofilament Genes Trigger Axonal Neuropathy. *Am. J. Hum. Genet.* 2016;98(4):597-614. PMID: 27040688, PMCID: PMC4833435
- 200.** Rossor AM, Tomaselli PJ, Reilly MM. Recent advances in the genetic neuropathies. *Curr Opin Neurol.* 2016;29(5):537-548. PMID: 27584852, PMCID: PMC5130159
- 201.** Shy ME. Gene therapy, CMT1X, and the inherited neuropathies. *Proc Natl Acad Sci U S A.* 2016;113(17):4552-4554. PMID: 27078106, PMCID: PMC4855541
- 202.** Shy M. LRSAM1 lessons. *Ann Neurol.* 2016;80(6):821-822. PMID: 28001317
- 203.** Vallat JM, Nizon M, Magee A, et al. Contactin-Associated Protein 1 (CNTNAP1) Mutations Induce Characteristic Lesions of the Paranodal Region. *J Neuropathol Exp Neurol.* 2016;75(12):1155-1159. PMID: 27818385
- 204.** Wegener C, Wegener K, Smith R, Schott KH, Burns J. Biomechanical effects of sensorimotor orthoses in adults with Charcot-Marie-Tooth disease. *Prosthet Orthot Int.* 2016;40(4):436-446. PMID: 25934421
- 205.** Brewer MH, Chaudhry R, Qi J, et al. Whole Genome Sequencing Identifies a 78 kb Insertion from Chromosome 8 as the Cause of Charcot-Marie-Tooth Neuropathy CMTX3. *PLoS Genet.* Jul 2016;12(7):e1006177. PMID: 27438001, PMCID: PMC4954712
- 206.** Bis DM, Schule R, Reichbauer J, et al. Uniparental disomy determined by whole-exome sequencing in a spectrum of rare motoneuron diseases and ataxias. *Molecular genetics & genomic medicine.* 2017;5(3):280-286. PMID: 28546998, PMCID: PMC5441426
- 207.** Burns J, Sman AD, Cornett KMD, et al. Safety and efficacy of progressive resistance exercise for Charcot-Marie-Tooth disease in children: a randomised, double-blind, sham-controlled trial. *The Lancet Child & adolescent health.* 2017;1(2):106-113. PMID: 30169201
- 208.** Cornett KMD, Menezes MP, Shy RR, et al. Natural history of Charcot-Marie-Tooth disease during childhood. *Ann Neurol.* 2017;82(3):353-359. PMID: 28796392
- 209.** Fledrich R, Mannil M, Leha A, et al. Biomarkers predict outcome in Charcot-Marie-Tooth disease 1A. *J Neurol Neurosurg Psychiatry.* 2017;88(11):941-952. PMID: 28860329
- 210.** Hengel H, Magee A, Mahanjah M, et al. CNTNAP1 mutations cause CNS hypomyelination and neuropathy with or without arthrogryposis. *Neurology Genetics.* 2017;3(2):e144. PMID: 28374019, PMCID: PMC5363873
- 211.** Horga A, Laura M, Jaunmuktane Z, et al. Genetic and clinical characteristics of NEFL-related Charcot-Marie-Tooth disease. *J Neurol Neurosurg Psychiatry.* 2017. PMID: 28501821, PMCID: PMC5580821
- 212.** Jerath NU, Shy ME. Charcot-Marie-Tooth Disease Type 1A: Influence of Body Mass Index on Nerve Conduction Studies and on the Charcot-Marie-Tooth Examination Score. *J Clin Neurophysiol.* 2017;34(6):508-511. PMID: 28914656, PMCID: PMC5679118

- 213.** Jerath NU, Shy ME. Charcot-Marie-Tooth disease type 1C: Clinical and electrophysiological findings for the c.334G>a (p.Gly112Ser) LITAF/SIMPLE mutation. *Muscle Nerve*. 2017. PMID: 28164329, PMCID: PMC5587391
- 214.** Kalmar B, Innes A, Wanisch K, et al. Mitochondrial deficits and abnormal mitochondrial retrograde axonal transport play a role in the pathogenesis of mutant Hsp27 induced Charcot Marie Tooth Disease. *Hum Mol Genet*. 2017. PMID: 28595321, PMCID: PMC5808738
- 215.** Kunovsky D, Cordier R, Bray P, Burns J. Handwriting difficulties of children with Charcot-Marie-Tooth disease type 1A. *J Peripher Nerv Syst*. 2017;22(1):34-38. PMID: 27917570
- 216.** Laura M, Singh D, Ramdharry G, et al. Prevalence and orthopedic management of foot and ankle deformities in Charcot-Marie-Tooth disease. *Muscle Nerve*. 2017. PMID: 28632967, PMCID: PMC5811923
- 217.** Manganelli F, Parisi S, Nolano M, et al. Novel mutations in dystonin provide clues to the pathomechanisms of HSAN-VI. *Neurology*. 2017;88(22):2132-2140. PMID: 28468842, PMCID: PMC5447400
- 218.** McKay MJ, Baldwin JN, Ferreira P, Simic M, Vanicek N, Burns J. Normative reference values for strength and flexibility of 1,000 children and adults. *Neurology*. 2017;88(1):36-43. PMID: 27881628, PMCID: PMC5200854
- 219.** Ozes B, Karagoz N, Schule R, et al. PLA2G6 mutations associated with a continuous clinical spectrum from neuroaxonal dystrophy to hereditary spastic paraparesis. *Clin Genet*. 2017;92(5):534-539. PMID: 28295203, PMCID: PMC5597457
- 220.** Panosyan FB, Kirk CA, Marking D, et al. Carpal Tunnel Syndrome in Inherited Neuropathies: A Retrospective Survey. *Muscle Nerve*. 2017. PMID: 28692128, PMCID: PMC5762426
- 221.** Panosyan FB, Laura M, Rossor AM, et al. Cross-sectional analysis of a large cohort with X-linked Charcot-Marie-Tooth disease (CMTX1). *Neurology*. 2017;89(9):927-935. PMID: 28768847, PMCID: PMC5577965
- 222.** Ramdharry GM, Pollard AJ, Grant R, et al. A study of physical activity comparing people with Charcot-Marie-Tooth disease to normal control subjects. *Disabil Rehabil*. 2017;39(17):1753-1758. PMID: 27684376, PMCID: PMC5592965
- 223.** Reilly MM, Pareyson D, Burns J, Laura M, Shy ME, Singh D. 221st ENMC International Workshop:: Foot Surgery in Charcot-Marie-Tooth disease. 10-12 June 2016, Naarden, The Netherlands. *Neuromuscul Disord*. 2017;27(12):1138-1142. PMID: 29074294
- 224.** Rocha N, Bulger DA, Frontini A, et al. Human biallelic MFN2 mutations induce mitochondrial dysfunction, upper body adipose hyperplasia, and suppression of leptin expression. *eLife*. 2017;6. PMID: 28414270, PMCID: PMC5422073
- 225.** Rossor AM, Carr AS, Devine H, et al. Peripheral neuropathy in complex inherited diseases: an approach to diagnosis. *J Neurol Neurosurg Psychiatry*. 2017;88(10):846-863. PMID: 28794150

- 226.** Rossor AM, Morrow JM, Polke JM, et al. Pilot phenotype and natural history study of hereditary neuropathies caused by mutations in the HSPB1 gene. *Neuromuscul Disord*. 2017;27(1):50-56. PMID: 27816334, PMCID: PMC5260843
- 227.** Saporta MA, Shy ME. A human cellular model to study peripheral myelination and demyelinating neuropathies. *Brain*. 2017;140(4):856-859. PMID: 28375459
- 228.** Shy M, Rebelo AP, Feely SM, et al. Mutations in BAG3 cause adult-onset Charcot-Marie-Tooth disease. *J Neurol Neurosurg Psychiatry*. 2017. PMID: 28754666
- 229.** Tomaselli PJ, Rossor AM, Horga A, et al. Mutations in noncoding regions of GJB1 are a major cause of X-linked CMT. *Neurology*. 2017;88(15):1445-1453. PMID: 28283593, PMCID: PMC5386440
- 230.** Tomaselli PJ, Rossor AM, Horga A, et al. A de novo dominant mutation in KIF1A associated with axonal neuropathy, spasticity and autism spectrum disorder. *J Peripher Nerv Syst*. 2017;22(4):460-463. PMID: 28834584, PMCID: PMC5763335
- 231.** Tsai PC, Soong BW, Mademan I, et al. A recurrent WARS mutation is a novel cause of autosomal dominant distal hereditary motor neuropathy. *Brain*. 2017. PMID: 28369220
- 232.** Wang DS, Wu X, Bai Y, et al. PMP22 exon 4 deletion causes ER retention of PMP22 and a gain-of-function allele in CMT1E. *Annals of clinical and translational neurology*. 2017;4(4):236-245. PMID: 28382305, PMCID: PMC5376752
- 233.** Zis P, Reilly MM, Rao DG, Tomaselli P, Rossor AM, Hadjivassiliou M. A novel mutation in the FGD4 gene causing Charcot-Marie-Tooth disease. *J Peripher Nerv Syst*. 2017;22(3):224-225. PMID: 28543957, PMCID: PMC5601274
- 234.** Abbott JA, Meyer-Schuman R, Lupo V, et al. Substrate interaction defects in histidyl-tRNA synthetase linked to dominant axonal peripheral neuropathy. *Hum Mutat*. 2018;39(3):415-432. PMID: 29235198, PMCID: PMC5983030
- 235.** Bai Y, Wu X, Brennan KM, et al. Myelin protein zero mutations and the unfolded protein response in Charcot Marie Tooth disease type 1B. *Annals of clinical and translational neurology*. 2018;5(4):445-455. PMID: 29687021, PMCID: PMC5899917
- 236.** Davies JL, Engelstad JK, Sr., L EG, et al. Somatotopic heat pain thresholds and intraepidermal nerve fibers in health. *Muscle Nerve*. 2018;58(4):509-516. PMID: 29543981, PMCID: PMC6139085
- 237.** Eichinger K, Burns J, Cornett K, et al. The Charcot-Marie-Tooth Functional Outcome Measure (CMT-FOM). *Neurology*. 2018;91(15):e1381-e1384. PMID: 30232254, PMCID: PMC6177280
- 238.** Hu B, McCollum M, Ravi V, et al. Myelin abnormality in Charcot-Marie-Tooth type 4J recapitulates features of acquired demyelination. *Ann Neurol*. 2018;83(4):756-770. PMID: 29518270, PMCID: PMC5912982

- 239.** Jerath NU, Mankodi A, Crawford TO, et al. Charcot-Marie-Tooth Disease type 4C: Novel mutations, clinical presentations, and diagnostic challenges. *Muscle Nerve*. 2018;57(5):749-755. PMID: 28981955, PMCID: PMC5886823
- 240.** Johnson NE, Heatwole C, Creigh P, et al. The Charcot-Marie-Tooth Health Index: Evaluation of a Patient-Reported Outcome. *Ann Neurol*. 2018;84(2):225-233. PMID: 30014533, PMCID: PMC6168418
- 241.** Lassuthova P, Rebelo AP, Ravenscroft G, et al. Mutations in ATP1A1 Cause Dominant Charcot-Marie-Tooth Type 2. *Am J Hum Genet*. 2018;102(3):505-514. PMID: 29499166, PMCID: PMC5985288
- 242.** Mandarakas MR, Menezes MP, Rose KJ, et al. Development and validation of the Charcot-Marie-Tooth Disease Infant Scale. *Brain*. 2018;141(12):3319-3330. PMID: 30476010, PMCID: PMC6312041
- 243.** Morrow JM, Evans MRB, Grider T, et al. Validation of MRC Centre MRI calf muscle fat fraction protocol as an outcome measure in CMT1A. *Neurology*. 2018;91(12):e1125-e1129. PMID: 30120135, PMCID: PMC6161551
- 244.** Panosyan FB, Kirk CA, Marking D, et al. Carpal tunnel syndrome in inherited neuropathies: A retrospective survey. *Muscle Nerve*. 2018;57(3):388-394. PMID: 28692128, PMCID: PMC5762426
- 245.** Pareyson D, Shy ME. Neurofilament light, biomarkers, and Charcot-Marie-Tooth disease. *Neurology*. 2018;90(6):257-259. PMID: 29321227
- 246.** Pareyson D, Stojkovic T, Leonard-Louis S, et al. Charcot-Marie-Tooth disease type 4B with myelin outfoldings (CMT4B): a multicenter retrospective study. European Journal of Neurology 2018;25: Supplement 2: Special Issue: SI Meeting Abstract 0121:25-29
- 247.** Ramdharry G. Six months of strength training reduces progression of dorsiflexor muscle weakness in children with Charcot-Marie-Tooth disease [commentary]. *Journal of physiotherapy*. 2018;64(1):58. PMID: 29289585
- 248.** Ramdharry GM, Reilly-O'Donnell L, Grant R, Reilly MM. Frequency and circumstances of falls for people with Charcot-Marie-Tooth disease: A cross sectional survey. *Physiother Res Int*. 2018;23(2):e1702. PMID: 29282812
- 249.** Saghira C, Bis DM, Stanek D, et al. Variant pathogenicity evaluation in the community-driven Inherited Neuropathy Variant Browser. *Hum Mutat*. 2018;39(5):635-642. PMID: 29473246, PMCID: PMC5903998
- 250.** Sandelius A, Zetterberg H, Blennow K, et al. Plasma neurofilament light chain concentration in the inherited peripheral neuropathies. *Neurology*. 2018;90(6):e518-e524. PMID: 29321234, PMCID: PMC5818017
- 251.** Shy ME. Antisense oligonucleotides offer hope to patients with Charcot-Marie-Tooth disease type 1A. *J Clin Invest*. 2018;128(1):110-112. PMID: 29199996, PMCID: PMC5749496

- 252.** Svaren J, Moran J, X W, Y B, Gutmann L, ME S. Skin Biopsy Biomarkers for CMT1A. *Journal of the Peripheral Nervous System*. 2018; Abstract Supplement: 108
- 253.** Synofzik M, Helbig KL, Harmuth F, et al. De novo ITPR1 variants are a recurrent cause of early-onset ataxia, acting via loss of channel function. *Eur J Hum Genet*. 2018;26(11):1623-1634. PMID: 29925855, PMCID: PMC6189112
- 254.** Bis-Brewer DM, Danzi MC, Wuchty S, Zuchner S. A network biology approach to unraveling inherited axonopathies. *Scientific reports*. 2019;9(1):1692. PMID: 30737464, PMCID: PMC6368620
- 255.** Pareyson D, Stojkovic T, Reilly MM, et al. A multicenter retrospective study of charcot-marie-tooth disease type 4B (CMT4B) associated with mutations in myotubularin-related proteins (MTMRs). *Ann Neurol*. 2019. PMID: 31070812
- 256.** Svaren J, Moran JJ, Wu X, et al. Schwann cell transcript biomarkers for hereditary neuropathy skin biopsies. *Ann Neurol*. 2019. PMID: 30945774
- 257.** Tao F, Beecham GW, Rebelo AP, et al. Variation in SIPA1L2 is correlated with phenotype modification in Charcot- Marie- Tooth disease type 1A. *Ann Neurol*. 2019;85(3):316-330. PMID: 30706531
- 258.** Cortese A, Phetteplace J, Polke J, et al. IMPACT OF TARGETED NEXT-GENERATION SEQUENCING (NGS) PANELS IN THE MOLECULAR DIAGNOSIS OF CMT IN UK / US SPECIALIST CLINICS. Submitted.
- 259.** Estilow T, Glanzman AM, Burns J, et al. Balance Impairment in Pediatric Charcot-Marie-Tooth Disease. *Muscle and Nerve*. Submitted
- 260.** Feifei T, Beecham G.W., Rebelo A, et al. Genome-Wide Association Study Identifies SIPA1L2 As A Genetic Modifier of Charcot Marie Tooth DiseaseType 1A. Submitted

Lysosomal Disease Network

Book Chapters

1. Leroy JG, Cathey SS, Friez MJ. Mucolipidosis III Alpha/Beta. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993.
2. Leroy JG, Cathey S, Friez MJ. Mucolipidosis II. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993.
3. Ziegler R, Shapiro E. Metabolic and neurodegenerative disorders across the lifespan. *Principles and Practice of Lifespan Developmental Neuropsychology*. Cambridge, UK: Cambridge University Press; 2010:427-448.
4. Chen A, Dickson P. Enzyme replacement therapy for cognitive decline in MPS I: past, present and future. *Current Medical Literature - Lysosomal Storage Diseases*. Vol 9. London, UK: Royal Society of Medicine; 2011:9-16.

5. Urrow T, Grabowski G. Lysosomal Diseases. In: Mehta A, Winchester B, eds. Emerging Therapies and Future Outcomes. West Sussex, UK: Wiley-Blackwell; 2012:174-180.
6. Grabowski G, Charnas L, Du W. Lysosomal acid lipase deficiencies: the Wolman disease/cholesterol ester storage disease spectrum. In: Valle D, Beaudet AL, Vogelstein B, et al., eds. *The Metabolic and Molecular Bases of Inherited Diseases*, 9th ed. New York, NY: McGraw-Hill; 2012.

Abstracts Presented at Conferences

1. Browning MF, Mauer M, Schiffmann RA. Update on Fabry disease identification in at-risk populations. Paper presented at: Lysosomal Disease Network WORLD Symposium; February 10-12, 2010; Miami, FL.
2. Clarke J, Kolodny E, Mahuran D, Fuller M, Tropak M, Keimel J, Sathe S, Pesotchinsky S, Rigat B. Open-label Phase I/II clinical trial of pyrimethamine for the treatment of chronic GM2 gangliosidosis. Paper presented at: Lysosomal Disease Network WORLD Symposium 2010; February 10-12, 2010; Miami, FL.
3. Poteagal M, Donley K, Shapiro E. Empirical assessment of social/emotional function in children with MPS III: preliminary observations on "Risk Room" exploration, auditory startle, and response to brief maternal separation and compliance demand. Paper presented at: Lysosomal Disease Network WORLD Symposium; February 10-12, 2010; Miami, FL.
4. Polgreen LE, Stevenson D, BJORAKER K, Petit M, Viskochil D, Whitley C. Update on the longitudinal study of bone disease and the impact of growth hormone treatment in MPS I, II, AND VI. Paper presented at: Lysosomal Disease Network, WORLD Symposium; February 10-12, 2010; Miami, FL.
5. Dyke JP, Sondhi D, Voss HU, Shungu DC, Mao X, Yohay KH, Worgall S, Hackett NR, Hollmann C, Yeotsas M, Kaminsky SM, Kosofsky B, Heier L, Crystal RG, Ballon D. Assessment of disease severity in late infantile neuronal ceroid lipofuscinosis using multiparametric MRI. Paper presented at: International Society of Magnetic Resonance in Medicine Nineteenth Annual Scientific Meeting. 2011.
6. Glynn E, Maurer M, Svarstad E, Tondel C, Najafian B. Mosaicism of podocyte involvement in untreated females with Fabry disease. Poster presented at: World Congress of Nephrology 2011; Vancouver, Canada.
7. Dyke JP, Sondhi D, Voss HU, Shungu DC, Yohay KH, Worgall S, Hackett NR, Hollmann C, Yeotsas M, Kaminsky SM, Kosofsky B, Heier L, Crystal RG, Ballon D. Multi-parametric magnetic resonance evaluation of late infantile neuronal ceroid lipofuscinosis. Paper presented at: Lysosomal Disease Network's 7th Annual World Symposium; February 16-18, 2011; Las Vegas, NV.
8. Maurer M, Whitley C, Svarstad E, Tondel C, Bostad L, Gubler MC, West M, Najafian B. Relationships of Fabry nephropathy. Paper presented at: American Society of Nephrology, Annual Meeting 2012; San Diego, CA.
9. Schiffman R, Forni S, Swift C, Wu X, Lockhart D, Pond S, Chee M, McNeill NH, Sims K, Benjamin ER, Sweetman L. High incidence of GLA variants in a non-selected heart deases patient population suggesting that the Fabry trait is a common cardiovascular risk factor. Paper presented at: American Society of Human Genetics Annual Meeting 2012; San Diego, CA.

- 10.** Schiffman R. The natural history of mucolipidosis type IV. Paper presented at: Lysosomal Disease Network's WORLD Symposium; February 8-10, 2012; San Diego, CA.
- 11.** Dyke JP, Sondhi D, Voss HU, Shungu DC, Mao X, Yohay KH, Worgall S, Hackett NR, Hollmann C, Yeotsas M, Kaminsky SM, Kosofsky B, Heier L, Crystal RG, Ballon D. Assessment of disease severity in late infantile neuronal ceroid lipofuscinosis using whole brain multiparametric magnetic resonance imaging. Paper presented at: Lysosomal Disease Network's 8th Annual World Symposium; February 8-10, 2012; San Diego, CA.
- 12.** Polgreen LE, Miller BS. Preliminary data on the growth impact and safety of human growth hormone treatment in children with Hurler and Hunter syndromes. Poster presented at: Lysosomal Disease Network's WORLD Symposium; February 8-10, 2012; San Diego, CA.
- 13.** Ahmed A, Cooksley R, Rudser K, Whitley C, Shapiro E. Is the mucopolysaccharidosis type I medical phenotype associated with specific causative factors? Paper presented at: American Society of Human Genetics Annual Meeting; November 6-10, 2012; San Francisco, CA.
- 14.** Yund B, Rudser K, Delaney D, et al. Brain abnormalities and neuropsychological function in children with attenuated mucopolysaccharidosis type II. Paper presented at: International Neuropsychological Society Meetings; February 6-9, 2013; Waikoloa, HI.
- 15.** Utz JR ZR, Raymond G, Karachinski P, Whitley CB. Natural history of gangliosidosis, and therapeutic interventions. American Society of Human Genetics Annual Meeting; October 22-26, 2013; Boston, MA.
- 16.** Sorgen PJ UJ, Whitley CB. Placebo controlled trial evaluating gabapentin for the treatment of small fiber neuropathic pain in patients with Fabry disease. Lysosomal Disease Network's 10th annual WORLD Symposium; February 11-13, 2014; San Diego, CA.
- 17.** Utz JR CT, Sorgen PJ, Whitley CB. Metabolomic study of CSF and serum markers in infantile and juvenile gangliosidosis diseases. Lysosomal Disease Network's 10th annual WORLD Symposium; February 11-13, 2014; San Diego, CA.
- 18.** Utz JR SP, Crutcher T, Whitley CB. Screening for CSF and serum biomarkers in infantile and juvenile gangliosidosis diseases. Lysosomal Disease Network's 10th annual WORLD Symposium; February 11-13, 2014; San Diego, CA.
- 19.** Utz JR WC. Eradication of inhibitors to enzyme replacement therapy in Hunter syndrome patient using non-cytotoxic, non-immunosuppressing regimen. Lysosomal Disease Network's 10th annual WORLD Symposium; February 11-13, 2014; San Diego, CA.
- 20.** JR U. Non-cytotoxic, non-immunosuppressing approach to tolerance induction during ERT treatment. FDA Workshop on Immune Responses to Enzyme Replacement Therapies: Role of Immune Tolerance Induction; June 9, 2014; Silver Spring, MD.
- 21.** Utz JR CT, Schneider J, Whitley CB. Biomarkers of inflammation in CSF and serum of infantile and juvenile gangliosidoses. American College of Medical Genetics and Genomics Annual Meeting; March 24-28, 2015; Salt Lake City, UT.
- 22.** Schneider J RK, Whitley CB, Utz JR. Prevalence of hypothyroidism in adult patients with Pompe disease. Lysosomal Disease Network's 11th annual WORLD Symposium; February 10-12, 2015; Orlando, FL.

Conference Proceedings

1. Patterson M, Porter F, Vaurio R, Brown T. Longitudinal study of cognition in subjects with Niemann-Pick disease, type C. *Mol. Genet. Metab.* February 2009;96(2):S34-S34.
2. Cathey S, Wood T, Friez M, Jules L. Collective strength in rare diseases: Longitudinal studies of the glycoproteinoses. *Mol. Genet. Metab.* February 2009;96(2):S17-S17.
3. Whitley C. Gene therapy for Tay-Sachs disease. *Mol. Genet. Metab.* February 2009;96(2):S45-S46.
4. Shapiro E. Longitudinal studies of brain structure and function in MPS disorders: A study of the Lysosomal Disease Network. *Mol. Genet. Metab.* 2010;99(2):S34.
5. Kishnani P, Banugaria S, DeArmey S, Mackey J, Young S, Bali D, Koeberl D, Rosenberg A, Messinger Y, Mendelsohn N, Rhead W, Chen YT. Immunological aspects of treatment of Pompe disease. *Mol. Genet. Metab.* 2010;99(2):S23-S23.
6. Nestrasil I, Ahmed A, Rudser K, BJORAKER K, Delaney K, Shapiro E. Brain volumes and neuropsychological function in attenuated and severe MPS I. *Mol. Genet. Metab.* 2010;99(2):S28-S28.
7. Ahmed A, Nestrasil I, Rudser K, Delaney K, Shapiro E. Preliminary data on quantitative MRI and neuropsychological function in the mild form of MPS II. *Mol. Genet. Metab.* 2010;99(2):S8-S9.
8. Ahmed A, Nestrasil I, Rudser K, Shapiro E. Reliability of manual and automated tracing of hippocampal volumes in MPS patients and normal controls: A report of the neuroimaging core of the lysosomal disease network. *Mol. Genet. Metab.* 2010;99(2):S9.
9. Patterson M, Brown T, Vaurio R, Yanjanin N, Porter F. Longitudinal study of cognition in subjects with Niemann-Pick disease, type C. *Mol. Genet. Metab.* 2010;99(2):S29-S30.
10. Cathey S, Wilson C, Sillence D, Horowitz L, Noble J. Longitudinal studies of the glycoproteinoses: An international update. *Mol. Genet. Metab.* 2010;99(2):S13-S13.
11. Chen A, Dickson P, Shapiro E, Lyons B, Kan S-h, Guillaume D. A study of intrathecal enzyme replacement for cognitive decline in mucopolysaccharidosis I. *Mol. Genet. Metab.* 2010;99(2):S13-S14.
12. Whitley C. Gene therapy for Tay-Sachs disease. *Mol. Genet. Metab.* 2010;99(2):S39-S39.
13. Wilcox W. Pulmonary disease and exercise tolerance in boys with Fabry disease. *Mol. Genet. Metab.* 2010;99(2):S39.
14. Banugaria S, Prater SN, Ng Y-K. The role of anti-rhGAA antibody titers and clinical outcomes in infantile Pompe disease patients. *Mol. Genet. Metab.* 2010;99(3).
15. Schiffmann R. The Natural History of Mucolipidosis Type IV. *Mol. Genet. Metab.* 2010;99(2).
16. Whitley CB. Lysosomal Disease Network's "WORLD Symposium 2010". *Mol. Genet. Metab.* 2010;99(2):S3-S7.
17. Msall M, Bauer S, Lyon N, Duffner P, Whitley C. Pilot studies of telephone surveillance for health, developmental and disability status and family supports for children with lysosomal storage disorders. *Mol. Genet. Metab.* 2011;102(2):S30-S31.

- 18.** Polgreen LE PM, Miller BS, Stevenson D, Viskochil D, Petryk A, Whitley CB. Update on the longitudinal study of bone and endocrine disease in children with MPS I, II, and VI. *Mol. Genet. Metab.* 2011;102(2):S36.
- 19.** Utz J, Eichler FS, Ziegler RS, Dietelberg-Okita BM, LeDuc RL, Whitley CB. A natural history of hexosaminidase deficiency. *Mol. Genet. Metab.* 2011;102(2):S43.
- 20.** Vera M, Le S, Garban H, Orchard P, Tolar J, Dickson P. Immune response to intrathecal enzyme therapy in Mucopolysaccharidosis I patients. *Mol. Genet. Metab.* 2011;102(2):S43-S44.
- 21.** Potegal M, Yund B, Shapiro E. Comparison Of Social/Emotional Function In Children With MPS I And MPS III: Interim Report. *Mol. Genet. Metab.* 2011;102(2):S36.
- 22.** Wilcox W. Pulmonary disease and exercise tolerance in boys with Fabry disease: A pilot study. *Mol. Genet. Metab.* 2011;102(2):S47.
- 23.** Cathey S. Longitudinal studies of the glycoproteinooses 2011 update. *Mol. Genet. Metab.* 2011;102(2):S10.
- 24.** Patterson M, Brown T, Zaccariello M, Vaurio R, Porter F. Longitudinal study of cognition in Niemann-Pick Disease, Type C. *Mol. Genet. Metab.* 2011;102(2):S34.
- 25.** Mink J, Augustine EF, Adams H, Newhouse NJ, Vierhile A, deBlieck EA, Cialone J, Marshall FJ. A phase II, randomized, controlled trial of Mycophenolate Mofetil in children with juvenile NCL (JNCL). *Mol. Genet. Metab.* 2011;102(2):S30.
- 26.** Polgreen LE SL, Fung EB, Viskochil D, Stevenson D, Whitley CB. Update on the longitudinal study of bone disease and the impact of growth hormone treatment in MPS I, II, and VI: skeletal outcomes. *Mol. Genet. Metab.* 2012;105(2):S53.
- 27.** Whitley CB. Lysosomal Disease Network's WORLD Symposium 2012. Paper presented at: Molecular Genetics and Metabolism; Feb, 2012. PMID: 22197640
- 28.** Polgreen LE SD, Rudser KD, Orchard PJ, Whitley CB. Biomarkers of bone remodeling in children with Hurler syndrome. *Mol. Genet. Metab.* 2013;108(2):S75-76.
- 29.** Taylor N DD, Steinberger J, Polgreen LE. Isokinetic strength differences in patients with mucopolysaccharidosis I, II, or VI. *Mol. Genet. Metab.* 2013;108(2):S89.
- 30.** Whitley C. Lysosomal Disease Network's WORLD Symposium 2013. Paper presented at: Molecular Genetics and Metabolism; Feb, 2013. PMID: 23333027
- 31.** Polgreen LE VR, Rudser KD, Kunin-Batson A, Utz JR, Shapiro EG, Whitley CB. TNF- α levels are increased in children with mucopolysaccharidosis types I, II, and VI treated with ERT. *Mol. Genet. Metab.* 2014;111(2):S86-87.

Journal Articles

- 1.** Dickson PI. Novel treatments and future perspectives: outcomes of intrathecal drug delivery. *Int. J. Clin. Pharmacol. Ther.* 2009;47 Suppl 1:S124-127. PMID: 20040323
- 2.** Olivova P, van der Veen K, Cullen E, Rose M, Zhang XK, Sims KB, Keutzer J, Browning MF. Effect of sample collection on alpha-galactosidase A enzyme activity measurements in dried blood spots on filter paper. *Clin. Chim. Acta.* May 2009;403(1-2):159-162. PMID: 19245803

- 3.** Chen A, Dickson PI. Intrathecal enzyme replacement therapy to treat spinal cord compression in mucopolysaccharidosis: overview and rationale. *Journal of Pediatric Rehabilitation Medicine*. 2010;3:7-11. PMID: 21791827
- 4.** Cathey SS, Leroy JG, Wood T, Eaves K, Simensen RJ, Kudo M, Stevenson RE, Friez MJ. Phenotype and genotype in mucolipidoses II and III alpha/beta: a study of 61 probands. *J. Med. Genet.* Jan 2010;47(1):38-48. PMID: 19617216, PMCID: PMC3712854
- 5.** Kishnani PS, Goldenberg PC, DeArmey SL, et al. Cross-reactive immunologic material status affects treatment outcomes in Pompe disease infants. *Mol. Genet. Metab.* Jan 2010;99(1):26-33. PMID: 19775921, PMCID: PMC3721340
- 6.** Ramaswami U, Najafian B, Schieppati A, Mauer M, Bichet DG. Assessment of renal pathology and dysfunction in children with Fabry disease. *Clin. J. Am. Soc. Nephrol.* Feb 2010;5(2):365-370. PMID: 20056758, PMCID: PMC4909119
- 7.** Polgreen LE, Miller BS. Growth patterns and the use of growth hormone in the mucopolysaccharidoses. *J Pediatr Rehabil Med.* Apr 19 2010;3(1):25-38. PMID: 20563263, PMCID: PMC2886985
- 8.** David-Vizcarra G, Briody J, Ault J, et al. The natural history and osteodystrophy of mucolipidosis types II and III. *J. Paediatr. Child Health.* Jun 2010;46(6):316-322. PMID: 20367762, PMCID: PMC4188554
- 9.** Msall ME. Developing preschool surveillance tools for adaptive functioning: lessons for neuro-oncology. *Eur. J. Paediatr. Neurol.* Sep 2010;14(5):368-379. PMID: 20471877
- 10.** Adams HR, Beck CA, Levy E, Jordan R, Kwon JM, Marshall FJ, Vierhile A, Augustine EF, de Blieck EA, Pearce DA, Mink JW. Genotype does not predict severity of behavioural phenotype in juvenile neuronal ceroid lipofuscinosis (Batten disease). *Dev. Med. Child Neurol.* Jul 2010;52(7):637-643. PMID: 20187884, PMCID: PMC2895016
- 11.** Patterson MC. Movers and shakers: diagnosing neurotransmitter diseases with CSF. *Neurology*. Jul 6 2010;75(1):15-17. PMID: 20534885
- 12.** Whitley CB, Utz JR. Maroteaux-Lamy syndrome (mucopolysaccharidosis type VI): a single dose of galsulfase further reduces urine glycosaminoglycans after hematopoietic stem cell transplantation. *Mol. Genet. Metab.* Dec 2010;101(4):346-348. PMID: 20800524
- 13.** Najafian B, Mauer M. Quantitating glomerular endothelial fenestration: an unbiased stereological approach. *Am. J. Nephrol.* 2011;33 Suppl 1:34-39. PMID: 21659733, PMCID: PMC3121551
- 14.** Abbott M-A, Prater SN, Banugaria SG, Richards SM, Young SP, Rosenberg AS, Kishnani PS. Atypical immunologic response in a patient with CRIM-negative Pompe disease. *Mol. Genet. Metab.* 2011;104(4):583-586. PMID: 21889385, PMCID: PMC3711241
- 15.** Sowell J, Wood T. Towards a selected reaction monitoring mass spectrometry fingerprint approach for the screening of oligosaccharidoses. *Anal. Chim. Acta*. Feb 7 2011;686(1-2):102-106. PMID: 21237314, PMCID: PMC4181681
- 16.** Dickson PI, Pariser AR, Groft SC, Ishihara RW, McNeil DE, Tagle D, Griebel DJ, Kaler SG, Mink JW, Shapiro EG, BJORAKER KJ, Krivitzky L, Provenzale JM, Gropman A, Orchard P, Raymond G, Cohen BH, Steiner RD, Goldkind SF, Nelson RM, Kakkis E, Patterson MC. Research challenges in

- central nervous system manifestations of inborn errors of metabolism. *Mol. Genet. Metab.* Mar 2011;102(3):326-338. PMID: 21176882, PMCID: PMC3040279
17. Najafian B, Svarstad E, Bostad L, Gubler MC, Tondel C, Whitley C, Mauer M. Progressive podocyte injury and globotriaosylceramide (GL-3) accumulation in young patients with Fabry disease. *Kidney Int.* Mar 2011;79(6):663-670. PMID: 21160462, PMCID: PMC3640823
 18. Bradshaw SE. Electron microscopy illuminates the pathology of Fabry nephropathy. *Nature reviews. Nephrology.* Mar 2011;7(3):126. PMID: 21473012
 19. Kerr DA, Memoli VA, Cathey SS, Harris BT. Mucolipidosis type III alpha/beta: the first characterization of this rare disease by autopsy. *Arch. Pathol. Lab. Med.* Apr 2011;135(4):503-510. PMID: 21466370, PMCID: PMC4188553
 20. Bali DS, Tolun AA, Goldstein JL, Dai J, Kishnani PS. Molecular analysis and protein processing in late-onset Pompe disease patients with low levels of acid alpha-glucosidase activity. *Muscle Nerve.* May 2011;43(5):665-670. PMID: 21484825
 21. Dickson PI, Chen AH. Intrathecal enzyme replacement therapy for mucopolysaccharidosis I: translating success in animal models to patients. *Curr. Pharm. Biotechnol.* Jun 2011;12(6):946-955. PMID: 21506913
 22. Banugaria SG, Prater SN, Ng YK, Kobori JA, Finkel RS, Ladda RL, Chen YT, Rosenberg AS, Kishnani PS. The impact of antibodies on clinical outcomes in diseases treated with therapeutic protein: lessons learned from infantile Pompe disease. *Genet. Med.* Aug 2011;13(8):729-736. PMID: 21637107, PMCID: PMC3954622
 23. El-Gharbawy AH, Mackey J, DeArmey S, et al. An individually modified approach to desensitize infants and young children with Pompe disease, and significant reactions to alglucosidase alfa infusions. *Mol. Genet. Metab.* Sep-Oct 2011;104(1-2):118-122. PMID: 21802969, PMCID: PMC3711228
 24. Cialone J, Augustine EF, Newhouse N, Adams H, Vierhile A, Marshall FJ, de Blieck EA, Kwon J, Rothberg PG, Mink JW. Parent-reported benefits of flupirtine in juvenile neuronal ceroid lipofuscinosis (Batten disease; CLN3) are not supported by quantitative data. *J. Inherit. Metab. Dis.* Oct 2011;34(5):1075-1081. PMID: 21556831, PMCID: PMC3174318
 25. Cialone J, Augustine EF, Newhouse N, Vierhile A, Marshall FJ, Mink JW. Quantitative telemedicine ratings in Batten disease: implications for rare disease research. *Neurology.* Nov 15 2011;77(20):1808-1811. PMID: 22013181, PMCID: PMC3233206
 26. Kwon JM, Adams H, Rothberg PG, Augustine EF, Marshall FJ, Deblieck EA, Vierhile A, Beck CA, Newhouse NJ, Cialone J, Levy E, Ramirez-Montealegre D, Dure LS, Rose KR, Mink JW. Quantifying physical decline in juvenile neuronal ceroid lipofuscinosis (Batten disease). *Neurology.* Nov 15 2011;77(20):1801-1807. PMID: 22013180, PMCID: PMC3233207
 27. Messinger YH, Mendelsohn NJ, Rhead W, Dimmock D, Hershkovitz E, Champion M, Jones SA, Olson R, White A, Wells C, Bali D, Case LE, Young SP, Rosenberg AS, Kishnani PS. Successful immune tolerance induction to enzyme replacement therapy in CRIM-negative infantile Pompe disease. *Genet. Med.* Jan 2012;14(1):135-142. PMID: 22237443, PMCID: PMC3711224
 28. Kelly AS, Metzig AM, Steinberger J, Braunlin EA. Endothelial function in children and adolescents with mucopolysaccharidosis. *J. Inherit. Metab. Dis.* Jan 10 2012. PMID: 22231383, PMCID: PMC3684413

- 29.** Bali DS, Goldstein JL, Banugaria S, Dai J, Mackey J, Rehder C, Kishnani PS. Predicting cross-reactive immunological material (CRIM) status in Pompe disease using GAA mutations: lessons learned from 10 years of clinical laboratory testing experience. *Am. J. Med. Genet. C Semin. Med. Genet.* Feb 15 2012;160(1):40-49. PMID: 22252923, PMCID: PMC3278076
- 30.** Warnock DG, Ortiz A, Mauer M, et al. Renal outcomes of agalsidase beta treatment for Fabry disease: role of proteinuria and timing of treatment initiation. *Nephrol. Dial. Transplant.* Mar 2012;27(3):1042-1049. PMID: 21804088, PMCID: PMC3289896
- 31.** Banugaria SG, Patel TT, Mackey J, et al. Persistence of high sustained antibodies to enzyme replacement therapy despite extensive immunomodulatory therapy in an infant with Pompe disease: need for agents to target antibody-secreting plasma cells. *Mol. Genet. Metab.* Apr 2012;105(4):677-680. PMID: 22365055, PMCID: PMC3711263
- 32.** Freeze HH, Eklund EA, Ng BG, Patterson MC. Neurology of inherited glycosylation disorders. *Lancet Neurol.* May 2012;11(5):453-466. PMID: 22516080, PMCID: PMC3625645
- 33.** Cialone J, Adams H, Augustine EF, Marshall FJ, Kwon JM, Newhouse N, Vierhile A, Levy E, Dure LS, Rose KR, Ramirez-Montealegre D, de Blieck EA, Mink JW. Females experience a more severe disease course in Batten disease. *J. Inherit. Metab. Dis.* May 2012;35(3):549-555. PMID: 22167274, PMCID: PMC3320704
- 34.** Lo SM, Choi M, Liu J, et al. Phenotype diversity in type 1 Gaucher disease: discovering the genetic basis of Gaucher disease/hematologic malignancy phenotype by individual genome analysis. *Blood.* May 17 2012;119(20):4731-4740. PMID: 22493294, PMCID: PMC3367875
- 35.** Prater SN, Banugaria SG, DeArmey SM, et al. The emerging phenotype of long-term survivors with infantile Pompe disease. *Genet. Med.* Sep 2012;14(9):800-810. PMID: 22538254, PMCID: PMC3947503
- 36.** Shapiro E, Guler OE, Rudser K, Delaney K, BJORAKER K, Whitley C, Tolar J, Orchard P, Provenzale J, Thomas KM. An exploratory study of brain function and structure in mucopolysaccharidosis type I: long term observations following hematopoietic cell transplantation (HCT). *Mol. Genet. Metab.* Sep 2012;107(1-2):116-121. PMID: 22867884, PMCID: PMC3444648
- 37.** Banugaria SG, Prater SN, Patel TT, et al. Algorithm for the early diagnosis and treatment of patients with cross reactive immunologic material-negative classic infantile pompe disease: a step towards improving the efficacy of ERT. *PLoS ONE.* 2013;8(6):e67052. PMID: 23825616, PMCID: PMC3692419
- 38.** Patterson MC, Mengel E, Wijburg FA, et al. Disease and patient characteristics in NP-C patients: findings from an international disease registry. *Orphanet J. Rare Dis.* 2013;8:12. PMID: 23324478, PMCID: PMC3558399
- 39.** Potegal M, Yund B, Rudser K, et al. Mucopolysaccharidosis Type IIIA presents as a variant of Kluver-Bucy syndrome. *J. Clin. Exp. Neuropsychol.* 2013;35(6):608-616. PMID: 23745734, PMCID: PMC3931576
- 40.** Eisengart JB, Rudser KD, Tolar J, Orchard PJ, Kivistö T, Ziegler RS, Whitley CB, Shapiro EG. Enzyme Replacement is Associated with Better Cognitive Outcomes after Transplant in Hurler Syndrome. *J. Pediatr.* Feb 2013;162(2):375-380 e371. PMID: 22974573, PMCID: PMC3524404

- 41.** Banugaria SG, Prater SN, McGann JK, et al. Bortezomib in the rapid reduction of high sustained antibody titers in disorders treated with therapeutic protein: lessons learned from Pompe disease. *Genet. Med.* Feb 2013;15(2):123-131. PMID: 23060045, PMCID: PMC3744338
- 42.** Patel TT, Banugaria SG, Frush DP, Enterline DS, Tanpaiboon P, Kishnani PS. Basilar artery aneurysm: a new finding in classic infantile Pompe disease. *Muscle Nerve*. Apr 2013;47(4):613-615. PMID: 23401069
- 43.** Dyke JP, Sondhi D, Voss HU, et al. Assessment of disease severity in late infantile neuronal ceroid lipofuscinosis using multiparametric MR imaging. *AJNR Am. J. Neuroradiol.* Apr 2013;34(4):884-889. PMID: 23042927, PMCID: PMC3644851
- 44.** de Blieck EA, Augustine EF, Marshall FJ, Adams H, Cialone J, Dure L, Kwon JM, Newhouse N, Rose K, Rothberg PG, Vierhile A, Mink JW. Methodology of clinical research in rare diseases: Development of a research program in juvenile neuronal ceroid lipofuscinosis (JNCL) via creation of a patient registry and collaboration with patient advocates. *Contemp. Clin. Trials.* Apr 26 2013;35(2):48-54. PMID: 23628560, PMCID: PMC3714100
- 45.** Najafian B, Mauer M, Hopkin RJ, Svarstad E. Renal complications of Fabry disease in children. *Pediatr. Nephrol.* May 2013;28(5):679-687. PMID: 22898981, PMCID: PMC3811930
- 46.** Holmay MJ, Terpstra M, Coles LD, et al. N-acetylcysteine boosts brain and blood glutathione in Gaucher and Parkinson diseases. *Clin. Neuropharmacol.* Jul-Aug 2013;36(4):103-106. PMID: 23860343, PMCID: PMC3934795
- 47.** Adams HR, Mink JW. Neurobehavioral features and natural history of juvenile neuronal ceroid lipofuscinosis (Batten disease). *J. Child Neurol.* Sep 2013;28(9):1128-1136. PMID: 24014508, PMCID: PMC3976549
- 48.** Augustine EF, Adams HR, Mink JW. Clinical trials in rare disease: challenges and opportunities. *J. Child Neurol.* Sep 2013;28(9):1142-1150. PMID: 24014509, PMCID: PMC3964003
- 49.** Dolisca SB, Mehta M, Pearce DA, Mink JW, Maria BL. Batten disease: clinical aspects, molecular mechanisms, translational science, and future directions. *J. Child Neurol.* Sep 2013;28(9):1074-1100. PMID: 23838031, PMCID: PMC3986921
- 50.** Grabowski G. Therapy for lysosomal acid lipase deficiency: replacing a missing link. *Hepatology*. Sep 2013;58(3):850-852. PMID: 23471861
- 51.** Mink JW, Augustine EF, Adams HR, Marshall FJ, Kwon JM. Classification and natural history of the neuronal ceroid lipofuscinoses. *J. Child Neurol.* Sep 2013;28(9):1101-1105. PMID: 23838030, PMCID: PMC3979348
- 52.** Schulz A, Kohlschutter A, Mink J, Simonati A, Williams R. NCL diseases - clinical perspectives. *Biochim. Biophys. Acta.* Nov 2013;1832(11):1801-1806. PMID: 23602993, PMCID: PMC4631127
- 53.** Vera M, Le S, Kan SH, et al. Immune response to intrathecal enzyme replacement therapy in mucopolysaccharidosis I patients. *Pediatr. Res.* Dec 2013;74(6):712-720. PMID: 24002329, PMCID: PMC3855632
- 54.** Delaney KA, Rudser KR, Yund BD, Whitley CB, Haslett PA, Shapiro EG. Methods of neurodevelopmental assessment in children with neurodegenerative disease: Sanfilippo syndrome. *JIMD reports.* 2014;13:129-137. PMID: 24190801, PMCID: PMC4110329

- 55.** Mauer M, Glynn E, Svarstad E, et al. Mosaicism of podocyte involvement is related to podocyte injury in females with Fabry disease. *PLoS ONE*. 2014;9(11):e112188. PMID: 25386848, PMCID: PMC4227696
- 56.** Schiffmann R, Pastores GM, Lien YH, et al. Agalsidase alfa in pediatric patients with Fabry disease: a 6.5-year open-label follow-up study. *Orphanet J. Rare Dis*. 2014;9:169. PMID: 25425121, PMCID: PMC4260255
- 57.** Stevenson DA, Rudser K, Kunin-Batson A, et al. Biomarkers of bone remodeling in children with mucopolysaccharidoses types I, II, and VI. *Journal of pediatric rehabilitation medicine*. 2014;7(2):159-165. PMID: 25096868, PMCID: PMC4420175
- 58.** Taylor NE, Dengel DR, Lund TC, et al. Isokinetic muscle strength differences in patients with mucopolysaccharidoses I, II, and VI. *Journal of pediatric rehabilitation medicine*. 2014;7(4):353-360. PMID: 25547887, PMCID: PMC4438747
- 59.** Valayannopoulos V, Malinova V, Honzik T, et al. Sebelipase alfa over 52 weeks reduces serum transaminases, liver volume and improves serum lipids in patients with lysosomal acid lipase deficiency. *J. Hepatol*. Nov 2014;61(5):1135-1142. PMID: 24993530, PMCID: PMC4203712
- 60.** Prater SN, Banugaria SG, Morgan C, Sung CC, Rosenberg AS, Kishnani PS. Letter to the Editors: Concerning "CRIM-negative Pompe disease patients with satisfactory clinical outcomes on enzyme replacement therapy" by Al Khalaf et al. *J. Inherit. Metab. Dis*. Jan 2014;37(1):141-143. PMID: 23887636, PMCID: PMC4353589
- 61.** Polgreen LE, Thomas W, Fung E, et al. Low Bone Mineral Content and Challenges in Interpretation of Dual-Energy X-Ray Absorptiometry in Children With Mucopolysaccharidoses Types I, II, and VI. *J. Clin. Densitom*. Jan-Mar 2014;17(1):200-206. PMID: 23562131, PMCID: PMC3872499
- 62.** Ahmed A, Whitley CB, Cooksley R, et al. Neurocognitive and neuropsychiatric phenotypes associated with the mutation L238Q of the alpha-L-iduronidase gene in Hurler-Scheie syndrome. *Mol. Genet. Metab*. Feb 2014;111(2):123-127. PMID: 24368159, PMCID: PMC3939822
- 63.** Petryk A, Polgreen LE, Zhang L, et al. Bone mineral deficits in recipients of hematopoietic cell transplantation: the impact of young age at transplant. *Bone Marrow Transplant*. Feb 2014;49(2):258-263. PMID: 24121211, PMCID: PMC3946360
- 64.** Polgreen LE, Thomas W, Orchard PJ, Whitley CB, Miller BS. Effect of recombinant human growth hormone on changes in height, bone mineral density, and body composition over 1-2 years in children with Hurler or Hunter syndrome. *Mol. Genet. Metab*. Feb 2014;111(2):101-106. PMID: 24368158, PMCID: PMC4018305
- 65.** Schiffmann R, Forni S, Swift C, et al. Risk of death in heart disease is associated with elevated urinary globotriaosylceramide. *Journal of the American Heart Association*. Feb 2014;3(1):e000394. PMID: 24496231, PMCID: PMC3959711
- 66.** Schiffmann R, Mayfield J, Swift C, Nestrasil I. Quantitative neuroimaging in mucolipidosis type IV. *Mol. Genet. Metab*. Feb 2014;111(2):147-151. PMID: 24332805, PMCID: PMC4097300

- 67.** Wang RY, Braunlin EA, Rudser KD, et al. Carotid intima-media thickness is increased in patients with treated mucopolysaccharidosis types I and II, and correlates with arterial stiffness. *Mol. Genet. Metab.* Feb 2014;111(2):128-132. PMID: 24268528, PMCID: PMC3946737
- 68.** Leroy JG, Sillence D, Wood T, et al. A novel intermediate mucolipidosis II/IIIalphabeta caused by GNPTAB mutation in the cytosolic N-terminal domain. *Eur. J. Hum. Genet.* May 2014;22(5):594-601. PMID: 24045841, PMCID: PMC3992569
- 69.** Rumsey RK, Rudser K, Delaney K, Potegal M, Whitley CB, Shapiro E. Acquired autistic behaviors in children with mucopolysaccharidosis type IIIA. *J. Pediatr.* May 2014;164(5):1147-1151 e1141. PMID: 24582005, PMCID: PMC4041612
- 70.** Chien YH, Goldstein JL, Hwu WL, et al. Baseline Urinary Glucose Tetrasaccharide Concentrations in Patients with Infantile- and Late-Onset Pompe Disease Identified by Newborn Screening. *JIMD reports.* 2015;19:67-73. PMID: 25681082, PMCID: PMC4501239
- 71.** Patterson MC, Mengel E, Vanier MT, et al. Stable or improved neurological manifestations during miglustat therapy in patients from the international disease registry for Niemann-Pick disease type C: an observational cohort study. *Orphanet J. Rare Dis.* 2015;10:65. PMID: 26017010, PMCID: PMC4462071
- 72.** Pena LD, Proia AD, Kishnani PS. Postmortem Findings and Clinical Correlates in Individuals with Infantile-Onset Pompe Disease. *JIMD reports.* 2015;23:45-54. PMID: 25763511, PMCID: PMC4484900
- 73.** Zigdon H, Savidor A, Levin Y, Meshcheriakova A, Schiffmann R, Futerman AH. Identification of a biomarker in cerebrospinal fluid for neuronopathic forms of Gaucher disease. *PLoS ONE.* 2015;10(3):e0120194. PMID: 25775479, PMCID: PMC4361053
- 74.** Utz JR, Crutcher T, Schneider J, Sorgen P, Whitley CB. Biomarkers of central nervous system inflammation in infantile and juvenile gangliosidoses. *Mol. Genet. Metab.* Feb 2015;114(2):274-280. PMID: 25557439, PMCID: PMC4386860
- 75.** Wolf DA, Banerjee S, Hackett PB, Whitley CB, McIvor RS, Low WC. Gene therapy for neurologic manifestations of mucopolysaccharidoses. *Expert Opin. Drug Deliv.* Feb 2015;12(2):283-296. PMID: 25510418, PMCID: PMC4393078
- 76.** Yund B, Rudser K, Ahmed A, et al. Cognitive, medical, and neuroimaging characteristics of attenuated mucopolysaccharidosis type II. *Mol. Genet. Metab.* Feb 2015;114(2):170-177. PMID: 25541100, PMCID: PMC4312717
- 77.** Aldenhoven M, Wynn RF, Orchard PJ, et al. Long-term outcome of Hurler syndrome patients after hematopoietic cell transplantation: an international multicenter study. *Blood.* Mar 26 2015;125(13):2164-2172. PMID: 25624320
- 78.** Case LE, Bjartmar C, Morgan C, et al. Safety and efficacy of alternative alglucosidase alfa regimens in Pompe disease. *Neuromuscul. Disord.* Apr 2015;25(4):321-332. PMID: 25617983
- 79.** Helman G, Van Haren K, Bonkowsky JL, et al. Disease specific therapies in leukodystrophies and leukoencephalopathies. *Mol. Genet. Metab.* Apr 2015;114(4):527-536. PMID: 25684057, PMCID: PMC4390468

- 80.** Kansagra S, Austin S, DeArmey S, Kazi Z, Kravitz RM, Kishnani PS. Longitudinal polysomnographic findings in infantile Pompe disease. *Am. J. Med. Genet. A*. Apr 2015;167A(4):858-861. PMID: 25706820
- 81.** Parikh S, Bernard G, Leventer RJ, et al. A clinical approach to the diagnosis of patients with leukodystrophies and genetic leukoencephelopathies. *Mol. Genet. Metab.* Apr 2015;114(4):501-515. PMID: 25655951, PMCID: PMC4390485
- 82.** Shapiro EG, Nestrasil I, Ahmed A, et al. Quantifying behaviors of children with Sanfilippo syndrome: the Sanfilippo Behavior Rating Scale. *Mol. Genet. Metab.* Apr 2015;114(4):594-598. PMID: 25770355, PMCID: PMC4390542
- 83.** Tan QK, Stockton DW, Pivnick E, et al. Premature pubarche in children with Pompe disease. *J. Pediatr.* Apr 2015;166(4):1075-1078 e1071. PMID: 25687635
- 84.** Van Haren K, Bonkowsky JL, Bernard G, et al. Consensus statement on preventive and symptomatic care of leukodystrophy patients. *Mol. Genet. Metab.* Apr 2015;114(4):516-526. PMID: 25577286
- 85.** Vanderver A, Prust M, Tonduti D, et al. Case definition and classification of leukodystrophies and leukoencephalopathies. *Mol. Genet. Metab.* Apr 2015;114(4):494-500. PMID: 25649058, PMCID: PMC4390457
- 86.** Schiffmann R, Swift C, Wang X, Blankenship D, Ries M. A prospective 10-year study of individualized, intensified enzyme replacement therapy in advanced Fabry disease. *J. Inherit. Metab. Dis.* Apr 22 2015. PMID: 25900714
- 87.** Burton BK, Deegan PB, Enns GM, et al. Clinical Features of Lysosomal Acid Lipase Deficiency - a Longitudinal Assessment of 48 Children and Adults. *J. Pediatr. Gastroenterol. Nutr.* Aug 6 2015. PMID: 26252914, PMCID: PMC4645959
- 88.** Ahmed A, Rudser K, Kunin-Batson A, Delaney K, Whitley C, Shapiro E. Mucopolysaccharidosis (MPS) Physical Symptom Score: Development, Reliability, and Validity. *JIMD reports*. Aug 25 2015. PMID: 26303610, PMCID: PMC4864710
- 89.** Stenger EO, Kazi Z, Lisi E, Gambello MJ, Kishnani P. Immune Tolerance Strategies in Siblings with Infantile Pompe Disease-Advantages for a Preemptive Approach to High-Sustained Antibody Titers. *Mol. Gen. Met. Rep.* Sep 1 2015;4:30-34. PMID: 26167453, PMCID: PMC4497810
- 90.** Shapiro EG, Nestrasil I, Rudser K, et al. Neurocognition across the spectrum of mucopolysaccharidosis type I: Age, severity, and treatment. *Mol. Genet. Metab.* Sep-Oct 2015;116(1-2):61-68. PMID: 26095521, PMCID: PMC4561597
- 91.** Berrier KL, Kazi ZB, Prater SN, et al. CRIM-negative infantile Pompe disease: characterization of immune responses in patients treated with ERT monotherapy. *Genet. Med.* Nov 2015;17(11):912-918. PMID: 25741864, PMCID: PMC4561024
- 92.** Bali DS, Goldstein JL, Rehder C, et al. Clinical Laboratory Experience of Blood CRIM Testing in Infantile Pompe Disease. *Molecular genetics and metabolism reports*. Dec 1 2015;5:76-79. PMID: 26693141, PMCID: PMC4674832
- 93.** Dyke JP, Sondhi D, Voss HU, et al. Brain Region-Specific Degeneration with Disease Progression in Late Infantile Neuronal Ceroid Lipofuscinosis (CLN2 Disease). *AJNR Am J Neuroradiol.* 2016;37(6):1160-1169. PMID: 26822727, PMCID: PMC4907890

- 94.** Langan TJ, Barcykowski AL, Dare J, Pannullo EC, Muscarella L, Carter RL. Evidence for improved survival in postsymptomatic stem cell-transplanted patients with Krabbe's disease. *J Neurosci Res.* 2016;94(11):1189-1194. PMID: 27638603, PMCID: PMC5484586
- 95.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 96.** Polgreen LE, Vehe RK, Rudser K, et al. Elevated TNF-alpha is associated with pain and physical disability in mucopolysaccharidosis types I, II, and VI. *Mol Genet Metab.* 2016;117(4):427-430. PMID: 26873528, PMCID: PMC4851859
- 97.** Rappaport J, Manthe RL, Solomon M, Garnacho C, Muro S. A Comparative Study on the Alterations of Endocytic Pathways in Multiple Lysosomal Storage Disorders. *Mol Pharm.* 2016;13(2):357-368. PMID: 26702793, PMCID: PMC4936955
- 98.** Shapiro E, King K, Ahmed A, et al. The Neurobehavioral Phenotype in Mucopolysaccharidosis Type IIIB: an Exploratory Study. *Molecular genetics and metabolism reports.* Mar 1 2016;6:41-47. PMID: 26918231, PMCID: PMC4762067
- 99.** Eisengart JB, Jarnes J, Ahmed A, et al. Long-term cognitive and somatic outcomes of enzyme replacement therapy in untransplanted Hurler syndrome. *Molecular genetics and metabolism reports.* 2017;13:64-68. PMID: 28983455, PMCID: PMC5622996
- 100.** Jarnes Utz JR, Kim S, King K, et al. Infantile gangliosidoses: Mapping a timeline of clinical changes. *Mol Genet Metab.* 2017. PMID: 28476546, PMCID: PMC5727905
- 101.** Kazi ZB, Desai AK, Berrier KL, et al. Sustained immune tolerance induction in enzyme replacement therapy-treated CRIM-negative patients with infantile Pompe disease. *JCI insight.* 2017;2(16). PMID: 28814660, PMCID: PMC5621909
- 102.** Kim J, Sinha S, Solomon M, et al. Co-coating of receptor-targeted drug nanocarriers with anti-phagocytic moieties enhances specific tissue uptake versus non-specific phagocytic clearance. *Biomaterials.* 2017;147:14-25. PMID: 28923682, PMCID: PMC5667353
- 103.** Kim S, Whitley CB, Jarnes Utz JR. Correlation between urinary GAG and anti-idursulfase ERT neutralizing antibodies during treatment with NICIT immune tolerance regimen: A case report. *Mol Genet Metab.* 2017;122(1-2):92-99. PMID: 28610913, PMCID: PMC5798249
- 104.** Mauer M, Sokolovskiy A, Barth JA, et al. Reduction of podocyte globotriaosylceramide content in adult male patients with Fabry disease with amenable GLA mutations following 6 months of migalastat treatment. *J Med Genet.* 2017;54(11):781-786. PMID: 28756410, PMCID: PMC5740534
- 105.** Mori M, Haskell G, Kazi Z, et al. Sensitivity of whole exome sequencing in detecting infantile- and late-onset Pompe disease. *Mol Genet Metab.* 2017;122(4):189-197. PMID: 29122469, PMCID: PMC5907499
- 106.** Nestrasil I, Shapiro E, Svatkova A, et al. Intrathecal enzyme replacement therapy reverses cognitive decline in mucopolysaccharidosis type I. *Am J Med Genet A.* 2017;173(3):780-783. PMID: 28211988, PMCID: PMC5367919
- 107.** Ou L, Przybilla MJ, Whitley CB. Proteomic analysis of mucopolysaccharidosis I mouse brain with two-dimensional polyacrylamide gel electrophoresis. *Mol Genet Metab.* 2017;120(1-2):101-110. PMID: 27742266, PMCID: PMC5293606

- 108.** Rairikar MV, Case LE, Bailey LA, et al. Insight into the phenotype of infants with Pompe disease identified by newborn screening with the common c.-32-13T>G "late-onset" GAA variant. *Mol Genet Metab*. 2017. PMID: 28951071, PMCID: PMC5722675
- 109.** Rairikar M, Kazi ZB, Desai A, Walters C, Rosenberg A, Kishnani PS. High dose IVIG successfully reduces high rhGAA IgG antibody titers in a CRIM-negative infantile Pompe disease patient. *Mol Genet Metab*. 2017. PMID: 28648664, PMCID: PMC5612830
- 110.** Solomon M, Muro S. Lysosomal enzyme replacement therapies: Historical development, clinical outcomes, and future perspectives. *Advanced drug delivery reviews*. 2017;118:109-134. PMID: 28502768, PMCID: PMC5828774
- 111.** Wang RY, Rudser KD, Dengel DR, et al. The Carotid Intima-Media Thickness and Arterial Stiffness of Pediatric Mucopolysaccharidosis Patients Are Increased Compared to Both Pediatric and Adult Controls. *Int J Mol Sci*. 2017;18(3). PMID: 28294991, PMCID: PMC5372650
- 112.** Ahrens-Nicklas R, Schlotawa L, Ballabio A, et al. Complex care of individuals with multiple sulfatase deficiency: Clinical cases and consensus statement. *Mol Genet Metab*. 2018;123(3):337-346. PMID: 29397290
- 113.** Desai AK, Walters CK, Cope HL, Kazi ZB, DeArmey SM, Kishnani PS. Enzyme replacement therapy with alglucosidase alfa in Pompe disease: Clinical experience with rate escalation. *Mol Genet Metab*. 2018;123(2):92-96. PMID: 29289479, PMCID: PMC5808871
- 114.** Eisengart JB, Rudser KD, Xue Y, et al. Long-term outcomes of systemic therapies for Hurler syndrome: an international multicenter comparison. *Genet Med*. 2018. PMID: 29517765
- 115.** Kazi ZB, Desai AK, Troxler RB, et al. An immune tolerance approach using transient low-dose methotrexate in the ERT-naive setting of patients treated with a therapeutic protein: experience in infantile-onset Pompe disease. *Genet Med*. 2018. PMID: 30214072
- 116.** McIntosh PT, Hobson-Webb LD, Kazi ZB, et al. Neuroimaging findings in infantile Pompe patients treated with enzyme replacement therapy. *Mol Genet Metab*. 2018;123(2):85-91. PMID: 29050825, PMCID: PMC5808895
- 117.** Nestrasil I, Ahmed A, Utz JM, Rudser K, Whitley CB, Jarnes-Utz JR. Distinct progression patterns of brain disease in infantile and juvenile gangliosidoses: Volumetric quantitative MRI study. *Mol Genet Metab*. 2018;123(2):97-104. PMID: 29352662, PMCID: PMC5832355
- 118.** Ou L, Przybilla MJ, Koniar B, Whitley CB. RTB lectin-mediated delivery of lysosomal alpha-L-iduronidase mitigates disease manifestations systemically including the central nervous system. *Mol Genet Metab*. 2018;123(2):105-111. PMID: 29198892, PMCID: PMC5808854
- 119.** Ou L, Przybilla MJ, Whitley CB. Metabolomics profiling reveals profound metabolic impairments in mice and patients with Sandhoff disease. *Mol Genet Metab*. 2018. PMID: 30236619
- 120.** Ou L, Przybilla MJ, Whitley CB. SAAMP 2.0: An algorithm to predict genotype-phenotype correlation of lysosomal storage diseases. *Clin Genet*. 2018. PMID: 29396849
- 121.** Schiffmann R, Swift C, McNeill N, et al. Low frequency of Fabry disease in patients with common heart disease. *Genet Med*. 2018;20(7):754-759. PMID: 29227985
- 122.** Shapiro E, Ahmed A, Whitley C, Delaney K. Observing the advanced disease course in mucopolysaccharidosis, type IIIA; a case series. *Mol Genet Metab*. 2018;123(2):123-126. PMID: 29198891

- 123.** Shapiro EG, Whitley CB, Eisengart JB. Beneath the floor: re-analysis of neurodevelopmental outcomes in untreated Hurler syndrome. *Orphanet J Rare Dis.* 2018;13(1):76. PMID: 29751845, PMCID: PMC5948735
- 124.** Sindelar M, Dyke JP, Deeb RS, et al. Untargeted Metabolite Profiling of Cerebrospinal Fluid Uncovers Biomarkers for Severity of Late Infantile Neuronal Ceroid Lipofuscinosis (CLN2, Batten Disease). *Scientific reports.* 2018;8(1):15229. PMID: 30323181, PMCID: PMC6189193
- 125.** Eisengart JB, Pierpont EI, Kaizer AM, et al. Intrathecal enzyme replacement for Hurler syndrome: biomarker association with neurocognitive outcomes. *Genet Med.* 2019. PMID: 31019279

Nephrotic Syndrome Rare Disease Clinical Research Network

Abstracts Presented at Conferences

1. Barisoni L, Jennette JC, Hodgin JB, Herzenberg A, Kopp J, Conway C, Hewett S, Nast C. The NEPTUNE pathology scoring system: a novel virtual microscopy protocol for evaluation of nephrotic syndrome. Paper presented at: American Society of Nephrology (ASN) Renal Week; November 8-13, 2011; Philadelphia.
2. Kretzler M, Holzman LB, Ojo A, Gadegbeku C, Gipson D. NEPTUNE: the Nephrotic Syndrome Study Network in the Rare Diseases Clinical Research Network. Paper presented at: American Society of Nephrology (ASN) Renal Week; November 8-13, 2011; Philadelphia.
3. Barisoni L. Overview of the pathology of minimal change disease and focal segmental glomerulosclerosis. Paper presented at: ISN (International Society of Nephrology) Update Course in Nephrology; December 9-12, 2011; Dubai, UAE.
4. Kretzler M. NEPTUNE. Paper presented at: 9th International Podocyte Conference; April 22-25, 2012; Miami, FL.
5. Kretzler M. Translational research in nephrotic syndrome across disciplines and continents. Paper presented at: 2012 International Society of Nephrology (ISN) Continuous Medical Education (CME) on "Forefronts in Glomerular Disease" August 23-25, 2012; Nanjing, China.
6. Barisoni L, Nast C, Jennette J, et al. The NEPTUNE Digital Pathology Protocol for Evaluation of Nephrotic Syndrome. Paper presented at: American Society of Nephrology (ASN) Kidney Week; October 30 - November 4, 2012; San Diego, CA.
7. Kretzler M, Holzman L, Gadegbeku C, Gipson D, Consortium TNSSN. NEPTUNE: The Nephrotic Syndrome Study Network in the Rare Diseases Clinical Research Network. Paper presented at: American Society of Nephrology (ASN) Kidney Week; October 30 - November 4, 2012; San Diego, CA.
8. Wickman L, Afshinnia F, Yang Y, et al. Profiling Human Urinary mRNA. Paper presented at: American Society of Nephrology (ASN) Kidney Week; October 30 - November 4, 2012; San Diego, CA.
9. Gipson D. Pediatric Nephrotic Syndrome. Paper presented at: International Pediatric Nephrology Kidney Fellows Conference; January 21-24, 2013; Wyndham Rio Mar, Puerto Rico.

- 10.** Kretzler M. Biobanking for rare renal disease, frontiers in nephrology. Paper presented at: Eureconomics General Assembly Meeting; April 3-6, 2013; Heidelberg, Germany.
- 11.** Barisoni L. A new role of renal pathology in systems biology era of nephrotic syndrome. Paper presented at: The Second International Renal Meeting and Mayo Clinic Day Meeting; April 30 - May 3, 2013; Cagliari, Italy.
- 12.** Kretzler M. International collaborations in rare disease. Paper presented at: Rare Diseases Clinical Research Network (RDCRN) Steering Committee Meeting; May 1, 2013; Rockville, MD.
- 13.** Trachtman H, Sethna C, Gibson K, et al. Focal Segmental Glomerulosclerosis (FSGS) in Pediatrics: Comparison R of Patients enrolled in an Observational Versus Interventional Trial. Paper presented at: Pediatric Academic Societies (PAS) Annual Meeting; May 4-7, 2013; Washington, DC.
- 14.** Gibson K, Greenbaum L, Trachtman H, et al. NEPTUNE Cohort Study: Pediatric Perspectives. Paper presented at: International Pediatric Nephrology Association Congress; August 30 - September, 2013; Shanghai, China.
- 15.** Gipson D. Patient Reported Outcomes in Nephrotic Syndrome. Paper presented at: Rare Disease Clinical Research Network (RDCRN) Steering Committee Meeting; October 2, 2013; Rockville, MD.
- 16.** Barisoni L. Molecular Diagnosis and Classification of FSGS. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 17.** Barisoni L, Nast C. The NEPTUNE Digital Pathology Morphologic Profiling Of Nephrotic Syndrome. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 18.** Gibson K, Troost J, Trachtman H, et al. Baseline Immunosuppression Exposure in Neptune Study Cohort. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 19.** Hogan M, Reich H, Nelson P, et al. Random Urine Protein to Creatinine Ratio (UPCR) Is a Relatively Poor Predictor of 24 hr Protein Excretion in Patients with Glomerular Disease. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 20.** Kretzler M, Holzman L, Gadegbeku C, Lienczewski C, Taylor-Moon D, Gipson D. On Behalf of the Nephrotic Syndrome Study Network, NEPTUNE: The Nephrotic Syndrome Study Network. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 21.** Nast C, Barisoni L, Troost J, Gasim A, Appel G, Catrnan D. Glomerular Descriptors Enhance Standard Renal Biopsy Diagnoses. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 22.** Sampson M, Otto E, Troost J, Gadegbeku C, Kretzler M. Monogenic Forms of Nephrotic Syndrome Occur in Diverse Genes across the Lifespan in North American Subjects. Paper

presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.

- 23.** Sampson M, Tan A, Gadebku C, Kretzler M, Hang H. Genetic Epidemiology and Other Genetic Studies of Common Kidney Diseases. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 24.** Trachtman H, Lafayette R. Pathobiology: Clinical/Diagnostic Renal Pathology and Lab Medicine – II. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 25.** Wickman L, Afshinnia F, Wang S, et al. Urine Podocyte mRNAs, Proteinuria, and Progression in Human Glomerular Diseases. Paper presented at: American Society of Nephrology Kidney Week; November 5-10, 2013; Atlanta, GA.
- 26.** Tanzer M, Smith K, Light C, Shereff D, Kretzler M, Gipson D. Assessment of the Educational Experience for Patients with a New Chronic Illness. Paper presented at: Pediatric Academic Society 2014 Annual Meeting; May 3-6, 2014; Vancouver, Canada.
- 27.** Tanzer M, Smith K, Light C, Shereff D, Kretzler M, Gipson D. Educational Topics for Patients Newly Diagnosed with Nephrotic Syndrome: The Patient's Perspective. Paper presented at: Pediatric Academic Society 2014 Annual Meeting; May 3-6, 2014; Vancouver, Canada.
- 28.** Martini S, Nair V, Eichinger F, Reich N, Kretzler M. Transcriptome-based cluster analysis identifies TNF-subgroup in Focal and Segmental Glomerulosclerosis (#4799). Paper presented at: American Society of Nephrology Kidney Week; November 11-16, 2014; Philadelphia, PA.
- 29.** Reich H, Nair V, Ju W, et al. Biomarkers of disease pathobiology in patients with glomerulonephritis in the NEPTUNE cohort. Paper presented at: American Society of Nephrology Kidney Week; November 11-16, 2014; Philadelphia, PA.
- 30.** Sampson M, Mariani L, Martini S, et al. Integrative genomics identifies novel Associations of APOL1 risk genotype in African-American NEPTUNE subjects. Paper presented at: American Society of Nephrology Kidney Week; November 11-16, 2014; Philadelphia, PA.
- 31.** Spinale J, Mariani L, Weyant R, Song P, Nihalani D, Holzman L. Reassessment of suPAR in Kidney Disease. Paper presented at: American Society of Nephrology Kidney Week; November 11-16, 2014; Philadelphia, PA.
- 32.** Mariani L, Zee J, Wang T, et al. Non-linear progression of kidney disease in Nephrotic Syndrome. Paper presented at: American Society of Nephrology Kidney Week; November 2-8, 2015; San Diego, CA.
- 33.** Nair V, Zhu H, Mariani L, et al. Urinary EGF predicts composite endpoints in three independent chronic kidney disease cohorts. Paper presented at: American Society of Nephrology Kidney Week; November 2-8, 2015; San Diego, CA.

- 34.** Ng D, Robertson C, Woroniecki R, et al. Characteristics of African American Children with Glomerular Disease by ApoL1 Risk Status in the CKID and Neptune Cohort Studies. Paper presented at: American Society of Nephrology Kidney Week; November 2-8, 2015; San Diego, CA.

Journal Articles

- 1.** Gadegbeku CA, Gipson DS, Holzman LB, et al. Design of the Nephrotic Syndrome Study Network (NEPTUNE) to evaluate primary glomerular nephropathy by a multidisciplinary approach. *Kidney Int.* Apr 2013;83(4):749-756. PMID: 23325076, PMCID: PMC3612359
- 2.** Barisoni L, Nast CC, Jennette JC, et al. Digital pathology evaluation in the multicenter Nephrotic Syndrome Study Network (NEPTUNE). *Clin. J. Am. Soc. Nephrol.* Aug 2013;8(8):1449-1459. PMID: 23393107, PMCID: PMC3731905
- 3.** Hogan MC, Johnson KL, Zenka RM, et al. Subfractionation, characterization, and in-depth proteomic analysis of glomerular membrane vesicles in human urine. *Kidney Int.* Nov 6 2013. PMID: 24196483, PMCID: PMC4008663
- 4.** Wickman L, Afshinnia F, Wang SQ, et al. Urine Podocyte mRNAs, Proteinuria, and Progression in Human Glomerular Diseases. *J. Am. Soc. Nephrol.* Dec 2013;24(12):2081-2095. PMID: 24052633, PMCID: PMC3839551
- 5.** Canetta PA, Kiryluk K, Appel GB. Glomerular diseases: emerging tests and therapies for IgA nephropathy. *Clin. J. Am. Soc. Nephrol.* Mar 2014;9(3):617-625. PMID: 24071652, PMCID: PMC3944769
- 6.** Moeller S, Canetta PA, Taylor AK, et al. Lack of serologic evidence to link IgA nephropathy with celiac disease or immune reactivity to gluten. *PLoS ONE.* 2014;9(4):e94677. PMID: 24732864, PMCID: PMC3986214
- 7.** Hogan MC, Lieske JC, Lienczewski CC, et al. Strategy and rationale for urine collection protocols employed in the NEPTUNE study. *BMC Nephrol.* 2015;16:190. PMID: 26577187, PMCID: PMC4650313
- 8.** Sampson MG, Hodgin JB, Kretzler M. Defining nephrotic syndrome from an integrative genomics perspective. *Pediatr Nephrol.* 2015;30(1):51-63; quiz 59. PMID: 24890338, PMCID: PMC4241380
- 9.** Spinale JM, Mariani LH, Kapoor S, et al. A reassessment of soluble urokinase-type plasminogen activator receptor in glomerular disease. *Kidney Int.* Mar 2015;87(3):564-574. PMID: 25354239, PMCID: PMC4344842
- 10.** Kikuchi M, Wickman L, Hodgin JB, Wiggins RC. Podometrics as a Potential Clinical Tool for Glomerular Disease Management. *Semin. Nephrol.* May 2015;35(3):245-255. PMID: 26215862, PMCID: PMC4518207
- 11.** Nast CC, Lemley KV, Hodgin JB, et al. Morphology in the Digital Age: Integrating High-Resolution Description of Structural Alterations With Phenotypes and Genotypes. *Semin. Nephrol.* May 2015;35(3):266-278. PMID: 26215864, PMCID: 26215864, PMCID: PMC4764351
- 12.** Sampson MG, Gillies CE, Robertson CC, et al. Using Population Genetics to Interrogate the Monogenic Nephrotic Syndrome Diagnosis in a Case Cohort. *J. Am. Soc. Nephrol.* Nov 3 2015. PMID: 26534921, PMCID: PMC4926977

- 13.** Kerlin BA, Waller AP, Sharma R, Chanley MA, Nieman MT, Smoyer WE. Disease Severity Correlates with Thrombotic Capacity in Experimental Nephrotic Syndrome. *J. Am. Soc. Nephrol.* Dec 2015;26(12):3009-3019. PMID: 25855774, PMCID: PMC4657841
- 14.** Ju W, Nair V, Smith S, et al. Tissue transcriptome-driven identification of epidermal growth factor as a chronic kidney disease biomarker. *Sci Transl Med.* Dec 2 2015;7(316):316ra193. PMID: 26631632, PMCID: PMC4861144
- 15.** Anders HJ, Kretzler M. Glomerular disease: Personalized immunonitoring in lupus and lupus nephritis. *Nature reviews Nephrology.* 2016;12(6):320-321. PMID: 27157443
- 16.** Barisoni L, Troost JP, Nast C, et al. Reproducibility of the NEPTUNE descriptor-based scoring system on whole-slide images and histologic and ultrastructural digital images. *Mod Pathol.* 2016;29(7):671-684. PMID: 27102348, PMCID: PMC5515468
- 17.** de Boer IH, Afkarian M, Tuttle KR. The Surging Tide of Diabetes: Implications for Nephrology. *Am. J. Kidney Dis.* 2016;67(3):364-366. PMID: 26725312, PMCID: PMC5013824
- 18.** Gillies CE, Otto EA, Vega-Warner V, et al. tarSVM: Improving the accuracy of variant calls derived from microfluidic PCR-based targeted next generation sequencing using a support vector machine. *BMC Bioinformatics.* 2016;17(1):233. PMID: 27287006, PMCID: PMC4902911
- 19.** Haas ME, Levenson AE, Sun X, et al. The Role of Proprotein Convertase Subtilisin/Kexin Type 9 in Nephrotic Syndrome-Associated Hypercholesterolemia. *Circulation.* 2016;134(1):61-72. PMID: 27358438, PMCID: PMC5345853
- 20.** Hogan MC, Reich HN, Nelson PJ, et al. The relatively poor correlation between random and 24-hour urine protein excretion in patients with biopsy-proven glomerular diseases. *Kidney Int.* 2016;90(5):1080-1089. PMID: 27528553, PMCID: PMC5065749
- 21.** Kim Y, Lee H, Manson SR, et al. Mesencephalic Astrocyte-Derived Neurotrophic Factor as a Urine Biomarker for Endoplasmic Reticulum Stress-Related Kidney Diseases. *J Am Soc Nephrol.* 2016;27(10):2974-2982. PMID: 26940092, PMCID: PMC5042655
- 22.** Lemley KV, Bagnasco SM, Nast CC, et al. Morphometry Predicts Early GFR Change in Primary Proteinuric Glomerulopathies: A Longitudinal Cohort Study Using Generalized Estimating Equations. *PLoS ONE.* 2016;11(6):e0157148. PMID: 27285824, PMCID: PMC4902229
- 23.** Mariani LH, Pendergraft WF, 3rd, Kretzler M. Defining Glomerular Disease in Mechanistic Terms: Implementing an Integrative Biology Approach in Nephrology. *Clin J Am Soc Nephrol.* 2016;11(11):2054-2060. PMID: 27630182, PMCID: PMC5108211
- 24.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 25.** Pedigo CE, Ducasa GM, Leclercq F, et al. Local TNF causes NFATc1-dependent cholesterol-mediated podocyte injury. *J Clin Invest.* 2016;126(9):3336-3350. PMID: 27482889, PMCID: PMC5004940

- 26.** Pullen N, Fornoni A. Drug discovery in focal and segmental glomerulosclerosis. *Kidney Int.* 2016;89(6):1211-1220. PMID: 27165834, PMCID: PMC4875964
- 27.** Rosenberg AZ, Palmer M, Merlin L, et al. The Application of Digital Pathology to Improve Accuracy in Glomerular Enumeration in Renal Biopsies. *PLoS ONE.* 2016;11(6):e0156441. PMID: 27310011, PMCID: PMC4911144
- 28.** Sampson MG, Robertson CC, Martini S, et al. Integrative Genomics Identifies Novel Associations with APOL1 Risk Genotypes in Black NEPTUNE Subjects. *J. Am. Soc. Nephrol.* 2016;27(3):814-823. PMID: 26150607, PMCID: PMC4769193
- 29.** Singh S, Manson SR, Lee H, et al. Tubular Overexpression of Angiopoietin-1 Attenuates Renal Fibrosis. *PLoS ONE.* 2016;11(7):e0158908. PMID: 27454431, PMCID: PMC4959721
- 30.** Gipson DS, Troost JP, Lafayette RA, et al. Complete Remission in the Nephrotic Syndrome Study Network. *Clin. J. Am. Soc. Nephrol.* Jan 7 2016;11(1):81-89. PMID: 26656320, PMCID: PMC4702222
- 31.** Barisoni L, Gimpel C, Kain R, et al. Digital pathology imaging as a novel platform for standardization and globalization of quantitative nephropathology. *Clinical kidney journal.* 2017;10(2):176-187. PMID: 28584625, PMCID: PMC5455257
- 32.** Barisoni L, Hodgin JB. Digital pathology in nephrology clinical trials, research, and pathology practice. *Curr Opin Nephrol Hypertens.* 2017;26(6):450-459. PMID: 28858910
- 33.** Beanlands H, Maione M, Poulton C, et al. Learning to live with nephrotic syndrome: experiences of adult patients and parents of children with nephrotic syndrome. *Nephrol Dial Transplant.* 2017;32(suppl_1):i98-i105. PMID: 28391342, PMCID: PMC5837224
- 34.** Crawford BD, Gillies CE, Robertson CC, et al. Evaluating Mendelian nephrotic syndrome genes for evidence for risk alleles or oligogenicity that explain heritability. *Pediatr Nephrol.* 2017;32(3):467-476. PMID: 27766458, PMCID: PMC5483602
- 35.** Hladunewich MA, Beanlands H, Herreshoff E, et al. Provider perspectives on treatment decision-making in nephrotic syndrome. *Nephrol Dial Transplant.* 2017;32(suppl_1):i106-i114. PMID: 28391336, PMCID: PMC5837354
- 36.** Kikuchi M, Wickman L, Rabah R, Wiggins RC. Podocyte number and density changes during early human life. *Pediatr Nephrol.* 2017;32(5):823-834. PMID: 28028615, PMCID: PMC5368211
- 37.** Kim Y, Park SJ, Chen YM. Mesencephalic astrocyte-derived neurotrophic factor (MANF), a new player in endoplasmic reticulum diseases: structure, biology, and therapeutic roles. *Transl Res.* 2017;188:1-9. PMID: 28719799, PMCID: PMC5601018
- 38.** Kim Y, Park SJ, Manson SR, et al. Elevated urinary CRELD2 is associated with endoplasmic reticulum stress-mediated kidney disease. *JCI insight.* 2017;2(23). PMID: 29212948, PMCID: PMC5752286
- 39.** Mariani LH, Martini S, Barisoni L, et al. Interstitial fibrosis scored on whole-slide digital imaging of kidney biopsies is a predictor of outcome in proteinuric glomerulopathies. *Nephrol Dial Transplant.* 2017. PMID: 28339906, PMCID: PMC5837529

- 40.** Ng DK, Robertson CC, Woroniecki RP, et al. APOL1-associated glomerular disease among African-American children: a collaboration of the Chronic Kidney Disease in Children (CKiD) and Nephrotic Syndrome Study Network (NEPTUNE) cohorts. *Nephrol Dial Transplant*. 2017;32(6):983-990. PMID: 27190333, PMCID: PMC5837652
- 41.** O'Toole JF, Bruggeman LA, Sedor JR. APOL1 and Proteinuria in the AASK: Unraveling the Pathobiology of APOL1. *Clin J Am Soc Nephrol*. 2017;12(11):1723-1725. PMID: 29051142, PMCID: PMC5672982
- 42.** Sethna CB, Meyers KEC, Mariani LH, et al. Blood Pressure and Visit-to-Visit Blood Pressure Variability Among Individuals With Primary Proteinuric Glomerulopathies. *Hypertension*. 2017;70(2):315-323. PMID: 28652469, PMCID: PMC5518633
- 43.** Sharma R, Waller AP, Agrawal S, et al. Thrombin-Induced Podocyte Injury Is Protease-Activated Receptor Dependent. *J Am Soc Nephrol*. 2017;28(9):2618-2630. PMID: 28424276, PMCID: PMC5576925
- 44.** Soliman NA, Nabhan MM, Abdelrahman SM, et al. Clinical spectrum of primary hyperoxaluria type 1: Experience of a tertiary center. *Nephrol Ther*. 2017;13(3):176-182. PMID: 28161266, PMCID: PMC5921832
- 45.** Tuttle KR. Back to the Future: Glomerular Hyperfiltration and the Diabetic Kidney. *Diabetes*. 2017;66(1):14-16. PMID: 27999101, PMCID: PMC5204314
- 46.** Grayson PC, Eddy S, Taroni JN, et al. Metabolic pathways and immunometabolism in rare kidney diseases. *Ann Rheum Dis*. 2018. PMID: 29724730
- 47.** Hamidi H, Kretzler M. Systems biology approaches to identify disease mechanisms and facilitate targeted therapy in the management of glomerular disease. *Curr Opin Nephrol Hypertens*. 2018;27(6):433-439. PMID: 30074515
- 48.** Hommos MS, Zeng C, Liu Z, et al. Global glomerulosclerosis with nephrotic syndrome; the clinical importance of age adjustment. *Kidney Int*. 2018;93(5):1175-1182. PMID: 29273332, PMCID: PMC5911429
- 49.** Lieske JC. Bariatric Surgery and Kidney Health. *J Am Soc Nephrol*. 2018;29(4):1085-1086. PMID: 29531098, PMCID: PMC5875969
- 50.** Miyata KN, Nast CC, Dai T, et al. Renal matrix Gla protein expression increases progressively with CKD and predicts renal outcome. *Exp Mol Pathol*. 2018;105(1):120-129. PMID: 29981754
- 51.** Nair V, Komorowsky CV, Weil EJ, et al. A molecular morphometric approach to diabetic kidney disease can link structure to function and outcome. *Kidney Int*. 2018;93(2):439-449. PMID: 29054530, PMCID: PMC5794609
- 52.** Park SJ, Kim Y, Chen YM. Endoplasmic reticulum stress and monogenic kidney diseases in precision nephrology. *Pediatr Nephrol*. 2018. PMID: 30099615
- 53.** Reynolds ML, Nachman PH, Mooberry MJ, Crona DJ, Derebail VK. Recurrent venous thromboembolism in primary membranous nephropathy despite direct Xa inhibitor therapy. *Journal of nephrology*. 2018. PMID: 30421320

- 54.** Zee J, Hodgin JB, Mariani LH, et al. Reproducibility and Feasibility of Strategies for Morphologic Assessment of Renal Biopsies Using the Nephrotic Syndrome Study Network Digital Pathology Scoring System. *Arch Pathol Lab Med.* 2018;142(5):613-625. PMID: 29457738, PMCID: PMC5946059
- 55.** Zee J, Mansfield S, Mariani LH, Gillespie BW. Using All Longitudinal Data to Define Time to Specified Percentages of Estimated GFR Decline: A Simulation Study. *Am J Kidney Dis.* 2018. PMID: 30249420
- 56.** Harder JL, Menon R, Otto EA, et al. Organoid single cell profiling identifies a transcriptional signature of glomerular disease. *JCI insight.* 2019;4(1). PMID: 30626756
- 57.** Troost JP, Gipson DS, Carollozzi NE, et al. Using PROMIS(R) to create clinically meaningful profiles of nephrotic syndrome patients. *Health Psychol.* 2019;38(5):410-421. PMID: 31045424, PMCID: PMC6499490

North American Mitochondrial Diseases Consortium

Journal Articles

- 1.** Dorado B, Area E, Akman HO, Hirano M. Onset and organ specificity of Tk2 deficiency depends on Tk1 down-regulation and transcriptional compensation. *Hum. Mol. Genet.* Jan 1 2011;20(1):155-164. PMID: 20940150, PMCID: PMC3000681
- 2.** Quinzii CM, Hirano M. Primary and secondary CoQ(10) deficiencies in humans. *Biofactors.* Sep 2011;37(5):361-365. PMID: 21990098, PMCID: PMC3258494
- 3.** Marti R, Dorado B, Hirano M. Measurement of mitochondrial dNTP pools. *Methods Mol. Biol.* 2012;837:135-148. PMID: 22215545
- 4.** Marti R, Lopez LC, Hirano M. Assessment of thymidine phosphorylase function: measurement of plasma thymidine (and deoxyuridine) and thymidine phosphorylase activity. *Methods Mol. Biol.* 2012;837:121-133. PMID: 22215544, PMCID: PMC4942128
- 5.** Rahman S, Clarke CF, Hirano M. 176th ENMC International Workshop: diagnosis and treatment of coenzyme Q(1)(0) deficiency. *Neuromuscul. Disord.* Jan 2012;22(1):76-86. PMID: 21723727, PMCID: PMC3222743
- 6.** Pascual JM, Liu P, Mao D, et al. Triheptanoin for glucose transporter type I deficiency (G1D): modulation of human ictogenesis, cerebral metabolic rate, and cognitive indices by a food supplement. *JAMA neurology.* Oct 2014;71(10):1255-1265. PMID: 25110966, PMCID: PMC4376124
- 7.** Balreira A, Boczonadi V, Barca E, et al. ANO10 mutations cause ataxia and coenzyme Q(1)(0) deficiency. *J. Neurol.* Nov 2014;261(11):2192-2198. PMID: 25182700, PMCID: PMC4221650
- 8.** Gonzalez M, Falk MJ, Gai X, Postrel R, Schule R, Zuchner S. Innovative genomic collaboration using the GENESIS (GEM.app) platform. *Hum. Mutat.* 2015;36(10):950-956. PMID: 26173844, PMCID: PMC4682547
- 9.** Falk MJ, Shen L, Gonzalez M, et al. Mitochondrial Disease Sequence Data Resource (MSeqDR): a global grass-roots consortium to facilitate deposition, curation, annotation, and integrated

- analysis of genomic data for the mitochondrial disease clinical and research communities. *Mol. Genet. Metab.* Mar 2015;114(3):388-396. PMID: 25542617, PMCID: PMC4512182
10. Navarro-Gomez D, Leipzig J, Shen L, et al. Phy-Mer: a novel alignment-free and reference-independent mitochondrial haplogroup classifier. *Bioinformatics*. Apr 15 2015;31(8):1310-1312. PMID: 25505086, PMCID: PMC4393525
 11. Al-Mehmadi S, Splitt M, Ramesh V, et al. FHF1 (FGF12) epileptic encephalopathy. *Neurology Genetics*. 2016;2(6):e115. PMID: 27830185, PMCID: PMC5087254
 12. Karaa A, Kriger J, Grier J, et al. Mitochondrial disease patients' perception of dietary supplements' use. *Mol Genet Metab*. 2016;119(1-2):100-108. PMID: 27444792, PMCID: PMC5031526
 13. Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
 14. Servian-Morilla E, Takeuchi H, Lee TV, et al. A POGLUT1 mutation causes a muscular dystrophy with reduced Notch signaling and satellite cell loss. *EMBO Mol Med*. 2016;8(11):1289-1309. PMID: 27807076, PMCID: PMC5090660
 15. Shen L, Diroma MA, Gonzalez M, et al. MSeqDR: A Centralized Knowledge Repository and Bioinformatics Web Resource to Facilitate Genomic Investigations in Mitochondrial Disease. *Hum Mutat*. 2016;37(6):540-548. PMID: 26919060, PMCID: PMC4846568
 16. Torres-Torronteras J, Cabrera-Perez R, Barba I, et al. Long-Term Restoration of Thymidine Phosphorylase Function and Nucleoside Homeostasis Using Hematopoietic Gene Therapy in a Murine Model of Mitochondrial Neurogastrointestinal Encephalomyopathy. *Hum Gene Ther.* 2016;27(9):656-667. PMID: 27004974, PMCID: PMC5079415
 17. Marin SE, Saneto RP. Neuropsychiatric Features in Primary Mitochondrial Disease. *Neurol. Clin.* Feb 2016;34(1):247-294. PMID: 26614002
 18. Garone C, Gurgel-Giannetti J, Sanna-Cherchi S, et al. A Novel SUCLA2 Mutation Presenting as a Complex Childhood Movement Disorder. *J Child Neurol*. 2017;32(2):246-250. PMID: 27651038
 19. Huang X, Bedoyan JK, Demirbas D, et al. Succinyl-CoA synthetase (SUCLA2) deficiency in two siblings with impaired activity of other mitochondrial oxidative enzymes in skeletal muscle without mitochondrial DNA depletion. *Mol Genet Metab*. 2017;120(3):213-222. PMID: 27913098, PMCID: PMC5346465
 20. Shin HK, Grahame G, McCandless SE, Kerr DS, Bedoyan JK. Enzymatic testing sensitivity, variability and practical diagnostic algorithm for pyruvate dehydrogenase complex (PDC) deficiency. *Mol Genet Metab*. 2017. PMID: 28918066, PMCID: PMC5722699
 21. Bedoyan JK, Yang SP, Ferdinandusse S, et al. Lethal neonatal case and review of primary short-chain enoyl-CoA hydratase (SCEH) deficiency associated with secondary lymphocyte pyruvate dehydrogenase complex (PDC) deficiency. *Mol Genet Metab*. Apr 2017;120(4):342-349. PMID: 28202214, PMCID: PMC5382105
 22. Barca E, Ganetzky RD, Potluri P, et al. USMG5 Ashkenazi Jewish founder mutation impairs mitochondrial complex V dimerization and ATP synthesis. *Hum Mol Genet*. 2018;27(19):3305-3312. PMID: 29917077, PMCID: PMC6140788

- 23.** Grier J, Hirano M, Karaa A, Shepard E, Thompson JLP. Diagnostic odyssey of patients with mitochondrial disease: Results of a survey. *Neurology Genetics*. 2018;4(2):e230. PMID: 29600276, PMCID: PMC5873725
- 24.** Hirano M, Emmanuele V, Quinzii CM. Emerging therapies for mitochondrial diseases. *Essays Biochem*. 2018;62(3):467-481. PMID: 29980632, PMCID: PMC6104515
- 25.** Raghavan NS, Brickman AM, Andrews H, et al. Whole-exome sequencing in 20,197 persons for rare variants in Alzheimer's disease. *Annals of clinical and translational neurology*. 2018;5(7):832-842. PMID: 30009200, PMCID: PMC6043775
- 26.** Shen L, Attimonelli M, Bai R, et al. MSeqDR mvTool: A mitochondrial DNA web and API resource for comprehensive variant annotation, universal nomenclature collation, and reference genome conversion. *Hum Mutat*. 2018. PMID: 29539190
- 27.** Zolkipli-Cunningham Z, Xiao R, Stoddart A, et al. Mitochondrial disease patient motivations and barriers to participate in clinical trials. *PLoS ONE*. 2018;13(5):e0197513. PMID: 29771953, PMCID: PMC5957366
- 28.** Barcelos IP, Haas RH. CoQ10 and Aging. *Biology*. 2019;8(2). PMID: 31083534
- 29.** Ganetzky RD, Stendel C, McCormick EM, et al. MT-ATP6 mitochondrial disease variants: Phenotypic and biochemical features analysis in 218 published cases and cohort of 14 new cases. *Hum Mutat*. 2019. PMID: 30763462
- 30.** Larson AA, Balasubramaniam S, Christodoulou J, et al. Biochemical signatures mimicking multiple carboxylase deficiency in children with mutations in MT-ATP6. *Mitochondrion*. 2019;44:58-64. PMID: 29307858
- 31.** Triska P, Kaneva K, Merkurjev D, et al. Landscape of germline and somatic mitochondrial DNA mutations in pediatric malignancies. *Cancer Res*. 2019. PMID: 30709931

Porphyrias Consortium

Book Chapters

- 1.** Anderson KE, Singal AK. Variegate Porphyria. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993.
- 2.** Balwani M, Bloomer J, Desnick R. X-Linked Protoporphyria. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993. PMID: 23409301
- 3.** Balwani M, Bloomer J, Desnick R. Erythropoietic Protoporphyria, Autosomal Recessive. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993. PMID: 23016163
- 4.** Bissell DM, Wang B, Cimino T, Lai J. Hereditary Coproporphyria. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993. PMID: 23236641

5. Erwin A, Balwani M, Desnick RJ. Congenital Erythropoietic Porphyria. In: Pagon RA, Adam MP, Bird TD, et al., eds. *GeneReviews(R)*. Seattle WA: University of Washington, Seattle; 1993. PMID: 24027798
6. Liu LU, Phillips J, Bonkovsky H. Hepatoerythropoietic Porphyria. In: Pagon RA, Adam MP, Bird TD, et al., eds. *GeneReviews(R)*. Seattle WA: University of Washington, Seattle; 1993. PMID: 24175354
7. Liu LU, Phillips J, Bonkovsky H. Porphyria Cutanea Tarda, Type II. In: Pagon RA, Adam MP, Bird TD, et al., eds. *GeneReviews(R)*. Seattle WA: University of Washington, Seattle; 1993. PMID: 23741761
8. Phillips JD, Kushner JP. The Porphyrias. In: Orkin SH, Nathan DG, Ginsburg D, Look AT, Fisher DE, Lux SE, eds. *Nathan and Oski's Hematology of Infancy and Childhood*. 7th ed. Philadelphia: Saunders 2008.
9. Anderson K, Sood G. Acute intermittent porphyria. *Best Practice*. London, UK: BMJ Publishing Group; 2008.
10. Sood G, Anderson K. Porphyria Cutanea Tarda. *Best Practice*. London, UK: BMJ Publishing Group; 2008.
11. Sood G, Anderson K. Porphyrias. In: Crowther M, Ginsberg J, Schunemann H, Meyer R, Lottenberg R, eds. *Evidence-Based Hematology*. United Kingdom: Blackwell Publishing Ltd; 2008:229-237.
12. Phillips JD, Anderson KE. The Porphyrias. In: Kaushansky K, Buetler E, Seligsohn U, Lichtman MA, Kipps TJ, Prchal JT, eds. *Williams Hematology*. 8th ed. New York: McGraw-Hill Medical; 2010:839-863.
13. Sood G, Anderson K. Clinical manifestations and diagnosis of acute intermittent porphyria. In: Rose B, ed. UpToDate. Waltham, MA: UpToDate; 2010.
14. Sood G, Anderson K. Management of acute intermittent porphyria. In: Rose B, ed. UpToDate. Waltham, MA: UpToDate; 2010.
15. Anderson K, Lee C, Balwani M, Desnick R. The porphyrias. In: Kliegman R, Stanton B, St. Geme J, Schor N, Behrman R, eds. *Nelson Textbook of Pediatrics*. 19 ed. Philadelphia, PA: Elsevier; 2011.
16. Phillips JD, Anderson K. The Porphyrias. In: Lichtman MA, Kaushansky K, Kipps TJ, Prchal JT, Levi MM, eds. *Williams Manual of Hematology*. 8th ed: McGraw-Hill Professional; 2011.
17. Anderson KE. The porphyrias. In: Goldman L, Schafer AI, eds. *Goldman's Cecil Medicine*. 24th ed. Philadelphia: Elsevier Saunders; 2012:1363-1371.
18. Lourenco CM, Lee C, Anderson KE. Disorders of heme biosynthesis In: J-M S, Van den Berghe G, Walter JH, eds. *Inborn Metabolic Diseases: Diagnosis and Treatment*. 5th ed. Berlin: Springer-Verlag; 2012:519-532.
19. Phillips JD. Side chain modification during heme biosynthesis. In: Kadish KM, Smith KM, Guilard R, eds. *Handbook of Porphyrin Science*. Vol 16: World Scientific Publishing Company; 2012:283-337.

- 20.** Bonkovsky HL, Guo J-T, Hou W, Li T, Narang T, Thapar M. Porphyrin and Heme Metabolism and the Porphyrias. *Comprehensive Physiology*: John Wiley & Sons, Inc.; 2013:365-401.
- 21.** Gou E, Anderson K. The Porphyrias. In: Hamblin M, Huang Y, eds. *Handbook of Photomedicine*. Boca Raton, FL: Taylor and Francis; 2013.

Abstracts Presented at Conferences

- 1.** Anderson K. CYP1A2*1F and GSTM1 Alleles Are Associated with Susceptibility to Porphyria Cutanea Tarda. Poster presented at: International Porphyrins & Porphyrias Meeting; April 2011; Cardiff, Wales.
- 2.** Bishop D, Tchaikovskii V, Nazarenko I, Balwani M, Doheny D, Desnick RJ. Expression and characterization of the ALAS2 carboxy-terminal gain-of-function mutations causing X-linked protoporphryia (Abstract #1157F). Paper presented at: 12th International Congress of Human Genetics/61st Annual Meeting of The American Society of Human Genetics; October 14, 2011; Montreal, Canada.
- 3.** Doheny D, Nazarenko I, Balwani M, Liu L, Naik H, Anderson K, Bissell DM, Bloomer JR, Bonkovsky HL, Kushner JP, Phillips J, Bishop D, Desnick RJ. Erythropoietic Protoporphryias: Frequency of Mutations in the Ferrochelatase Gene Causing Autosomal Recessive Erythropoietic Protoporphryia and Mutations in the 5'-Aminolevulinate Synthase 2 Gene Causing X-Linked Protoporphryia (Abstract #1338T). Paper presented at: 12th International Congress of Human Genetics/61st Annual Meeting of The American Society of Human Genetics; October 14, 2011; Montreal, Canada.
- 4.** Desnick RJ. Overview of RDCRN and Porphyrias Consortium Activities. Paper presented at: AASLD Annual Meeting; November 6, 2011; San Francisco, CA.
- 5.** Wang B. PTF Experience from the Trainee Perspective. Paper presented at: AASLD Annual Meeting; November 6, 2011; San Francisco, CA.
- 6.** Anderson K. The cutaneous porphyrias. Paper presented at: AASLD Annual Meeting; November 6, 2011; San Francisco, CA.
- 7.** Desnick RJ. The Porphyrias: Cardinal Signs and Diagnosis/Treatment. Paper presented at: American College of Medical Genetics Annual Clinical Genetics Meeting; March 31, 2012; Charlotte, NC.
- 8.** Singh A, Pierson K, Wilkinson G, Anderson K. Porphyrias: prevalence and frequency of testing in a national health care database. Paper presented at: Annual Meeting of the American Association for the Study of Liver Disease (AASLD); November 9-13, 2012; Boston, MA.
- 9.** Balwani M, Desnick RJ. The Porphyrias: Advances in Diagnosis and Treatment. Paper presented at: American Society of Hematology, Educational Program; December 8-10, 2012; New Orleans, LA. PMID: 23233556
- 10.** Ludtke A, Yasuda M, Balwani M, et al. First US Orthotopic Liver Transplant for Intractable Acute Intermittent Porphyria. *The American Society of Human Genetics 63rd Annual Meeting*. Boston, MA2013.

- 11.** Ludtke A, Yasuda M, Lin G, et al. Acute Intermittent Porphyria: Identification of 23 Novel Hydroxymethylbilane Synthase Mutations and Functional Characterization of Six Novel Missense Mutations. *ACMG Annual Clinical Genetics Meeting*. Phoenix, AZ2013.
- 12.** Balwani M, Bishop D, Nazarenko I, et al. Mutation analysis of 155 North American Patients with Erythropoietic Protoporphyria reveals novel Ferrochelatase Mutations and a high prevalence of X-Linked Protoporphyria due to previous and novel 5-Aminolevulinate Synthase 2 mutations. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 13.** Balwani M, Naik H, Peter I, et al. Erythropoietic Protoporphyria and X-Linked Protoporphyria in the United States: Results from the Longitudinal Study of the NIH/RDCRN Porphyrin Consortium. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 14.** Bishop D, Tchaikovskii V, Nazarenko I, Desnick R. Synthase Gain-of-Function Mutations Causing X-Linked Protoporphyria. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 15.** Gou E, Singh A, Pierson K, Wilkinson G, Anderson K. Frequency of Porphyria Testing in a National Health Care Database. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 16.** Larion S, Caballes F, Hwang S, et al. Circadian rhythms in acute intermittent porphyria—a pilot study. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 17.** Ludtke A, Yasuda M, Gan L, et al. Acute Intermittent Porphyria: Identification of 19 Novel Hydroxymethylbilane Synthase Mutations and Functional Characterization of Four Novel Missense Mutations. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 18.** Maddukuri V, Yazici C, Anderson K, et al. Acute intermittent porphyria [AIP] in the United States: features of the first 82 cases enrolled in the longitudinal study of the porphyria consortium [PC]. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
- 19.** Mittal S, Yasuda M, Desnick R, Anderson K. Metabolic Analysis in Transgenic Mouse Models of Acute Intermittent Porphyria (AIP). Paper presented at: Annual Assembly of the Swiss Society

of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.

20. Naik H, Balwani M, Doheny D, Liu L, Desnick R. Experience with a Pilot Skype Internet Support Group for Symptomatic Patients with Acute Intermittent Porphyria. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
21. Phillips J, Warby C, Bergonia H, Marcero J, Parker C, Franklin M. Porphyria studies in Cyp1A2-/- and wild type mice suggest that heme regulation of ALA-synthase transcription and mitochondrial membrane translocation can be separated based on heme supply-and-demand. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
22. Singal A, Jampana S, Kormos-Hallberg C, Anderson K. Low-dose hydroxychloroquine to treat or prevent relapse of porphyria cutanea tarda during hepatitis C treatment. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
23. Singal A, Gou E, Albuerne M, Kormos-Hallberg C, Anderson K. Relapse of porphyria cutanea tarda after achieving remission with phlebotomy or low dose hydroxychloroquine. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
24. Yazici C, Maddukuri V, Anderson K, et al. Hereditary coproporphyria [HCP] and variegate porphyria [VP] in the United States: Initial results from the longitudinal study of the porphyria consortium [PC]. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.
25. Wang B, Bissell D, Lai J, Cimino T, Porphyrias Consortium. A Combined Clinical Index for the Diagnosis of Acute Porphyria. Paper presented at: Annual Assembly of the Swiss Society of Clinical Chemistry & International Congress of Porphyrins and Porphyrias; May 16-18, 2013; Lucerne, Switzerland.

Conference Proceedings

1. Hou W, Tian Q, Lu QL, Schrum LW, Bonkovsky HL. Zinc protoporphyrin, a novel endogenous HCV NS3-4A protease inhibitor, displays anti-viral activity. [Abstract #926 Presidential Poster of Distinction, presented at Annual Meeting of the American Association for the Study of Liver Diseases]. *Hepatology*. 2011;54(S1):128A-359A.
2. Hwang SI, Lee YY, Park JO, Norton HJ, Clemens E, Schrum LW, Bonkovsky HL. The measurement of hepcidin from human urine and serum to study effects of a single dose of oral iron by an

optimized LC-MS/MS method. [Abstract #1204 presented at Annual Meeting of the American Association for the Study of Liver Diseases]. *Hepatology*. 2011;54(S1):931A.

3. Tian Q, Hou W, Steuerwald NM, Schrum LW, Bonkovsky HL. Heme markedly up-regulates RNA-binding motif protein 24 gene expression in human hepatocytes. [Abstract #895 presented at the Annual Meeting of the American Association for the Study of Liver Diseases]. *Hepatology*. 2011;54(S1):780A.
4. Tian Q, Hou W, Zheng J, Schrum LW, Bonkovsky HL. LONP1-dependent breakdown of mitochondrial 5-aminolevulinic acid synthase protein by heme in human liver cells. [Abstract #904 presented at the Annual Meeting of the American Association for the Study of Liver Diseases]. *Hepatology*. 2011;54(S1):785A.

Journal Articles

1. Jalil S, Grady JJ, Lee C, Anderson KE. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* Mar 2010;8(3):297-302, 302 e291. PMCID: PMC2834813
2. Hou W, Tian Q, Zheng J, Bonkovsky HL. Zinc mesoporphyrin induces rapid proteasomal degradation of hepatitis C nonstructural 5A protein in human hepatoma cells. *Gastroenterology*. May 2010;138(5):1909-1919. PMCID: PMC2860067
3. Gunn GB, Anderson KE, Patel AJ, et al. Severe radiation therapy-related soft tissue toxicity in a patient with porphyria cutanea tarda: a literature review. *Head Neck*. Aug 2010;32(8):1112-1117. PMCID: PMC2891307
4. Dailey HA, Septer AN, Daugherty L, Thames D, Gerdes S, Stabb EV, Dunn AK, Dailey TA, Phillips JD. The Escherichia coli protein YfeX functions as a porphyrinogen oxidase, not a heme dechelatase. *MBio*. 2011;2(6):e00248-00211. PMCID: PMC3215433
5. Li T, Bonkovsky HL, Guo JT. Structural analysis of heme proteins: implications for design and prediction. *BMC Struct. Biol.* 2011;11:13. PMCID: PMC3059290
6. Bishop DF, Clavero S, Mohandas N, Desnick RJ. Congenital erythropoietic porphyria: characterization of murine models of the severe common (C73R/C73R) and later-onset genotypes. *Mol. Med.* 2011;17(7-8):748-756. PMCID: PMC3146604
7. Machaczka M, Klimkowska M, Regenthal S, Hagglund H. Gaucher disease with foamy transformed macrophages and erythrophagocytic activity. *J. Inherit. Metab. Dis.* Feb 2011;34(1):233-235. PMID: 21113739
8. Hasanoglu A, Balwani M, Kasapkara CS, Ezgu FS, Okur I, Tumer L, Cakmak A, Nazarenko I, Yu C, Clavero S, Bishop DF, Desnick RJ. Harderoporphyrinia due to homozygosity for coproporphyrinogen oxidase missense mutation H327R. *J. Inherit. Metab. Dis.* Feb 2011;34(1):225-231. PMCID: PMC3091031
9. Wickliffe JK, Abdel-Rahman SZ, Lee C, Kormos-Hallberg C, Sood G, Rondelli CM, Grady JJ, Desnick RJ, Anderson KE. CYP1A2*1F and GSTM1 alleles are associated with susceptibility to porphyria cutanea tarda. *Mol. Med.* Mar-Apr 2011;17(3-4):241-247. PMCID: PMC3060985

- 10.** Lorenzo FRt, Phillips JD, Nussenzveig R, Lingam B, Koul PA, Schrier SL, Prchal JT. Molecular basis of two novel mutations found in type I methemoglobinemia. *Blood Cells. Mol. Dis.* Apr 15 2011;46(4):277-281. PMCID: PMC3075332
- 11.** Troadec MB, Warner D, Wallace J, Thomas K, Spangrude GJ, Phillips J, Khalimonchuk O, Paw BH, Ward DM, Kaplan J. Targeted deletion of the mouse Mitoferrin1 gene: from anemia to protoporphyrinia. *Blood.* May 19 2011;117(20):5494-5502. PMCID: PMC3109720
- 12.** Lakner AM, Bonkovsky HL, Schrum LW. microRNAs: fad or future of liver disease. *World J. Gastroenterol.* May 28 2011;17(20):2536-2542. PMCID: PMC3103811
- 13.** Boynton TO, Gerdes S, Craven SH, Neidle EL, Phillips JD, Dailey HA. Discovery of a gene involved in a third bacterial protoporphyrinogen oxidase activity through comparative genomic analysis and functional complementation. *Appl. Environ. Microbiol.* Jul 2011;77(14):4795-4801. PMCID: PMC3147383
- 14.** Wang Y, Langer NB, Shaw GC, Yang G, Li L, Kaplan J, Paw BH, Bloomer JR. Abnormal mitoferrin-1 expression in patients with erythropoietic protoporphyrinia. *Exp. Hematol.* Jul 2011;39(7):784-794. PMCID: PMC3143264
- 15.** Tian Q, Li T, Hou W, Zheng J, Schrum LW, Bonkovsky HL. Lon peptidase 1 (LONP1)-dependent breakdown of mitochondrial 5-aminolevulinic acid synthase protein by heme in human liver cells. *J. Biol. Chem.* Jul 29 2011;286(30):26424-26430. PMCID: PMC3143606
- 16.** Zhang J, Yasuda M, Desnick RJ, Balwani M, Bishop D, Yu C. A LC-MS/MS method for the specific, sensitive, and simultaneous quantification of 5-aminolevulinic acid and porphobilinogen. *J. Chromatogr. B Analyt. Technol. Biomed. Life. Sci.* Aug 15 2011;879(24):2389-2396. PMCID: PMC3269068
- 17.** To-Figueras J, Phillips JD, Gonzalez-Lopez JM, Badenas C, Madrigal I, Gonzalez-Romaris EM, Ramos C, Aguirre JM, Herrero C. Hepatoerythropoietic porphyria due to a novel mutation in the uroporphyrinogen decarboxylase gene. *Br. J. Dermatol.* Sep 2011;165(3):499-505. PMCID: PMC3818800
- 18.** Huang Z, Chen K, Xu T, Zhang J, Li Y, Li W, Agarwal AK, Clark AM, Phillips JD, Pan X. Sampageline inhibits heme biosynthesis in both yeast and human. *Eukaryot. Cell.* Nov 2011;10(11):1536-1544. PMCID: PMC3209050
- 19.** Hwang SI, Lee YY, Park JO, Norton HJ, Clemens E, Schrum LW, Bonkovsky HL. Effects of a single dose of oral iron on hepcidin concentrations in human urine and serum analyzed by a robust LC-MS/MS method. *Clin. Chim. Acta.* Nov 20 2011;412(23-24):2241-2247. PMCID: PMC3207492
- 20.** Phillips JD, Kushner JP, Bergonia HA, Franklin MR. Uroporphyrinia in the Cyp1a2^{-/-} mouse. *Blood Cells. Mol. Dis.* Dec 15 2011;47(4):249-254. PMCID: PMC3223295
- 21.** Wang L, He F, Bu J, Liu X, Du W, Dong J, Cooney JD, Dubey SK, Shi Y, Gong B, Li J, McBride PF, Jia Y, Lu F, Soltis KA, Lin Y, Namburi P, Liang C, Sundaresan P, Paw BH, Li DY, Phillips JD, Yang Z. ABCB6 mutations cause ocular coloboma. *Am. J. Hum. Genet.* Jan 13 2012;90(1):40-48. PMCID: PMC3257322
- 22.** Ryan Caballes F, Sendi H, Bonkovsky HL. Hepatitis C, porphyria cutanea tarda and liver iron: an update. *Liver Int.* Jul 2012;32(6):880-893. PMCID: PMC3418709
- 23.** Balwani M, Desnick RJ. The porphyrias: advances in diagnosis and treatment. *Blood.* Nov 29 2012;120(23):4496-4504. PMCID: PMC3512229

- 24.** Singal AK, Kormos-Hallberg C, Lee C, Sadagoparamanujam VM, Grady JJ, Freeman DH, Jr., Anderson KE. Low-dose hydroxychloroquine is as effective as phlebotomy in treatment of patients with porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* Dec 2012;10(12):1402-1409. PMID: 22985607, PMCID: PMC3501544
- 25.** Bishop DF, Tchaikovskii V, Nazarenko I, Desnick RJ. Molecular expression and characterization of erythroid-specific 5-aminolevulinate synthase gain-of-function mutations causing X-linked protoporphyria. *Mol. Med.* 2013;19:18-25. PMID: 23348515, PMCID: PMC3592931
- 26.** Balwani M, Doheny D, Bishop DF, et al. Loss-of-function ferrochelatase and gain-of-function erythroid-specific 5-aminolevulinate synthase mutations causing erythropoietic protoporphyria and x-linked protoporphyria in North American patients reveal novel mutations and a high prevalence of X-linked protoporphyria. *Mol. Med.* 2013;19:26-35. PMID: 23364466, PMCID: PMC3646094
- 27.** Bonkovsky HL. Risk factors for porphyria cutanea tarda -the iron/HFE connection. *Liver Int.* Jan 2013;33(1):162. PMID: 23121614
- 28.** Bonkovsky HL, Hou W, Steuerwald N, et al. Heme status affects human hepatic messenger RNA and microRNA expression. *World J. Gastroenterol.* Mar 14 2013;19(10):1593-1601. PMID: 23538684, PMCID: PMC3602476
- 29.** Larion S, Caballes FR, Hwang SI, et al. Circadian rhythms in acute intermittent porphyria--a pilot study. *Eur. J. Clin. Invest.* Jul 2013;43(7):727-739. PMID: 23650938, PMCID: PMC3687345
- 30.** Clavero S, Ahuja Y, Bishop DF, et al. Diagnosis of feline acute intermittent porphyria presenting with erythrodontia requires molecular analyses. *Vet. J.* Dec 2013;198(3):720-722. PMID: 24239138, PMCID: PMC3963809
- 31.** Yasuda M, Gan L, Chen B, et al. RNAi-mediated silencing of hepatic Alas1 effectively prevents and treats the induced acute attacks in acute intermittent porphyria mice. *Proc. Natl. Acad. Sci. U. S. A.* May 27 2014;111(21):7777-7782. PMID: 24821812, PMCID: PMC4040563
- 32.** Singal AK, Parker C, Bowden C, Thapar M, Liu L, McGuire BM. Liver transplantation in the management of porphyria. *Hepatology.* Sep 2014;60(3):1082-1089. PMID: 24700519, PMCID: PMC4498564
- 33.** Yien YY, Robledo RF, Schultz IJ, et al. TMEM14C is required for erythroid mitochondrial heme metabolism. *J. Clin. Invest.* Oct 2014;124(10):4294-4304. PMID: 25157825, PMCID: PMC4191016
- 34.** Bonkovsky HL, Maddukuri VC, Yazici C, et al. Acute porphyrias in the USA: features of 108 subjects from porphyrias consortium. *Am. J. Med.* Dec 2014;127(12):1233-1241. PMID: 25016127, PMCID: PMC4563803
- 35.** Bossi K, Lee J, Schmeltzer P, et al. Homeostasis of iron and hepcidin in erythropoietic protoporphyria. *Eur. J. Clin. Invest.* 2015;45(10):1032-1041. PMID: 26199063
- 36.** Medlock AE, Shiferaw MT, Marcero JR, et al. Identification of the Mitochondrial Heme Metabolism Complex. *PLoS ONE.* 2015;10(8):e0135896. PMID: 26287972, PMCID: PMC4545792
- 37.** O'Brien TR, Pfeiffer RM, Paquin A, et al. Comparison of functional variants in IFNL4 and IFNL3 for association with HCV clearance. *J Hepatol.* 2015;63(5):1103-1110. PMID: 26186989, PMCID: PMC4615534

- 38.** Ramanujam VM, Anderson KE. Porphyria Diagnostics-Part 1: A Brief Overview of the Porphyrias. *Current protocols in human genetics / editorial board, Jonathan L Haines [et al]*. 2015;86:17.20.11-26. PMID: 26132003, PMCID: PMC4640448
- 39.** Wang G, Bonkovsky HL, de Lemos A, Burczynski FJ. Recent insights into the biological functions of liver fatty acid binding protein 1. *J Lipid Res*. 2015;56(12):2238-2247. PMID: 26443794, PMCID: PMC4655993
- 40.** Yasuda M, Erwin AL, Liu LU, et al. Liver Transplantation for Acute Intermittent Porphyria: Biochemical and Pathologic Studies of the Explanted Liver. *Mol. Med.* 2015;21:487-495. PMID: 26062020, PMCID: PMC4607616
- 41.** Dailey HA, Gerdes S, Dailey TA, Burch JS, Phillips JD. Noncanonical coproporphyrin-dependent bacterial heme biosynthesis pathway that does not use protoporphyrin. *Proc. Natl. Acad. Sci. U. S. A.* Feb 17 2015;112(7):2210-2215. PMID: 25646457, PMCID: PMC4343137
- 42.** Bissell DM, Lai JC, Meister RK, Blanc PD. Role of Delta-aminolevulinic Acid in the Symptoms of Acute Porphyria. *Am. J. Med.* Mar 2015;128(3):313-317. PMID: 25446301, PMCID: PMC4339446
- 43.** Langendonk JG, Balwani M, Anderson KE, et al. Afamelanotide for Erythropoietic Protoporphyria. *N. Engl. J. Med.* Jul 2 2015;373(1):48-59. PMID: 26132941, PMCID: PMC4780255
- 44.** Bergonia HA, Franklin MR, Kushner JP, Phillips JD. A method for determining delta-aminolevulinic acid synthase activity in homogenized cells and tissues. *Clin. Biochem.* Aug 2015;48(12):788-795. PMID: 25959086, PMCID: PMC4522353
- 45.** Farrell CP, Parker CJ, Phillips JD. Exome sequencing for molecular characterization of non-HFE hereditary hemochromatosis. *Blood Cells. Mol. Dis.* Aug 2015;55(2):101-103. PMID: 26142323, PMCID: PMC4491409
- 46.** Gou EW, Balwani M, Bissell DM, et al. Pitfalls in Erythrocyte Protoporphyrin Measurement for Diagnosis and Monitoring of Protoporphyrrias. *Clin. Chem.* Dec 2015;61(12):1453-1456. PMID: 26482161, PMCID: PMC4744648
- 47.** Balwani M, Singh P, Seth A, et al. Acute Intermittent Porphyria in children: A case report and review of the literature. *Mol Genet Metab*. 2016;119(4):295-299. PMID: 27769855, PMCID: PMC5154763
- 48.** Chen B, Solis-Villa C, Hakenberg J, et al. Acute Intermittent Porphyria: Predicted Pathogenicity of HMBS Variants Indicates Extremely Low Penetrance of the Autosomal Dominant Disease. *Hum Mutat.* 2016;37(11):1215-1222. PMID: 27539938, PMCID: PMC5063710
- 49.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 50.** Naik H, Stoecker M, Sanderson SC, Balwani M, Desnick RJ. Experiences and concerns of patients with recurrent attacks of acute hepatic porphyria: A qualitative study. *Mol Genet Metab*. 2016. PMID: 27595545, PMCID: PMC5083146
- 51.** Piel RB, 3rd, Shiferaw MT, Vashisht AA, et al. A Novel Role for Progesterone Receptor Membrane Component 1 (PGRMC1): A Partner and Regulator of Ferrochelatase. *Biochemistry (Mosc)*. 2016;55(37):5204-5217. PMID: 27599036, PMCID: PMC5278647

- 52.** French JB, Bonacini M, Ghabril M, Foureau D, Bonkovsky HL. Hepatotoxicity Associated with the Use of Anti-TNF-alpha Agents. *Drug Saf*. Mar 2016;39(3):199-208. PMID: 26692395, PMCID: PMC4752395
- 53.** Balwani M, Wang B, Anderson KE, et al. Acute Hepatic Porphyrias: Recommendations for Evaluation and Long Term Management. *Hepatology*. 2017. PMID: 28605040, PMCID: PMC5605422
- 54.** Singal AK, Venkata KVR, Jampana S, Islam FU, Anderson KE. Hepatitis C Treatment in Patients With Porphyria Cutanea Tarda. *Am J Med Sci*. 2017;353(6):523-528. PMID: 28641714, PMCID: PMC5484053
- 55.** Yien YY, Ducamp S, van der Vorm LN, et al. Mutation in human CLPX elevates levels of delta-aminolevulinate synthase and protoporphyrin IX to promote erythropoietic protoporphyrria. *Proc Natl Acad Sci U S A*. 2017;114(38):E8045-e8052. PMID: 28874591, PMCID: PMC5617249
- 56.** Chen B, Solis-Villa C, Erwin AL, et al. Identification and characterization of 40 novel hydroxymethylbilane synthase mutations that cause acute intermittent porphyria. *J Inherit Metab Dis*. 2018. PMID: 29594648
- 57.** Lala SM, Naik H, Balwani M. Diagnostic Delay in Erythropoietic Protoporphyrria. *J Pediatr*. 2018. PMID: 30041937
- 58.** Salameh H, Sarairah H, Rizwan M, Kuo YF, Anderson KE, Singal AK. Relapse of porphyria cutanea tarda after treatment with phlebotomy or 4-aminoquinoline antimalarial: A Meta-analysis. *Br J Dermatol*. 2018. PMID: 29750336
- 59.** Yien YY, Shi J, Chen C, et al. FAM210B is an erythropoietin target and regulates erythroid heme synthesis by controlling mitochondrial iron import and ferrochelatase activity. *J Biol Chem*. 2018;293(51):19797-19811. PMID: 30366982, PMCID: PMC6314115
- 60.** Chen B, Wang M, Gan L, Zhang B, Desnick RJ, Yasuda M. Characterization of the hepatic transcriptome following phenobarbital induction in mice with AIP. *Mol Genet Metab*. 2019. PMID: 30777612
- 61.** Moghe A, Ramanujam VMS, Phillips JD, Desnick RJ, Anderson KE. Harderoporphyria: Case of lifelong photosensitivity associated with compound heterozygous coproporphyrinogen oxidase (CPOX) mutations. *Molecular genetics and metabolism reports*. 2019;19:100457. PMID: 30828546, PMCID: PMC6383327
- 62.** Pulgar VM, Yasuda M, Gan L, Desnick RJ, Bonkovsky HL. Sex differences in vascular reactivity in mesenteric arteries from a mouse model of acute intermittent porphyria. *Mol Genet Metab*. 2019. PMID: 30639047
- 63.** Yasuda M, Desnick RJ. Murine models of the human porphyrias: Contributions toward understanding disease pathogenesis and the development of new therapies. *Mol Genet Metab*. 2019. PMID: 30737139

Special Projects

1. Bloomer JR. Managing acute porphyrias: practice considerations in inpatient and outpatient settings. *Medscape Education Gastroenterology*. 2010.
<http://www.medscape.org/viewarticle/730948>. Accessed February 28, 2013.

2. Anderson KE. Porphyria-an overview. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2010.
3. Sood G, Anderson KE. Acute intermittent porphyria. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2010.
4. Singal A, Anderson KE. Porphyria cutanea tarda and hepatoerythropoietic porphyria. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2010.
5. Singal A, Anderson KE. Variegate porphyria. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2010.
6. Mittal S, Anderson KE. Erythropoietic porphyria. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2011.
7. Mittal S, Anderson KE. Congenital erythropoietic porphyria. In: Rose BD, ed. *UpToDate*. Waltham, MA: UpToDate; 2013.
8. Anderson KE, Singal A. Variegate porphyria In: Pagon RA, Bird TD, Dolan CR, et al., eds. *GeneReviews [Internet]*. Vol 1993-. Seattle, Washington: University of Washington, Seattle; 2013: <http://www.ncbi.nlm.nih.gov/books/NBK121283/>. PMID: 23409300
9. Bloomer JR. Porphyria, ALA-D. 2010; <http://www.rarediseases.org/rare-disease-information/rare-diseases/byID/324/viewAbstract>. Accessed February 29, 2013.
10. Anderson KE. Porphyria, variegate. 2010; <http://www.rarediseases.org/rare-disease-information/rare-diseases/byID/324/viewAbstract>. Accessed April 4, 2014.

Primary Immune Deficiency Treatment Consortium

Journal Articles

1. Griffith LM, Cowan MJ, Kohn DB, et al. Allogeneic hematopoietic cell transplantation for primary immune deficiency diseases: current status and critical needs. *J. Allergy Clin. Immunol.* Dec 2008;122(6):1087-1096. PMID: 18992926, PMCID: PMC3357108
2. Patel NC, Chinen J, Rosenblatt HM, et al. Long-term outcomes of nonconditioned patients with severe combined immunodeficiency transplanted with HLA-identical or haploidentical bone marrow depleted of T cells with anti-CD6 mAb. *J. Allergy Clin. Immunol.* Dec 2008;122(6):1185-1193. PMID: 19084111
3. Shearer WT, Notarangelo LD, Griffith LM. Treatment of immunodeficiency: long-term outcome and quality of life. *J. Allergy Clin. Immunol.* Dec 2008;122(6):1065-1068. PMID: 19084107
4. Chinen J, Shearer WT. Advances in basic and clinical immunology in 2008. *J. Allergy Clin. Immunol.* Feb 2009;123(2):328-332. PMID: 19203657
5. Sarzotti-Kelsoe M, Win CM, Parrott RE, et al. Thymic output, T-cell diversity, and T-cell function in long-term human SCID chimeras. *Blood*. Aug 13 2009;114(7):1445-1453. PMID: 19433858, PMCID: PMC2727406
6. Patel NC, Chinen J, Rosenblatt HM, et al. Outcomes of patients with severe combined immunodeficiency treated with hematopoietic stem cell transplantation with and without

- preconditioning. *J. Allergy Clin. Immunol.* Nov 2009;124(5):1062-1069 e1061-1064. PMID: 19895994, PMCID: PMC3271026
- 7. Griffith LM, Cowan MJ, Notarangelo LD, et al. Improving cellular therapy for primary immune deficiency diseases: recognition, diagnosis, and management. *J. Allergy Clin. Immunol.* Dec 2009;124(6):1152-1160 e1112. PMID: 20004776, PMCID: PMC2831471
 - 8. Railey MD, Lokhnygina Y, Buckley RH. Long-term clinical outcome of patients with severe combined immunodeficiency who received related donor bone marrow transplants without pretransplant chemotherapy or post-transplant GVHD prophylaxis. *J. Pediatr.* Dec 2009;155(6):834-840 e831. PMID: 19818451, PMCID: PMC2784223
 - 9. Dvorak CC, Cowan MJ. Radiosensitive severe combined immunodeficiency disease. *Immunol. Allergy Clin. North Am.* Feb 2010;30(1):125-142. PMID: 20113890, PMCID: PMC2818388
 - 10. Chinen J, Shearer WT. Secondary immunodeficiencies, including HIV infection. *J Allergy Clin Immunol.* 2010 Feb; 125(2 Suppl 2):S195-203. PMID: 20042227, PMCID: PMC6151868
 - 11. Chinen J, Shearer WT. Advances in basic and clinical immunology in 2009. *J. Allergy Clin. Immunol.* Mar 2010;125(3):563-568. PMID: 20226292, PMCID: PMC2841291
 - 12. Buckley RH. B-cell function in severe combined immunodeficiency after stem cell or gene therapy: a review. *J. Allergy Clin. Immunol.* Apr 2010;125(4):790-797. PMID: 20371393, PMCID: PMC2857969
 - 13. Walter JE, Rucci F, Patrizi L, Recher M, Regenass S, Paganini T, Keszei M, Pessach I, Lang PA, Poliani PL, Giliani S, Al-Herz W, Cowan MJ, Puck JM, Bleesing J, Niehues T, Schuetz C, Malech H, DeRavin SS, Facchetti F, Gennery AR, Andersson E, Kamani NR, Sekiguchi J, Alenezi HM, Chinen J, Dbaibo G, ElGhazali G, Fontana A, Pasic S, Detre C, Terhorst C, Alt FW, Notarangelo LD. Expansion of immunoglobulin-secreting cells and defects in B cell tolerance in Rag-dependent immunodeficiency. *J. Exp. Med.* Jul 5 2010;207(7):1541-1554. PMID: 20547827, PMCID: PMC2901061
 - 14. Zemble R, Luning Prak E, McDonald K, McDonald-McGinn D, Zackai E, Sullivan K. Secondary immunologic consequences in chromosome 22q11.2 deletion syndrome (DiGeorge syndrome/velocardiofacial syndrome). *Clin. Immunol.* Sep 2010;136(3):409-418. PMID: 20472505, PMCID: PMC2917481
 - 15. Buckley RH. Transplantation of hematopoietic stem cells in human severe combined immunodeficiency: longterm outcomes. *Immunol. Res.* Apr 2011;49(1-3):25-43. PMID: 21116871, PMCID: PMC3798033
 - 16. Nicholas S, Krance RA, Hanson IC, et al. Early versus delayed diagnosis of SCID: triumph versus tragedy. *Clin. Immunol.* Jun 2011;139(3):360-362. PMID: 21497138
 - 17. Moratto D, Giliani S, Bonfim C, Mazzolari E, Fischer A, Ochs HD, Cant AJ, Thrasher AJ, Cowan MJ, Albert MH, Small T, Pai SY, Haddad E, Lisa A, Hambleton S, Slatter M, Cavazzana-Calvo M, Mahlaoui N, Picard C, Torgerson TR, Burroughs L, Koliski A, Neto JZ, Porta F, Qasim W, Veys P, Kavanau K, Honig M, Schulz A, Friedrich W, Notarangelo LD. Long-term outcome and lineage-specific chimerism in 194 patients with Wiskott-Aldrich syndrome treated by hematopoietic cell transplantation in the period 1980-2009: an international collaborative study. *Blood.* Aug 11 2011;118(6):1675-1684. PMID: 21659547, PMCID: PMC3156052

- 18.** Becker-Herman S, Meyer-Bahlburg A, Schwartz MA, Jackson SW, Hudkins KL, Liu C, Sather BD, Khim S, Liggitt D, Song W, Silverman GJ, Alpers CE, Rawlings DJ. WASp-deficient B cells play a critical, cell-intrinsic role in triggering autoimmunity. *J. Exp. Med.* Sep 26 2011;208(10):2033-2042. PMID: 21875954, PMCID: PMC3182055
- 19.** Marcus N, Takada H, Law J, et al. Hematopoietic stem cell transplantation for CD3delta deficiency. *J. Allergy Clin. Immunol.* Nov 2011;128(5):1050-1057. PMID: 21757226, PMCID: PMC4490832
- 20.** Tison BE, Nicholas SK, Abramson SL, et al. Autoimmunity in a cohort of 130 pediatric patients with partial DiGeorge syndrome. *J. Allergy Clin. Immunol.* Nov 2011;128(5):1115-1117 e1111-1113. PMID: 21835443
- 21.** Yu GP, Nadeau KC, Berk DR, de Saint Basile G, Lambert N, Knapnougel P, Roberts J, Kavanau K, Dunn E, Stiehm ER, Lewis DB, Umetsu DT, Puck JM, Cowan MJ. Genotype, phenotype, and outcomes of nine patients with T-B+NK+ SCID. *Pediatr. Transplant.* Nov 2011;15(7):733-741. PMID: 21883749, PMCID: PMC3196791
- 22.** Puck JM. The case for newborn screening for severe combined immunodeficiency and related disorders. *Ann. N. Y. Acad. Sci.* Dec 2011;1246:108-117. PMID: 22236435, PMCID: PMC4474477
- 23.** Puck JM. Neonatal screening for severe combined immunodeficiency. *Curr. Opin. Pediatr.* Dec 2011;23(6):667-673. PMID: 22001765, PMCID: PMC3299571
- 24.** Recher M, Berglund LJ, Avery DT, Cowan MJ, Gennery AR, Smart J, Peake J, Wong M, Pai SY, Baxi S, Walter JE, Palendira U, Tangye GA, Rice M, Brothers S, Al-Herz W, Oettgen H, Eibel H, Puck JM, Cattaneo F, Ziegler JB, Giliani S, Tangye SG, Notarangelo LD. IL-21 is the primary common gamma chain-binding cytokine required for human B-cell differentiation in vivo. *Blood.* Dec 22 2011;118(26):6824-6835. PMID: 22039266, PMCID: PMC3338166
- 25.** Martinez CA, Shah S, Shearer WT, et al. Excellent survival after sibling or unrelated donor stem cell transplantation for chronic granulomatous disease. *J. Allergy Clin. Immunol.* Jan 2012;129(1):176-183. PMID: 22078471
- 26.** Chinen J, Shearer WT. Advances in basic and clinical immunology in 2011. *J. Allergy Clin. Immunol.* Feb 2012;129(2):342-348. PMID: 22206779, PMCID: PMC3279946
- 27.** Siberry GK, Leister E, Jacobson DL, et al. Increased risk of asthma and atopic dermatitis in perinatally HIV-infected children and adolescents. *Clin. Immunol.* Feb 2012;142(2):201-208. PMID: 22094294, PMCID: PMC3273595
- 28.** Buckley RH. The long quest for neonatal screening for severe combined immunodeficiency. *J. Allergy Clin. Immunol.* Mar 2012;129(3):597-604; quiz 605-596. PMID: 22277203, PMCID: PMC3294102
- 29.** Hanson IC, Shearer WT. Ruling out HIV infection when testing for severe combined immunodeficiency and other T-cell deficiencies. *J. Allergy Clin. Immunol.* Mar 2012;129(3):875-876 e875. PMID: 22386446
- 30.** Puck JM. Laboratory technology for population-based screening for severe combined immunodeficiency in neonates: the winner is T-cell receptor excision circles. *J. Allergy Clin. Immunol.* Mar 2012;129(3):607-616. PMID: 22285280, PMCID: PMC3294074

- 31.** Roberts JL, Buckley RH, Luo B, et al. CD45-deficient severe combined immunodeficiency caused by uniparental disomy. *Proc. Natl. Acad. Sci. U. S. A.* Jun 26 2012;109(26):10456-10461. PMID: 22689986, PMCID: PMC3387083
- 32.** Leechawengwongs E, Shearer WT. Lymphoma complicating primary immunodeficiency syndromes. *Curr. Opin. Hematol.* Jul 2012;19(4):305-312. PMID: 22525579
- 33.** Taylor PA, Kelly RM, Bade ND, Smith MJ, Stefanski HE, Blazar BR. FTY720 markedly increases alloengraftment but does not eliminate host anti-donor T cells that cause graft rejection on its withdrawal. *Biol. Blood Marrow Transplant.* Sep 2012;18(9):1341-1352. PMID: 22728248, PMCID: PMC3520609
- 34.** Chan SK, Shearer WT. HCT survival in ADA-SCID: what's the buzz? *Blood.* Oct 25 2012;120(17):3392-3393. PMID: 23100302
- 35.** Punwani D, Gonzalez-Espinosa D, Comeau AM, Dutra A, Pak E, Puck J. Cellular calibrators to quantitate T-cell receptor excision circles (TRECs) in clinical samples. *Mol. Genet. Metab.* Nov 2012;107(3):586-591. PMID: 23062576, PMCID: PMC3483425
- 36.** Mangurian C, Cowan MJ. The missing vital sign. *BMJ.* 2013;347:f4163. PMID: 23833077, PMCID: PMC4688548
- 37.** Buckley RH, Win CM, Moser BK, Parrott RE, Sajaroff E, Sarzotti-Kelsoe M. Post-transplantation B cell function in different molecular types of SCID. *J. Clin. Immunol.* Jan 2013;33(1):96-110. PMID: 23001410, PMCID: PMC3549311
- 38.** Chinen J, Notarangelo LD, Shearer WT. Advances in basic and clinical immunology in 2012. *J. Allergy Clin. Immunol.* Mar 2013;131(3):675-682. PMID: 23374612
- 39.** Cattaneo F, Recher M, Masneri S, et al. Hypomorphic Janus kinase 3 mutations result in a spectrum of immune defects, including partial maternal T-cell engraftment. *J. Allergy Clin. Immunol.* Apr 2013;131(4):1136-1145. PMID: 23384681
- 40.** Gelfand EW, Ochs HD, Shearer WT. Controversies in IgG replacement therapy in patients with antibody deficiency diseases. *J. Allergy Clin. Immunol.* Apr 2013;131(4):1001-1005. PMID: 23540617
- 41.** Haddad E, Leroy S, Buckley RH. B-cell reconstitution for SCID: Should a conditioning regimen be used in SCID treatment? *J. Allergy Clin. Immunol.* Apr 2013;131(4):994-1000. PMID: 23465660, PMCID: PMC3615028
- 42.** Henderson LA, Frugoni F, Hopkins G, et al. First reported case of Omenn syndrome in a patient with reticular dysgenesis. *J. Allergy Clin. Immunol.* Apr 2013;131(4):1227-1230, 1230 e1221-1223. PMID: 23014587, PMCID: PMC3894621
- 43.** Selleri S, Dieng MM, Nicoletti S, et al. Cord-blood-derived mesenchymal stromal cells downmodulate CD4+ T-cell activation by inducing IL-10-producing Th1 cells. *Stem Cells Dev.* Apr 1 2013;22(7):1063-1075. PMID: 23167734, PMCID: PMC3608091
- 44.** Horn B, Cowan MJ. Unresolved issues in hematopoietic stem cell transplantation for severe combined immunodeficiency: need for safer conditioning and reduced late effects. *J. Allergy Clin. Immunol.* May 2013;131(5):1306-1311. PMID: 23622119, PMCID: PMC5575916
- 45.** Kwan A, Church JA, Cowan MJ, et al. Newborn screening for severe combined immunodeficiency and T-cell lymphopenia in California: results of the first 2 years. *J. Allergy Clin. Immunol.* Jul 2013;132(1):140-150. PMID: 23810098, PMCID: PMC3759317

- 46.** Teigland CL, Parrott RE, Buckley RH. Long-term outcome of non-ablative booster BMT in patients with SCID. *Bone Marrow Transplant*. Aug 2013;48(8):1050-1055. PMID: 23396406, PMCID: PMC3737279
- 47.** Chen R, Giliani S, Lanzi G, et al. Whole-exome sequencing identifies tetratricopeptide repeat domain 7A (TTC7A) mutations for combined immunodeficiency with intestinal atresias. *J. Allergy Clin. Immunol.* Sep 2013;132(3):656-664 e617. PMID: 23830146, PMCID: PMC3759618
- 48.** Dvorak CC, Cowan MJ, Logan BR, et al. The natural history of children with severe combined immunodeficiency: baseline features of the first fifty patients of the primary immune deficiency treatment consortium prospective study 6901. *J. Clin. Immunol.* Oct 2013;33(7):1156-1164. PMID: 23818196, PMCID: PMC3784642
- 49.** Henderson LA, Frugoni F, Hopkins G, et al. Expanding the spectrum of recombination-activating gene 1 deficiency: a family with early-onset autoimmunity. *J. Allergy Clin. Immunol.* Oct 2013;132(4):969-971 e961-962. PMID: 23891352, PMCID: PMC3874115
- 50.** Savic RM, Cowan MJ, Dvorak CC, et al. Effect of weight and maturation on busulfan clearance in infants and small children undergoing hematopoietic cell transplantation. *Biol. Blood Marrow Transplant*. Nov 2013;19(11):1608-1614. PMID: 24029650, PMCID: PMC3848313
- 51.** Johnson TS, Terrell CE, Millen SH, Katz JD, Hildeman DA, Jordan MB. Etoposide selectively ablates activated T cells to control the immunoregulatory disorder hemophagocytic lymphohistiocytosis. *J. Immunol.* Jan 1 2014;192(1):84-91. PMID: 24259502, PMCID: PMC4177106
- 52.** Schuetz C, Neven B, Dvorak CC, et al. SCID patients with ARTEMIS vs RAG deficiencies following HCT: increased risk of late toxicity in ARTEMIS-deficient SCID. *Blood*. Jan 9 2014;123(2):281-289. PMID: 24144642, PMCID: PMC3953035
- 53.** Griffith LM, Cowan MJ, Notarangelo LD, et al. Primary Immune Deficiency Treatment Consortium (PIDTC) report. *J. Allergy Clin. Immunol.* Feb 2014;133(2):335-347. PMID: 24139498, PMCID: PMC3960312
- 54.** Haddad E, Allakhverdi Z, Griffith LM, Cowan MJ, Notarangelo LD. Survey on retransplantation criteria for patients with severe combined immunodeficiency. *J. Allergy Clin. Immunol.* Feb 2014;133(2):597-599. PMID: 24331379, PMCID: PMC3960313
- 55.** Chen K, Wu W, Mathew D, et al. Autoimmunity due to RAG deficiency and estimated disease incidence in RAG1/2 mutations. *J. Allergy Clin. Immunol.* Mar 2014;133(3):880-882 e810. PMID: 24472623, PMCID: PMC4107635
- 56.** Chinen J, Notarangelo LD, Shearer WT. Advances in basic and clinical immunology in 2013. *J. Allergy Clin. Immunol.* Apr 2014;133(4):967-976. PMID: 24589342, PMCID: PMC3988899
- 57.** Lee YN, Frugoni F, Dobbs K, et al. A systematic analysis of recombination activity and genotype-phenotype correlation in human recombination-activating gene 1 deficiency. *J. Allergy Clin. Immunol.* Apr 2014;133(4):1099-1108. PMID: 24290284, PMCID: PMC4005599
- 58.** Shearer WT, Dunn E, Notarangelo LD, et al. Establishing diagnostic criteria for severe combined immunodeficiency disease (SCID), leaky SCID, and Omenn syndrome: the Primary Immune Deficiency Treatment Consortium experience. *J. Allergy Clin. Immunol.* Apr 2014;133(4):1092-1098. PMID: 24290292, PMCID: PMC3972266

- 59.** Shearer WT, Fleisher TA, Buckley RH, et al. Recommendations for live viral and bacterial vaccines in immunodeficient patients and their close contacts. *J. Allergy Clin. Immunol.* Apr 2014;133(4):961-966. PMID: 24582311, PMCID: PMC4009347
- 60.** Pai SY, Logan BR, Griffith LM, et al. Transplantation outcomes for severe combined immunodeficiency, 2000-2009. *N. Engl. J. Med.* Jul 31 2014;371(5):434-446. PMID: 25075835, PMCID: PMC4183064
- 61.** Kwan A, Abraham RS, Currier R, et al. Newborn screening for severe combined immunodeficiency in 11 screening programs in the United States. *JAMA*. Aug 20 2014;312(7):729-738. PMID: 25138334, PMCID: PMC4492158
- 62.** Mandala WL, Ananworanich J, Apornpong T, et al. Control lymphocyte subsets: can one country's values serve for another's? *J. Allergy Clin. Immunol.* Sep 2014;134(3):759-761 e758. PMID: 25171870, PMCID: PMC4150016
- 63.** Dvorak CC, Hassan A, Slatter MA, et al. Comparison of outcomes of hematopoietic stem cell transplantation without chemotherapy conditioning by using matched sibling and unrelated donors for treatment of severe combined immunodeficiency. *J. Allergy Clin. Immunol.* Oct 2014;134(4):935-943 e915. PMID: 25109802, PMCID: PMC4186906
- 64.** Abolhassani H, Wang N, Aghamohammadi A, et al. A hypomorphic recombination-activating gene 1 (RAG1) mutation resulting in a phenotype resembling common variable immunodeficiency. *J. Allergy Clin. Immunol.* Dec 2014;134(6):1375-1380. PMID: 24996264, PMCID: PMC4261008
- 65.** Pai SY, Cowan MJ. Stem cell transplantation for primary immunodeficiency diseases: the North American experience. *Curr. Opin. Allergy Clin. Immunol.* Dec 2014;14(6):521-526. PMID: 25259542, PMCID: PMC4238389
- 66.** Walter JE, Lo MS, Kis-Toth K, et al. Impaired receptor editing and heterozygous RAG2 mutation in a patient with systemic lupus erythematosus and erosive arthritis. *J. Allergy Clin. Immunol.* Jan 2015;135(1):272-273. PMID: 25312763, PMCID: PMC4289116
- 67.** Buchbinder D, Baker R, Lee YN, et al. Identification of patients with RAG mutations previously diagnosed with common variable immunodeficiency disorders. *J. Clin. Immunol.* Feb 2015;35(2):119-124. PMID: 25516070, PMCID: PMC4479182
- 68.** Punwani D, Wang H, Chan AY, et al. Combined immunodeficiency due to MALT1 mutations, treated by hematopoietic cell transplantation. *J. Clin. Immunol.* Feb 2015;35(2):135-146. PMID: 25627829, PMCID: PMC4352191
- 69.** Punwani D, Pelz B, Yu J, et al. Coronin-1A: immune deficiency in humans and mice. *J. Clin. Immunol.* Feb 2015;35(2):100-107. PMID: 25666293, PMCID: PMC4489527
- 70.** Bunupuradah T, Hansudewechakul R, Kosalaraksa P, et al. HLA-DRB1454 and predictors of new-onset asthma in HIV-infected Thai children. *Clin. Immunol.* Mar 2015;157(1):26-29. PMID: 25546395
- 71.** Niss O, Sholl A, Bleesing JJ, Hildeman DA. IL-10/Janus kinase/signal transducer and activator of transcription 3 signaling dysregulates Bim expression in autoimmune lymphoproliferative syndrome. *J. Allergy Clin. Immunol.* Mar 2015;135(3):762-770. PMID: 25174872, PMCID: PMC4344440

- 72.** Wahlstrom JT, Dvorak CC, Cowan MJ. Hematopoietic Stem Cell Transplantation for Severe Combined Immunodeficiency. *Curr Pediatr Rep.* Mar 1 2015;3(1):1-10. PMID: 25821657, PMCID: PMC4371740
- 73.** Kwan A, Puck JM. History and current status of newborn screening for severe combined immunodeficiency. *Semin. Perinatol.* Apr 2015;39(3):194-205. PMID: 25937517, PMCID: PMC4433840
- 74.** Long-Boyle JR, Savic R, Yan S, et al. Population pharmacokinetics of busulfan in pediatric and young adult patients undergoing hematopoietic cell transplant: a model-based dosing algorithm for personalized therapy and implementation into routine clinical use. *Ther. Drug Monit.* Apr 2015;37(2):236-245. PMID: 25162216, PMCID: PMC4342323
- 75.** Chinen J, Notarangelo LD, Shearer WT. Advances in basic and clinical immunology in 2014. *J. Allergy Clin. Immunol.* May 2015;135(5):1132-1141. PMID: 25956014
- 76.** Kwan A, Hu D, Song M, et al. Successful newborn screening for SCID in the Navajo Nation. *Clin. Immunol.* May 2015;158(1):29-34. PMID: 25762520, PMCID: PMC4420660
- 77.** Zheng P, Noroski LM, Hanson IC, et al. Molecular mechanisms of functional natural killer deficiency in patients with partial DiGeorge syndrome. *J. Allergy Clin. Immunol.* May 2015;135(5):1293-1302. PMID: 25748067, PMCID: PMC5540306
- 78.** Cowan MJ, Gennery AR. Radiation-sensitive severe combined immunodeficiency: The arguments for and against conditioning before hematopoietic cell transplantation-what to do? *J. Allergy Clin. Immunol.* Jun 5 2015. PMID: 26055221, PMCID: PMC4641002
- 79.** Brauer PM, Pessach IM, Clarke E, et al. Modeling altered T-cell development with induced pluripotent stem cells from patients with RAG1-dependent immune deficiencies. *Blood.* 2016;128(6):783-793. PMID: 27301863, PMCID: PMC4982452
- 80.** Burbank AJ, Shah SN, Montgomery M, Peden D, Tarrant TK, Weimer ET. Clinically focused exome sequencing identifies an homozygous mutation that confers DOCK8 deficiency. *Pediatr Allergy Immunol.* 2016;27(1):96-98. PMID: 26235511, PMCID: PMC4724217
- 81.** Chinen J, Notarangelo LD, Shearer WT. Advances in clinical immunology in 2015. *J Allergy Clin Immunol.* 2016;138(6):1531-1540. PMID: 27931534, PMCID: PMC5157931
- 82.** De Ravin SS, Wu X, Moir S, et al. Lentiviral hematopoietic stem cell gene therapy for X-linked severe combined immunodeficiency. *Sci Transl Med.* 2016;8(335):335ra357. PMID: 27099176, PMCID: PMC5557273
- 83.** Cowan MJ. The Primary Immune Deficiency Treatment Consortium: how can it improve definitive therapy for PID? *Expert review of clinical immunology.* 2016;12(10):1007-1009. PMID: 27454438, PMCID: PMC5105591
- 84.** Griffith LM, Cowan MJ, Notarangelo LD, et al. Primary Immune Deficiency Treatment Consortium (PIDTC) update. *J. Allergy Clin. Immunol.* 2016. PMID: 27262745, PMCID: PMC4986691
- 85.** Jackson SW, Schraping NE, Jacobs HM, Wang S, Chait A, Rawlings DJ. Cutting Edge: BAFF Overexpression Reduces Atherosclerosis via TACI-Dependent B Cell Activation. *J Immunol.* 2016;197(12):4529-4534. PMID: 27837104, PMCID: PMC5147509

- 86.** Lee YN, Frugoni F, Dobbs K, et al. Characterization of T and B cell repertoire diversity in patients with RAG deficiency. *Science immunology*. 2016;1(6). PMID: 28783691, PMCID: PMC5586490
- 87.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 88.** Punwani D, Zhang Y, Yu J, et al. Multisystem Anomalies in Severe Combined Immunodeficiency with Mutant BCL11B. *N Engl J Med.* 2016;375(22):2165-2176. PMID: 27959755, PMCID: PMC5215776
- 89.** Schussler E, Beasley MB, Maglione PJ. Lung Disease in Primary Antibody Deficiencies. *The journal of allergy and clinical immunology In practice*. 2016;4(6):1039-1052. PMID: 27836055, PMCID: PMC5129846
- 90.** Selleri S, Bifsha P, Civini S, et al. Human mesenchymal stromal cell-secreted lactate induces M2-macrophage differentiation by metabolic reprogramming. *Oncotarget*. 2016;7(21):30193-30210. PMID: 27070086, PMCID: PMC5058674
- 91.** Dietz AC, Duncan CN, Alter BP, et al. The Second Pediatric Blood and Marrow Transplant Consortium International Consensus Conference on Late Effects after Pediatric Hematopoietic Cell Transplantation: Defining the Unique Late Effects of Children Undergoing Hematopoietic Cell Transplantation for Immune Deficiencies, Inherited Marrow Failure Disorders, and Hemoglobinopathies. *Biol Blood Marrow Transplant.* 2017;23(1):24-29. PMID: 27737772, PMCID: PMC5267609
- 92.** Dorsey MJ, Dvorak CC, Cowan MJ, Puck JM. Treatment of infants identified as having severe combined immunodeficiency by means of newborn screening. *J Allergy Clin Immunol.* 2017;139(3):733-742. PMID: 28270365, PMCID: PMC5385855
- 93.** Dvorak CC, Patel K, Puck JM, et al. Unconditioned unrelated donor bone marrow transplantation for IL7Ralpha- and Artemis-deficient SCID. *Bone Marrow Transplant.* 2017;52(7):1036-1038. PMID: 28436970, PMCID: PMC5774618
- 94.** Dvorak CC, Puck JM, Wahlstrom JT, Dorsey M, Melton A, Cowan MJ. Neurologic event-free survival demonstrates a benefit for SCID patients diagnosed by newborn screening. *Blood advances*. 2017;1(20):1694-1698. PMID: 29296816, PMCID: PMC5728344
- 95.** Heimall J, Buckley RH, Puck J, et al. Recommendations for Screening and Management of Late Effects in Patients with Severe Combined Immunodeficiency after Allogenic Hematopoietic Cell Transplantation: A Consensus Statement from the Second Pediatric Blood and Marrow Transplant Consortium International Conference on Late Effects after Pediatric HCT. *Biol Blood Marrow Transplant.* 2017;23(8):1229-1240. PMID: 28479164, PMCID: PMC6015789
- 96.** Heimall J, Logan BR, Cowan MJ, et al. Immune reconstitution and survival of 100 SCID patients post-hematopoietic cell transplant: a PIDTC natural history study. *Blood.* 2017;130(25):2718-2727. PMID: 29021228, PMCID: PMC5746165
- 97.** Heimall J, Puck J, Buckley R, et al. Current Knowledge and Priorities for Future Research in Late Effects after Hematopoietic Stem Cell Transplantation (HCT) for Severe Combined Immunodeficiency Patients: A Consensus Statement from the Second Pediatric Blood and Marrow Transplant Consortium International Conference on Late Effects after Pediatric HCT. *Biol Blood Marrow Transplant.* 2017;23(3):379-387. PMID: 28068510, PMCID: PMC5659271

- 98.** Hoenig M, Lagresle-Peyrou C, Pannicke U, et al. Reticular dysgenesis: international survey on clinical presentation, transplantation, and outcome. *Blood*. 2017;129(21):2928-2938. PMID: 28331055, PMCID: PMC5445572
- 99.** Kumanovics A, Lee YN, Close DW, et al. Estimated disease incidence of RAG1/2 mutations: A case report and querying the Exome Aggregation Consortium. *J Allergy Clin Immunol*. 2017;139(2):690-692.e693. PMID: 27609655, PMCID: PMC5303162
- 100.** de la Morena MT, Leonard D, Torgerson TR, et al. Long-term outcomes of 176 patients with X-linked hyper-IgM syndrome treated with or without hematopoietic cell transplantation. *J Allergy Clin Immunol*. 2017;139(4):1282-1292. PMID: 27697500, PMCID: PMC5374029
- 101.** Punwani D, Kawahara M, Yu J, et al. Lentivirus Mediated Correction of Artemis-Deficient Severe Combined Immunodeficiency. *Hum Gene Ther*. 2017;28(1):112-124. PMID: 27611239, PMCID: PMC5278830
- 102.** Rowe JH, Stadinski BD, Henderson LA, et al. Abnormalities of T-cell receptor repertoire in CD4(+) regulatory and conventional T cells in patients with RAG mutations: Implications for autoimmunity. *J Allergy Clin Immunol*. 2017;140(6):1739-1743.e1737. PMID: 28864286, PMCID: PMC5911433
- 103.** Wahlstrom J, Patel K, Eckhert E, et al. Transplacental maternal engraftment and posttransplantation graft-versus-host disease in children with severe combined immunodeficiency. *J Allergy Clin Immunol*. 2017;139(2):628-633.e610. PMID: 27444177, PMCID: PMC5161721
- 104.** Barzaghi F, Amaya Hernandez LC, Neven B, et al. Long-term follow-up of IPEX syndrome patients after different therapeutic strategies: An international multicenter retrospective study. *J Allergy Clin Immunol*. 2018;141(3):1036-1049.e1035. PMID: 29241729, PMCID: PMC6050203
- 105.** Belderbos ME, Gennery AR, Dvorak CC, et al. Outcome of domino hematopoietic stem cell transplantation in human subjects: An international case series. *J Allergy Clin Immunol*. 2018;142(5):1628-1631.e1624. PMID: 29981805, PMCID: PMC6226332
- 106.** Buchbinder D, Smith MJ, Kawahara M, Cowan MJ, Buzby JS, Abraham RS. Application of a radiosensitivity flow assay in a patient with DNA ligase 4 deficiency. *Blood advances*. 2018;2(15):1828-1832. PMID: 30061307, PMCID: PMC6093729
- 107.** Chinen J, Cowan MJ. Advances and highlights in primary immunodeficiencies in 2017. *J Allergy Clin Immunol*. 2018;142(4):1041-1051. PMID: 30170128, PMCID: PMC6175644
- 108.** Dvorak CC, Haddad E, Buckley RH, et al. The Genetic Landscape of SCID in the US and Canada in the Current Era (2010-2018). *J Allergy Clin Immunol*. 2018. PMID: 30193840
- 109.** Haddad E, Logan BR, Griffith LM, et al. SCID genotype and 6-month posttransplant CD4 count predict survival and immune recovery. *Blood*. 2018;132(17):1737-1749. PMID: 30154114, PMCID: PMC6202916

- 110.** Kohn DB, Hershfield MS, Puck JM, et al. Consensus approach for the management of severe combined immune deficiency caused by adenosine deaminase deficiency. *J Allergy Clin Immunol*. 2018. PMID: 30194989
- 111.** Kuo CY, Long JD, Campo-Fernandez B, et al. Site-Specific Gene Editing of Human Hematopoietic Stem Cells for X-Linked Hyper-IgM Syndrome. *Cell reports*. 2018;23(9):2606-2616. PMID: 29847792, PMCID: PMC6181643
- 112.** Leiding JW, Okada S, Hagin D, et al. Hematopoietic stem cell transplantation in patients with gain-of-function signal transducer and activator of transcription 1 mutations. *J Allergy Clin Immunol*. 2018;141(2):704-717.e705. PMID: 28601685
- 113.** Mangurian C, Scalchunes C, Yoo J, et al. Psychosocial services for primary immunodeficiency disorder families during hematopoietic cell transplantation: A descriptive study. *Palliat Support Care*. 2018;1-6. PMID: 30223912
- 114.** Miggelbrink AM, Logan BR, Buckley RH, et al. B-cell differentiation and IL-21 response in IL2RG/JAK3 SCID patients after hematopoietic stem cell transplantation. *Blood*. 2018;131(26):2967-2977. PMID: 29728406, PMCID: PMC6024640
- 115.** Slack J, Albert MH, Balashov D, et al. Outcome of hematopoietic cell transplantation for DNA double-strand break repair disorders. *J Allergy Clin Immunol*. 2018;141(1):322-328.e310. PMID: 28392333, PMCID: PMC5632132
- 116.** Yoo J, Halley M, Lown A, Yank V, Ort K, Cowan M, Dorsey M, Smith H, Iyengar S, Scalchunes C, Mangurian C. Supporting caregivers during hematopoietic cell transplantation for children with primary immunodeficiency disorders. *J Allergy Clin Immunol*. 2018 Oct 25. doi: 10.1016/j.jaci.2018.10.017.
- 117.** Amatuni GS, Currier RJ, Church JA, et al. Newborn Screening for Severe Combined Immunodeficiency and T-cell Lymphopenia in California, 2010-2017. *Pediatrics*. 2019;143(2). PMID: 30683812, PMCID: PMC6361357
- 118.** Mamcarz E, Zhou S, Lockey T, et al. Lentiviral Gene Therapy Combined with Low-Dose Busulfan in Infants with SCID-X1. *N Engl J Med*. 2019;380(16):1525-1534. PMID: 30995372
- 119.** Puck JM. Newborn screening for severe combined immunodeficiency and T-cell lymphopenia. *Immunol Rev*. 2019;287(1):241-252. PMID: 30565242

Rare Kidney Stone Consortium

Book Chapters

1. Edvardsson VO, Palsson R, Sahota A. Adenine Phosphoribosyltransferase Deficiency. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993. PMID: 22934314

2. Lieske JC, Milliner DS, Beara-Lasic L, Rossetti S. Dent Disease. In: Pagon RA, Bird TD, Dolan CR, Stephens K, Adam MP, eds. *GeneReviews*. Seattle WA: University of Washington, Seattle; 1993. PMID: 22876375

Abstracts Presented at Conferences

1. Edvardsson V, Gudbjartsson D, Indridason O, et al. Sequence Variants at the UMOD Gene Associate with Risk of Kidney Stone Disease. American Society of Nephrology Kidney Week. San Diego, CA2009.
2. Edvardsson V, Palsson R, Indridason O, Thorvaldsson S, Stefansson K. Familial Clustering of Kidney Stone Disease in Iceland. Biennial Meeting of The Nordic Society of Nephrology. Helsinki, Finland2009.
3. Indridason O, Gudbjartsson D, Edvardsson V, et al. The Association Between Chronic Kidney Disease and Sequence Variants in the UMOD Gene is Highly Dependent on Age. American Society of Nephrology Kidney Week. San Diego, CA2009.
4. Milliner D, Monico C, Bergstrahl E, Lieske J. Urine oxalate variability in primary hyperoxaluria. American Society of Nephrology Kidney Week. San Diego, CA2009.
5. Monico C, Olson J, Bergstrahl E, Heilman R, Milliner D. Effect of betaine on urine oxalate in primary hyperoxaluria, type I. American Society of Nephrology (ASN) Kidney Week. Philadelphia, PA2011.
6. Lieske J. How do kidney stones start? Paper presented at: Second International Istanbul Urolithiasis Days; February, 2011; Istanbul, Turkey.
7. Lieske J. What can epidemiology teach us regarding the pathogenesis and consequences of kidney stones? Paper presented at: Second International Istanbul Urolithiasis Days; February, 2011; Istanbul, Turkey.
8. Milliner D. Hyperoxaluria: an update. Paper presented at: Pediatric Nephrology Seminar XXXVIII; March, 2011; Miami Beach, Florida.
9. Lewis M, Sahota A, Ward MD, Goldfarb DS, Holmes E, Want EJ. Characterization of small molecule aggregate components in cystine stones as a screen for candidate stone inhibitors. Paper presented at: American Society for Mass Spectrometry; June, 2011; Denver, CO.
10. Milliner D. Effects of betaine as molecular chaperone in primary hyperoxaluria, type I. Paper presented at: Research on Calculus Kinetics Society; September, 2011; Boston, Massachusetts.
11. Langman C, Vural G, Brooks E. Proteomics in genetic kidney stone disease. Paper presented at: 44th Annual Scientific Meeting of European Society of Paediatric Nephrology (ESPN); September 14-17, 2011; Dubrovnik, Croatia.
12. Goldfarb D. Update on cystinuria: registry and new therapeutic approaches. Paper presented at: Council of Pediatric Nephrology and Urology Meeting; October, 2011; New York.
13. Sahota A, Yang M, Shikkel S, Kathuria N, Lewis M, Ward MD, Goldfarb DS, Tischfield JA. A new pharmacologic approach for cystinuria. Paper presented at: American Society for Human Genetics; October, 2011; Montreal, Canada.
14. Sahota A, Yang M, Shikkel S, Lewis M, Goldfarb DS, Ward MD, Tischfield JA. Tailored inhibition of cystine stone formation as a therapy for cystinuria. Paper presented at: Society for the Study of Inborn Errors of Metabolism (SSIEM); November, 2011; United Kingdom.

- 15.** Sigurdsson B, Thorsteinsdottir M, Eirksson FF, Edvardsson VO, Palsson R. Rapid method for determination of urinary 2,8-dihydroxyadenine concentration with by UPLC-MS/MS. Paper presented at: Annual Meeting of the European Bioanalysis Forum; November, 2011; Barcelona, Spain.
- 16.** Mattoo A, Modersitzki F, Asplin J, Cohen BH, Grasso M, Goldfarb DS. Clinical validation of a novel assay used for monitoring treatment of patients with cystinuria. Paper presented at: Annual meeting of the American Society of Nephrology; November, 2011; Philadelphia, PA.
- 17.** Chopra B, Amer H, Rodrigo E, Lieske J. Oxalosis after kidney transplantation in bariatric surgery patients: a retrospective analysis. American Society of Nephrology (ASN) Kidney Week. San Diego, CA2012.
- 18.** Edvardsson V. Clinical features and long-term renal outcome in Icelandic patients with APRT deficiency and 2,8-dihydroxyadeninuria. *The 11th Congress of the European Society of Internal Medicine*. Madrid, Spain2012.
- 19.** Eirin A, Irazabal M, Lieske J, Nasr S, Sethi S, Fervenza F. Dent's Disease Presenting as Global Glomerulosclerosis. American Society of Nephrology (ASN) Kidney Week. San Diego, CA2012.
- 20.** Lieske J. Kidney Stones 2012 Overview/ Summary. *American Society of Nephrology Kidney Week*. San Diego, CA2012.
- 21.** Lieske J. Primary Hyperoxaluria: not such a rare disease? *Research on Calculous Kinetics Society Session at the American Urological Association Meeting*. Atlanta, GA2012.
- 22.** Lieske J, Bergstrahl E, Mehta R, Langman C, Milliner D. Determinants and outcome of renal calcification in primary hyperoxaluria. American Society of Nephrology (ASN) Kidney Week. San Diego2012.
- 23.** Runolfsdottir H, Palsson R, Agustsdottir I, Edvardsson V. Clinical Features and Long-Term Renal Outcome in Icelandic Patients with APRT Deficiency and 2,8-Dihydroxyadeninuria. American Society of Nephrology (ASN) Kidney Week. San Diego, CA2012.
- 24.** Edvardsson V. Rare causes of kidney stones and kidney failure: focus on APRT deficiency and 2,8-dihydroxyadeninuria. Paper presented at: Symposium on Rare Disease, Annual Meeting of the Icelandic Medical Association; January, 2012; Reykjavic, Iceland.
- 25.** Lieske J. Stones from the inside out: what every urologist sees but few nephrologists know about. Paper presented at: Hong Kong Society of Nephrology, Renal Commissioned Training; January, 2012; Hong Kong, People's Republic of China.
- 26.** Goldfarb D. Cysinturia. Paper presented at: 12th International Symposium on Urolithiasis; May, 2012; Ouro Preto, Brazil.
- 27.** Lieske J. Hypertension and Urolithiasis. Paper presented at: 12th International Symposium on Urolithiasis; May, 2012; Ouro Preto, Brazil.
- 28.** Edvardsson VO, Sigurdsson B, Thorsteinsdottir M, Palsson R. Rapid determination of urinary 2,8-dihydroxyadenine with liquid chromatography - electrospray tandem mass spectrometry for monitoring of drug treatment. Paper presented at: The 49th Annual ERA-EDTA Congress; May, 2012; Paris, France.
- 29.** Cohen J, Goldfarb DS, Grasso M. Management of cystinuric patients in a dedicated stone clinic decreases stone events. Paper presented at: Annual Meeting of the American Urological Association; May, 2012; Atlanta, GA.

- 30.** Cohen J, Mattoo A, Modersitzki F, Asplin J, Goldfarb DS, Grasso M. Clinical validation of a novel assay used for monitoring treatment of patients with cystinuria. Paper presented at: Annual Meeting of the American Urological Association; May, 2012; Atlanta, GA.
- 31.** Tosesto E, Casarin A, Cristofaro R, Salviati L, Anglani F. The complexity of the 5'UTR region of CLCN5 gene: ten 5'UTR ends are differentially expressed in the human kidney. Paper presented at: 49th ERA-EDTA Congress; May, 2012; Paris, France.
- 32.** Thorsteinsdottir M, Sigurdsson B, Edvardsson VO, Palsson R. Chemometric optimization of UPLC-MS/MS assay for rapid determination of urinary 2,8-dihydroxyadenine for therapeutic drug monitoring of APRT deficient patients. . Paper presented at: The 60th ASMS Conference on Mass Spectrometry and Allied Topics; May 2012, 2012; Vancouver, BC, Canada.
- 33.** Lieske J. Primary hyperoxaluria: not such a rare disease? Paper presented at: Research on Calculous Kinetics Society Session at the American Urological Association Meeting; May, May 2012; Atlanta, GA.
- 34.** Edvardsson VO, Hardarson S, Palsson R. Renal histopathological findings in patients with 2, 8-Dihydroxyadeninuria. Paper presented at: 49th Annual ERA-EDTA Congress; May 24-27, 2012; Paris, France.
- 35.** Milliner D. Future treatment options/studies. Paper presented at: 10th International Primary Hyperoxaluria Workshop; June, 2012; Bonn, Germany.
- 36.** Thorsteinsdottir M, Sigurdsson B, Erikksson F, Edvardsson VO, Palsson R. Rapid determination of urinary 2,8-dihydroxyadenine by UPLC-MS/MS for therapeutic drug monitoring of APRT deficient patients. Paper presented at: The XXXIII Meeting of the Nordic Society for Clinical Chemistry; June, 2012; Reykjavik, Iceland.
- 37.** Khoul S, Khandrika L, Meacham R, Olson J, Lieske JC, Milliner D. Culture of hepatocytes from primary hyperoxaluria type I liver. Paper presented at: 10th International Primary Hyperoxaluria Workshop; June, 2012; Bonn, Germany.
- 38.** Knight J, Riedel TJ, Lowther WT, Holmes RP. Measurement of 4-hydroxy-2-oxoglutarate in urine, liver and sera from primary hyperoxaluria type 3 patients Paper presented at: 10th International Primary Hyperoxaluria Workshop; June, 2012; Bonn, Germany.
- 39.** Lorenz E, Dyck PJ, Tracy J, Milliner D. Progressive demyelinating polyradiculoneuropathy due to intraneuronal oxalate deposition in two patients with type I primary hyperoxaluria (PHI). Paper presented at: 10th International Primary Hyperoxaluria Workshop; June, 2012; Bonn, Germany.
- 40.** Cornell LD, Pamidi N, Nasr SH, Milliner D. Features of recurrent oxalosis in the renal allograft. Paper presented at: 10th International Primary Hyperoxaluria Workshop; June, 2012; Bonn, Germany.
- 41.** Edvardsson V. APRT deficiency and dihydroxyadeninuria: an underrecognized cause of kidney stones and CKD. Paper presented at: Annual Meeting of the ROCK Society; September, 2012; Indianapolis, Indiana.
- 42.** Milliner D. Crystal nephropathies and chameleons. Paper presented at: 8th Uruguayan Congress of Nephrology; September, 2012; Montevideo, Uruguay.
- 43.** Milliner D. Kids and stones and bones. Paper presented at: 8th Uruguayan Congress of Nephrology; September, 2012; Montevideo, Uruguay.

- 44.** Edvardsson VO, Hardarson S, Palsson R. Renal histopathological findings in patients with 2,8-dihydroxyadeninuria. Paper presented at: European Society For Pediatric Nephrology; September, 2012; Krakow, Poland.
- 45.** Edvardsson V, Agustsdottir I, Palsson R. Childhood presentation and renal outcome of APRT deficiency (2,8-Dihydroxyadeninuria) in Iceland. Paper presented at: European Society For Pediatric Nephrology, 45th Annual Meeting; September, 2012; Krakow, Poland.
- 46.** Thorsteinsdottir M, Bragi Sigurdsson B, Eirksson FF, Edvardsson VO, Palsson R. Chemometric optimization of UPLC-MS/MS assay for evaluation of rare causes of kidney stones and kidney failure. Paper presented at: Waters 3rd Nordic MS Symposium; Sept 11-12, 2012; Jurmala, Latvia.
- 47.** Edvardsson V. Clinical features and long-term renal outcome of Icelandic patients with APRT deficiency and 2,8-dihydroxyadeninuria. Paper presented at: 11th Congress of the European Society of Internal Medicine; October, 2012; Madrid, Spain.
- 48.** Runolfsdottir H, Edvardsson VO, Hardarson S, Palsson R. Renal histopathological findings in patients with 2,8-dihydroxyadeninuria. Paper presented at: The 11th Congress of the European Society of Internal Medicine; October, 2012; Madrid, Spain.
- 49.** Edvardsson VO, Runolfsdottir H, Agustsdottir I, Palsson R. Long-term renal outcome in patients with APRT deficiency and 2,8-dihydroxyadeninuria. Paper presented at: Annual Meeting of The American Society of Nephrology; November, 2012; San Diego, CA.
- 50.** Edvardsson V. APRT deficiency. Nordic Society of Nephrology 32nd Biennial Congress. Reykjavik, Iceland2013.
- 51.** Lieske J. Bariatric Surgery and Nephrolithiasis. Nephrolithiasis: a systemic disorder. Rome, Italy2013.
- 52.** Lieske J. Dent Disease. Nordic Society of Nephrology 32nd Biennial Congress. Reykjavik, Iceland2013.
- 53.** Milliner D. Primary Hyperoxaluria. Nordic Society of Nephrology 32nd Biennial Congress. Reykjavik, Iceland2013.
- 54.** Thorsteinsdottir M. Quantification of Purine Biomarkers by UPLC-MS/MS for Clinical Diagnostic of Rare Kidney Stones and Kidney Failure. 61st ASMS Conference on Mass Spectrometry. Minneapolis, MN2013.

Journal Articles

1. Hoppe B, Beck BB, Milliner DS. The primary hyperoxalurias. *Kidney Int.* Jun 2009;75(12):1264-1271. PMID: 19225556, PMCID: PMC4577278
2. Mookadam F, Kheir ME, Alharthi M, Moustafa S, Kazmier FJ, McBain R, Mookadam M, Tajik J, Milliner DS. Vascular Involvement in Primary Hyperoxalosis: An Evidence Based Systematic Overview Over a Fifty Year Span. *Nephro Urol Mon.* 2010;02(03):390-396.
3. Nasr SH, Sethi S, Cornell LD, Milliner DS, Boelkins M, Broviac J, Fidler ME. Crystalline nephropathy due to 2,8-dihydroxyadeninuria: an under-recognized cause of irreversible renal failure. *Nephrol. Dial. Transplant.* Jun 2010;25(6):1909-1915. PMID: 2064951

4. Chillaron J, Font-Llitjos M, Fort J, Zorzano A, Goldfarb DS, Nunes V, Palacin M. Pathophysiology and treatment of cystinuria. *Nature reviews. Nephrology*. Jul 2010;6(7):424-434. PMID: 20517292
5. Belostotsky R, Seboun E, Idelson GH, Milliner DS, Becker-Cohen R, Rinat C, Monico CG, Feinstein S, Ben-Shalom E, Magen D, Weissman I, Charon C, Frishberg Y. Mutations in DHDPSL are responsible for primary hyperoxaluria type III. *Am. J. Hum. Genet.* Sep 10 2010;87(3):392-399. PMID: 20797690, PMCID: PMC2933339
6. Rimer JD, An Z, Zhu Z, Lee MH, Goldfarb DS, Wesson JA, Ward MD. Crystal growth inhibitors for the prevention of L-cystine kidney stones through molecular design. *Science*. Oct 15 2010;330(6002):337-341. PMID: 20947757, PMCID: PMC5166609
7. Bergstrahl EJ, Monico CG, Lieske JC, Herges RM, Langman CB, Hoppe B, Milliner DS. Transplantation outcomes in primary hyperoxaluria. *Am. J. Transplant.* Nov 2010;10(11):2493-2501. PMID: 20849551, PMCID: PMC2965313
8. Mookadam F, Smith T, Jiamsripong P, Moustafa SE, Monico CG, Lieske JC, Milliner DS. Cardiac abnormalities in primary hyperoxaluria. *Circ. J.* Nov 2010;74(11):2403-2409. PMID: 20921818
9. Anglani F, Del Prete D, Peruzzi L. [Participation in the International Dent's disease registry: clinical spin-offs and research prospects]. *Giornale italiano di nefrologia : organo ufficiale della Societa italiana di nefrologia*. Jan-Feb 2011;28(1):7-8. PMID: 21341234
10. Lee HJ, Jeong SJ, Lee EO, Bae H, Lieske JC, Kim SH. 1,2,3,4,6-Penta-O-galloyl-beta-D-glucose reduces renal crystallization and oxidative stress in a hyperoxaluric rat model. *Kidney Int.* Mar 2011;79(5):538-545. PMID: 1085110
11. Murphy S, Reilly MM. Amyloid neuropathies. *Advances in Clinical Neuroscience and Rehabilitation*. March/April 2011;11(1):16-19.
12. Coe FL, Evan A, Worcester E. Pathophysiology-based treatment of idiopathic calcium kidney stones. *Clin. J. Am. Soc. Nephrol.* Aug 2011;6(8):2083-2092. PMID: 21825103, PMCID: PMC5825183
13. Rule AD, Krambeck AE, Lieske JC. Chronic kidney disease in kidney stone formers. *Clin. J. Am. Soc. Nephrol.* Aug 2011;6(8):2069-2075. PMID: 21784825, PMCID: PMC3156433
14. Goldfarb DS. Potential pharmacologic treatments for cystinuria and for calcium stones associated with hyperuricosuria. *Clin. J. Am. Soc. Nephrol.* Aug 2011;6(8):2093-2097. PMID: 21757641, PMCID: PMC3156434
15. Monico CG, Rossetti S, Belostotsky R, Cogal AG, Herges RM, Seide BM, Olson JB, Bergstrahl EJ, Williams HJ, Haley WE, Frishberg Y, Milliner DS. Primary hyperoxaluria type III gene HOGA1 (formerly DHDPSL) as a possible risk factor for idiopathic calcium oxalate urolithiasis. *Clin. J. Am. Soc. Nephrol.* Sep 2011;6(9):2289-2295. PMID: 21896830, PMCID: PMC3358997
16. Hoppe B, Groothoff JW, Hulton SA, Cochat P, Niaudet P, Kemper MJ, Deschenes G, Unwin R, Milliner D. Efficacy and safety of Oxalobacter formigenes to reduce urinary oxalate in primary hyperoxaluria. *Nephrol. Dial. Transplant.* Nov 2011;26(11):3609-3615. PMID: 21460356
17. Lee HJ, Jeong SJ, Park MN, Linnes M, Han HJ, Kim JH, Lieske JC, Kim SH. Gallotannin suppresses calcium oxalate crystal binding and oxalate-induced oxidative stress in renal epithelial cells. *Biol. Pharm. Bull.* 2012;35(4):539-544. PMID: 22466558, PMCID: PMC3910304

- 18.** Beara-Lasic L, Edvardsson V, Palsson R, Lieske J, Goldfarb D, Milliner D. Genetic Causes of Kidney Stones and Kidney Failure. *Clinical Reviews in Bone and Mineral Metabolism*. 2012;10(1):2-18.
- 19.** de Cogain M, Krambeck AE, Rule AD, Li X, Bergstrahl EJ, Gettman MT, Lieske JC. Shock wave lithotripsy and diabetes mellitus: a population-based cohort study. *Urology*. Feb 2012;79(2):298-302. PMID: 22088569, PMCID: PMC3274621
- 20.** Monico CG, Milliner DS. Genetic determinants of urolithiasis. *Nature reviews. Nephrology*. Mar 2012;8(3):151-162. PMID: 22183508, PMCID: PMC3901084
- 21.** Schinstock CA, Semret MH, Wagner SJ, et al. Urinalysis is more specific and urinary neutrophil gelatinase-associated lipocalin is more sensitive for early detection of acute kidney injury. *Nephrol. Dial. Transplant*. May 2013;28(5):1175-1185. PMID: 22529161
- 22.** Rule AD, Sasiwimonphan K, Lieske JC, Keddis MT, Torres VE, Vrtiska TJ. Characteristics of renal cystic and solid lesions based on contrast-enhanced computed tomography of potential kidney donors. *Am. J. Kidney Dis*. May 2012;59(5):611-618. PMID: 22398108, PMCID: PMC3328591
- 23.** Dwyer ME, Krambeck AE, Bergstrahl EJ, Milliner DS, Lieske JC, Rule AD. Temporal trends in incidence of kidney stones among children: a 25-year population based study. *J. Urol*. Jul 2012;188(1):247-252. PMID: 22595060, PMCID: PMC3482509
- 24.** Pang R, Linnes MP, O'Connor HM, Li X, Bergstrahl E, Lieske JC. Controlled metabolic diet reduces calcium oxalate supersaturation but not oxalate excretion after bariatric surgery. *Urology*. Aug 2012;80(2):250-254. PMID: 22554593, PMCID: PMC3411876
- 25.** El-Zoghby ZM, Lieske JC, Foley RN, Bergstrahl EJ, Li X, Melton LJ, 3rd, Krambeck AE, Rule AD. Urolithiasis and the Risk of ESRD. *Clin. J. Am. Soc. Nephrol*. Sep 2012;7(9):1409-1415. PMID: 22745275, PMCID: PMC3430957
- 26.** Riedel TJ, Knight J, Murray MS, Milliner DS, Holmes RP, Lowther WT. 4-Hydroxy-2-oxoglutarate aldolase inactivity in primary hyperoxaluria type 3 and glyoxylate reductase inhibition. *Biochim. Biophys. Acta*. Oct 2012;1822(10):1544-1552. PMID: 22771891, PMCID: PMC3418427
- 27.** Edvardsson VO, Indridason OS, Haraldsson G, Kjartansson O, Palsson R. Temporal trends in the incidence of kidney stone disease. *Kidney Int*. Jan 2013;83(1):146-152. PMID: 22992468
- 28.** Lorenz EC, Michet CJ, Milliner DS, Lieske JC. Update on oxalate crystal disease. *Curr. Rheumatol. Rep*. Jul 2013;15(7):340. PMID: 23666469, PMCID: PMC3710657
- 29.** Sumorok N, Goldfarb DS. Update on cystinuria. *Curr. Opin. Nephrol. Hypertens*. Jul 2013;22(4):427-431. PMID: 23666417, PMCID: PMC4514483
- 30.** Liu X, Arguelles L, Zhou Y, et al. Longitudinal trajectory of vitamin D status from birth to early childhood in the development of food sensitization. *Pediatr. Res*. Sep 2013;74(3):321-326. PMID: 23797532, PMCID: PMC3773018
- 31.** Edvardsson VO, Goldfarb DS, Lieske JC, et al. Hereditary causes of kidney stones and chronic kidney disease. *Pediatr. Nephrol*. Oct 2013;28(10):1923-1942. PMID: 23334384, PMCID: PMC4138059
- 32.** Fervenza FC. A patient with nephrotic-range proteinuria and focal global glomerulosclerosis. *Clin. J. Am. Soc. Nephrol*. Nov 2013;8(11):1979-1987. PMID: 23886564, PMCID: PMC3817907

- 33.** Worcester EM, Evan AP, Coe FL, et al. A test of the hypothesis that oxalate secretion produces proximal tubule crystallization in primary hyperoxaluria type I. *Am. J. Physiol. Renal Physiol.* Dec 1 2013;305(11):F1574-1584. PMID: 24089413, PMCID: PMC3882369
- 34.** Nasr SH, Milliner DS, Wooldridge TD, Sethi S. Triamterene crystalline nephropathy. *Am. J. Kidney Dis.* Jan 2014;63(1):148-152. PMID: 23958399
- 35.** Modersitzki F, Pizzi L, Grasso M, Goldfarb DS. Health-related quality of life (HRQoL) in cystine compared with non-cystine stone formers. *Urolithiasis.* Feb 2014;42(1):53-60. PMID: 24253538, PMCID: PMC4514515
- 36.** Tang X, Lieske JC. Acute and chronic kidney injury in nephrolithiasis. *Curr. Opin. Nephrol. Hypertens.* Jul 2014;23(4):385-390. PMID: 24848936, PMCID: PMC4096690
- 37.** Meeusen JW, Lieske JC. Looking for a better creatinine. *Clin. Chem.* Aug 2014;60(8):1036-1039. PMID: 24573605
- 38.** Fattah H, Hambaroush Y, Goldfarb DS. Cystine nephrolithiasis. *Translational andrology and urology.* Sep 1 2014;3(3):228-233. PMID: 25383320, PMCID: PMC4220544
- 39.** Ali FN, Falkner B, Gidding SS, Price HE, Keith SW, Langman CB. Fibroblast growth factor-23 in obese, normotensive adolescents is associated with adverse cardiac structure. *J. Pediatr.* Oct 2014;165(4):738-743 e731. PMID: 25063724, PMCID: PMC4177448
- 40.** Zaidan M, Palsson R, Merieau E, et al. Recurrent 2,8-dihydroxyadenine nephropathy: a rare but preventable cause of renal allograft failure. *Am. J. Transplant.* Nov 2014;14(11):2623-2632. PMID: 25307253, PMCID: PMC4560835
- 41.** Ketha H, Singh RJ, Grebe SK, et al. Altered Calcium and Vitamin D Homeostasis in First-Time Calcium Kidney Stone-Formers. *PLoS ONE.* 2015;10(9):e0137350. PMID: 26332888, PMCID: PMC4558059
- 42.** Sigurjonsdottir VK, Runolfsdottir HL, Indridason OS, Palsson R, Edvardsson VO. Impact of nephrolithiasis on kidney function. *BMC Nephrol.* 2015;16:149. PMID: 26316205, PMCID: PMC4551564
- 43.** Berini SE, Tracy JA, Engelstad JK, Lorenz EC, Milliner DS, Dyck PJ. Progressive polyradiculoneuropathy due to intraneural oxalate deposition in type 1 primary hyperoxaluria. *Muscle Nerve.* Mar 2015;51(3):449-454. PMID: 25363903, PMCID: PMC4577279
- 44.** Carrasco A, Jr., Granberg CF, Gettman MT, Milliner DS, Krambeck AE. Surgical management of stone disease in patients with primary hyperoxaluria. *Urology.* Mar 2015;85(3):522-526. PMID: 25733260, PMCID: PMC4559267
- 45.** Deng F, Finer G, Haymond S, Brooks E, Langman CB. Applicability of estimating glomerular filtration rate equations in pediatric patients: comparison with a measured glomerular filtration rate by iohexol clearance. *Transl. Res.* Mar 2015;165(3):437-445. PMID: 25445208, PMCID: PMC4346435
- 46.** Tang X, Bergstrahl EJ, Mehta RA, Vrtiska TJ, Milliner DS, Lieske JC. Nephrocalcinosis is a risk factor for kidney failure in primary hyperoxaluria. *Kidney Int.* Mar 2015;87(3):623-631. PMID: 25229337, PMCID: PMC4344931

- 47.** Lieske JC, Mehta RA, Milliner DS, Rule AD, Bergstrahl EJ, Sarr MG. Kidney stones are common after bariatric surgery. *Kidney Int.* Apr 2015;87(4):839-845. PMID: 25354237, PMCID: PMC4382441
- 48.** Lee MH, Sahota A, Ward MD, Goldfarb DS. Cystine growth inhibition through molecular mimicry: a new paradigm for the prevention of crystal diseases. *Curr. Rheumatol. Rep.* May 2015;17(5):510. PMID: 25874348, PMCID: PMC4518543
- 49.** Kovacevic L, Lu H, Goldfarb DS, Lakshmanan Y, Caruso JA. Urine proteomic analysis in cystinuric children with renal stones. *J. Pediatr. Urol.* Aug 2015;11(4):217 e211-216. PMID: 26076823, PMCID: PMC4540695
- 50.** Hopp K, Cogal AG, Bergstrahl EJ, et al. Phenotype-Genotype Correlations and Estimated Carrier Frequencies of Primary Hyperoxaluria. *J. Am. Soc. Nephrol.* Oct 2015;26(10):2559-2570. PMID: 25644115, PMCID: PMC4587693
- 51.** Perinpam M, Ware EB, Smith JA, Turner ST, Kardia SL, Lieske JC. Effect of Demographics on Excretion of Key Urinary Factors Related to Kidney Stone Risk. *Urology*. Oct 2015;86(4):690-696. PMID: 26206452, PMCID: PMC4592816
- 52.** Sahota A, Parihar JS, Capaccione KM, et al. Novel cystine ester mimics for the treatment of cystinuria-induced urolithiasis in a knockout mouse model. *Urology*. Nov 2014;84(5):1249 e1249-1215. PMID: 25443947, PMCID: PMC4498569
- 53.** Goldfarb DS, Hirsch J. Hypothesis: Urbanization and exposure to urban heat islands contribute to increasing prevalence of kidney stones. *Med. Hypotheses*. Dec 2015;85(6):953-957. PMID: 26372336, PMCID: PMC4648638
- 54.** Amin R, Eid L, Edvardsson VO, Fairbanks L, Moudgil A. An unusual cause of pink diapers in an infant: Questions and Answers. *Pediatr Nephrol*. 2016;31(4):575, 577-580. PMID: 25823987, PMCID: PMC4591217
- 55.** Barnett C, Nazzal L, Goldfarb DS, Blaser MJ. The Presence of Oxalobacter formigenes in the Microbiome of Healthy Young Adults. *J. Urol.* 2016;195(2):499-506. PMID: 26292041, PMCID: PMC4747808
- 56.** Giesen C, Lieske JC. The Influence of Processing and Storage Conditions on Renal Protein Biomarkers. *Clin J Am Soc Nephrol*. 2016;11(10):1726-1728. PMID: 27654929, PMCID: PMC5053796
- 57.** Hu L, Yang Y, Aloysius H, et al. L-Cystine Diamides as L-Cystine Crystallization Inhibitors for Cystinuria. *J Med Chem*. 2016;59(15):7293-7298. PMID: 27409142, PMCID: PMC5774851
- 58.** Kovacevic L, Lu H, Caruso JA, Lakshmanan Y. Renal Tubular Dysfunction in Pediatric Urolithiasis: Proteomic Evidence. *Urology*. 2016;92:100-105. PMID: 26892647, PMCID: PMC4891186
- 59.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 60.** Scales CD, Jr., Tasian GE, Schwaderer AL, Goldfarb DS, Star RA, Kirkali Z. Urinary Stone Disease: Advancing Knowledge, Patient Care, and Population Health. *Clin J Am Soc Nephrol*. 2016;11(7):1305-1312. PMID: 26964844, PMCID: PMC4934851
- 61.** Thorsteinsdottir M, Thorsteinsdottir UA, Eirksson FF, et al. Quantitative UPLC-MS/MS assay of urinary 2,8-dihydroxyadenine for diagnosis and management of adenine

phosphoribosyltransferase deficiency. *J Chromatogr B Analyt Technol Biomed Life Sci.* 2016;1036-1037:170-177. PMID: 27770717, PMCID: PMC5445224

62. Wang X, Anglani F, Beara-Lasic L, et al. Glomerular Pathology in Dent Disease and Its Association with Kidney Function. *Clin J Am Soc Nephrol.* 2016;11(12):2168-2176. PMID: 27697782, PMCID: PMC5142066
63. Whittamore JM, Hatch M. The role of intestinal oxalate transport in hyperoxaluria and the formation of kidney stones in animals and man. *Urolithiasis.* 2016;45(1):89-108. PMID: 27913853, PMCID: PMC5358548
64. Zhao F, Bergstrahl EJ, Mehta RA, et al. Predictors of Incident ESRD among Patients with Primary Hyperoxaluria Presenting Prior to Kidney Failure. *Clin. J. Am. Soc. Nephrol.* Jan 7 2016;11(1):119-126. PMID: 26656319, PMCID: PMC4702224
65. Lieske JC, Turner ST, Edeh SN, Ware EB, Kardia SL, Smith JA. Heritability of dietary traits that contribute to nephrolithiasis in a cohort of adult sibships. *Journal of nephrology.* Feb 2016;29(1):45-51. PMID: 25963767, PMCID: PMC4643420
66. Runolfsdottir HL, Palsson R, Agustsdottir IM, Indridason OS, Edvardsson VO. Kidney Disease in Adenine Phosphoribosyltransferase Deficiency. *Am. J. Kidney Dis.* Mar 2016;67(3):431-438. PMID: 26724837, PMCID: PMC4819988
67. Brooks ER, Hoppe B, Milliner DS, et al. Assessment of Urine Proteomics in Type 1 Primary Hyperoxaluria. *Am. J. Nephrol.* May 3 2016;43(4):293-303. PMID: 27161247, PMCID: PMC4904731
68. Dhondup T, Lorenz EC, Milliner DS, Lieske JC. Combined Liver-Kidney Transplantation for Primary Hyperoxaluria Type 2: A Case Report. *Am J Transplant.* 2017. PMID: 28681512, PMCID: PMC5739996
69. Edvardsson VO, Runolfsdottir HL, Thorsteinsdottir UA, et al. Comparison of the effect of allopurinol and febuxostat on urinary 2,8-dihydroxyadenine excretion in patients with APRT deficiency: A clinical trial. *European journal of internal medicine.* 2017. PMID: 29241594, PMCID: PMC5817015
70. Gianesello L, Priante G, Ceol M, et al. Albumin uptake in human podocytes: a possible role for the cubilin-amnionless (CUBAM) complex. *Scientific reports.* 2017;7(1):13705. PMID: 29057905, PMCID: PMC5651885
71. Goldfarb DS. Refining Diagnostic Approaches in Nephrolithiasis: Incomplete Distal Renal Tubular Acidosis. *Clin J Am Soc Nephrol.* 2017;12(9):1380-1382. PMID: 28775128, PMCID: PMC5586576
72. Goldfarb DS, Grasso M. Case Study - Case Studies in Cystinuria. *Urol Nurs.* 2017;37(2):90-93. PMID: 29240374, PMCID: PMC5764755
73. Goldstein B, Goldfarb DS. Early Recognition and Management of Rare Kidney Stone Disorders. *Urol Nurs.* 2017;37(2):81-89, 102. PMID: 29240373, PMCID: PMC5764757
74. Mulay SR, Eberhard JN, Desai J, et al. Hyperoxaluria Requires TNF Receptors to Initiate Crystal Adhesion and Kidney Stone Disease. *J Am Soc Nephrol.* 2017;28(3):761-768. PMID: 27612997, PMCID: PMC5328164

75. Perinpam M, Enders FT, Mara KC, et al. Plasma oxalate in relation to eGFR in patients with primary hyperoxaluria, enteric hyperoxaluria and urinary stone disease. *Clin Biochem*. 2017;50(18):1014-1019. PMID: 28764885, PMCID: PMC5705406
76. Goldfarb DS. Empiric therapy for kidney stones. *Urolithiasis*. 2018. PMID: 30478476
77. Kovacevic L, Caruso JA, Lu H, et al. Urine proteomic profiling in patients with nephrolithiasis and cystinuria. *Int Urol Nephrol*. 2018. PMID: 30519981
78. Policastro LJ, Saggi SJ, Goldfarb DS, Weiss JP. Personalized Intervention in Monogenic Stone Formers. *J Urol*. 2018;199(3):623-632. PMID: 29061541, PMCID: PMC5910290
79. Thorsteinsdottir M, Thorsteinsdottir UA, Eiriksson FF, et al. Corrigendum to "Quantitative UPLC-MS/MS assay of urinary 2,8-dihydroxyadenine for diagnosis and management of adenine phosphoribosyltransferase deficiency" [J. Chromatogr. B 1036-1037 (2016) 170-177]. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2018;1092:530. PMID: 29861153
80. D'Costa MR, Winkler NS, Milliner DS, Norby SM, Hickson LJ, Lieske JC. Oxalosis Associated With High-Dose Vitamin C Ingestion in a Peritoneal Dialysis Patient. *Am J Kidney Dis*. 2019. PMID: 30910370
81. Malieckal DA, Modersitzki F, Mara K, Enders FT, Asplin JR, Goldfarb DS. Effect of increasing doses of cystine-binding thiol drugs on cystine capacity in patients with cystinuria. *Urolithiasis*. 2019. PMID: 30980122
82. Shen F, Zhao Y, Wang L, et al. Rare disease knowledge enrichment through a data-driven approach. *BMC Med Inform Decis Mak*. 2019;19(1):32. PMID: 30764825, PMCID: PMC6376651

Rare Lung Diseases Consortium

Book Chapters

1. Krischer JP. Clinical trials for rare lung diseases. In: McCormack FX, Panos RJ, Trapnell BC, eds. *Molecular Basis of Pulmonary Disease*. 1st ed: Springer; 2010.

Journal Articles

1. Whitsett JA, Wert SE, Trapnell BC. Genetic disorders influencing lung formation and function at birth. *Hum. Mol. Genet*. Oct 1 2004;13 Spec No 2:R207-215. PMID: 15358727
2. Uchida K, Beck DC, Yamamoto T, Berclaz PY, Abe S, Staudt MK, Carey BC, Filippi MD, Wert SE, Denson LA, Puchalski JT, Hauck DM, Trapnell BC. GM-CSF autoantibodies and neutrophil dysfunction in pulmonary alveolar proteinosis. *N. Engl. J. Med.* Feb 8 2007;356(6):567-579. PMID: 17287477
3. Juvet SC, McCormack FX, Kwiatkowski DJ, Downey GP. Molecular pathogenesis of lymphangioleiomyomatosis: lessons learned from orphans. *Am. J. Respir. Cell Mol. Biol*. Apr 2007;36(4):398-408. PMID: 17099139, PMCID: PMC2176113
4. Deterding R. Evaluating infants and children with interstitial lung disease. *Semin. Respir. Crit. Care Med*. Jun 2007;28(3):333-341. PMID: 17562503
5. Trotta BM, Stolin AV, Williams MB, Gay SB, Brody AS, Altes TA. Characterization of the relation between CT technical parameters and accuracy of quantification of lung attenuation on

- quantitative chest CT. *AJR. American Journal of Roentgenology*. Jun 2007;188(6):1683-1690. PMID: 17515394
6. Deutsch GH, Young LR, Deterding RR, Fan LL, Dell SD, Bean JA, Brody AS, Nogee LM, Trapnell BC, Langston C, Albright EA, Askin FB, Baker P, Chou PM, Cool CM, Coventry SC, Cutz E, Davis MM, Dishop MK, Galambos C, Patterson K, Travis WD, Wert SE, White FV. Diffuse lung disease in young children: application of a novel classification scheme. *Am. J. Respir. Crit. Care Med.* Dec 1 2007;176(11):1120-1128. PMID: 17885266, PMCID: PMC2176101
 7. Young LR, Inoue Y, McCormack FX. Diagnostic potential of serum VEGF-D for lymphangioleiomyomatosis. *N. Engl. J. Med.* Jan 10 2008;358(2):199-200. PMID: 18184970, PMCID: PMC3804557
 8. Inoue Y, Trapnell BC, Tazawa R, Arai T, Takada T, Hizawa N, Kasahara Y, Tatsumi K, Hojo M, Ichiwata T, Tanaka N, Yamaguchi E, Eda R, Oishi K, Tsuchihashi Y, Kaneko C, Nukiwa T, Sakatani M, Krischer JP, Nakata K. Characteristics of a large cohort of patients with autoimmune pulmonary alveolar proteinosis in Japan. *Am. J. Respir. Crit. Care Med.* Apr 1 2008;177(7):752-762. PMID: 18202348, PMCID: PMC2720118
 9. Suzuki T, Sakagami T, Rubin BK, Nogee LM, Wood RE, Zimmerman SL, Smolarek T, Dishop MK, Wert SE, Whitsett JA, Grabowski G, Carey BC, Stevens C, van der Loo JC, Trapnell BC. Familial pulmonary alveolar proteinosis caused by mutations in CSF2RA. *J. Exp. Med.* Nov 24 2008;205(12):2703-2710. PMID: 18955570, PMCID: PMC2585845
 10. Schmitherst VJ, Altes TA, Young LR, Franz DN, Bissler JJ, McCormack FX, Dardzinski BJ, Brody AS. Automated algorithm for quantifying the extent of cystic change on volumetric chest CT: initial results in Lymphangioleiomyomatosis. *AJR. American Journal of Roentgenology*. Apr 2009;192(4):1037-1044. PMID: 19304711
 11. Trapnell BC, Carey BC, Uchida K, Suzuki T. Pulmonary alveolar proteinosis, a primary immunodeficiency of impaired GM-CSF stimulation of macrophages. *Curr. Opin. Immunol.* Oct 2009;21(5):514-521. PMID: 19796925, PMCID: PMC2779868
 12. Tazawa R, Trapnell BC, Inoue Y, Arai T, Takada T, Nasuhara Y, Hizawa N, Kasahara Y, Tatsumi K, Hojo M, Ishii H, Yokoba M, Tanaka N, Yamaguchi E, Eda R, Tsuchihashi Y, Morimoto K, Akira M, Terada M, Otsuka J, Ebina M, Kaneko C, Nukiwa T, Krischer JP, Akazawa K, Nakata K. Inhaled granulocyte/macrophage-colony stimulating factor as therapy for pulmonary alveolar proteinosis. *Am. J. Respir. Crit. Care Med.* Jun 15 2010;181(12):1345-1354. PMID: 20167854, PMCID: PMC2894410
 13. Ingelfinger JR, Drazen JM. Patient organizations and research on rare diseases. *N. Engl. J. Med.* Apr 28 2011;364(17):1670-1671. PMID: 21410388
 14. McCormack FX, Inoue Y, Moss J, et al. Efficacy and safety of sirolimus in lymphangioleiomyomatosis. *N. Engl. J. Med.* Apr 28 2011;364(17):1595-1606. PMID: 21410393, PMCID: PMC3118601
 15. Rosenbaum L. How Much Would You Give to Save a Dying Bird? Patient Advocacy and Biomedical Research. *N. Engl. J. Med.* 2012;367(18):1755-1759. PMID: 23113489
 16. Suzuki T, Arumugam P, Sakagami T, et al. Pulmonary macrophage transplantation therapy. *Nature*. Oct 23 2014;514(7523):450-454. PMID: 25274301, PMCID: PMC4236859

- 17.** Trapnell BC. A lymphocyte-mediated cause of secondary PAP. *Blood*. Jan 8 2015;125(2):215-216. PMID: 25573969
- 18.** Fan LL, Dishop MK, Galambos C, et al. Diffuse Lung Disease in Biopsied Children 2 to 18 Years of Age. Application of the chILD Classification Scheme. *Annals of the American Thoracic Society*. Oct 2015;12(10):1498-1505. PMID: 26291470, PMCID: PMC4627419
- 19.** Saito A, Nikolaidis NM, Amlal H, et al. Modeling pulmonary alveolar microlithiasis by epithelial deletion of the Npt2b sodium phosphate cotransporter reveals putative biomarkers and strategies for treatment. *Sci Transl Med*. Nov 11 2015;7(313):313ra181. PMID: 26560359, PMCID: PMC4764987
- 20.** Argula RG, Kokosi M, Lo P, et al. A Novel Quantitative Computed Tomographic Analysis Suggests How Sirolimus Stabilizes Progressive Air Trapping in Lymphangioleiomyomatosis. *Annals of the American Thoracic Society*. 2016;13(3):342-349. PMID: 26799509, PMCID: PMC5015717
- 21.** Campo I, Luisetti M, Griese M, et al. A Global Survey on Whole Lung Lavage in Pulmonary Alveolar Proteinosis. *Chest*. 2016;150(1):251-253. PMID: 27396783, PMCID: PMC6026236
- 22.** Campo I, Luisetti M, Griese M, et al. Whole lung lavage therapy for pulmonary alveolar proteinosis: a global survey of current practices and procedures. *Orphanet J Rare Dis*. 2016;11(1):115. PMID: 27577926, PMCID: PMC5006612
- 23.** El-Chemaly S, Young LR. Hermansky-Pudlak Syndrome. *Clin Chest Med*. 2016;37(3):505-511. PMID: 27514596, PMCID: PMC4987498
- 24.** McCormack FX, Gupta N, Finlay GR, et al. Official American Thoracic Society/Japanese Respiratory Society Clinical Practice Guidelines: Lymphangioleiomyomatosis Diagnosis and Management. *Am J Respir Crit Care Med*. 2016;194(6):748-761. PMID: 27628078, PMCID: PMC5803656
- 25.** O'Brien KJ, Lozier J, Cullinane AR, et al. Identification of a novel mutation in HPS6 in a patient with hemophilia B and oculocutaneous albinism. *Mol Genet Metab*. 2016;119(3):284-287. PMID: 27641950, PMCID: PMC5083180
- 26.** Osterburg AR, Nelson RL, Yaniv BZ, et al. NK cell activating receptor ligand expression in lymphangioleiomyomatosis is associated with lung function decline. *JCI insight*. 2016;1(16):e87270. PMID: 27734028, PMCID: PMC5053147
- 27.** Sahin M, Henske EP, Manning BD, et al. Advances and Future Directions for Tuberous Sclerosis Complex Research: Recommendations From the 2015 Strategic Planning Conference. *Pediatr Neurol*. 2016;60:1-12. PMID: 27267556, PMCID: PMC4921275
- 28.** Vicary GW, Vergne Y, Santiago-Cornier A, Young LR, Roman J. Pulmonary Fibrosis in Hermansky-Pudlak Syndrome. *Annals of the American Thoracic Society*. 2016;13(10):1839-1846. PMID: 27529121, PMCID: PMC5466158
- 29.** Young LR, Trapnell BC, Mandl KD, Swarr DT, Wambach JA, Blaisdell CJ. Accelerating Scientific Advancement for Pediatric Rare Lung Disease Research. Report from a National Institutes of Health-NHLBI Workshop, September 3 and 4, 2015. *Annals of the American Thoracic Society*. 2016;13(12):385-393. PMID: 27925785, PMCID: PMC5291498
- 30.** Cooley J, Lee YCG, Gupta N. Spontaneous pneumothorax in diffuse cystic lung diseases. *Curr Opin Pulm Med*. 2017;23(4):323-333. PMID: 28590337, PMCID: PMC5563542

- 31.** Gaskill CF, Carrier EJ, Kropski JA, et al. Disruption of lineage specification in adult pulmonary mesenchymal progenitor cells promotes microvascular dysfunction. *J Clin Invest.* 2017;127(6):2262-2276. PMID: 28463231, PMCID: PMC5451236
- 32.** Gupta N, Kopras EJ, Henske EP, et al. Spontaneous Pneumothoraces in Patients with Birt-Hogg-Dube Syndrome. *Annals of the American Thoracic Society.* 2017;14(5):706-713. PMID: 28248571, PMCID: PMC5427741
- 33.** Gupta N, Langenderfer D, McCormack FX, Schauer DP, Eckman MH. Chest Computed Tomographic Image Screening for Cystic Lung Diseases in Patients with Spontaneous Pneumothorax Is Cost Effective. *Annals of the American Thoracic Society.* 2017;14(1):17-25. PMID: 27737563, PMCID: PMC5461992
- 34.** Hetzel M, Suzuki T, Hashtchin AR, et al. Function and Safety of Lentivirus-Mediated Gene Transfer for CSF2RA-Deficiency. *Human gene therapy methods.* 2017;28(6):318-329. PMID: 28854814, PMCID: PMC5734162
- 35.** Kropski JA, Reiss S, Markin C, et al. Rare Genetic Variants in PARN Are Associated with Pulmonary Fibrosis in Families. *Am J Respir Crit Care Med.* 2017;196(11):1481-1484. PMID: 28414520, PMCID: PMC5736978
- 36.** Kropski JA, Young LR, Cogan JD, et al. Genetic Evaluation and Testing of Patients and Families with Idiopathic Pulmonary Fibrosis. *Am J Respir Crit Care Med.* 2017;195(11):1423-1428. PMID: 27786550, PMCID: PMC5470751
- 37.** Kugathasan S, Denson LA, Walters TD, et al. Prediction of complicated disease course for children newly diagnosed with Crohn's disease: a multicentre inception cohort study. *Lancet.* 2017;389(10080):1710-1718. PMID: 28259484, PMCID: PMC5719489
- 38.** Liu H, Jakubzick C, Osterburg AR, et al. Dendritic Cell Trafficking and Function in Rare Lung Diseases. *Am J Respir Cell Mol Biol.* 2017;57(4):393-402. PMID: 28586276, PMCID: PMC5650088
- 39.** McCormack FX, Gupta N, Finlay GR, et al. Reply: The ATS/JRS Guidelines on Lymphangioleiomyomatosis: Filling in the Gaps. *Am J Respir Crit Care Med.* 2017;196(5):660-661. PMID: 28288285, PMCID: PMC5803663
- 40.** Mueller C, Gernoux G, Gruntman AM, et al. 5 Year Expression and Neutrophil Defect Repair after Gene Therapy in Alpha-1 Antitrypsin Deficiency. *Mol Ther.* 2017;25(6):1387-1394. PMID: 28408179, PMCID: PMC5474959
- 41.** Kropski JA, Blackwell TS. Endoplasmic reticulum stress in the pathogenesis of fibrotic disease. *J Clin Invest.* 2018;128(1):64-73. PMID: 29293089, PMCID: PMC5749533
- 42.** McCarthy C, Avetisyan R, Carey BC, Chalk C, Trapnell BC. Prevalence and healthcare burden of pulmonary alveolar proteinosis. *Orphanet J Rare Dis.* 2018;13(1):129. PMID: 30064481, PMCID: PMC6069872
- 43.** McCarthy C, Lee E, Bridges JP, et al. Statin as a novel pharmacotherapy of pulmonary alveolar proteinosis. *Nature communications.* 2018;9(1):3127. PMID: 30087322, PMCID: PMC6081448
- 44.** Sivley RM, Sheehan JH, Kropski JA, et al. Three-dimensional spatial analysis of missense variants in RTEL1 identifies pathogenic variants in patients with Familial Interstitial Pneumonia. *BMC Bioinformatics.* 2018;19(1):18. PMID: 29361909, PMCID: PMC5781290

45. Wajda N, Gupta N. Air Travel-Related Spontaneous Pneumothorax in Diffuse Cystic Lung Diseases. *Current pulmonology reports*. 2018;7(2):56-62. PMID: 30859057, PMCID: PMC6407859
46. Stearman RS, Cornelius AR, Young LR, et al. Familial Pulmonary Fibrosis and Hermansky-Pudlak Syndrome Rare Missense Mutations In Context. *Am J Respir Crit Care Med*. 2019. PMID: 30985222

Rett Syndrome, MECP2 Duplication, and Rett-related Disorders Consortium

Book Chapters

1. Percy A. Rett syndrome: clinical and molecular update. *Current Opinion in Pediatrics*. Vol 162004:670-677.
2. Percy A. Rett syndrome. In: Maria B, ed. *Current Management in Child Neurology*. 3rd ed. Hamilton, Ontario: BC Decker; 2005.
3. Percy A. Rett syndrome: clinical update and future prospects. In: Rubin IL, Crocker AC, eds. *Medical Care for Children and Adults with Developmental Disabilities*. 2nd ed. Baltimore: Paul H. Brookes Publishing 2006:171-178.
4. Percy A. Rett syndrome. In: McMillan J, Feigin RD, DeAngelis C, Jones MD, eds. *Oski's Pediatrics: Principles & Practice*. 5th ed. Philadelphia: Lippincott Williams & Wilkins; 2006:2361-2363.
5. Tarquinio D, Percy A. Rett disorder. In: Hollander E, Loklevzon A, Coyle JT, eds. *APPI Textbook of Autism Spectrum Disorder*2008.
6. Neul J. Rett syndrome and MECP2-related disorders. *Autism Spectrum Disorders*: Oxford University Press; 2009.
7. Percy A, Lane J. Rett syndrome. In: Maria B, ed. *Current Management in Child Neurology*. Vol 375-382. Hamilton, Ontario: BC Decker; 2009.
8. Calfa G, Pozzo-Miller L, Percy A. Rett Syndrome: On Clinical and Genetic Features and Experimental Models Based on MECP2 Dysfunction. In: Powell C, Monteggia L, eds. *The Autisms: Molecules to Model Systems*. NY: Oxford University Press; 2013:57-90.
9. Chapleau C, Lane J, Pozzo-Miller L, Percy A. Rett Syndrome: A Model of Genetic Neurodevelopmental Disorders. In: Puiu M, ed. *Genetic Disorders*: InTech; 2013.

Abstracts Presented at Conferences

1. Van den Veyver I, Amir R, Fang P, Yu Z, Glaze D, Percy A, Zoghbi H, Roa B. Mutations in the newly discovered coding exon 1 of MECP2 are a rare cause of classic Rett syndrome. Paper presented at: ASHG 54th Annual Meeting; October, 2004; Toronto.
2. Neul J, Glaze D, Percy A, Lane J, Barrish J. Specific MECP2 mutations confer different severity in Rett syndrome. Paper presented at: Child Neurology Society 34th Annual Meeting2005; Los Angeles, CA.

- 3.** Fang P, Ward P, Glaze D, Van den Veyver I, Percy A, Zoghbi H, Roa B. Comprehensive clinical testing of the MECP2 gene for Rett syndrome. Paper presented at: American College of Medical Genetics Annual Meeting; March, 2005.
- 4.** Roa B, Ward P, Glaze D, Neul J, Van den Veyver I, Percy A, Zoghbi H, Fang P. Clinical molecular testing for rett syndrome: comprehensive analysis for point mutations and large rearrangements in the MECP2 gene. Paper presented at: Rett Syndrome Research Foundation Annual Meeting; Jun 27-29, 2005; Chicago, IL.
- 5.** Fang P, Ward P, Berry S, Irons M, Chong B, Van den Veyver I, Neul J, Percy A, Glaze D, Zoghbi H, Roa B. MECP2 gene rearrangements in female and male patients with features of Rett syndrome. Paper presented at: American Society of Human Genetics 55th Annual Meeting; October, 2005; Salt Lake City, UT.
- 6.** Percy A. Summary of clinical trials experience in Rett syndrome. Paper presented at: Clinical Trials In Rett Syndrome International Workshop; May 29-31, 2006; San Francisco, CA.
- 7.** Percy A. Gene therapy in Rett syndrome. Paper presented at: Clinical Trials In Rett Syndrome International Workshop; May 29-31, 2006; San Francisco, CA.
- 8.** Percy A. Rett syndrome: current status and new directions. Paper presented at: 10th Annual International Child Neurology Congress; June, 2006; Montreal, Canada.
- 9.** Percy A. Syndromic forms of mental retardation, neurogenetics for the practitioner. Paper presented at: R. O. Brady Lecture in Neurogenetics; Nov 10, 2006; New York, NY.
- 10.** Percy A. Rett syndrome and MECP2: understanding the genotype-phenotype correlations. Paper presented at: National Society of Genetic Counselors; Nov 13, 2006; Nashville, TN.
- 11.** Tarquinio D, Lane J, Percy A. The natural history of Rett syndrome: phenotypic differences in classical rett syndrome are associated with specific MECP2 mutations. Paper presented at: Rare Disease Clinical Research Network Conference on Clinical Research for Rare Diseases; September, 2007; Bethesda, MD.
- 12.** Tarquinio D, Motil K, Glaze D, Skinner S, Neul J, Annese F, Barrish J, Geerts S, Lane J, Percy A. Growth charts for Rett syndrome: birth to 18 years of age. Paper presented at: Child Neurology Society meeting2008.
- 13.** Peters SU, Tavyev J, Zhang F, Zoghbi H. An emerging behavioral phenotype in female carriers with MECP2 duplications: implications for the broad autism phenotype. Paper presented at: The Keystone Symposia: Toward a Pathophysiology of Autism; February 24, 2008; Santa Fe, NM.
- 14.** Kirby R, Percy A, Lane J, Glaze D, Skinner S, MacLeod P, Barrish J, Annese F. Longevity in Rett syndrome: probing the North American database. Paper presented at: Child Neurology Society meeting; November, 2008.
- 15.** Tarquinio D, Motil K, Glaze D, Skinner S, Neul J, Annese F, Barrish J, Geerts S, Lane J, Percy A. Growth charts for Rett syndrome: birth to 18 years of age. Paper presented at: American Academy of Neurology annual meeting; April, 2009; Seattle, WA.
- 16.** Glaze D, Percy A, Skinner S, Motil K, Neul J, Barrish J, Lane J, Geerts S, Annese F, Graham J, McNair L. Natural history of Rett syndrome: epilepsy. Paper presented at: Pediatric Academic Society meeting; May 2-9, 2009.

- 17.** Percy A, Lee H-S, Glaze D, Skinner S, Motil K, Neul J, Barrish J, Lane J, Geerts S, Annese F, Graham J, McNair L. Profiling scoliosis in Rett syndrome. Paper presented at: Pediatric Academic Society meeting; May 2-9, 2009.

Journal Articles

- 1.** Neul JL, Maricich SM, Islam M, Barrish J, Smith EO, Bottiglieri T, Hyland K, Humphreys P, Percy A, Glaze D. Spinal fluid 5-methyltetrahydrofolate levels are normal in Rett syndrome. *Neurology*. Jun 28 2005;64(12):2151-2152. PMID: 15985595
- 2.** Percy AK, Lane JB. Rett syndrome: model of neurodevelopmental disorders. *J. Child Neurol*. Sep 2005;20(9):718-721. PMID: 16225824
- 3.** Tofil NM, Buckmaster MA, Winkler MK, Callans BH, Islam MP, Percy AK. Deep sedation with propofol in patients with Rett syndrome. *J. Child Neurol*. Mar 2006;21(3):210-213. PMID: 16901422
- 4.** Motil KJ, Schultz RJ, Abrams S, Ellis KJ, Glaze DG. Fractional calcium absorption is increased in girls with Rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Apr 2006;42(4):419-426. PMID: 16641581
- 5.** Kankirawatana P, Leonard H, Ellaway C, Scurlock J, Mansour A, Makris CM, Dure LSt, Friez M, Lane J, Kiraly-Borri C, Fabian V, Davis M, Jackson J, Christodoulou J, Kaufmann WE, Ravine D, Percy AK. Early progressive encephalopathy in boys and MECP2 mutations. *Neurology*. Jul 11 2006;67(1):164-166. PMID: 16832102
- 6.** del Gaudio D, Fang P, Scaglia F, Ward PA, Craigen WJ, Glaze DG, Neul JL, Patel A, Lee JA, Irons M, Berry SA, Pursley AA, Grebe TA, Freedenberg D, Martin RA, Hsich GE, Khera JR, Friedman NR, Zoghbi HY, Eng CM, Lupski JR, Beaudet AL, Cheung SW, Roa BB. Increased MECP2 gene copy number as the result of genomic duplication in neurodevelopmentally delayed males. *Genet. Med.* Dec 2006;8(12):784-792. PMID: 17172942
- 7.** Percy AK, Lane JB, Childers J, Skinner S, Annese F, Barrish J, Caeg E, Glaze DG, MacLeod P. Rett syndrome: North American database. *J. Child Neurol*. Dec 2007;22(12):1338-1341. PMID: 18174548
- 8.** Percy A. Rett Syndrome: From Recognition to Diagnosis to Intervention. *Expert Review of Endocrinology & Metabolism* 2008;3(3):327-336.
- 9.** Bebbington A, Anderson A, Ravine D, Fyfe S, Pineda M, de Klerk N, Ben-Zeev B, Yatawara N, Percy A, Kaufmann WE, Leonard H. Investigating genotype-phenotype relationships in Rett syndrome using an international data set. *Neurology*. Mar 11 2008;70(11):868-875. PMID: 18332345
- 10.** Neul JL, Fang P, Barrish J, Lane J, Caeg EB, Smith EO, Zoghbi H, Percy A, Glaze DG. Specific mutations in methyl-CpG-binding protein 2 confer different severity in Rett syndrome. *Neurology*. Apr 15 2008;70(16):1313-1321. PMID: 18337588, PMCID: PMC2677974
- 11.** Percy AK. Rett syndrome: recent research progress. *J. Child Neurol*. May 2008;23(5):543-549. PMID: 18056689
- 12.** Motil KJ, Ellis KJ, Barrish JO, Caeg E, Glaze DG. Bone mineral content and bone mineral density are lower in older than in younger females with Rett syndrome. *Pediatr. Res.* Oct 2008;64(4):435-439. PMID: 18535484, PMCID: PMC2663405

13. Louise S, Fyfe S, Bebbington A, Bahi-Buisson N, Anderson A, Pineda M, Percy A, Zeev BB, Wu XR, Bao X, Leod PM, Armstrong J, Leonard H. InterRett, a model for international data collection in a rare genetic disorder. *Research in Autism Spectrum Disorders*. 2009;3(3):639-659. PMID: 24348750, PMCID: PMC3858578
14. Rudaz CG, Matagne V, Ronnekleiv O, Bosch M, Percy A, Ojeda S. FXYD1, a Modulator of Na⁺,K⁺-ATPase Activity, Facilitates Female Sexual Development by Maintaining Gonadotrophin-Releasing Hormone Neuronal Excitability. *J. Neuroendocrinol.* February 2009;21(2):102-122. PMID: 19187398, PMCID: PMC2934895
15. Glaze DG, Percy AK, Motil KJ, Lane JB, Isaacs JS, Schultz RJ, Barrish JO, Neul JL, O'Brien WE, Smith EO. A study of the treatment of Rett syndrome with folate and betaine. *J. Child Neurol.* May 2009;24(5):551-556. PMID: 19225139, PMCID: PMC2760386
16. Larimore JL, Chapleau CA, Kudo S, Theibert A, Percy AK, Pozzo-Miller L. Bdnf overexpression in hippocampal neurons prevents dendritic atrophy caused by Rett-associated MECP2 mutations. *Neurobiol. Dis.* May 2009;34(2):199-211. PMID: 19217433, PMCID: PMC2726722
17. Motil KJ, Morrissey M, Caeg E, Barrish JO, Glaze DG. Gastrostomy placement improves height and weight gain in girls with Rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Aug 2009;49(2):237-242. PMID: 19525868
18. Chapleau CA, Calfa GD, Lane MC, Albertson AJ, Larimore JL, Kudo S, Armstrong DL, Percy AK, Pozzo-Miller L. Dendritic spine pathologies in hippocampal pyramidal neurons from Rett syndrome brain and after expression of Rett-associated MECP2 mutations. *Neurobiol. Dis.* Aug 2009;35(2):219-233. PMID: 19442733, PMCID: PMC2722110
19. Ramocki MB, Peters SU, Tavyev YJ, Zhang F, Carvalho CM, Schaaf CP, Richman R, Fang P, Glaze DG, Lupski JR, Zoghbi HY. Autism and other neuropsychiatric symptoms are prevalent in individuals with MeCP2 duplication syndrome. *Ann. Neurol.* Dec 2009;66(6):771-782. PMID: 20035514, PMCID: PMC2801873
20. Samaco RC, Mandel-Brehm C, Chao HT, et al. Loss of MeCP2 in aminergic neurons causes cell-autonomous defects in neurotransmitter synthesis and specific behavioral abnormalities. *Proc. Natl. Acad. Sci. U. S. A.* Dec 22 2009;106(51):21966-21971. PMID: 20007372, PMCID: PMC2799790
21. Kirby RS, Lane JB, Childers J, Skinner SA, Annese F, Barrish JO, Glaze DG, Macleod P, Percy AK. Longevity in Rett syndrome: analysis of the North American Database. *J. Pediatr.* Jan 2010;156(1):135-138 e131. PMID: 19772971, PMCID: PMC2794941
22. Glaze DG, Percy AK, Skinner S, Motil KJ, Neul JL, Barrish JO, Lane JB, Geerts SP, Annese F, Graham J, McNair L, Lee HS. Epilepsy and the natural history of Rett syndrome. *Neurology*. Mar 16 2010;74(11):909-912. PMID: 20231667, PMCID: PMC2836870
23. Percy AK, Lee HS, Neul JL, Lane JB, Skinner SA, Geerts SP, Annese F, Graham J, McNair L, Motil KJ, Barrish JO, Glaze DG. Profiling scoliosis in Rett syndrome. *Pediatr. Res.* Apr 2010;67(4):435-439. PMID: 20032810, PMCID: PMC2852102
24. Percy AK, Neul JL, Glaze DG, Motil KJ, Skinner SA, Khwaja O, Lee HS, Lane JB, Barrish JO, Annese F, McNair L, Graham J, Barnes K. Rett syndrome diagnostic criteria: lessons from the Natural History Study. *Ann. Neurol.* Dec 2010;68(6):951-955. PMID: 21104896, PMCID: PMC3021984

- 25.** Neul JL, Kaufmann WE, Glaze DG, Christodoulou J, Clarke AJ, Bahi-Buisson N, Leonard H, Bailey ME, Schanen NC, Zappella M, Renieri A, Huppke P, Percy AK. Rett syndrome: revised diagnostic criteria and nomenclature. *Ann. Neurol.* Dec 2010;68(6):944-950. PMID: 21154482, PMCID: PMC3058521
- 26.** Percy AK. Rett syndrome: exploring the autism link. *Arch. Neurol.* Aug 2011;68(8):985-989. PMID: 1825235, PMCID: PMC3674963
- 27.** Lane JB, Lee HS, Smith LW, et al. Clinical severity and quality of life in children and adolescents with Rett syndrome. *Neurology.* Nov 15 2011;77(20):1812-1818. PMID: 22013176, PMCID: PMC3233210
- 28.** Motil KJ, Barrish JO, Lane J, Geerts SP, Annese F, McNair L, Percy AK, Skinner SA, Neul JL, Glaze DG. Vitamin d deficiency is prevalent in girls and women with rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Nov 2011;53(5):569-574. PMID: 21637127, PMCID: PMC3638258
- 29.** Khwaja OS, Sahin M. Translational research: Rett syndrome and tuberous sclerosis complex. *Curr. Opin. Pediatr.* Dec 2011;23(6):633-639. PMID: 21970827, PMCID: PMC3212611
- 30.** McCauley MD, Wang T, Mike E, Herrera J, Beavers DL, Huang TW, Ward CS, Skinner S, Percy AK, Glaze DG, Wehrens XH, Neul JL. Pathogenesis of lethal cardiac arrhythmias in MeCP2 mutant mice: implication for therapy in Rett syndrome. *Sci Transl Med.* Dec 14 2011;3(113):113ra125. PMID: 22174313, PMCID: PMC3633081
- 31.** Chapleau CA, Boggio EM, Calfa G, Percy AK, Giustetto M, Pozzo-Miller L. Hippocampal CA1 pyramidal neurons of MeCP2 mutant mice show a dendritic spine phenotype only in the presymptomatic stage. *Neural Plast.* 2012;2012:976164. PMID: 22919518, PMCID: PMC3418521
- 32.** Motil KJ, Caeg E, Barrish JO, Geerts S, Lane JB, Percy AK, Annese F, McNair L, Skinner SA, Lee HS, Neul JL, Glaze DG. Gastrointestinal and nutritional problems occur frequently throughout life in girls and women with rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Sep 2012;55(3):292-298. PMID: 22331013, PMCID: PMC3393805
- 33.** Bebbington A, Downs J, Percy A, Pineda M, Zeev BB, Bahi-Buisson N, Leonard H. The phenotype associated with a large deletion on MECP2. *Eur. J. Hum. Genet.* Sep 2012;20(9):921-927. PMID: 22473088, PMCID: PMC3421119
- 34.** Tarquinio DC, Motil KJ, Hou W, Lee HS, Glaze DG, Skinner SA, Neul JL, Annese F, McNair L, Barrish JO, Geerts SP, Lane JB, Percy AK. Growth failure and outcome in Rett syndrome: specific growth references. *Neurology.* Oct 16 2012;79(16):1653-1661. PMID: 23035069, PMCID: PMC3468773
- 35.** Chapleau CA, Lane J, Larimore J, Li W, Pozzo-Miller L, Percy AK. Recent Progress in Rett Syndrome and MeCP2 Dysfunction: Assessment of Potential Treatment Options. *Future neurology.* Jan 1 2013;8(1). PMID: 24348096, PMCID: PMC3859379
- 36.** Chapleau CA, Lane J, Kirwin SM, et al. Detection of rarely identified multiple mutations in MECP2 gene do not contribute to enhanced severity in Rett syndrome. *Am. J. Med. Genet. A.* Jul 2013;161A(7):1638-1646. PMID: 23696494, PMCID: PMC3689857
- 37.** Leonard H, Ravikumara M, Baikie G, et al. Assessment and management of nutrition and growth in Rett syndrome. *J. Pediatr. Gastroenterol. Nutr.* Oct 2013;57(4):451-460. PMID: 24084372, PMCID: PMC3906202

- 38.** Percy AK. Neuroscience. Path to treat Rett syndrome. *Science*. Oct 18 2013;342(6156):318-320. PMID: 24136956
- 39.** Chapleau CA, Lane J, Pozzo-Miller L, Percy AK. Evaluation of current pharmacological treatment options in the management of Rett syndrome: from the present to future therapeutic alternatives. *Current clinical pharmacology*. Nov 2013;8(4):358-369. PMID: 24050745, PMCID: PMC3789853
- 40.** Neul JL, Lane JB, Lee HS, et al. Developmental delay in Rett syndrome: data from the natural history study. *J. Neurodev. Disord.* 2014;6(1):20. PMID: 25071871, PMCID: PMC4112822
- 41.** Percy A. The American history of Rett syndrome. *Pediatr. Neurol.* Jan 2014;50(1):1-3. PMID: 24200039, PMCID: PMC3874243
- 42.** Cuddapah VA, Pillai RB, Shekar KV, et al. Methyl-CpG-binding protein 2 (MECP2) mutation type is associated with disease severity in Rett syndrome. *J. Med. Genet.* Mar 2014;51(3):152-158. PMID: 24399845, PMCID: PMC4403764
- 43.** Kalman LV, Tarleton JC, Percy AK, et al. Development of a Genomic DNA Reference Material Panel for Rett Syndrome (MECP2-Related Disorders) Genetic Testing. *J. Mol. Diagn.* Mar 2014;16(2):273-279. PMID: 24508304, PMCID: PMC3937532
- 44.** Suter B, Treadwell-Deering D, Zoghbi HY, Glaze DG, Neul JL. Brief report: MECP2 mutations in people without Rett syndrome. *J. Autism Dev. Disord.* Mar 2014;44(3):703-711. PMID: 23921973, PMCID: PMC3880396
- 45.** Pinto AL, Fernandez IS, Peters JM, et al. Localization of sleep spindles, k-complexes, and vertex waves with subdural electrodes in children. *J. Clin. Neurophysiol.* Aug 2014;31(4):367-374. PMID: 25083850
- 46.** Killian JT, Lane JB, Cutter GR, et al. Pubertal development in Rett syndrome deviates from typical females. *Pediatr. Neurol.* Dec 2014;51(6):769-775. PMID: 25283752, PMCID: PMC4254166
- 47.** Peters SU, Gordon RL, Key AP. Induced gamma oscillations differentiate familiar and novel voices in children with MECP2 duplication and Rett syndromes. *J. Child Neurol.* Feb 2015;30(2):145-152. PMID: 24776956, PMCID: PMC4406405
- 48.** Tarquinio DC, Hou W, Neul JL, et al. Age of diagnosis in rett syndrome: patterns of recognition among diagnosticians and risk factors for late diagnosis. *Pediatr. Neurol.* Jun 2015;52(6):585-591 e582. PMID: 25801175, PMCID: PMC4442062
- 49.** Tarquinio DC, Hou W, Neul JL, et al. The Changing Face of Survival in Rett Syndrome and MECP2-Related Disorders. *Pediatr. Neurol.* Nov 2015;53(5):402-11. PMID: 26278631, PMCID: PMC4609589
- 50.** Pozzo-Miller L, Pati S, Percy AK. Rett Syndrome: Reaching for Clinical Trials. *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*. Jul 2015;12(3):631-640. PMID: 25861995, PMCID: PMC4489949
- 51.** Olson HE, Tambunan D, LaCoursiere C, et al. Mutations in epilepsy and intellectual disability genes in patients with features of Rett syndrome. *Am. J. Med. Genet. A.* Sep 2015;167A(9):2017-2025. PMID: 25914188, PMCID: PMC5722031

- 52.** Neul JL, Glaze DG, Percy AK, et al. Improving Treatment Trial Outcomes for Rett Syndrome: The Development of Rett-specific Anchors for the Clinical Global Impression Scale. *J. Child Neurol.* Nov 2015;30(13):1743-1748. PMID: 25895911, PMCID: PMC4610825
- 53.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 54.** Percy AK. Progress in Rett Syndrome: from discovery to clinical trials. *Wien Med Wochenschr.* 2016;166(11-12):325-332. PMID: 27491553, PMCID: PMC5005392
- 55.** Sheikh TI, Ausio J, Faghfouri H, et al. From Function to Phenotype: Impaired DNA Binding and Clustering Correlates with Clinical Severity in Males with Missense Mutations in MECP2. *Scientific reports.* 2016;6:38590. PMID: 27929079, PMCID: PMC5144150
- 56.** Ward CS, Huang TW, Herrera JA, et al. Loss of MeCP2 Causes Urological Dysfunction and Contributes to Death by Kidney Failure in Mouse Models of Rett Syndrome. *PLoS ONE.* 2016;11(11):e0165550. PMID: 27828991, PMCID: PMC5102405
- 57.** Killian JT, Jr., Lane JB, Lee HS, et al. Caretaker Quality of Life in Rett Syndrome: Disorder Features and Psychological Predictors. *Pediatr. Neurol.* Jan 11 2016. PMID: 26995066, PMCID: PMC4899118
- 58.** Sajan SA, Jhangiani SN, Muzny DM, et al. Enrichment of mutations in chromatin regulators in people with Rett syndrome lacking mutations in MECP2. *Genet. Med.* May 12 2016. PMID: 27171548, PMCID: PMC5107176
- 59.** Dy ME, Waugh JL, Sharma N, et al. Defining Hand Stereotypies in Rett Syndrome: A Movement Disorders Perspective. *Pediatr Neurol.* 2017;75:91-95. PMID: 28838622, PMCID: PMC5624791
- 60.** Killian JT, Lane JB, Lee HS, et al. Scoliosis in Rett Syndrome: Progression, Comorbidities, and Predictors. *Pediatr Neurol.* 2017;70:20-25. PMID: 28347601, PMCID: PMC5461984
- 61.** Lane JB, Salter AR, Jones NE, et al. Assessment of Caregiver Inventory for Rett Syndrome. *J Autism Dev Disord.* 2017;47(4):1102-1112. PMID: 28132121, PMCID: PMC5357458
- 62.** Tarquinio DC, Hou W, Berg A, et al. Longitudinal course of epilepsy in Rett syndrome and related disorders. *Brain.* 2017;140(Pt 2):306-318. PMID: 28007990, PMCID: PMC5278305
- 63.** Gold JA, Mahmoud R, Cassidy SB, Kimonis V. Comparison of perinatal factors in deletion versus uniparental disomy in Prader-Willi syndrome. *Am J Med Genet A.* 2018;176(5):1161-1165. PMID: 29681103, PMCID: PMC5918292
- 64.** Mahmoud R, Singh P, Weiss L, et al. Newborn screening for Prader-Willi syndrome is feasible: Early diagnosis for better outcomes. *Am J Med Genet A.* 2018. PMID: 30556641
- 65.** Sadhwani A, Sanjana NE, Willen JM, et al. Two Angelman families with unusually advanced neurodevelopment carry a start codon variant in the most highly expressed UBE3A isoform. *Am J Med Genet A.* 2018. PMID: 29737008
- 66.** Tan WH, Bird LM, Sadhwani A, et al. A randomized controlled trial of levodopa in patients with Angelman syndrome. *Am J Med Genet A.* 2018;176(5):1099-1107. PMID: 28944563, PMCID: PMC5867193
- 67.** Tarquinio DC, Hou W, Neul JL, et al. The course of awake breathing disturbances across the lifespan in Rett syndrome. *Brain Dev.* 2018. PMID: 29657083

- 68.** Buchanan CB, Stallworth JL, Scott AE, et al. Behavioral profiles in Rett syndrome: Data from the natural history study. *Brain Dev.* 2019;41(2):123-134. PMID: 30217666, PMCID: PMC6392009
- 69.** Khan N, Cabo R, Tan WH, Tayag R, Bird LM. Healthcare burden among individuals with Angelman syndrome: Findings from the Angelman Syndrome Natural History Study. *Molecular genetics & genomic medicine.* 2019:e734. PMID: 31090212
- 70.** Motil KJ, Lane JB, Barrish JO, et al. Biliary Tract Disease in Girls and Young Women with Rett Syndrome. *J Pediatr Gastroenterol Nutr.* 2019. PMID: 30664568
- 71.** Neul JL, Benke TA, Marsh ED, et al. The array of clinical phenotypes of males with mutations in Methyl-CpG binding protein 2. *Am J Med Genet B Neuropsychiatr Genet.* 2019;180(1):55-67. PMID: 30536762
- 72.** Sadhwani A, Willen JM, LaVallee N, et al. Maladaptive behaviors in individuals with Angelman syndrome. *Am J Med Genet A.* 2019;179(6):983-992. PMID: 30942555

Sterol and Isoprenoid Diseases Consortium

Book Chapters

1. He M, Smith L, Vockley J. SC4MOL deficiency. In: Valle D, Beaudet A, Vogelstein B, et al., eds. *Online Metabolic and Molecular Bases of Inherited Disease.* New York, NY: McGraw-Hill Global Education Holdings, LLC; 2014.

Journal Articles

1. Merkens LS, Wassif C, Healy K, et al. Smith-Lemli-Opitz syndrome and inborn errors of cholesterol synthesis: summary of the 2007 SLO/RSH Foundation scientific conference sponsored by the National Institutes of Health. *Genet. Med.* May 2009;11(5):359-364. PMID: 19452638, PMCID: PMC2884390
2. DeBarber AE, Connor WE, Pappu AS, Merkens LS, Steiner RD. ESI-MS/MS quantification of 7alpha-hydroxy-4-cholest-3-one facilitates rapid, convenient diagnostic testing for cerebrotendinous xanthomatosis. *Clin. Chim. Acta.* Jan 2010;411(1-2):43-48. PMID: 19808031
3. McLaren KW, Severson TM, du Souich C, Stockton DW, Kratz LE, Cunningham D, Hendson G, Morin RD, Wu D, Paul JE, An J, Nelson TN, Chou A, DeBarber AE, Merkens LS, Michaud JL, Waters PJ, Yin J, McGillivray B, Demos M, Rouleau GA, Grzeschik KH, Smith R, Tarpey PS, Shears D, Schwartz CE, Gecz J, Stratton MR, Arbour L, Hurlbert J, Van Allen MI, Herman GE, Zhao Y, Moore R, Kelley RI, Jones SJ, Steiner RD, Raymond FL, Marra MA, Boerkoel CF. Hypomorphic temperature-sensitive alleles of NSDHL cause CK syndrome. *Am. J. Hum. Genet.* Dec 10 2010;87(6):905-914. PMID: 21129721, PMCID: PMC2997364
4. DeBarber AE, Eroglu Y, Merkens LS, Pappu AS, Steiner RD. Smith-Lemli-Opitz syndrome. *Expert Rev Mol Med.* 2011;13:e24. PMID: 21777499, PMCID: PMC3366105
5. He M, Kratz LE, Michel JJ, Vallejo AN, Ferris L, Kelley RI, Hoover JJ, Jukic D, Gibson KM, Wolfe LA, Ramachandran D, Zwick ME, Vockley J. Mutations in the human SC4MOL gene encoding a methyl sterol oxidase cause psoriasisiform dermatitis, microcephaly, and developmental delay. *J. Clin. Invest.* Mar 1 2011;121(3):976-984. PMID: 21285510, PMCID: PMC3049385

6. DeBarber AE, Sandlers Y, Pappu AS, Merkens LS, Duell PB, Lear SR, Erickson SK, Steiner RD. Profiling sterols in cerebrotendinous xanthomatosis: utility of Girard derivatization and high resolution exact mass LC-ESI-MS(n) analysis. *J. Chromatogr. B Analyt. Technol. Biomed. Life. Sci.* May 15 2011;879(17-18):1384-1392. PMID: 21168372, PMCID: PMC3326078
7. Steiner LA, Ehrenkranz RA, Peterec SM, Steiner RD, Reyes-Mugica M, Gallagher PG. Perinatal onset mevalonate kinase deficiency. *Pediatr. Dev. Pathol.* Jul-Aug 2011;14(4):301-306. PMID: 21425920
8. Monson DM, DeBarber AE, Bock CJ, Anadiotis G, Merkens LS, Steiner RD, Stout AU. Cerebrotendinous xanthomatosis: a treatable disease with juvenile cataracts as a presenting sign. *Arch. Ophthalmol.* Aug 2011;129(8):1087-1088. PMID: 21825196, PMCID: PMC3366103
9. Hager EJ, Piganelli JD, Tse HM, Gibson KM. Aberrant expression of costimulatory molecules in splenocytes of the mevalonate kinase-deficient mouse model of human hyper-IgD syndrome (HIDS). *J. Inherit. Metab. Dis.* Jan 2012;35(1):159-168. PMID: 21607759, PMCID: PMC3654530
10. Liu Y, Xia B, Gleason TJ, Castaneda U, He M, Berry GT, Fridovich-Keil JL. N- and O-linked glycosylation of total plasma glycoproteins in galactosemia. *Mol. Genet. Metab.* Aug 2012;106(4):442-454. PMID: 22743281, PMCID: PMC3426456
11. Wolfe LA, Morava E, He M, Vockley J, Gibson KM. Heritable disorders in the metabolism of the dolichols: A bridge from sterol biosynthesis to molecular glycosylation. *Am. J. Med. Genet. C Semin. Med. Genet.* Nov 15 2012;160C(4):322-328. PMID: 23059969, PMCID: PMC3995744
12. Svoboda MD, Christie JM, Eroglu Y, Freeman KA, Steiner RD. Treatment of Smith-Lemli-Opitz syndrome and other sterol disorders. *Am. J. Med. Genet. C Semin. Med. Genet.* Nov 15 2012;160C(4):285-294. PMID: 23042642, PMCID: PMC3890258
13. Liu W, Xu L, Lamberson CR, Merkens LS, Steiner RD, Elias ER, Haas D, Porter NA. Assays of plasma dehydrocholesterol esters and oxysterols from Smith-Lemli-Opitz syndrome patients. *J. Lipid Res.* Jan 2013;54(1):244-253. PMID: 23072947, PMCID: PMC3520531
14. Simon A, Drenth JP, Matern D, Goetzman ES, Hager EJ, Gibson KM. Long chain fatty acid (Lcfa) abnormalities in hyper IgD syndrome (Hids) and Familial Mediterranean Fever (Fmf): new insight into heritable periodic fevers. *Mol. Genet. Metab.* Mar 2013;108(3):166-171. PMID: 23375471, PMCID: PMC3654528
15. Sampson M, Jüppner H. Genes, Exomes, Genomes, Copy Number: What is Their Future in Pediatric Renal Disease. *Curr Pediatr Rep.* March 1 2013;1(1):52-59. PMID: 27642543, PMCID: PMC5022771
16. Kanungo S, Soares N, He M, Steiner RD. Sterol metabolism disorders and neurodevelopment-an update. *Developmental disabilities research reviews.* Jun 2013;17(3):197-210. PMID: 23798009
17. DeBarber AE, Luo J, Star-Weinstock M, et al. A blood test for cerebrotendinous xanthomatosis with potential for disease detection in newborns. *J. Lipid Res.* Jan 2014;55(1):146-154. PMID: 24186955, PMCID: PMC3927472
18. He M, Smith LD, Chang R, Li X, Vockley J. The role of sterol-C4-methyl oxidase in epidermal biology. *Biochim. Biophys. Acta.* Mar 2014;1841(3):331-335. PMID: 24144731, PMCID: PMC3943829

- 19.** DeBarber AE, Luo J, Giugliani R, et al. A useful multi-analyte blood test for cerebrotendinous xanthomatosis. *Clin. Biochem.* Jun 2014;47(9):860-863. PMID: 24769274, PMCID: PMC4175980
- 20.** Merkens MJ, Sinden NL, Brown CD, et al. Feeding impairments associated with plasma sterols in smith-lemli-opitz syndrome. *J. Pediatr.* Oct 2014;165(4):836-841 e831. PMID: 25039049, PMCID: PMC4177270
- 21.** Othman RA, Myrie SB, Mymin D, et al. Ezetimibe reduces plant sterol accumulation and favorably increases platelet count in sitosterolemia. *J. Pediatr.* Jan 2015;166(1):125-131. PMID: 25444527, PMCID: PMC4274192
- 22.** Ajagbe BO, Othman RA, Myrie SB. Plant Sterols, Stanols, and Sitosterolemia. *J. AOAC Int.* May-Jun 2015;98(3):716-723. PMID: 25941971; PMCID: PMC4514516
- 23.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 24.** Freeman KA, Olufs E, Tudor M, Roullet JB, Steiner RD. A Pilot Study of the Association of Markers of Cholesterol Synthesis with Disturbed Sleep in Smith-Lemli-Opitz Syndrome. *J. Dev. Behav. Pediatr.* Jun 2016;37(5):424-430. PMID: 27244299, PMCID: PMC4890614
- 25.** Adang LA, Sherbini O, Ball L, et al. Revised consensus statement on the preventive and symptomatic care of patients with leukodystrophies. *Mol Genet Metab.* 2017;122(1-2):18-32. PMID: 28863857
- 26.** Hidalgo ET, Orillac C, Hersh A, Harter DH, Rizzo WB, Weiner HL. Intrathecal Baclofen Therapy for the Treatment of Spasticity in Sjogren-Larsson Syndrome. *J Child Neurol.* 2017;32(1):100-103. PMID: 28257279, PMCID: PMC5339737
- 27.** Othman RA, Myrie SB, Mymin D, Roullet JB, Steiner RD, Jones PJH. Effect of ezetimibe on low- and high-density lipoprotein subclasses in sitosterolemia. *Atherosclerosis.* 2017;260:27-33. PMID: 28340366, PMCID: PMC5419426
- 28.** Othman RA, Myrie SB, Mymin D, et al. Thyroid Hormone Status in Sitosterolemia Is Modified by Ezetimibe. *J Pediatr.* 2017. PMID: 28625503
- 29.** Bose M, Mahadevan M, Schules DR, et al. Emotional experience in parents of children with Zellweger spectrum disorders: A qualitative study. *Molecular genetics and metabolism reports.* 2019;19:100459. PMID: 30815361, PMCID: PMC6377409

Urea Cycle Disorders Consortium

Abstracts Presented at Conferences

- 1.** Lichter-Konecki U, Cabrera-Luque J, Moses L, Gallo V. Identifying astrocyte functions altered during hyperammonemic encephalopathy. Paper presented at: Society for Neuroscience Annual Meeting; November 12-16, 2005; Washington, DC.
- 2.** Tuchman M. Collaborative Investigations of Urea Cycle Disorders: The Importance of Research Networks in the Study of Rare Diseases. Paper presented at: American Society of Human Genetics Annual Meeting; October 23-27, 2007; San Diego, CA.

3. Gropman A. 13C MRS study of ornithine transcarbamylase deficiency (OTCD). Paper presented at: Society for Inherited Metabolic Disorders Meeting; March, 2008; Asilomar, CA.
4. Kahn I, Seltzer R, Van Meter J, Gropman A. Diffusion tensor imaging detects areas of abnormal white matter microstructure in patients with partial ornithine transcarbamylase deficiency (OTCD). Paper presented at: Society for Inherited Metabolic Disorders Meeting; March, 2008; Asilomar, CA.
5. Tuchman M. Setting up Multi-Institutional Network Research in Rare Diseases: The Urea Cycle Consortium. Paper presented at: Society for Inherited Metabolic Disorders Meeting; March, 2008; Asilomar, CA
6. Lee B. Urea cycle disorders best practices and new developments: clinical presentation, laboratory diagnosis, and chronic management. Paper presented at: American College of Medical Genetics Annual Clinical Genetics Meeting; March 12-16, 2008; Phoenix, AZ.
7. Licher-Konecki U. A Rare Disease Clinical Research Consortium for the collaborative investigation of UCDs Paper presented at: Pediatric Academic Societies Annual Meeting; May, 2009; Baltimore, MD.
8. Batshaw M. The Urea Cycle Disorders Consortium. Paper presented at: National Urea Cycle Disorders Foundation; July, 2009; Pasadena, California.
9. Batshaw M. The Urea Cycle Disorders Consortium. Paper presented at: Satellite Symposium to the 11th International Congress on Inborn Errors of Metabolism; August, 2009; La Jolla, California.
10. Batshaw M. Setting up multi-institutional research network in rare disease: The Urea Cycle Disorders Consortium. Paper presented at: Institute of Medicine Committee on Accelerating Rare Diseases Research and Orphan Product Development; November 23, 2009.
11. Gropman A, Shattuck K, Prust M, et al. Increased dorsolateral prefrontal cortex activation in OTCD during working memory. Paper presented at: National Urea Cycle Disorders Foundation Annual Conference; July 9-11, 2010; Cambridge, MA.
12. Krivitzky L, Waisbren S. Neuropsychological Functioning in Rare Diseases; Research Challenges and Potential Solutions. Paper presented at: 39th Annual Meeting of the International Neuropsychological Society; February 2-5, 2011; Boston, MA.
13. Breedan A, Prust M, Krivitzky L, Gropman A. Cognitive Tests Sensitive to the Neurological Impairment in Ornithine Transcarbamylase Deficiency (OTCD). Paper presented at: 34th Annual Meeting of the Society for Inherited Metabolic Disorders; February 27 - March 2, 2011; Asilomar, CA.
14. Licher U. Update on the urea cycle disorders registry. Paper presented at: 34th Annual Meeting of the Society for Inherited Metabolic Disorders; February 27 - March 2, 2011; Asilomar, CA.
15. Shattuck K, Prust M, Seltzer R, et al. Increased Dorsolateral Prefrontal Cortex Activation in Ornithine Transcarbamylase Deficiency (OTCD) During Working memory: An fMRI study. Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; February 27 - March 2, 2011; Asilomar, CA.

- 16.** Shattuck K, Prust M, Seltzer R, Hailu A, vanMeter J, Gropman A. Altered Neural Activation in ornithine Transcarbamylase Deficiency during working memory. Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; February 27 - March 2, 2011; Asilomar, CA.
- 17.** Batshaw M. The Urea Cycle Disorders Consortium (UCDC). Paper presented at: 4th Annual Rare Disease Day February 28, 2011; Bethesda, MD.
- 18.** Gropman A, Shattuck K, Prust M, et al. Increased dorsolateral prefrontal cortex activation in OTCD during working memory. Paper presented at: 11th International Congress of the European Society for Magnetic Resonance in Neuroradiology; March 24-26, 2011; Amsterdam, The Netherlands.
- 19.** Batshaw M. Data Quality Challenges of Multisite Clinical Trials Panel. Paper presented at: Quality Data from Pediatric Clinical Trials Meeting; October 21, 2011; Bethesda, MD.
- 20.** Diaz G, Krivitzky L, Mokhtarani M, et al. Ammonia (NH₃) Control and Improved Neurocognitive Outcome Among Urea Cycle Disorder (UCD) Patients Treated with Glycerol Phenylbutyrate (GPB). Paper presented at: American College of Medical Genetics Conference; March 27-31, 2012; Charlotte, NC.
- 21.** Diaz G, Krivitzky L, Mokhtarani M, et al. Ammonia (NH₃) Control and Improved Neurocognitive Outcome Among Urea Cycle Disorder (UCD) Patients Treated with Glycerol Phenylbutyrate (GPB). Paper presented at: Society for Inherited Metabolic Disorders Annual Conference March 31 - April 2, 2012; Charlotte, NC.
- 22.** Ludwig W, Ellenbogen A, Gropman A. MDFiber Tracts in the Corpus Callosum Correlate with Scores on Behavioral Tasks and Glutamine Levels in Patients with OTCD, initial study (selected for travel award). Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; March 31 - April 2, 2012; Charlotte, NC.
- 23.** Mokhtarani M, Diaz G, Rhead W, et al. Elevated Phenylacetic Acid (PAA) Levels Appear Linked to Neurological Adverse Events in Healthy Adults But Not in Urea Cycle Disorder (UCD) Patients. Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; March 31 - April 2, 2012; Charlotte, NC.
- 24.** Monteleone J, Mokhtarani M, Diaz G, et al. Population PK Analysis of Glycerol Phenylbutyrate (GPB) and Sodium Phenylbutyrate (NaPBA) in Adult and Pediatric Patients with Urea Cycle Disorders (UCD). Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; March 31 - April 2, 2012; Charlotte, NC.
- 25.** Mokhtarani M, Diaz G, Rhead W, et al. Urinary Phenylacetateylglutamine Appears to Be a More Useful Marker than Metabolite Blood Levels for Therapeutic Monitoring of Phenylacetic Acid (PAA) Prodrugs. Paper presented at: Society for Inherited Metabolic Disorders Annual Conference; March 31 - April 2, 2012; Charlotte, NC.

- 26.** Diaz G, Mokhtarani M, Rhead W, et al. Ammonia (NH3) amino acid and hyperammonemic crises (HACS) in pediatric and adult patients with urea cycle disorders (UCDS) during dosing with sodium phenylbutyrate (NaPBA) vs. Glycerol phenylbutyrate (GPB). Paper presented at: Garrod Association Symposium; May 31 - June 1, 2013; Sherbrooke, Canada.
- 27.** Lee B, Mokhtarani M, Diaz G, et al. Optimizing ammonia (NH3) control in urea cycle disorder (UCD) patients: short and long-term implications. Paper presented at: Garrod Association Symposium; May 31 - June 1, 2013; Sherbrooke, Canada.
- 28.** Diaz G, Mokhtarani M, Rhead W, et al. Ammonia (NH3) amino acid and hyperammonemic crises (HACS) in pediatric and adult patients with urea cycle disorders (UCDS) during dosing with sodium phenylbutyrate (NaPBA) vs. Glycerol phenylbutyrate (GPB). Paper presented at: 31st Annual Meeting of the Southeastern Regional Genetics Group™, Inc July 18-20, 2013; Asheville, NC.
- 29.** Lee B, Mokhtarani M, Diaz G, et al. Optimizing ammonia (NH3) control in urea cycle disorder (UCD) patients: short and long-term implications. Paper presented at: 12th International Congress of Inborn Errors of Metabolism; September 3-6, 2013; Barcelona, Spain.

Conference Proceedings

- 1.** Patrick TB, Richesson R, Andrews JE, Folk LC. SNOMED CT coding variation and grouping for "other findings" in a longitudinal study on urea cycle disorders. *AMIA. Annu. Symp. Proc.* 2008:11-15.
- 2.** Bhavsar S, Khalidi N, Carette S, et al. Venothromboembolism in Large Vessel Vasculitis. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting; October 2014, 2014; Boston, MA.
- 3.** Carmona F, Mackie S, Martin J, et al. An Immunochip Study Confirms a Strong Contribution of HLA Class I and II Genes in the Susceptibility to Giant Cell Arteritis. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting2014; Boston, MA.
- 4.** Mecoli C, Wang F, Pappas C, et al. The Relationship of ARMS2 Genotype with Idiopathic Inflammatory Vasculitis. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting2014; Boston, MA.
- 5.** A R-P, Warner R, Cuthbertson D, et al. Biomarkers of Disease Activity in Vasculitis. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting2014; Boston, MA.
- 6.** Sreih A, Ezzeddine R, Fan J, et al. The Role of Macrophage Migration Inhibitory Factor (MIF) and MIF Gene Polymorphisms in the Pathogenesis of Granulomatosis with Polyangiitis. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting)2014; Boston, MA.
- 7.** Sy A, Dehghan N, Khalidi N, et al. Vasculitis and Inflammatory Bowel Diseases: A Study of 32 Patients with Both Conditions and Systematic Review of the Literature. Paper presented at: American College of Rheumatology (ACR/ARHP) Annual Meeting2014; Boston, MA.

Journal Articles

1. Kleppe S, Mian A, Lee B. Urea Cycle Disorders. *Curr. Treat. Options Neurol.* Jul 2003;5(4):309-319. PMID: 12791198
2. Gropman AL, Batshaw ML. Cognitive outcome in urea cycle disorders. *Mol. Genet. Metab.* Apr 2004;81 Suppl 1:S58-62. PMID: 15050975
3. Mian A, McCormack WM, Jr., Mane V, Kleppe S, Ng P, Finegold M, O'Brien WE, Rodgers JR, Beaudet AL, Lee B. Long-term correction of ornithine transcarbamylase deficiency by WPRE-mediated overexpression using a helper-dependent adenovirus. *Mol. Ther.* Sep 2004;10(3):492-499. PMID: 15336649
4. Caldovic L, Morizono H, Daikhin Y, et al. Restoration of ureagenesis in N-acetylglutamate synthase deficiency by N-carbamylglutamate. *J. Pediatr.* Oct 2004;145(4):552-554. PMID: 15480384
5. Scaglia F, Brunetti-Pierri N, Kleppe S, Marini J, Carter S, Garlick P, Jahoor F, O'Brien W, Lee B. Clinical consequences of urea cycle enzyme deficiencies and potential links to arginine and nitric oxide metabolism. *J. Nutr.* Oct 2004;134(10 Suppl):2775S-2782S; discussion 2796S-2797S. PMID: 15465784
6. Crombez EA, Cederbaum SD. Hyperargininemia due to liver arginase deficiency. *Mol. Genet. Metab.* Mar 2005;84(3):243-251. PMID: 15694174
7. Gropman AL. Expanding the diagnostic and research toolbox for inborn errors of metabolism: the role of magnetic resonance spectroscopy. *Mol. Genet. Metab.* Sep-Oct 2005;86(1-2):2-9. PMID: 16276565
8. Summar ML, Barr F, Dawling S, et al. Unmasked adult-onset urea cycle disorders in the critical care setting. *Crit. Care Clin.* Oct 2005;21(4 Suppl):S1-8. PMID: 16227111
9. Lanpher B, Brunetti-Pierri N, Lee B. Inborn errors of metabolism: the flux from Mendelian to complex diseases. *Nat. Rev. Genet.* Jun 2006;7(6):449-460. PMID: 16708072
10. Eeds AM, Mortlock D, Wade-Martins R, Summar ML. Assessing the functional characteristics of synonymous and nonsynonymous mutation candidates by use of large DNA constructs. *Am. J. Hum. Genet.* Apr 2007;80(4):740-750. PMID: 17357079, PMCID: PMC1852709
11. Gropman AL, Summar M, Leonard JV. Neurological implications of urea cycle disorders. *J. Inherit. Metab. Dis.* Nov 2007;30(6):865-879. PMID: 18038189, PMCID: PMC3758693
12. Gropman AL, Seltzer RR, Yudkoff M, Sawyer A, VanMeter J, Fricke ST. 1H MRS allows brain phenotype differentiation in sisters with late onset ornithine transcarbamylase deficiency (OTCD) and discordant clinical presentations. *Mol. Genet. Metab.* May 2008;94(1):52-60. PMID: 18262815, PMCID: PMC2486377
13. Tuchman M, Caldovic L, Daikhin Y, et al. N-carbamylglutamate markedly enhances ureagenesis in N-acetylglutamate deficiency and propionic acidemia as measured by isotopic incorporation and blood biomarkers. *Pediatr. Res.* Aug 2008;64(2):213-217. PMID: 18414145, PMCID: PMC2640836
14. Tuchman M, Lee B, Lichter-Konecki U, Summar ML, Yudkoff M, Cederbaum SD, Kerr DS, Diaz GA, Seashore MR, Lee HS, McCarter RJ, Krischer JP, Batshaw ML. Cross-sectional multicenter study of patients with urea cycle disorders in the United States. *Mol. Genet. Metab.* Aug 2008;94(4):397-402. PMID: 18562231, PMCID: PMC2640937

- 15.** Brunetti-Pierri N, Clarke C, Mane V, Palmer DJ, Lanpher B, Sun Q, O'Brien W, Lee B. Phenotypic correction of ornithine transcarbamylase deficiency using low dose helper-dependent adenoviral vectors. *J. Gene Med.* Aug 2008;10(8):890-896. PMID: 18563850, PMCID: PMC2766563
- 16.** Deardorff MA, Gaddipati H, Kaplan P, Sanchez-Lara PA, Sondheimer N, Spinner NB, Hakonarson H, Ficicioglu C, Ganesh J, Markello T, Loehelt B, Zand DJ, Yudkoff M, Lichter-Konecki U. Complex management of a patient with a contiguous Xp11.4 gene deletion involving ornithine transcarbamylase: a role for detailed molecular analysis in complex presentations of classical diseases. *Mol. Genet. Metab.* Aug 2008;94(4):498-502. PMID: 18524659, PMCID: PMC2572572
- 17.** Gropman AL, Fricke ST, Seltzer RR, Hailu A, Adeyemo A, Sawyer A, van Meter J, Gaillard WD, McCarter R, Tuchman M, Batshaw M. ¹H MRS identifies symptomatic and asymptomatic subjects with partial ornithine transcarbamylase deficiency. *Mol. Genet. Metab.* Sep-Oct 2008;95(1-2):21-30. PMID: 18662894, PMCID: PMC3724938
- 18.** Sailasuta N, Robertson LW, Harris KC, Gropman AL, Allen PS, Ross BD. Clinical NOE ¹³C MRS for neuropsychiatric disorders of the frontal lobe. *J. Magn. Reson.* Dec 2008;195(2):219-225. PMID: 18829354, PMCID: PMC2610418
- 19.** Gropman A, Rigas A. Neurometabolic disorders: urea-cycle disorder, outcomes, development and treatment. *Pediatric Health.* December 2008;2(6):701-713.
- 20.** Richesson RL, Lee HS, Cuthbertson D, Lloyd J, Young K, Krischer JP. An automated communication system in a contact registry for persons with rare diseases: scalable tools for identifying and recruiting clinical research participants. *Contemp. Clin. Trials.* Jan 2009;30(1):55-62. PMID: 18804556, PMCID: PMC2640948
- 21.** Krivitzky L, Babikian T, Lee HS, Thomas NH, Burk-Paull KL, Batshaw ML. Intellectual, adaptive, and behavioral functioning in children with urea cycle disorders. *Pediatr. Res.* Jul 2009;66(1):96-101. PMID: 19287347, PMCID: PMC2746951
- 22.** Venkateswaran L, Scaglia F, McLin V, Hertel P, Shchelochkov OA, Karpen S, Mahoney D, Jr., Yee DL. Ornithine transcarbamylase deficiency: a possible risk factor for thrombosis. *Pediatr. Blood Cancer.* Jul 2009;53(1):100-102. PMID: 19343772, PMCID: PMC4869977
- 23.** Gropman AL, Sailasuta N, Harris KC, Abulseoud O, Ross BD. Ornithine transcarbamylase deficiency with persistent abnormality in cerebral glutamate metabolism in adults. *Radiology.* Sep 2009;252(3):833-841. PMID: 19567648, PMCID: PMC2734894
- 24.** Brunetti-Pierri N, Erez A, Shchelochkov O, Craigen W, Lee B. Systemic hypertension in two patients with ASL deficiency: a result of nitric oxide deficiency? *Mol. Genet. Metab.* Sep-Oct 2009;98(1-2):195-197. PMID: 19592285, PMCID: PMC2746757
- 25.** Mc Guire PJ, Parikh A, Diaz GA. Profiling of oxidative stress in patients with inborn errors of metabolism. *Mol. Genet. Metab.* Sep-Oct 2009;98(1-2):173-180. PMID: 19604711, PMCID: PMC2915835
- 26.** Ah Mew N, Payan I, Daikhin Y, Nissim I, Tuchman M, Yudkoff M. Effects of a single dose of N-carbamylglutamate on the rate of ureagenesis. *Mol. Genet. Metab.* Dec 2009;98(4):325-330. PMID: 19660971, PMCID: PMC2784258
- 27.** Seminara J, Tuchman M, Krivitzky L, Krischer J, Lee HS, Lemons C, Baumgartner M, Cederbaum S, Diaz GA, Feigenbaum A, Gallagher RC, Harding CO, Kerr DS, Lanpher B, Lee B, Lichter-Konecki

- U, McCandless SE, Merritt JL, Oster-Granite ML, Seashore MR, Stricker T, Summar M, Waisbren S, Yudkoff M, Batshaw ML. Establishing a consortium for the study of rare diseases: The Urea Cycle Disorders Consortium. *Mol. Genet. Metab.* 2010;100 Suppl 1:S97-105. PMID: 20188616, PMCID: PMC2858794
28. Yudkoff M, Ah Mew N, Daikhin Y, Horyn O, Nissim I, Payan I, Tuchman M. Measuring in vivo ureagenesis with stable isotopes. *Mol. Genet. Metab.* 2010;100 Suppl 1:S37-41. PMID: 20338795, PMCID: PMC2858793
29. Caldovic L, Ah Mew N, Shi D, Morizono H, Yudkoff M, Tuchman M. N-acetylglutamate synthase: structure, function and defects. *Mol. Genet. Metab.* 2010;100 Suppl 1:S13-19. PMID: 0303810, PMCID: PMC2876818
30. Campeau PM, Pivalizza PJ, Miller G, McBride K, Karpen S, Goss J, Lee BH. Early orthotopic liver transplantation in urea cycle defects: follow up of a developmental outcome study. *Mol. Genet. Metab.* 2010;100 Suppl 1:S84-87. PMID: 20223690, PMCID: PMC2867349
31. Deignan JL, De Deyn PP, Cederbaum SD, Fuchshuber A, Roth B, Gsell W, Marescau B. Guanidino compound levels in blood, cerebrospinal fluid, and post-mortem brain material of patients with argininemia. *Mol. Genet. Metab.* 2010;100 Suppl 1:S31-36. PMID: 20176499
32. Gropman A. Brain imaging in urea cycle disorders. *Mol. Genet. Metab.* 2010;100 Suppl 1:S20-30. PMID: 20207564, PMCID: PMC3258295
33. Oldham MS, VanMeter JW, Shattuck KF, Cederbaum SD, Gropman AL. Diffusion tensor imaging in arginase deficiency reveals damage to corticospinal tracts. *Pediatr. Neurol.* Jan 2010;42(1):49-52. PMID: 20004862, PMCID: PMC3758690
34. Ah Mew N, McCarter R, Daikhin Y, Nissim I, Yudkoff M, Tuchman M. N-carbamylglutamate augments ureagenesis and reduces ammonia and glutamine in propionic acidemia. *Pediatrics.* Jul 2010;126(1):e208-214. PMID: 20566609, PMCID: PMC3297024
35. Lee B, Rhead W, Diaz GA, Scharschmidt BF, Mian A, Shchelochkov O, Marier JF, Beliveau M, Mauney J, Dickinson K, Martinez A, Gargosky S, Mokhtarani M, Berry SA. Phase 2 comparison of a novel ammonia scavenging agent with sodium phenylbutyrate in patients with urea cycle disorders: safety, pharmacokinetics and ammonia control. *Mol. Genet. Metab.* Jul 2010;100(3):221-228. PMID: 20382058, PMCID: PMC2905228
36. Gropman AL, Gertz B, Shattuck K, Kahn IL, Seltzer R, Krivitsky L, Van Meter J. Diffusion tensor imaging detects areas of abnormal white matter microstructure in patients with partial ornithine transcarbamylase deficiency. *AJNR Am. J. Neuroradiol.* Oct 2010;31(9):1719-1723. PMID: 19287347, PMCID: PMC2746951
37. Shchelochkov OA, Li FY, Wang J, Zhan H, Towbin JA, Jefferies JL, Wong LJ, Scaglia F. Milder clinical course of Type IV 3-methylglutaconic aciduria due to a novel mutation in TMEM70. *Mol. Genet. Metab.* Oct-Nov 2010;101(2-3):282-285. PMID: 20728387
38. Wang J, Shchelochkov OA, Zhan H, Li F, Chen LC, Brundage EK, Pursley AN, Schmitt ES, Haberle J, Wong LJ. Molecular characterization of CPS1 deletions by array CGH. *Mol. Genet. Metab.* Jan 2011;102(1):103-106. PMID: 20855223, PMCID: PMC4869965
39. Erez A, Nagamani SC, Lee B. Argininosuccinate lyase deficiency-argininosuccinic aciduria and beyond. *Am. J. Med. Genet. C Semin. Med. Genet.* Feb 15 2011;157(1):45-53. PMID: 21312326, PMCID: PMC3073162

- 40.** Erez A, Shchelochkov OA, Plon SE, Scaglia F, Lee B. Insights into the pathogenesis and treatment of cancer from inborn errors of metabolism. *Am. J. Hum. Genet.* Apr 8 2011;88(4):402-421. PMID: 21473982, PMCID: PMC3071916
- 41.** Morgan TM, Schlegel C, Edwards KM, Welch-Burke T, Zhu Y, Sparks R, Summar M. Vaccines are not associated with metabolic events in children with urea cycle disorders. *Pediatrics.* May 2011;127(5):e1147-1153. PMID: 21482610, PMCID: PMC3387867
- 42.** Marini JC, Lanpher BC, Scaglia F, O'Brien WE, Sun Q, Garlick PJ, Jahoor F, Lee B. Phenylbutyrate improves nitrogen disposal via an alternative pathway without eliciting an increase in protein breakdown and catabolism in control and ornithine transcarbamylase-deficient patients. *Am. J. Clin. Nutr.* Jun 2011;93(6):1248-1254. PMID: 21490144, PMCID: PMC3095500
- 43.** Haberle J, Shchelochkov OA, Wang J, Katsonis P, Hall L, Reiss S, Eeds A, Willis A, Yadav M, Summar S, Lichtarge O, Rubio V, Wong LJ, Summar M. Molecular defects in human carbamoy phosphate synthetase I: mutational spectrum, diagnostic and protein structure considerations. *Hum. Mutat.* Jun 2011;32(6):579-589. PMID: 21120950, PMCID: PMC4861085
- 44.** Licher-Konecki U, Diaz GA, Merritt JL, 2nd, Feigenbaum A, Jomphe C, Marier JF, Beliveau M, Mauney J, Dickinson K, Martinez A, Mokhtarani M, Scharschmidt B, Rhead W. Ammonia control in children with urea cycle disorders (UCDs); phase 2 comparison of sodium phenylbutyrate and glycerol phenylbutyrate. *Mol. Genet. Metab.* Aug 2011;103(4):323-329. PMID: 21612962
- 45.** Jain-Ghai S, Nagamani SC, Blaser S, Siriwardena K, Feigenbaum A. Arginase I deficiency: severe infantile presentation with hyperammonemia: more common than reported? *Mol. Genet. Metab.* Sep-Oct 2011;104(1-2):107-111. PMID: 21802329, PMCID: PMC3171515
- 46.** Heibel SK, Ah Mew N, Caldovic L, Daikhin Y, Yudkoff M, Tuchman M. N-carbamylglutamate enhancement of ureagenesis leads to discovery of a novel deleterious mutation in a newly defined enhancer of the NAGS gene and to effective therapy. *Hum. Mutat.* Oct 2011;32(10):1153-1160. PMID: 21681857, PMCID: PMC3976964
- 47.** Prust MJ, Gropman AL, Hauser N. New frontiers in neuroimaging applications to inborn errors of metabolism. *Mol. Genet. Metab.* Nov 2011;104(3):195-205. PMID: 21778100, PMCID: PMC3758691
- 48.** Wilson JM, Shchelochkov OA, Gallagher RC, Batshaw ML. Hepatocellular carcinoma in a research subject with ornithine transcarbamylase deficiency. *Mol. Genet. Metab.* Feb 2012;105(2):263-265. PMID: 2129577, PMCID: PMC3273986
- 49.** Mitchell S, Welch-Burke T, Dumitrescu L, Lomenick JP, Murdock DG, Crawford DC, Summar M. Peptide tyrosine tyrosine levels are increased in patients with urea cycle disorders. *Mol. Genet. Metab.* May 2012;106(1):39-42. PMID: 22459207, PMCID: PMC3336020
- 50.** Nagamani SC, Erez A, Lee B. Argininosuccinate lyase deficiency. *Genet. Med.* May 2012;14(5):501-507. PMID: 22241104 , PMCID: PMC3709024
- 51.** Nagamani SC, Campeau PM, Shchelochkov OA, et al. Nitric-oxide supplementation for treatment of long-term complications in argininosuccinic aciduria. *Am. J. Hum. Genet.* May 4 2012;90(5):836-846. PMID: 22541557, PMCID: PMC3376491
- 52.** Fike CD, Sidoryk-Wegrzynowicz M, Aschner M, Summar M, Prince LS, Cunningham G, Kaplowitz M, Zhang Y, Aschner JL. Prolonged hypoxia augments L-citrulline transport by system A in the

- newborn piglet pulmonary circulation. *Cardiovasc. Res.* Aug 1 2012;95(3):375-384. PMID: 22673370, PMCID: PMC3400357
- 53.** Nagamani SC, Lee B, Erez A. Optimizing therapy for argininosuccinic aciduria. *Mol. Genet. Metab.* Sep 2012;107(1-2):10-14. PMID: 22841516, PMCID: PMC3444682
- 54.** Nagamani SC, Shchelochkov OA, Mullins MA, Carter S, Lanpher BC, Sun Q, Kleppe S, Erez A, O'Brian Smith E, Marini JC, Lee B. A randomized controlled trial to evaluate the effects of high-dose versus low-dose of arginine therapy on hepatic function tests in argininosuccinic aciduria. *Mol. Genet. Metab.* Nov 2012;107(3):315-321. PMID: 23040521, PMCID: PMC3483446
- 55.** Gropman AL. Patterns of brain injury in inborn errors of metabolism. *Semin. Pediatr. Neurol.* Dec 2012;19(4):203-210. PMID: 23245553, PMCID: PMC3758694
- 56.** Ah Mew N, Krivitzky L, McCarter R, Batshaw M, Tuchman M. Clinical outcomes of neonatal onset proximal versus distal urea cycle disorders do not differ. *J. Pediatr.* Feb 2013;162(2):324-329 e321. PMID: 22901741, PMCID: PMC4440324
- 57.** Ferriero R, Manco G, Lamantea E, et al. Phenylbutyrate therapy for pyruvate dehydrogenase complex deficiency and lactic acidosis. *Sci Transl Med.* Mar 6 2013;5(175):175ra131. PMID: 23467562, PMCID: PMC4102924
- 58.** Gropman AL, Shattuck K, Prust MJ, et al. Altered neural activation in ornithine transcarbamylase deficiency during executive cognition: an fMRI study. *Hum. Brain Mapp.* Apr 2013;34(4):753-761. PMID: 22110002, PMCID: PMC3338900
- 59.** Smith W, Diaz GA, Lichter-Konecki U, et al. Ammonia control in children ages 2 months through 5 years with urea cycle disorders: comparison of sodium phenylbutyrate and glycerol phenylbutyrate. *J. Pediatr.* Jun 2013;162(6):1228-1234, 1234 e1221. PMID: 23324524, PMCID: PMC4017326
- 60.** Diaz GA, Krivitzky LS, Mokhtarani M, et al. Ammonia control and neurocognitive outcome among urea cycle disorder patients treated with glycerol phenylbutyrate. *Hepatology.* Jun 2013;57(6):2171-2179. PMID: 22961727, PMCID: PMC3557606
- 61.** Gropman AL, Prust M, Breeden A, Fricke S, VanMeter J. Urea cycle defects and hyperammonemia: effects on functional imaging. *Metab. Brain Dis.* Jun 2013;28(2):269-275. PMID: 23149878, PMCID: PMC3594356
- 62.** Lichter-Konecki U, Nadkarni V, Moudgil A, et al. Feasibility of adjunct therapeutic hypothermia treatment for hyperammonemia and encephalopathy due to urea cycle disorders and organic acidemias. *Mol. Genet. Metab.* Aug 2013;109(4):354-359. PMID: 23791307
- 63.** Zhong L, Li S, Li M, et al. Vector sequences are not detected in tumor tissue from research subjects with ornithine transcarbamylase deficiency who previously received adenovirus gene transfer. *Hum. Gene Ther.* Sep 2013;24(9):814-819. PMID: 24010702, PMCID: PMC3768231
- 64.** Summar ML, Koelker S, Freedenberg D, et al. The incidence of urea cycle disorders. *Mol. Genet. Metab.* Sep-Oct 2013;110(1-2):179-180. PMID: 23972786, PMCID: PMC4364413

- 65.** McGuire PJ, Lee HS, Summar ML. Infectious precipitants of acute hyperammonemia are associated with indicators of increased morbidity in patients with urea cycle disorders. *J. Pediatr.* Dec 2013;163(6):1705-1710 e1701. PMID: 24084106, PMC3958925
- 66.** Landau YE, Licher-Konecki U, Levy HL. Genomics in newborn screening. *J. Pediatr.* Jan 2014;164(1):14-19. PMID: 23992678
- 67.** Gallagher RC, Lam C, Wong D, Cederbaum S, Sokol RJ. Significant hepatic involvement in patients with ornithine transcarbamylase deficiency. *J. Pediatr.* Apr 2014;164(4):720-725 e726. PMID: 24485820, PMCID: PMC4070427
- 68.** Berry SA, Licher-Konecki U, Diaz GA, et al. Glycerol phenylbutyrate treatment in children with urea cycle disorders: pooled analysis of short and long-term ammonia control and outcomes. *Mol. Genet. Metab.* May 2014;112(1):17-24. PMID: 24630270, PMCID: PMC4382922
- 69.** Batshaw ML, Groft SC, Krischer JP. Research into rare diseases of childhood. *JAMA*. May 7 2014;311(17):1729-1730. PMID: 24794360
- 70.** Helman G, Pacheco-Colon I, Gropman AL. The urea cycle disorders. *Semin. Neurol.* Jul 2014;34(3):341-349. PMID: 25192511
- 71.** Burrage LC, Jain M, Gandolfo L, Lee BH, Nagamani SC. Sodium phenylbutyrate decreases plasma branched-chain amino acids in patients with urea cycle disorders. *Mol. Genet. Metab.* Jul 3 2014. PMID: 25042691, PMCID: PMC4177960
- 72.** Burrage LC, Nagamani SC, Campeau PM, Lee BH. Branched-chain amino acid metabolism: from rare Mendelian diseases to more common disorders. *Hum. Mol. Genet.* Sep 15 2014;23(R1):R1-8. PMID: 24651065, PMC4170715
- 73.** Batshaw ML, Tuchman M, Summar M, Seminara J. A longitudinal study of urea cycle disorders. *Mol. Genet. Metab.* Sep-Oct 2014;113(1-2):127-130. PMID: 25135652, PMCID: PMC4178008
- 74.** Burrage LC, Jain M, Gandolfo L, Lee BH, Nagamani SC. Sodium phenylbutyrate decreases plasma branched-chain amino acids in patients with urea cycle disorders. *Mol. Genet. Metab.* Sep-Oct 2014;113(1-2):131-135. PMID: 25042691, PMCID: PMC4177960
- 75.** Pacheco-Colon I, Fricke S, VanMeter J, Gropman AL. Advances in urea cycle neuroimaging: Proceedings from the 4th International Symposium on urea cycle disorders, Barcelona, Spain, September 2013. *Mol. Genet. Metab.* Sep-Oct 2014;113(1-2):118-126. PMID: 25066103, PMCID: PMC4177962
- 76.** Sprouse C, King J, Helman G, et al. Investigating neurological deficits in carriers and affected patients with ornithine transcarbamylase deficiency. *Mol. Genet. Metab.* Sep-Oct 2014;113(1-2):136-141. PMID: 24881970, PMCID: PMC4458385
- 77.** Burrage LC, Sun Q, Elsea SH, et al. Human recombinant arginase enzyme reduces plasma arginine in mouse models of arginase deficiency. *Hum Mol Genet.* 2015;24(22):6417-6427. PMID: 26358771, PMCID: PMC5007608

- 78.** Kolker S, Dobbelaere D, Haberle J, et al. Networking Across Borders for Individuals with Organic Acidurias and Urea Cycle Disorders: The E-IMD Consortium. *JIMD reports*. 2015;22:29-38. PMID: 25701269, PMCID: PMC4486274
- 79.** Pacheco-Colon I, Washington SD, Sprouse C, Helman G, Gropman AL, VanMeter JW. Reduced Functional Connectivity of Default Mode and Set-Maintenance Networks in Ornithine Transcarbamylase Deficiency. *PLoS ONE*. 2015;10(6):e0129595. PMID: 26067829, PMCID: PMC4466251
- 80.** Shi D, Allewell NM, Tuchman M. From Genome to Structure and Back Again: A Family Portrait of the Transcarbamylases. *Int. J. Mol. Sci.* 2015;16(8):18836-18864. PMID: 26274952, PMCID: PMC4581275
- 81.** Waisbren SE, He J, McCarter R. Assessing Psychological Functioning in Metabolic Disorders: Validation of the Adaptive Behavior Assessment System, Second Edition (ABAS-II), and the Behavior Rating Inventory of Executive Function (BRIEF) for Identification of Individuals at Risk. *JIMD reports*. Feb 25 2015. PMID: 25712381, PMCID: PMC4470946
- 82.** Chong JX, Burrage LC, Beck AE, et al. Autosomal-Dominant Multiple Pterygium Syndrome Is Caused by Mutations in MYH3. *Am. J. Hum. Genet.* May 7 2015;96(5):841-849. PMID: 25957469, PMCID: PMC4570285
- 83.** Caldovic L, Abdikarim I, Narain S, Tuchman M, Morizono H. Genotype-Phenotype Correlations in Ornithine Transcarbamylase Deficiency: A Mutation Update. *Journal of genetics and genomics = Yi chuan xue bao*. May 20 2015;42(5):181-194. PMID: 26059767, PMCID: PMC4565140
- 84.** Boyer SW, Barclay LJ, Burrage LC. Inherited Metabolic Disorders: Aspects of Chronic Nutrition Management. *Nutr. Clin. Pract.* Jun 16 2015. PMID: 26079521, PMCID: PMC4515158
- 85.** Lee B, Diaz GA, Rhead W, et al. Blood ammonia and glutamine as predictors of hyperammonemic crises in patients with urea cycle disorder. *Genet. Med.* Jul 2015;17(7):561-568. PMID: 25503497, PMCID: PMC4465427
- 86.** Boyer SW, Barclay LJ, Burrage LC. Inherited Metabolic Disorders: Aspects of Chronic Nutrition Management. *Nutr. Clin. Pract.* Aug 2015;30(4):502-510. PMID: 26079521, PMCID: PMC4515158
- 87.** Pferdehirt R, Jain M, Blazo MA, Lee B, Burrage LC. Catel-Manzke Syndrome: Further Delineation of the Phenotype Associated with Pathogenic Variants in. *Molecular genetics and metabolism reports*. Sep 1 2015;4:89-91. PMID: 26366375, PMCID: PMC4563870
- 88.** Kolker S, Cazorla AG, Valayannopoulos V, et al. The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 1: the initial presentation. *J. Inherit. Metab. Dis.* Nov 2015;38(6):1041-1057. PMID: 25875215
- 89.** Kolker S, Valayannopoulos V, Burlina AB, et al. The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 2: the evolving clinical phenotype. *J. Inherit. Metab. Dis.* Nov 2015;38(6):1059-1074. PMID: 25875216

- 90.** Burrage LC, Charng WL, Eldomery MK, et al. De Novo GMNN Mutations Cause Autosomal-Dominant Primordial Dwarfism Associated with Meier-Gorlin Syndrome. *Am. J. Hum. Genet.* Dec 3 2015;97(6):904-913. PMID: 26637980, PMCID: PMC4678788
- 91.** Heringer J, Valayannopoulos V, Lund AM, et al. Impact of age at onset and newborn screening on outcome in organic acidurias. *J. Inherit. Metab. Dis.* Dec 21 2015. PMID: 26689403
- 92.** Burrage LC, Miller MJ, Wong LJ, et al. Elevations of C14:1 and C14:2 Plasma Acylcarnitines in Fasted Children: A Diagnostic Dilemma. *J. Pediatr.* 2016;169:208-213.e202. PMID: 26602010, PMCID: PMC4729603
- 93.** Krivitzky LS, Walsh KS, Fisher EL, Berl MM. Executive functioning profiles from the BRIEF across pediatric medical disorders: Age and diagnosis factors. *Child neuropsychology : a journal on normal and abnormal development in childhood and adolescence.* 2016;22(7):870-888. PMID: 26143938, PMCID: PMC4703575
- 94.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 95.** Shapiro E, Bernstein J, Adams HR, et al. Neurocognitive clinical outcome assessments for inborn errors of metabolism and other rare conditions. *Mol. Genet. Metab.* Jun 2016;118(2):65-69. PMID: 27132782, PMCID: PMC4895194
- 96.** Waisbren SE, Gropman AL, Batshaw ML. Improving long term outcomes in urea cycle disorders-report from the Urea Cycle Disorders Consortium. *J Inherit Metab Dis.* 2016;39(4):573-584. PMID: 27215558, PMCID: PMC4921309
- 97.** Atwal PS, Medina CR, Burrage LC, Sutton VR. Nineteen-year follow-up of a patient with severe glutathione synthetase deficiency. *J Hum Genet.* Jul 2016;61(7):669-672. PMID: 26984560, PMCID: PMC4961564
- 98.** Nagamani SCS, Agarwal U, Tam A, et al. A randomized trial to study the comparative efficacy of phenylbutyrate and benzoate on nitrogen excretion and ureagenesis in healthy volunteers. *Genet Med.* 2017. PMID: 29693650, PMCID: PMC5924481
- 99.** Sin YY, Price PR, Ballantyne LL, Funk CD. Proof-of-Concept Gene Editing for the Murine Model of Inducible Arginase-1 Deficiency. *Scientific reports.* 2017;7(1):2585. PMID: 28566761, PMCID: PMC5451454
- 100.** Buerger C, Garbade SF, Dietrich Alber F, et al. Impairment of cognitive function in ornithine transcarbamylase deficiency is global rather than domain-specific and is associated with disease onset, sex, maximum ammonium, and number of hyperammonemic events. *J Inherit Metab Dis.* 2018. PMID: 30671983
- 101.** Kho J, Tian X, Wong WT, et al. Argininosuccinate Lyase Deficiency Causes an Endothelial-Dependent Form of Hypertension. *Am J Hum Genet.* 2018;103(2):276-287. PMID: 30075114, PMCID: PMC6080833

- 102.** Posset R, Garbade SF, Boy N, et al. Transatlantic combined and comparative data analysis of 1095 patients with urea cycle disorders-a successful strategy for clinical research of rare diseases. *J Inherit Metab Dis.* 2018. PMID: 29974348
- 103.** Uittenbogaard M, Brantner CA, Fang Z, Wong LC, Gropman A, Chiaramello A. Novel insights into the functional metabolic impact of an apparent de novo m.8993T>G variant in the MT-ATP6 gene associated with maternally inherited form of Leigh Syndrome. *Mol Genet Metab.* 2018. PMID: 29602698
- 104.** Waisbren SE, Cuthbertson D, Burgard P, Holbert A, McCarter R, Cederbaum S. Biochemical markers and neuropsychological functioning in distal urea cycle disorders. *J Inherit Metab Dis.* 2018. PMID: 29423830
- 105.** Larson AA, Balasubramaniam S, Christodoulou J, et al. Biochemical signatures mimicking multiple carboxylase deficiency in children with mutations in MT-ATP6. *Mitochondrion.* 2019;44:58-64. PMID: 29307858

Vasculitis Clinical Research Consortium

Book Chapters

1. Mahr A, Merkel PA. Vasculitis. In: Creager MA, ed. *Atlas of vascular disease*. 3rd ed. Philadelphia, PA: Current Medicine Group/Springer; 2008.
2. Rodriguez-Pla A. Polyarteritis nodosa and other necrotizing systemic vasculitis. In: Gómez-Reino ea, ed. *Handbook of the Spanish Society of Rheumatology*. 5th ed: Editorial Médica Panamericana, S.A.; 2008.
3. Silva F, Lynch J, Fishbein M, Specks U. Wegener's granulomatosis. In: Lynch JP, ed. *Interstitial Pulmonary and Bronchiolar Disorders*. Vol 227. New York, NY: Informa healthcare; 2008.
4. Pujol R, Jaraquemada D, Rodriguez-Pla A. Tolerancia y Enfermedades Autoinmunitarias (Chapter 5:Tolerance and Autoimmune Disorders). In: Rozman C, ed. *Tratado de Medicina Interna Farreras-Rozman (Internal Medicine Textbook Farreras-Rozman)*. XVII ed. Spain: Editorial Elsevier; 2012.

Abstracts Presented at Conferences

1. Kumpers P, Monach PA, Cuthbertson D, Carette S, Hoffman GS, Khalidi N, Langford L, Seo P, Specks U, Yitterberg S, Haubitz M, Merkel PA. Angiopoietin-2 as a Biomarker in ANCA-Associated Vasculitis. Paper presented at: 14th International Vasculitis and ANCA Workshop. 2009; Lund, Sweden.
2. Clowse M, Richesson R, Pieper C, Merkel PA, Consortium VCR. Pregnancy in Men and Women with Vasculitis. Paper presented at: American College of Rheumatology Annual Scientific Meeting; November 5-9, 2011; Chicago, IL.
3. Clowse M, Richesson R, Pieper C, Merkel PA, Consortium VCR. Infertility Among Patients with Vasculitis. Paper presented at: American College of Rheumatology Annual Meeting; November 5-9, 2011; Chicago, IL.

4. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shereff D, Richesson R, Fraenkel L, Merkel PA. Illness perceptions among patients with different forms of vasculitis. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.
5. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shereff D, Richesson R, Fraenkel L, Merkel PA. Assessing fatigue in systemic vasculitis from the patient's perspective. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.
6. Grayson PC, Amudala NA, McAlear C, LeDuc RL, Shereff D, Richesson R, Fraenkel L, Merkel PA. Causal beliefs of disease among patients with systemic vasculitis. Paper presented at: American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting; November 10-14, 2012; Washington, DC.

Journal Articles

1. Rodriguez-Pla A, Bosch-Gil JA, Rossello-Urgell J, Huguet-Redecilla P, Stone JH, Vilardell-Tarres M. Metalloproteinase-2 and -9 in giant cell arteritis: involvement in vascular remodeling. *Circulation*. Jul 12 2005;112(2):264-269. PMID: 15998676
2. Merkel PA, Seo P, Aries P, Neogi T, Villa-Forte A, Boers M, Cuthbertson D, Felson DT, Hellmich B, Hoffman GS, Jayne DR, Kallenberg CG, Krischer J, Mahr A, Matteson EL, Specks U, Luqmani R, Stone J. Current status of outcome measures in vasculitis: focus on Wegener's granulomatosis and microscopic polyangiitis. Report from OMERACT 7. *J. Rheumatol.* Dec 2005;32(12):2488-2495. PMID: 16331794
3. Koenig CL, Langford CA. Novel therapeutic strategies for large vessel vasculitis. *Rheum. Dis. Clin. North Am.* Feb 2006;32(1):173-186, xi. PMID: 16504829
4. Rodriguez-Pla A, Stone JH. Vasculitis and systemic infections. *Curr. Opin. Rheumatol.* Jan 2006;18(1):39-47. PMID: 16344618
5. Mahr AD, Neogi T, Merkel PA. Epidemiology of Wegener's granulomatosis: Lessons from descriptive studies and analyses of genetic and environmental risk determinants. *Clin. Exp. Rheumatol.* Mar-Apr 2006;24(2 Suppl 41):S82-91. PMID: 16859601
6. Richesson RL, Andrews JE, Krischer JP. Use of SNOMED CT to represent clinical research data: a semantic characterization of data items on case report forms in vasculitis research. *J. Am. Med. Inform. Assoc.* Sep-Oct 2006;13(5):536-546. PMID: 16799121, PMCID: PMC1561787
7. Silva F, Hummel AM, Fass DN, Specks U. Development and Characterization of a Monoclonal Antibody (MCPR3-7) Against the Pro-form of Proteinase 3. *Clin. Exp. Rheumatol.* 2007;25.
8. Rodriguez-Pla A, Rossello-Urgell J, Bosch-Gil JA, Huguet-Redecilla P, Vilardell-Tarres M. Proposal to decrease the number of negative temporal artery biopsies. *Scand. J. Rheumatol.* Mar-Apr 2007;36(2):111-118. PMID: 17476617
9. Sebastian JK, Mahr AD, Ahmed SS, Stone JH, Romay-Penabad Z, Davis JC, Hoffman GS, McCune WJ, St Clair EW, Specks U, Spiera R, Pierangeli S, Merkel PA. Antiendothelial cell antibodies in patients with Wegener's granulomatosis: prevalence and correlation with disease activity and manifestations. *J. Rheumatol.* May 2007;34(5):1027-1031. PMID: 17444585
10. Hellmich B, Flossmann O, Gross WL, Bacon P, Cohen-Tervaert JW, Guillemin L, Jayne D, Mahr A, Merkel PA, Raspe H, Scott DG, Witter J, Yazici H, Luqmani RA. EULAR recommendations for

conducting clinical studies and/or clinical trials in systemic vasculitis: focus on anti-neutrophil cytoplasm antibody-associated vasculitis. *Ann. Rheum. Dis.* May 2007;66(5):605-617. PMID: 17170053, PMCID: PMC2703775

11. Seo P, Luqmani RA, Flossmann O, Hellmich B, Herlyn K, Hoffman GS, Jayne D, Kallenberg CG, Langford CA, Mahr A, Matteson EL, Mukhtyar CB, Neogi T, Rutgers A, Specks U, Stone JH, Ytterberg SR, Merkel PA. The future of damage assessment in vasculitis. *J. Rheumatol.* Jun 2007;34(6):1357-1371. PMID: 17552062
12. Mahr AD, Jover JA, Spiera RF, Hernandez-Garcia C, Fernandez-Gutierrez B, Lavalley MP, Merkel PA. Adjunctive methotrexate for treatment of giant cell arteritis: an individual patient data meta-analysis. *Arthritis Rheum.* Aug 2007;56(8):2789-2797. PMID: 17665429
13. Hernandez-Rodriguez J, Tan CD, Molloy ES, Khasnis A, Rodriguez ER, Hoffman GS. Vasculitis involving the breast: a clinical and histopathologic analysis of 34 patients. *Medicine (Baltimore)*. Mar 2008;87(2):61-69. PMID: 18344804
14. Koenig CL, Langford CA. Takayasu's arteritis. *Curr. Treat. Options Cardiovasc. Med.* Apr 2008;10(2):164-172. PMID: 18325319
15. Rodriguez-Pla A, Beaty TH, Savino PJ, Eagle RC, Jr., Seo P, Soloski MJ. Association of a nonsynonymous single-nucleotide polymorphism of matrix metalloproteinase 9 with giant cell arteritis. *Arthritis Rheum.* Jun 2008;58(6):1849-1853. PMID: 18512818
16. Mahr AD, Neogi T, Lavalley MP, Davis JC, Hoffman GS, McCune WJ, Specks U, Spiera RF, St Clair EW, Stone JH, Merkel PA. Assessment of the item selection and weighting in the Birmingham vasculitis activity score for Wegener's granulomatosis. *Arthritis Rheum.* Jun 15 2008;59(6):884-891. PMID: 18512722, PMCID: PMC3645860
17. Hauser T, Mahr A, Metzler C, Coste J, Sommerstein R, Gross WL, Guillemin L, Hellmich B. The leucotriene receptor antagonist montelukast and the risk of Churg-Strauss syndrome: a case-crossover study. *Thorax*. Aug 2008;63(8):677-682. PMID: 18276721
18. Koenig CL, Mu HH, Van Schelt A, Lo E, Ward DM, Kaplan J, De Domenico I. Hepcidin is elevated in mice injected with Mycoplasma arthritidis. *Journal of Inflammation (London, England)*. 2009;6:33. PMID: 19930711, PMCID: PMC2791099
19. Khasnis A, Molloy ES. Mimics of primary systemic vasculitides. *International Journal of Clinical Rheumatology*. 2009;4(5).
20. Merkel PA, Cuthbertson DD, Hellmich B, Hoffman GS, Jayne DR, Kallenberg CG, Krischer JP, Luqmani R, Mahr AD, Matteson EL, Specks U, Stone JH. Comparison of disease activity measures for anti-neutrophil cytoplasmic autoantibody (ANCA)-associated vasculitis. *Ann. Rheum. Dis.* Jan 2009;68(1):103-106. PMID: 18664546, PMCID: PMC3139244
21. Koenig CL, Hernandez-Rodriguez J, Molloy ES, Clark TM, Hoffman GS. Limited utility of rapamycin in severe, refractory Wegener's granulomatosis. *J. Rheumatol.* Jan 2009;36(1):116-119. PMID: 19012360
22. Tomasson G, Monach PA, Merkel PA. Thromboembolic disease in vasculitis. *Curr. Opin. Rheumatol.* Jan 2009;21(1):41-46. PMID: 19077717, PMCID: PMC3204384
23. Mukhtyar C, Guillemin L, Cid MC, Dasgupta B, de Groot K, Gross W, Hauser T, Hellmich B, Jayne D, Kallenberg CG, Merkel PA, Raspe H, Salvarani C, Scott DG, Stegeman C, Watts R, Westman K,

- Witter J, Yazici H, Luqmani R. EULAR recommendations for the management of primary small and medium vessel vasculitis. *Ann. Rheum. Dis.* Mar 2009;68(3):310-317. PMID: 18413444
- 24.** Khasnis A, Langford CA. Update on vasculitis. *J. Allergy Clin. Immunol.* Jun 2009;123(6):1226-1236. PMID: 19501230
- 25.** Seo P, Jayne D, Luqmani R, Merkel PA. Assessment of damage in vasculitis: expert ratings of damage. *Rheumatology (Oxford)*. Jul 2009;48(7):823-827. PMID: 19454608, PMCID: PMC2722812
- 26.** Silva F, Specks U, Sethi S, Irazabal MV, Fervenza FC. Successful pregnancy and delivery of a healthy newborn despite transplacental transfer of antimyeloperoxidase antibodies from a mother with microscopic polyangiitis. *Am. J. Kidney Dis.* Sep 2009;54(3):542-545. PMID: 19395136
- 27.** Merkel PA, Herlyn K, Mahr AD, Neogi T, Seo P, Walsh M, Boers M, Luqmani R. Progress towards a core set of outcome measures in small-vessel vasculitis. Report from OMERACT 9. *J. Rheumatol.* Oct 2009;36(10):2362-2368. PMID: 19820226, PMCID: PMC3142467
- 28.** Rodriguez-Pla A, Martinez-Murillo F, Savino PJ, Eagle RC, Jr., Seo P, Soloski MJ. MMP-12, a novel matrix metalloproteinase associated with giant cell arteritis. *Rheumatology*. Nov 2009;48(11):1460-1461. PMID: 19736181, PMCID: PMC2782257
- 29.** Pagnoux C, Seror R, Henegar C, et al. Clinical features and outcomes in 348 patients with polyarteritis nodosa: a systematic retrospective study of patients diagnosed between 1963 and 2005 and entered into the French Vasculitis Study Group Database. *Arthritis Rheum.* Feb 2010;62(2):616-626. PMID: 20112401
- 30.** Koenig CL, Gota CE, Langford CA, Hoffman GS, Natowicz MR. Serum chitotriosidase activity and Wegener's granulomatosis. *Clin. Biochem.* Mar 2010;43(4-5):512-514. PMID: 19958755
- 31.** Silva F, Specks U, Kalra S, Hogan MC, Leung N, Sethi S, Fervenza FC. Mycophenolate mofetil for induction and maintenance of remission in microscopic polyangiitis with mild to moderate renal involvement--a prospective, open-label pilot trial. *Clin. J. Am. Soc. Nephrol.* Mar 2010;5(3):445-453. PMID: 20093349, PMCID: PMC2827580
- 32.** Pagnoux C, Dechartres A, Giraudeau B, Seror R, Guillemin L, Ravaud P. Reporting of corticosteroid use in systemic disease trials: evidence from a systematic review of the potential impact on treatment effect. *Arthritis Care Res (Hoboken)*. Jul 2010;62(7):1002-1008. PMID: 20589700
- 33.** Walsh M, Merkel PA, Mahr A, Jayne D. Effects of duration of glucocorticoid therapy on relapse rate in antineutrophil cytoplasmic antibody-associated vasculitis: A meta-analysis. *Arthritis Care Res (Hoboken)*. Aug 2010;62(8):1166-1173. PMID: 20235186, PMCID: PMC2946200
- 34.** Khasnis AA, Calabrese LH. Tumor necrosis factor inhibitors and lung disease: a paradox of efficacy and risk. *Semin. Arthritis Rheum.* Oct 2010;40(2):147-163. PMID: 19914686
- 35.** Herlyn K, Hellmich B, Seo P, Merkel PA. Patient-reported outcome assessment in vasculitis may provide important data and a unique perspective. *Arthritis Care Res (Hoboken)*. Nov 2010;62(11):1639-1645. PMID: 20556814, PMCID: PMC3123033
- 36.** Dion J, Bachmeyer C, Moguelet P, Lescure FX, Pagnoux C. Livedo reticularis and erythematous macules of the forearms indicating cutaneous microscopic polyangiitis. *Am. J. Med.* Nov 2010;123(11):e5-6. PMID: 21035582

- 37.** Pierrot-Deseilligny Despujol C, Pouchot J, Pagnoux C, Coste J, Guillevin L. Predictors at diagnosis of a first Wegener's granulomatosis relapse after obtaining complete remission. *Rheumatology*. Nov 2010;49(11):2181-2190. PMID: 20675708
- 38.** Mahr AD, Edberg JC, Stone JH, Hoffman GS, St Clair EW, Specks U, Dellaripa PF, Seo P, Spiera RF, Rouhani FN, Brantly ML, Merkel PA. Alpha(1)-antitrypsin deficiency-related alleles Z and S and the risk of Wegener's granulomatosis. *Arthritis Rheum*. Dec 2010;62(12):3760-3767. PMID: 20827781, PMCID: PMC3123032
- 39.** Seror R, Pagnoux C, Ruivard M, Landru I, Wahl D, Riviere S, Aussant S, Mahr A, Cohen P, Mounthon L, Guillevin L. Treatment strategies and outcome of induction-refractory Wegener's granulomatosis or microscopic polyangiitis: analysis of 32 patients with first-line induction-refractory disease in the WEGENT trial. *Ann. Rheum. Dis.* Dec 2010;69(12):2125-2130. PMID: 20643762
- 40.** Silva F, Hummel AM, Jenne DE, Specks U. Discrimination and variable impact of ANCA binding to different surface epitopes on proteinase 3, the Wegener's autoantigen. *J. Autoimmun*. Dec 2010;35(4):299-308. PMID: 20810247, PMCID: PMC2963671
- 41.** Suppiah R, Flossman O, Mukhtyar C, Alberici F, Baslund B, Brown D, Hasan N, Holle J, Hruskova Z, Jayne D, Judge A, Little MA, Merkel PA, Palmisano A, Seo P, Stegeman C, Tesar V, Vaglio A, Westman K, Luqmani R. Measurement of damage in systemic vasculitis: a comparison of the Vasculitis Damage Index with the Combined Damage Assessment Index. *Ann. Rheum. Dis.* Jan 2011;70(1):80-85. PMID: 20736392, PMCID: PMC4982462
- 42.** Barreto P, Pagnoux C, Luca L, Aouizerate J, Ortigueira I, Cohen P, Muller G, Guillevin L. Dorsal prevertebral lesions in Wegener granulomatosis: report on four cases. *Joint Bone Spine*. Jan 2011;78(1):88-91. PMID: 20851656
- 43.** Guillevin L, Pagnoux C, Seror R, Mahr A, Mounthon L, Le Toumelin P. The Five-Factor Score revisited: assessment of prognoses of systemic necrotizing vasculitides based on the French Vasculitis Study Group (FVSG) cohort. *Medicine (Baltimore)*. Jan 2011;90(1):19-27. PMID: 21200183
- 44.** Kermani TA, Warrington KJ. Lower extremity vasculitis in polymyalgia rheumatica and giant cell arteritis. *Curr. Opin. Rheumatol*. Jan 2011;23(1):38-42. PMID: 21037479, PMCID: PMC3085840
- 45.** de Menthon M, Cohen P, Pagnoux C, et al. Infliximab or rituximab for refractory Wegener's granulomatosis: long-term follow up. A prospective randomised multicentre study on 17 patients. *Clin. Exp. Rheumatol*. Jan-Feb 2011;29(1 Suppl 64):S63-71. PMID: 21586199
- 46.** Direskeneli H, Aydin SZ, Merkel PA. Assessment of disease activity and progression in Takayasu's arteritis. *Clin. Exp. Rheumatol*. Jan-Feb 2011;29(1 Suppl 64):S86-91. PMID: 21586201, PMCID: PMC3645853
- 47.** Kermani TA, Warrington KJ, Amin S. Malignancy risk in vasculitis. *Therapeutic Advances in Musculoskeletal Disease*. February 1, 2011 2011;3(1):55-63. PMID: 22870466, PMCID: PMC3383535
- 48.** Pagnoux C, Stubbe M, Lifermann F, Decaux O, Pavic M, Berezne A, Delacroix-Szmania I, Meaux-Ruault N, Bienvenu B, Cabane J, Guillevin L. Wegener's granulomatosis strictly and persistently localized to one organ is rare: assessment of 16 patients from the French Vasculitis Study Group database. *J. Rheumatol*. Mar 2011;38(3):475-478. PMID: 21123319

- 49.** Suppiah R, Judge A, Batra R, Flossmann O, Harper L, Hoglund P, Javaid MK, Jayne D, Mukhtyar C, Westman K, Davis JC, Jr., Hoffman GS, McCune WJ, Merkel PA, St Clair EW, Seo P, Spiera R, Stone JH, Luqmani R. A model to predict cardiovascular events in patients with newly diagnosed Wegener's granulomatosis and microscopic polyangiitis. *Arthritis Care Res (Hoboken)*. Apr 2011;63(4):588-596. PMID: 21452269, PMCID: PMC4511092
- 50.** Walsh M, Catapano F, Szpirer W, Thorlund K, Bruchfeld A, Guillevin L, Haubitz M, Merkel PA, Peh CA, Pusey C, Jayne D. Plasma exchange for renal vasculitis and idiopathic rapidly progressive glomerulonephritis: a meta-analysis. *Am. J. Kidney Dis.* Apr 2011;57(4):566-574. PMID: 21194817, PMCID: PMC3062650
- 51.** Kermani TA, Crowson CS, Achenbach SJ, Luthra HS. Idiopathic retroperitoneal fibrosis: a retrospective review of clinical presentation, treatment, and outcomes. *Mayo Clin. Proc.* Apr 2011;86(4):297-303. PMID: 21454732, PMCID: PMC3068889
- 52.** Le Guenno G, Mahr A, Pagnoux C, Dhote R, Guillevin L. Incidence and predictors of urotoxic adverse events in cyclophosphamide-treated patients with systemic necrotizing vasculitides. *Arthritis Rheum.* May 2011;63(5):1435-1445. PMID: 21337321
- 53.** Luqmani RA, Suppiah R, Grayson PC, Merkel PA, Watts R. Nomenclature and classification of vasculitis - update on the ACR/EULAR diagnosis and classification of vasculitis study (DCVAS). *Clin. Exp. Immunol.* May 2011;164 Suppl 1:11-13. PMID: 21447123, PMCID: PMC3095857
- 54.** Kermani TA, Ytterberg SR, Warrington KJ. Pneumocystis jiroveci pneumonia in giant cell arteritis: A case series. *Arthritis Care Res (Hoboken)*. May 2011;63(5):761-765. PMID: 21240966, PMCID: PMC3091984
- 55.** Pagnoux C, Thorne C, Mandelcorn ED, Carette S. CNS involvement in acute posterior multifocal placoid pigment epitheliopathy. *Can. J. Neurol. Sci.* May 2011;38(3):526-528. PMID: 21515519
- 56.** Pagnoux C, Le Guern V, Goffinet F, Diot E, Limal N, Pannier E, Warzocha U, Tsatsaris V, Dhote R, Karras A, Cohen P, Damade R, Mouthon L, Guillevin L. Pregnancies in systemic necrotizing vasculitides: report on 12 women and their 20 pregnancies. *Rheumatology*. May 2011;50(5):953-961. PMID: 21183452
- 57.** Cao Y, Schmitz JL, Yang J, Hogan SL, Bunch D, Hu Y, Jennette CE, Berg EA, Arnett FC, Jr., Jennette JC, Falk RJ, Preston GA. DRB1*15 allele is a risk factor for PR3-ANCA disease in African Americans. *J. Am. Soc. Nephrol.* Jun 2011;22(6):1161-1167. PMID: 21617122, PMCID: PMC3103736
- 58.** Dunogue B, Pagnoux C, Guillevin L. Churg-strauss syndrome: clinical symptoms, complementary investigations, prognosis and outcome, and treatment. *Semin. Respir. Crit. Care Med.* Jun 2011;32(3):298-309. PMID: 21674415
- 59.** Guilpain P, Chereau C, Goulvestre C, et al. The oxidation induced by antimyeloperoxidase antibodies triggers fibrosis in microscopic polyangiitis. *Eur. Respir. J.* Jun 2011;37(6):1503-1513. PMID: 21071471
- 60.** Marchand-Janssen C, Loulergue P, Mouthon L, et al. Patients with systemic inflammatory and autoimmune diseases are at risk of vaccine-preventable illnesses. *Rheumatology*. Jun 2011;50(6):1099-1105. PMID: 21258052

- 61.** Tomasson G, Lavalley M, Tanriverdi K, et al. Relationship between markers of platelet activation and inflammation with disease activity in Wegener's granulomatosis. *J. Rheumatol.* Jun 2011;38(6):1048-1054. PMID: 21411717, PMCID: PMC3653633
- 62.** Walsh M, Mukhtyar C, Mahr A, Herlyn K, Luqmani R, Merkel PA, Jayne DR. Health-related quality of life in patients with newly diagnosed antineutrophil cytoplasmic antibody-associated vasculitis. *Arthritis Care Res (Hoboken)*. Jul 2011;63(7):1055-1061. PMID: 21452254, PMCID: PMC3128179
- 63.** Direskeneli H, Aydin SZ, Kermani TA, Matteson EL, Boers M, Herlyn K, Luqmani RA, Neogi T, Seo P, Suppiah R, Tomasson G, Merkel PA. Development of outcome measures for large-vessel vasculitis for use in clinical trials: opportunities, challenges, and research agenda. *J. Rheumatol.* Jul 2011;38(7):1471-1479. PMID: 21724719, PMCID: PMC3653638
- 64.** Espy C, Morelle W, Kavian N, et al. Sialylation levels of anti-proteinase 3 antibodies are associated with the activity of granulomatosis with polyangiitis (Wegener's). *Arthritis Rheum.* Jul 2011;63(7):2105-2115. PMID: 21437874
- 65.** Merkel PA, Aydin SZ, Boers M, Direskeneli H, Herlyn K, Seo P, Suppiah R, Tomasson G, Luqmani RA. The OMERACT core set of outcome measures for use in clinical trials of ANCA-associated vasculitis. *J. Rheumatol.* Jul 2011;38(7):1480-1486. PMID: 21724720, PMCID: PMC3645858
- 66.** Silva F, Seo P, Schroeder DR, Stone JH, Merkel PA, Hoffman GS, Spiera R, Sebastian JK, Davis JC, Jr., St Clair EW, Allen NB, McCune WJ, Ytterberg SR, Specks U. Solid malignancies among etanercept-treated patients with granulomatosis with polyangiitis (Wegener's): long-term followup of a multicenter longitudinal cohort. *Arthritis Rheum.* Aug 2011;63(8):2495-2503. PMID: 21484770, PMCID: PMC3149780
- 67.** Khasnis AA, Schoen RT, Calabrese LH. Emerging viral infections in rheumatic diseases. *Semin. Arthritis Rheum.* Oct 2011;41(2):236-246. PMID: 21440932
- 68.** Pagnoux C, Berezne A, Damade R, Paillot J, Aouizerate J, Le Guern V, Salmon D, Guillemin L. Encrusting cystitis due to *Corynebacterium urealyticum* in a patient with ANCA-associated vasculitis: case report and review of the literature. *Semin. Arthritis Rheum.* Oct 2011;41(2):297-300. PMID: 21277617
- 69.** Grayson PC, Sloan JM, Niles JL, Monach PA, Merkel PA. Antineutrophil cytoplasmic antibodies, autoimmune neutropenia, and vasculitis. *Semin. Arthritis Rheum.* Dec 2011;41(3):424-433. PMID: 21507463, PMCID: PMC3163109
- 70.** Monach PA, Tomasson G, Specks U, Stone JH, Cuthbertson D, Krischer J, Ding L, Fervenza FC, Fessler BJ, Hoffman GS, Ikle D, Kallenberg CG, Langford CA, Mueller M, Seo P, St Clair EW, Spiera R, Tchao N, Ytterberg SR, Gu YZ, Snyder RD, Merkel PA. Circulating markers of vascular injury and angiogenesis in antineutrophil cytoplasmic antibody-associated vasculitis. *Arthritis Rheum.* Dec 2011;63(12):3988-3997. PMID: 21953143, PMCID: PMC3227746
- 71.** Neel A, Masseau A, Hervier B, Bossard C, Cacoub P, Pagnoux C, Hamidou MA. Life-threatening hepatitis C virus-associated polyarteritis nodosa successfully treated by rituximab. *J. Clin. Rheumatol.* Dec 2011;17(8):439-441. PMID: 22089995
- 72.** Kelley JM, Monach PA, Ji C, Zhou Y, Wu J, Tanaka S, Mahr AD, Johnson S, McAlear C, Cuthbertson D, Carette S, Davis JC, Jr., Dellaripa PF, Hoffman GS, Khalidi N, Langford CA, Seo P, St Clair EW, Specks U, Stone JH, Spiera RF, Ytterberg SR, Merkel PA, Edberg JC, Kimberly RP. IgA

- and IgG antineutrophil cytoplasmic antibody engagement of Fc receptor genetic variants influences granulomatosis with polyangiitis. *Proc. Natl. Acad. Sci. U. S. A.* Dec 20 2011;108(51):20736-20741. PMID: 22147912, PMCID: PMC3251158
73. Monach PA, Kumpers P, Lukasz A, Tomasson G, Specks U, Stone JH, Cuthbertson D, Krischer J, Carette S, Ding L, Hoffman GS, Ikle D, Kallenberg CG, Khalidi NA, Langford CA, Seo P, St Clair EW, Spiera R, Tchao N, Ytterberg SR, Haubitz M, Merkel PA. Circulating angiopoietin-2 as a biomarker in ANCA-associated vasculitis. *PLoS ONE.* 2012;7(1):e30197. PMID: 22279570, PMCID: PMC3261176
74. Pagnoux C, Wolter NE. Vasculitis of the upper airways. *Swiss Med. Wkly.* 2012;142:w13541. PMID: 22430874
75. Roubaud-Baudron C, Pagnoux C, Meaux-Ruault N, Grasland A, Zoulim A, J LEG, Prud'homme A, Bienvenu B, de Menthon M, Camps S, V LEG, Aouba A, Cohen P, Mouthon L, Guillemin L. Rituximab maintenance therapy for granulomatosis with polyangiitis and microscopic polyangiitis. *J. Rheumatol.* Jan 2012;39(1):125-130. PMID: 22089465
76. Tomasson G, Grayson PC, Mahr AD, Lavallee M, Merkel PA. Value of ANCA measurements during remission to predict a relapse of ANCA-associated vasculitis--a meta-analysis. *Rheumatology.* Jan 2012;51(1):100-109. PMID: 22039267, PMCID: PMC3276294
77. Kostianovsky A, Charles P, Alves JF, et al. Immunogenicity and safety of seasonal and 2009 pandemic A/H1N1 influenza vaccines for patients with autoimmune diseases: a prospective, monocentre trial on 199 patients. *Clin. Exp. Rheumatol.* Jan-Feb 2012;30(1 Suppl 70):S83-89. PMID: 22640652
78. Kostianovsky A, Hauser T, Pagnoux C, et al. Alveolar haemorrhage in ANCA-associated vasculitides: 80 patients' features and prognostic factors. *Clin. Exp. Rheumatol.* Jan-Feb 2012;30(1 Suppl 70):S77-82. PMID: 22640651
79. Tomasson G, Boers M, Walsh M, LaValley M, Cuthbertson D, Carette S, Davis JC, Hoffman GS, Khalidi NA, Langford CA, McAlear CA, McCune WJ, Monach PA, Seo P, Specks U, Spiera R, St Clair EW, Stone JH, Ytterberg SR, Merkel PA. Assessment of health-related quality of life as an outcome measure in granulomatosis with polyangiitis (Wegener's). *Arthritis Care Res (Hoboken).* Feb 2012;64(2):273-279. PMID: 21954229, PMCID: PMC3250569
80. Grayson PC, Tomasson G, Cuthbertson D, Carette S, Hoffman GS, Khalidi NA, Langford CA, McAlear CA, Monach PA, Seo P, Warrington KJ, Ytterberg SR, Merkel PA. Association of vascular physical examination findings and arteriographic lesions in large vessel vasculitis. *J. Rheumatol.* Feb 2012;39(2):303-309. PMID: 22174204, PMCID: PMC3729730
81. Dufour JF, Le Gallou T, Cordier JF, et al. Urogenital manifestations in Wegener granulomatosis: a study of 11 cases and review of the literature. *Medicine (Baltimore).* Mar 2012;91(2):67-74. PMID: 22391468.
82. Hernandez-Rodriguez J, Tan CD, Koening CL, Khasnis A, Rodriguez ER, Hoffman GS. Testicular vasculitis: findings differentiating isolated disease from systemic disease in 72 patients. *Medicine (Baltimore).* Mar 2012;91(2):75-85. PMID: 22391469
83. Shahane A, Khasnis A, Hajj Ali R. Three unusual mimics of primary angiitis of the central nervous system. *Rheumatol. Int.* Mar 2012;32(3):737-742. PMID: 21161532

- 84.** Kermani TA, Warrington KJ. Recent advances in diagnostic strategies for giant cell arteritis. *Curr. Neurol. Neurosci. Rep.* Apr 2012;12(2):138-144. PMID: 22205235
- 85.** Neel A, Auffray-Calvier E, Guillou B, et al. Challenging the diagnosis of primary angiitis of the central nervous system: a single-center retrospective study. *J. Rheumatol.* May 2012;39(5):1026-1034. PMID: 22467936
- 86.** Kermani TA, Schmidt J, Crowson CS, Ytterberg SR, Hunder GG, Matteson EL, Warrington KJ. Utility of erythrocyte sedimentation rate and C-reactive protein for the diagnosis of giant cell arteritis. *Semin. Arthritis Rheum.* Jun 2012;41(6):866-871. PMID: 22119103, PMCID: PMC3307891
- 87.** Neel A, Pagnoux C, Guillemin L, Hamidou M. [Central nervous system vasculitides: an update]. *Rev. Med. Interne.* Jul 2012;33(7):381-389. PMID: 22683146
- 88.** Richesson RL, Sutphen R, Shereff D, Krischer JP. The Rare Diseases Clinical Research Network Contact Registry update: features and functionality. *Contemp. Clin. Trials.* Jul 2012;33(4):647-656. PMID: 22405970, PMCID: PMC3652679
- 89.** Grayson PC, Maksimowicz-McKinnon K, Clark TM, Tomasson G, Cuthbertson D, Carette S, Khalidi NA, Langford CA, Monach PA, Seo P, Warrington KJ, Ytterberg SR, Hoffman GS, Merkel PA. Distribution of arterial lesions in Takayasu's arteritis and giant cell arteritis. *Ann. Rheum. Dis.* Aug 2012;71(8):1329-1334. PMID: 22328740, PMCID: PMC3729734
- 90.** Chemouny JM, Pagnoux C, Caudwell V, et al. ANCA-associated diseases and lung carcinomas: a five-case series. *Clin. Nephrol.* Sep 4 2012. PMID: 22948118
- 91.** Chung SA, Xie G, Rosenthal D, et al. Meta-analysis of genetic polymorphisms in granulomatosis with polyangiitis (Wegener's) reveals shared susceptibility loci with rheumatoid arthritis. *Arthritis Rheum.* Oct 2012;64(10):3463-3471. PMID: 22508400, PMCID: PMC3425721
- 92.** Kermani TA, Ham EK, Camilleri MJ, Warrington KJ. Polyarteritis nodosa-like vasculitis in association with minocycline use: a single-center case series. *Semin. Arthritis Rheum.* Oct 2012;42(2):213-221. PMID: 22704357
- 93.** Cartin-Ceba R, Peikert T, Specks U. Pathogenesis of ANCA-associated vasculitis. *Curr. Rheumatol. Rep.* Dec 2012;14(6):481-493. PMID: 22927039
- 94.** Walsh M, Merkel PA, Peh CA, Szpirer W, Guillemin L, Pusey CD, Dezoysa J, Ives N, Clark WF, Quillen K, Winters JL, Wheatley K, Jayne D. Plasma exchange and glucocorticoid dosing in the treatment of anti-neutrophil cytoplasm antibody associated vasculitis (PEXIVAS): protocol for a randomized controlled trial. *Trials.* 2013;14:73. PMID: 23497590, PMCID: PMC3607855
- 95.** Comarmond C, Pagnoux C, Khellaf M, et al. Eosinophilic granulomatosis with polyangiitis (Churg-Strauss): clinical characteristics and long-term followup of the 383 patients enrolled in the French Vasculitis Study Group cohort. *Arthritis Rheum.* Jan 2013;65(1):270-281. PMID: 23044708
- 96.** Kermani TA, Warrington KJ. Polymyalgia rheumatica. *Lancet.* Jan 5 2013;381(9860):63-72. PMID: 23051717
- 97.** Pugnet G, Pagnoux C, Bezanahary H, Ly KH, Vidal E, Guillemin L. Progressive multifocal encephalopathy after cyclophosphamide in granulomatosis with polyangiitis (Wegener) patients: case report and review of literature. *Clin. Exp. Rheumatol.* Jan-Feb 2013;31(1 Suppl 75):S62-64. PMID: 23663683

- 98.** Pagnoux C, Mahendira D, Laskin CA. Fertility and pregnancy in vasculitis. *Best Pract. Res. Clin. Rheumatol.* Feb 2013;27(1):79-94. PMID: 23507059
- 99.** Pagnoux C, Saadoun D. Virus-Associated Vasculitides: An Update. *Current Immunology Reviews.* February 2013;9(1):2-12.
- 100.** Tomasson G. Quality of life and outcome measures in vasculitis. *Best Pract. Res. Clin. Rheumatol.* Feb 2013;27(1):69-77. PMID: 23507058
- 101.** Terrier B, Carrat F, Krastinova E, et al. Prognostic factors of survival in patients with non-infectious mixed cryoglobulinaemia vasculitis: data from 242 cases included in the CryoVas survey. *Ann. Rheum. Dis.* Mar 2013;72(3):374-380. PMID: 22586172
- 102.** Marmursztein J, Guillemin L, Trebossen R, et al. Churg-Strauss syndrome cardiac involvement evaluated by cardiac magnetic resonance imaging and positron-emission tomography: a prospective study on 20 patients. *Rheumatology.* Apr 2013;52(4):642-650. PMID: 22772324
- 103.** Pagnoux C, de Boysson H. L38. How to treat primary vasculitis of the central nervous system. *Presse Med.* Apr 2013;42(4 Pt 2):605-607. PMID: 23465297
- 104.** Rothschild PR, Pagnoux C, Seror R, Brezin AP, Delair E, Guillemin L. Ophthalmologic manifestations of systemic necrotizing vasculitides at diagnosis: a retrospective study of 1286 patients and review of the literature. *Semin. Arthritis Rheum.* Apr 2013;42(5):507-514. PMID: 23270762
- 105.** Lieberthal JG, Cuthbertson D, Carette S, et al. urinary biomarkers in relapsing antineutrophil cytoplasmic antibody-associated vasculitis. *J. Rheumatol.* May 2013;40(5):674-683. PMID: 23547217, PMCID: PMC4505819
- 106.** McGeoch L, Silecky WB, Maher J, Carette S, Pagnoux C. Temporal arteritis in the young. *Joint Bone Spine.* May 2013;80(3):324-327. PMID: 23142255
- 107.** Mahr A, Katsahian S, Varet H, et al. Revisiting the classification of clinical phenotypes of anti-neutrophil cytoplasmic antibody-associated vasculitis: a cluster analysis. *Ann. Rheum. Dis.* Jun 2013;72(6):1003-1010. PMID: 22962314
- 108.** Samson M, Puechal X, Devilliers H, et al. Long-term outcomes of 118 patients with eosinophilic granulomatosis with polyangiitis (Churg-Strauss syndrome) enrolled in two prospective trials. *J. Autoimmun.* Jun 2013;43:60-69. PMID: 23590801
- 109.** Grayson PC, Amudala NA, McAlear CA, et al. Illness perceptions and fatigue in systemic vasculitis. *Arthritis Care Res (Hoboken).* Jul 16 2013. PMID: 23861259, PMCID: PMC3962511
- 110.** Clowse ME, Richeson RL, Pieper C, Merkel PA. Pregnancy outcomes among patients with vasculitis. *Arthritis Care Res (Hoboken).* Aug 2013;65(8):1370-1374. PMID: 23401494, PMCID: PMC4366137
- 111.** de Boysson H, Boutemy J, Creveuil C, et al. Is there a place for cyclophosphamide in the treatment of giant-cell arteritis? A case series and systematic review. *Semin. Arthritis Rheum.* Aug 2013;43(1):105-112. PMID: 23453684
- 112.** Monach PA, Warner RL, Tomasson G, et al. Serum proteins reflecting inflammation, injury and repair as biomarkers of disease activity in ANCA-associated vasculitis. *Ann. Rheum. Dis.* Aug 2013;72(8):1342-1350. PMID: 22975753, PMCID: PMC4982463

- 113.** Schmidt J, Kermani TA, Bacani AK, et al. Diagnostic features, treatment, and outcomes of Takayasu arteritis in a US cohort of 126 patients. *Mayo Clin. Proc.* Aug 2013;88(8):822-830. PMID: 23849994
- 114.** Saruhan-Direskeneli G, Hughes T, Aksu K, et al. Identification of multiple genetic susceptibility Loci in takayasu arteritis. *Am. J. Hum. Genet.* Aug 8 2013;93(2):298-305. PMID: 23830517, PMCID: PMC3738826
- 115.** Xie G, Rosenthal D, Sherva R, et al. Association of granulomatosis with polyangiitis (Wegener's) with HLA-DPB1*04 and SEMA6A gene variants: evidence from genome-wide analysis. *Arthritis Rheum.* Sep 2013;65(9):2457-2468. PMID: 23740775, PMCID: PMC4471994
- 116.** Grayson PC, Cuthbertson D, Carette S, et al. New features of disease after diagnosis in 6 forms of systemic vasculitis. *J. Rheumatol.* Nov 2013;40(11):1905-1912. PMID: 23908447, PMCID: PMC4292850
- 117.** Kermani TA, Warrington KJ, Crowson CS, et al. Large-vessel involvement in giant cell arteritis: a population-based cohort study of the incidence-trends and prognosis. *Ann. Rheum. Dis.* Dec 1 2013;72(12):1989-1994. PMID: 23253927, PMCID: PMC4112513
- 118.** Langford CA, Monach PA, Specks U, et al. An open-label trial of abatacept (CTLA4-IG) in non-severe relapsing granulomatosis with polyangiitis (Wegener's). *Ann. Rheum. Dis.* Dec 9 2013. PMID: 24323392, PMCID: PMC4149903
- 119.** Monach PA. Biomarkers in vasculitis. *Curr. Opin. Rheumatol.* Jan 2014;26(1):24-30. PMID: 24257367, PMCID: PMC4015522
- 120.** Hatemi G, Merkel PA, Hamuryudan V, et al. Outcome measures used in clinical trials for Behcet syndrome: a systematic review. *J. Rheumatol.* Mar 2014;41(3):599-612. PMID: 24488418, PMCID: PMC4508275
- 121.** Merkel PA, Aydin SZ, Boers M, et al. Current status of outcome measure development in vasculitis. *J. Rheumatol.* Mar 2014;41(3):593-598. PMID: 24429177, PMCID: PMC4507266
- 122.** Grayson PC, Amudala NA, McAlear CA, et al. Causal Attributions about Disease Onset and Relapse in Patients with Systemic Vasculitis. *J. Rheumatol.* May 2014;41(5):923-930. PMID: 24634202, PMCID: PMC4008683
- 123.** Mooney J, Spalding N, Poland F, et al. The informational needs of patients with ANCA-associated vasculitis-development of an informational needs questionnaire. *Rheumatology.* Aug 2014;53(8):1414-1421. PMID: 24625507, PMCID: PMC4103516
- 124.** Grayson PC, Monach PA, Pagnoux C, et al. Value of commonly measured laboratory tests as biomarkers of disease activity and predictors of relapse in eosinophilic granulomatosis with polyangiitis. *Rheumatology.* Nov 17 2014. PMID: 25406357, PMCID: PMC4502335
- 125.** Aydin SZ, Direskeneli H, Sreih A, et al. Update on Outcome Measure Development for Large Vessel Vasculitis: Report from OMERACT 12. *J. Rheumatol.* 2015;42(12):2465-2469. PMID: 26077399, PMCID: PMC4668221
- 126.** Dejaco C, Oppl B, Monach P, et al. Serum biomarkers in patients with relapsing eosinophilic granulomatosis with polyangiitis (churg-sauss). *PLoS ONE.* 2015;10(3):e0121737. PMID: 25812008, PMCID: PMC4374913

- 127.** Hatemi G, Ozguler Y, Direskeneli H, et al. Current Status, Goals, and Research Agenda for Outcome Measures Development in Behcet Syndrome: Report from OMERACT 2014. *J Rheumatol.* 2015;42(12):2436-2441. PMID: 26373563, PMCID: PMC4940045
- 128.** Milman N, Boonen A, Merkel PA, Tugwell P. Mapping of the outcome measures in rheumatology core set for antineutrophil cytoplasmic antibody-associated vasculitis to the International Classification of Function, Disability and Health. *Arthritis Care Res (Hoboken)*. Feb 2015;67(2):255-263. PMID: 25048363, PMCID: PMC4505813
- 129.** Pagnoux C, Carette S, Khalidi NA, et al. Comparability of patients with ANCA-associated vasculitis enrolled in clinical trials or in observational cohorts. *Clin. Exp. Rheumatol.* Mar-Apr 2015;33(2 Suppl 89):S-77-83. PMID: 26016754, PMCID: PMC4525702
- 130.** Carmona FD, Mackie SL, Martin JE, et al. A Large-Scale Genetic Analysis Reveals a Strong Contribution of the HLA Class II Region to Giant Cell Arteritis Susceptibility. *Am. J. Hum. Genet.* Apr 2 2015;96(4):565-580. PMID: 25817017, PMCID: PMC4385191
- 131.** Renauer PA, Saruhan-Direskeneli G, Coit P, et al. Identification of Susceptibility Loci in IL6, RPS9/LILRB3, and an Intergenic Locus on Chromosome 21q22 in Takayasu Arteritis in a Genome-Wide Association Study. *Arthritis & rheumatology (Hoboken, N.J.)*. May 2015;67(5):1361-1368. PMID: 25604533, PMCID: PMC4414813
- 132.** Kermani TA, Warrington KJ, Cuthbertson D, et al. Disease Relapses among Patients with Giant Cell Arteritis: A Prospective, Longitudinal Cohort Study. *J. Rheumatol.* Jul 2015;42(7):1213-1217. PMID: 25877501, PMCID: PMC4505815
- 133.** McGeoch L, Carette S, Cuthbertson D, et al. Cardiac Involvement in Granulomatosis with Polyangiitis. *J. Rheumatol.* Jul 2015;42(7):1209-1212. PMID: 25934819, PMCID: PMC4505809
- 134.** Robson JC, Milman N, Tomasson G, et al. Exploration, Development, and Validation of Patient-reported Outcomes in Antineutrophil Cytoplasmic Antibody-associated Vasculitis Using the OMERACT Process. *J. Rheumatol.* Sep 1 2015. PMID: 26329344, PMCID: PMC4940036
- 135.** Bingham CO, 3rd, Bartlett SJ, Merkel PA, et al. Using patient-reported outcomes and PROMIS in research and clinical applications: experiences from the PCORI pilot projects. *Qual Life Res.* 2016;25(8):2109-2116. PMID: 26914103, PMCID: PMC4946989
- 136.** Kermani TA, Cuthbertson D, Carette S, et al. The Birmingham Vasculitis Activity Score as a Measure of Disease Activity in Patients with Giant Cell Arteritis. *J Rheumatol.* 2016;43(6):1078-1084. PMID: 27036388, PMCID: PMC4891218
- 137.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis.* 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759
- 138.** Sreih AG, Annepureddy N, Springer J, et al. Development and validation of case-finding algorithms for the identification of patients with anti-neutrophil cytoplasmic antibody-associated vasculitis in large healthcare administrative databases. *Pharmacoepidemiology and drug safety.* 2016;25(12):1368-1374. PMID: 27804171, PMCID: PMC5135635
- 139.** Sy A, Khalidi N, Dehghan N, et al. Vasculitis in patients with inflammatory bowel diseases: A study of 32 patients and systematic review of the literature. *Semin Arthritis Rheum.* 2016;45(4):475-482. PMID: 26315859, PMCID: PMC4982464

- 140.** Tamura RN, Krischer JP, Pagnoux C, et al. A small n sequential multiple assignment randomized trial design for use in rare disease research. *Contemp. Clin. Trials.* Jan 2016;46:48-51. PMID: 26586608, PMCID: PMC4695231
- 141.** Aydin SZ, Direskeneli H, Merkel PA. Assessment of Disease Activity in Large-vessel Vasculitis: Results of an International Delphi Exercise. *J Rheumatol.* 2017. PMID: 28864648
- 142.** Carmona FD, Coit P, Saruhan-Direskeneli G, et al. Analysis of the common genetic component of large-vessel vasculitides through a meta-Immunochip strategy. *Scientific reports.* 2017;7:43953. PMID: 28277489, PMCID: PMC5344032
- 143.** Carmona FD, Vaglio A, Mackie SL, et al. A Genome-wide Association Study Identifies Risk Alleles in Plasminogen and P4HA2 Associated with Giant Cell Arteritis. *Am J Hum Genet.* 2017;100(1):64-74. PMID: 28041642, PMCID: PMC5223025
- 144.** Gopaluni S, Smith RM, Lewin M, et al. Rituximab versus azathioprine as therapy for maintenance of remission for anti-neutrophil cytoplasm antibody-associated vasculitis (RITAZAREM): study protocol for a randomized controlled trial. *Trials.* 2017;18(1):112. PMID: 28270229, PMCID: PMC5341185
- 145.** Hatemi G, Meara A, Ozguler Y, et al. Developing a Core Set of Outcome Measures for Behcet Disease: Report from OMERACT 2016. *J Rheumatol.* 2017. PMID: 28365574
- 146.** Krischer J, Cronholm PF, Burroughs C, et al. Experience With Direct-to-Patient Recruitment for Enrollment Into a Clinical Trial in a Rare Disease: A Web-Based Study. *J Med Internet Res.* 2017;19(2):e50. PMID: 28246067, PMCID: PMC5350442
- 147.** Langford CA, Cuthbertson D, Ytterberg SR, et al. A Randomized, Double-Blind Trial of Abatacept (CTLA-4Ig) for the Treatment of Giant Cell Arteritis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(4):837-845. PMID: 28133925, PMCID: PMC5378642
- 148.** Langford CA, Cuthbertson D, Ytterberg SR, et al. A Randomized, Double-Blind Trial of Abatacept (CTLA-4Ig) for the Treatment of Takayasu Arteritis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(4):846-853. PMID: 28133931, PMCID: PMC5378643
- 149.** Merkel PA, Xie G, Monach PA, et al. Identification of Functional and Expression Polymorphisms Associated With Risk for Antineutrophil Cytoplasmic Autoantibody-Associated Vasculitis. *Arthritis & rheumatology (Hoboken, NJ).* 2017;69(5):1054-1066. PMID: 28029757, PMCID: PMC5434905
- 150.** Oommen E, Hummel A, Allmannsberger L, et al. IgA antibodies to myeloperoxidase in patients with eosinophilic granulomatosis with polyangiitis (Churg-Strauss). *Clin Exp Rheumatol.* 2017;35 Suppl 103(1):98-101. PMID: 28281453, PMCID: PMC5514423
- 151.** Robson JC, Dawson J, Cronholm PF, et al. Patient perceptions of glucocorticoids in anti-neutrophil cytoplasmic antibody-associated vasculitis. *Rheumatol Int.* 2017. PMID: 29124398
- 152.** Robson JC, Tomasson G, Milman N, et al. OMERACT Endorsement of Patient-reported Outcome Instruments in Antineutrophil Cytoplasmic Antibody-associated Vasculitis. *J Rheumatol.* 2017. PMID: 28864650, PMCID: PMC5951181
- 153.** Selewski DT, Thompson A, Kovacs S, et al. Patient-Reported Outcomes in Glomerular Disease. *Clin J Am Soc Nephrol.* 2017;12(1):140-148. PMID: 27259977, PMCID: PMC5220669

- 154.** Sreih AG, Alibaz-Oner F, Kermani TA, et al. Development of a Core Set of Outcome Measures for Large-vessel Vasculitis: Report from OMERACT 2016. *J Rheumatol*. 2017. PMID: 28864646, PMCID: PMC5712274
- 155.** Barra L, Borchin RL, Burroughs C, et al. Impact of vasculitis on employment and income. *Clin Exp Rheumatol*. 2018. PMID: 29352849
- 156.** Conklin LS, Merkel PA, Pachman LM, et al. Serum biomarkers of glucocorticoid response and safety in anti-neutrophil cytoplasmic antibody-associated vasculitis and juvenile dermatomyositis. *Steroids*. 2018;140:159-166. PMID: 30352204
- 157.** Grayson PC, Alehashemi S, Bagheri AA, et al. (18) F-Fluorodeoxyglucose-Positron Emission Tomography As an Imaging Biomarker in a Prospective, Longitudinal Cohort of Patients With Large Vessel Vasculitis. *Arthritis & rheumatology (Hoboken, NJ)*. 2018;70(3):439-449. PMID: 29145713, PMCID: PMC5882488
- 158.** Grayson PC, Eddy S, Taroni JN, et al. Metabolic pathways and immunometabolism in rare kidney diseases. *Ann Rheum Dis*. 2018. PMID: 29724730
- 159.** Kermani TA, Diab S, Sreih AG, et al. Arterial lesions in giant cell arteritis: A longitudinal study. *Semin Arthritis Rheum*. 2018. PMID: 29880442
- 160.** Kermani TA, Sreih AG, Cuthbertson D, et al. Evaluation of damage in giant cell arteritis. *Rheumatology (Oxford)*. 2018;57(2):322-328. PMID: 29112740, PMCID: PMC5850105
- 161.** Quinn KA, Ahlman MA, Malayeri AA, et al. Comparison of magnetic resonance angiography and (18)F-fluorodeoxyglucose positron emission tomography in large-vessel vasculitis. *Ann Rheum Dis*. 2018. PMID: 29666047
- 162.** Rhee RL, Holweg CTJ, Wong K, et al. Serum periostin as a biomarker in eosinophilic granulomatosis with polyangiitis. *PLoS ONE*. 2018;13(10):e0205768. PMID: 30308057, PMCID: PMC6181402
- 163.** Robson JC, Dawson J, Cronholm PF, et al. Health-related quality of life in ANCA-associated vasculitis and item generation for a disease-specific patient-reported outcome measure. *Patient related outcome measures*. 2018;9:17-34. PMID: 29379322, PMCID: PMC5759851
- 164.** Springer JM, Monach P, Cuthbertson D, et al. Serum S100 Proteins as a Marker of Disease Activity in Large Vessel Vasculitis. *J Clin Rheumatol*. 2018. PMID: 29470262
- 165.** Aydin SZ, Robson JC, Sreih AG, et al. Update on Outcome Measure Development in Large-Vessel Vasculitis: Report from OMERACT 2018. *J Rheumatol*. 2019. PMID: 30877212
- 166.** Tomasson G, Farrar JT, Cuthbertson D, et al. Feasibility and Construct Validation of the Patient Reported Outcomes Measurement Information System (PROMIS) in Systemic Vasculitis. *J Rheumatol*. 2019. PMID: 30824648

RDCRN Publications, Previous Partners

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Book Chapters

1. Butler MG. Genetics and obesity: Prader-Willi syndrome, an illustrative example. In: Ling PR, ed. *Focus on Obesity Research*. Hauppauge, NY: Nova Science Publishers; 2005:51-88.
2. Butler MG. Prader-Willi syndrome: an example of genomic imprinting. In: Butler MG, Meaney FJ, eds. *Genetics of Developmental Disabilities*. 1st ed. Boca Raton: Taylor & Francis; 2005:279-318.
3. McCune H, Driscoll DJ. Prader-Willi syndrome. In: Ekwall SW, Ekwall VK, eds. *Pediatric Nutrition in Chronic Diseases and Developmental Disorders*. Oxford: Oxford University Press; 2005:128-132.
4. Butler MG, Hanchett J, Thompson T. Clinical findings and natural history of Prader-Willi syndrome. In: Butler MG, Lee PDK, Whitman BY, eds. *Management of Prader-Willi Syndrome*. 3rd ed. New York, NY: Springer-Verlag Publishers; 2006:3-48.
5. Hodapp RM, Dykens E. Behavioural phenotypes: growing understandings of psychiatric disorders in individuals with disabilities. In: Bouras N, Holt G, eds. *Psychiatric and behavioural disorders in developmental disabilities* 2nd ed. Cambridge: Cambridge University Press; 2007:202-214.
6. Hodapp RM, Dykens E. Behavioral effects of genetic mental retardation disorders. In: Jacobson JW, Mulick JA, Rojahn J, eds. *Handbook of Intellectual and Developmental Disabilities*. New York: Springer 2007.
7. Levitas A, Dykens E, Finucane B, Kates. Behavioral phenotypes. In: Fletcher R, Loschen E, Stavrakaki C, First M, eds. *Diagnostic Manual-Intellectual Disability: A textbook of diagnosis of mental disorders in persons with intellectual disability*. Kingston, NY: NADD Press; 2007.
8. Volkmar F, Dykens E, Hodapp RM. Mental retardation. In: Martin A, Volkmar F, eds. *Lewis's Child and Adolescent Psychiatry*. 4 ed. Philadelphia: Lippincott Williams & Wilkins; 2007:401-409.
9. Bittel DC, Butler MG. Clinical genetics, gene expression and imprinting in Prader-Willi syndrome: invited review. In: Squire L, ed. *New Encyclopedia of Neuroscience*. Hauppauge, NY: Nova Science Publishers; 2008:51-88.
10. Bird LM. Angelman syndrome. In: Squire L, ed. *Encyclopedia of Neuroscience*. Vol 1. Oxford: Academic Press; 2009:375-380.

Abstracts Presented at Conferences

1. Beaudet A. Status of therapeutic trials in Angelman syndrome. Paper presented at: Canadian Angelman Syndrome Society, 7th International Conference; July 23, 2004; Edmonton, Alberta, Canada.
2. Bacino C, Peters S, Beaudet A, Madduri N, Bird L, Barbieri-Welge R, Bichell T, Sahoo T. Comparative genome microarray testing in deletion positive Angelman syndrome subjects and genotype-phenotype correlations. Class I deletions predict a more severe phenotype. Paper presented at: The American College of Medical Genetics Meeting; March 17-20, 2005; Grapevine, TX.
3. Beaudet A, Bacino C, Bird L, Kimonis V, Peters S, Bichell T, Barbieri-Welge R, Shinawi L. Results of a trial of folic acid and betaine in Angelman syndrome and future directions. Paper presented at: Biennial Angelman Syndrome Foundation Conference; June 28, 2005; Anaheim, CA.
4. Bird L, Bichell T, Bacino C, Beaudet A, Shinawi L, Kimonis V. Gastrointestinal manifestations of Angelman syndrome. Paper presented at: Biennial Angelman Syndrome Foundation Conference; June 28, 2005; Anaheim, CA.
5. Peters S, Beaudet A, Madduri N, Sahoo T, Bird L, Barbieri-Welge R, Bichell T, Bacino C. Autism in Angelman syndrome. Paper presented at: The biennial Angelman Syndrome Foundation Conference; June 28, 2005; Anaheim, CA.
6. Peters S, Sahoo T, Beaudet A, German J, Bird L, Barbieri-Welge R, Bichell T, Bacino C. Redefining the clinical phenotype in Angelman syndrome using microarray-based comparative genomic hybridization testing in children with known deletions. Paper presented at: American Society of Human Genetics Meeting; October 25-29, 2005; Salt Lake City, UT.
7. Dykens EM. New findings on behavioral strengths and problems in persons with Prader-Willi syndrome. Paper presented at: The 28th Annual Prader-Willi Syndrome Scientific and Parent Conference; July, 2006; Grand Island, NY.
8. Driscoll D. Neurocognitive studies of Prader-Willi syndrome and early-onset morbid obesity. Paper presented at: Medical Genetics Grand Rounds; July 7, 2006; Cambridge University, Cambridge, England.
9. Peters S, Sahoo T, German J, Shaw C, Bird L, Kimoni sV, Beaudet A, Bacino C. Identification of novel deletions of 15q11q13 in Angelman syndrome by array-based comparative genomic hybridization (CGH): Large segmental duplions flank the breakpoints. Poster presentation Paper presented at: The American Society of Human Genetics meeting; October 9-13, 2006; New Orleans, LA.
10. Driscoll D. The nutritional phases of Prader-Willi syndrome. Paper presented at: First International Prader-Willi Syndrome Consensus Conference; October 26-28, 2006; Toulouse, France.
11. Dykens EM. Behavioural problems in Prader-Willi and Williams syndromes. Paper presented at: International Jerome Lejeune Clinical Conference; November, 2006; Institut Pasteur, Paris, France.
12. Dykens EM, Roof E, Pantino E, Johnson R, Bialik M. Prader-Willi syndrome: Toward a more balanced phenotype. Paper presented at: 40th Annual Gatlinburg Conference on Research and Theory in Intellectual and Developmental Disabilities; March, 2007.

- 13.** Dykens EM. Strengths and weaknesses in people with Prader-Willi syndrome. Paper presented at: The 5th International Conference on Prader-Willi syndrome; June, 2007; Cluj, Romania.
- 14.** Schwenk KA, Miller JL, Kranzler JH, Driscoll DJ. Prader-Willi syndrome and others with early-onset morbid obesity share similar strengths in cognition and achievement. Paper presented at: International Prader-Willi Syndrome Organization 2007 Conference; June, 2007; Cluj, Romania.
- 15.** Bird L. Results of the Folate-Betaine trial for the treatment of Angelman syndrome, and progress in the Betaine-B12-Creatine-Metafolin trial. Paper presented at: Biennial Angelman Syndrome Foundation conference; July 25, 2007; St. Louis, MO.
- 16.** Tan W, Bacino C, Skinner S, Beaudet A, Bichell T, LM B. A summary of the Rare Disease Network's Angelman syndrome natural history study. Paper presented at: Angelman Syndrome Foundation 2007 Scientific Symposium; July 25, 2007; St Louis, MO.
- 17.** Bichell T, Kimonis V, Bacino C, Beaudet A, Bird L, Nespeca M. Efficacy of anti-epileptic medications for Angelman syndrome. Paper presented at: Angelman Syndrome Foundation's 10th Biennial Conference and Scientific Symposium; July 26, 2007; St. Louis, MO.
- 18.** Bichell TJ, Valle C, Johnson M, Huffsmith B, Rossi L, Ulman T, Gutierrez C, Key S, Lee E, Dykens E. Alphabet therapy: a novel way to teach children with Angelman syndrome and measure their academic abilities. Paper presented at: Angelman Syndrome Foundation's 10th Biennial Conference and Scientific Symposium; July 26, 2007; St. Louis, MO.
- 19.** Tan W, Lawrence J, Bacino C, Skinner S, Beaudet A, Bichell T, LM B. A natural history study of Angelman syndrome. Paper presented at: Rare Diseases Clinical Research Network 2007 Conference on Clinical Research for Rare Diseases; Sept 9, 2007; Bethesda, MD.
- 20.** Driscoll D. Health issues and medical interventions in childhood for Prader-Willi syndrome. Paper presented at: Prader-Willi California Foundation Annual Meeting; October 25, 2007; Los Angeles, CA.
- 21.** Butler MG. Genetics of Prader-Willi syndrome. Paper presented at: 1st Asia-Pacific Prader-Willi Syndrome Conference; March 1, 2008; Wellington, New Zealand.
- 22.** Butler MG. Prader-Willi syndrome: evidence of autism. Paper presented at: 1st Asia-Pacific Prader-Willi Syndrome Conference; March 2, 2008; Wellington, New Zealand.
- 23.** Rossi L, Valle C, Lumauag F, Johnson M, Huffsmith B, Ulman T, Gutierrez C, Key S, Lee E, Dykens E, Bichell TJ. Alphabet therapy: a novel way to teach children with Angelman syndrome and measure their academic abilities. Paper presented at: ABAI Annual Conference; May, 2008; Chicago, IL.
- 24.** Butler MG. Genetic subtype differences in Prader-Willi syndrome. Paper presented at: Italian Auxological Institute -50th Anniversary Conference; May 8, 2008; Milan, Italy.
- 25.** Peters SU, Bird LM, Barbier-Welge R, Tan WH, Hundley R, Skinner S, Bauer-Carlin A, Sahoo T, Bacino CA. The relationship between molecular subtype and autism symptom severity in Angelman syndrome. Paper presented at: The International Meeting for Autism Research; May 15, 2008; London, UK.
- 26.** Driscoll D. Overview of Prader-Willi syndrome. Paper presented at: Prader-Willi Syndrome Association (USA) National Meeting; July, 2008; Milwaukee, WI.

- 27.** Dykens EM. Effects of growth hormone treatment on young children with Prader-Willi syndrome. Paper presented at: 30th Annual Scientific Conference of the Prader-Willi Syndrome; July, 2008; Milwaukee, WI.
- 28.** Miller JL, Driscoll DJ. Changes in head circumference with growth hormone therapy in individuals with PWS. Paper presented at: Prader-Willi Syndrome Association Meeting; July, 2008; Milwaukee, WI.
- 29.** Schwenk KA, Miller JL, Kranzler JH, Lynn CH, Driscoll DJ. Factors effecting cognitive and achievement abilities in Prader-Willi syndrome. Paper presented at: Prader-Willi Syndrome Association Meeting; July, 2008; Milwaukee, WI.
- 30.** Kim S-J, Miller JL, Kuipers PJ, German JR, Beaudet AL, Sahoo T, Driscoll DJ. Unique deletions in Prader-Willi syndrome. Paper presented at: Prader-Willi Syndrome Association 2008 Meeting; July 2008; Milwaukee, WI.
- 31.** Cassidy SB, McCandless SE, Driscoll DJ, Schwartz S. Do some people with severe Prader-Willi syndrome have two microdeletion syndromes? . Paper presented at: David Smith Meeting; August, 2008; Greenwood, SC.
- 32.** Bird L, Bacino C, Skinner S, Tan W-H, Peters S, Kimonis V, Barbieri-Welge R, Bichell T, Waisbren S, Gentile J, Tunick R, Anselm I, Beaudet A. Treatment of Angelman syndrome: results of the Folate-Betaine trial and interim analysis of the metafolin-betaine-vitamin B12-creatine trial. Paper presented at: David W. Smith Workshop on Malformations and Morphogenesis; August 9, 2008.
- 33.** Dykens EM, Finucane B. Behavioral and psychiatric phenotypes in genetic syndromes: Implications for treatment. Paper presented at: 25th Annual NADD Conference; November, 2008; Ontario, Canada.
- 34.** Peters SU, Bacino CA, Chu Z, Yallampalli R, Torres L, Hunter JV, Wilde EA. Inside the brain in Angelman syndrome: phenotypic characterization using advanced neuroimaging techniques. Paper presented at: The annual meeting of The American Society of Human Genetics; November, 2008; Philadelphia, PA.
- 35.** Butler MG, Kibiryeva N, Fischer W, Bittel DC. High resolution array comparative genomic hybridization (aCHG) in individuals with Prader-Willi syndrome. Paper presented at: KUMC Faculty Research Day and Poster Session; November 6, 2008; Kansas City, KS.
- 36.** Driscoll D. Prader-Willi syndrome, genetics of obesity section. Paper presented at: American College of Medical Genetics Meeting; March 25-29, 2009; Tampa, FL.
- 37.** Gentile J, Tan W, Bacino C, Skinner S, Barbieri-Welge R, Bauer-Carlin A, Beaudet A, Bichell T, Horowitz L, Lee H, Sahoo T, Waisbren S, Bird L, Peters S. A neurodevelopmental survey of Angelman syndrome with genotype-phenotype correlations. Paper presented at: American College of Medical GeneticsAnnual Clinical Meeting; March 27, 2009; Tampa, Florida.
- 38.** Peters SU, Bacino CA, Chu Z, Merkley T, Traipe E, Hunter JV, Wilde EA. Phenotypic characterization in Angelman syndrome using advanced neuroimaging techniques. Paper presented at: The annual meeting of The American College of Medical Genetics; March 27, 2009; Tampa, Florida.
- 39.** Tan W, Bacino C, Skinner S, Anselm I, Barbieri-Welge R, Bauer-Carlin A, Beaudet A, Bichell T, Gentile J, Glaze D, Horowitz L, Lee H, Nespeca M, Peters S, Sahoo T, Sarco D, Waisbren S, Bird L.

Clinical features in 102 patients with Angelman syndrome. Paper presented at: American College of Medical Genetics 2009 Annual Clinical Meeting; March 27, 2009; Tampa, Florida.

- 40.** Bacino C, Peters S, Beaudet A, Bird L, Barbieri-Welge R, Bichell T, Sahoo T. Deletion classes in Angelman syndrome: genotype-phenotype correlations. Paper presented at: Biennial Angelman Syndrome Foundation conference; June 28, 2010; Anaheim, CA.

Journal Articles

- 1.** Weeber EJ, Jiang YH, Elgersma Y, Varga AW, Carrasquillo Y, Brown SE, Christian JM, Mirnikjoo B, Silva A, Beaudet AL, Sweatt JD. Derangements of hippocampal calcium/calmodulin-dependent protein kinase II in a mouse model for Angelman mental retardation syndrome. *J. Neurosci.* Apr 1 2003;23(7):2634-2644. PMID: 12684449
- 2.** Shapira NA, Lessig MC, Lewis MH, Goodman WK, Driscoll DJ. Effects of topiramate in adults with Prader-Willi syndrome. *Am. J. Ment. Retard.* Jul 2004;109(4):301-309. PMID: 15176917
- 3.** Peters SU, Goddard-Finegold J, Beaudet AL, Madduri N, Turcich M, Bacino CA. Cognitive and adaptive behavior profiles of children with Angelman syndrome. *Am. J. Med. Genet. A.* Jul 15 2004;128A(2):110-113. PMID: 15213998
- 4.** Jiang YH, Beaudet AL. Human disorders of ubiquitination and proteasomal degradation. *Curr. Opin. Pediatr.* Aug 2004;16(4):419-426. PMID: 15273504
- 5.** Peters SU, Beaudet AL, Madduri N, Bacino CA. Autism in Angelman syndrome: implications for autism research. *Clin. Genet.* Dec 2004;66(6):530-536. PMID: 15521981
- 6.** Rodriguez-Jato S, Nicholls RD, Driscoll DJ, Yang TP. Characterization of cis- and trans-acting elements in the imprinted human SNURF-SNRPN locus. *Nucleic Acids Res.* 2005;33(15):4740-4753. PMID: 16116039, PMCID: PMC1188517
- 7.** Bittel DC, Kibiryeva N, Talebizadeh Z, Driscoll DJ, Butler MG. Microarray analysis of gene/transcript expression in Angelman syndrome: deletion versus UPD. *Genomics.* Jan 2005;85(1):85-91. PMID: 15607424
- 8.** Shapira NA, Lessig MC, He AG, James GA, Driscoll DJ, Liu Y. Satiety dysfunction in Prader-Willi syndrome demonstrated by fMRI. *J. Neurol. Neurosurg. Psychiatry.* Feb 2005;76(2):260-262. PMID: 15654046, PMCID: PMC1739487
- 9.** Talebizadeh Z, Kibiryeva N, Bittel DC, Butler MG. Ghrelin, peptide YY and their receptors: gene expression in brain from subjects with and without Prader-Willi syndrome. *Int. J. Mol. Med.* Apr 2005;15(4):707-711. PMID: 15754036
- 10.** Talebizadeh Z, Butler MG. Insulin resistance and obesity-related factors in Prader-Willi syndrome: comparison with obese subjects. *Clin. Genet.* Mar 2005;67(3):230-239. PMID: 15691361
- 11.** Hartley SL, Maclean WE, Jr., Butler MG, Zarcone J, Thompson T. Maladaptive behaviors and risk factors among the genetic subtypes of Prader-Willi syndrome. *Am. J. Med. Genet. A.* Jul 15 2005;136(2):140-145. PMID: 15940679, PMCID: PMC1896317
- 12.** Bittel DC, Butler MG. Prader-Willi syndrome: clinical genetics, cytogenetics and molecular biology. *Expert Rev Mol Med.* Jul 25 2005;7(14):1-20. PMID: 16038620

- 13.** Sahoo T, Shaw CA, Young AS, Whitehouse NL, Schroer RJ, Stevenson RE, Beaudet AL. Array-based comparative genomic hybridization analysis of recurrent chromosome 15q rearrangements. *Am. J. Med. Genet. A*. Dec 1 2005;139A(2):106-113. PMID: 16284940
- 14.** Sellinger MH, Hodapp RM, Dykens E. Leisure activities in individuals with Prader-Willi, Williams, and Down syndromes. *Journal of Developmental and Physical Disabilities*. 2006;18(1):59-71.
- 15.** Young J, Zarcone J, Holsen L, Anderson MC, Hall S, Richman D, Butler MG, Thompson T. A measure of food seeking in individuals with Prader-Willi syndrome. *J. Intellect. Disabil. Res.* Jan 2006;50(Pt 1):18-24. PMID: 16316427, PMCID: PMC1535345
- 16.** Kennedy L, Bittel DC, Kibiryeva N, Kalra SP, Torto R, Butler MG. Circulating adiponectin levels, body composition and obesity-related variables in Prader-Willi syndrome: comparison with obese subjects. *Int. J. Obes.* Feb 2006;30(2):382-387. PMID: 16231029
- 17.** Miller J, Silverstein J, Shuster J, Driscoll DJ, Wagner M. Short-term effects of growth hormone on sleep abnormalities in Prader-Willi syndrome. *J. Clin. Endocrinol. Metab.* Feb 2006;91(2):413-417. PMID: 16317059
- 18.** Williams CA, Beaudet AL, Clayton-Smith J, Knoll JH, Kyllerman M, Laan LA, Magenis RE, Moncla A, Schinzel AA, Summers JA, Wagstaff J. Angelman syndrome 2005: updated consensus for diagnostic criteria. *Am. J. Med. Genet. A*. Mar 1 2006;140(5):413-418. PMID: 16470747
- 19.** Sahoo T, Peters SU, Madduri NS, Glaze DG, German JR, Bird LM, Barbieri-Welge R, Bichell TJ, Beaudet AL, Bacino CA. Microarray based comparative genomic hybridization testing in deletion bearing patients with Angelman syndrome: genotype-phenotype correlations. *J. Med. Genet.* Jun 2006;43(6):512-516. PMID: 16183798, PMCID: PMC2564536
- 20.** Miller J, Kranzler J, Liu Y, Schmalfuss I, Theriaque DW, Shuster JJ, Hatfield A, Mueller OT, Goldstone AP, Sahoo T, Beaudet AL, Driscoll DJ. Neurocognitive findings in Prader-Willi syndrome and early-onset morbid obesity. *J. Pediatr.* Aug 2006;149(2):192-198. PMID: 16887432
- 21.** Bittel DC, Kibiryeva N, Butler MG. Expression of 4 genes between chromosome 15 breakpoints 1 and 2 and behavioral outcomes in Prader-Willi syndrome. *Pediatrics*. Oct 2006;118(4):e1276-1283. PMID: 16982806
- 22.** Theodoro MF, Talebizadeh Z, Butler MG. Body composition and fatness patterns in Prader-Willi syndrome: comparison with simple obesity. *Obesity (Silver Spring)*. Oct 2006;14(10):1685-1690. PMID: 17062796
- 23.** Wu MY, Tsai TF, Beaudet AL. Deficiency of Rbbp1/Arid4a and Rbbp1l1/Arid4b alters epigenetic modifications and suppresses an imprinting defect in the PWS/AS domain. *Genes Dev.* Oct 15 2006;20(20):2859-2870. PMID: 17043311, PMCID: PMC1619944
- 24.** Butler MG. Management of obesity in Prader-Willi syndrome. *Nat. Clin. Pract. Endocrinol. Metab.* Nov 2006;2(11):592-593. PMID: 17082801
- 25.** Lawson-Yuen A, Wu BL, Lip V, Sahoo T, Kimonis V. Atypical cases of Angelman syndrome. *Am. J. Med. Genet. A*. Nov 1 2006;140(21):2361-2364. PMID: 17036311
- 26.** van Woerden GM, Harris KD, Hojjati MR, Gustin RM, Qiu S, de Avila Freire R, Jiang YH, Elgersma Y, Weeber EJ. Rescue of neurological deficits in a mouse model for Angelman syndrome by reduction of alphaCaMKII inhibitory phosphorylation. *Nat. Neurosci.* Mar 2007;10(3):280-282. PMID: 17259980

- 27.** Bittel DC, Kibiryeva N, Sell SM, Strong TV, Butler MG. Whole genome microarray analysis of gene expression in Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):430-442. PMID: 17236194
- 28.** Bittel DC, Kibiryeva N, McNulty SG, Driscoll DJ, Butler MG, White RA. Whole genome microarray analysis of gene expression in an imprinting center deletion mouse model of Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):422-429. PMID: 17036336
- 29.** Butler MG, Bittel DC. Plasma obestatin and ghrelin levels in subjects with Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):415-421. PMID: 17304548
- 30.** Butler MG, Theodoro M, Skouse JD. Thyroid function studies in Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):488-492. PMID: 17304546
- 31.** Butler MG, Theodoro MF, Bittel DC, Donnelly JE. Energy expenditure and physical activity in Prader-Willi syndrome: comparison with obese subjects. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):449-459. PMID: 17103434
- 32.** Butler MG, Theodoro MF, Bittel DC, Kuipers PJ, Driscoll DJ, Talebizadeh Z. X-chromosome inactivation patterns in females with Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):469-475. PMID: 17036338
- 33.** Miller JL, Couch JA, Schmalfuss I, He G, Liu Y, Driscoll DJ. Intracranial abnormalities detected by three-dimensional magnetic resonance imaging in Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):476-483. PMID: 17103438
- 34.** Stevenson DA, Heinemann J, Angulo M, Butler MG, Loker J, Rupe N, Kendell P, Clericuzio CL, Scheimann AO. Deaths due to choking in Prader-Willi syndrome. *Am. J. Med. Genet. A*. Mar 1 2007;143(5):484-487. PMID: 17036318, PMCID: PMC3243066
- 35.** Khalil AM, Driscoll DJ. Trimethylation of histone H3 lysine 4 is an epigenetic mark at regions escaping mammalian X inactivation. *Epigenetics*. Apr-Jun 2007;2(2):114-118. PMID: 17965609
- 36.** Miller JL, James GA, Goldstone AP, Couch JA, He G, Driscoll DJ, Liu Y. Enhanced activation of reward mediating prefrontal regions in response to food stimuli in Prader-Willi syndrome. *J. Neurol. Neurosurg. Psychiatry*. Jun 2007;78(6):615-619. PMID: 17158560, PMCID: PMC2077944
- 37.** Zarcone J, Napolitano D, Peterson C, Breidbord J, Ferraioli S, Caruso-Anderson M, Holsen L, Butler MG, Thompson T. The relationship between compulsive behaviour and academic achievement across the three genetic subtypes of Prader-Willi syndrome. *J. Intellect. Disabil. Res*. Jun 2007;51(Pt. 6):478-487. PMID: 17493030
- 38.** Dykens EM, Maxwell MA, Pantino E, Kossler R, Roof E. Assessment of hyperphagia in Prader-Willi syndrome. *Obesity (Silver Spring)*. Jul 2007;15(7):1816-1826. PMID: 17636101
- 39.** Miller JL, Couch JA, Leonard CM, Schwenk K, Towler SD, Shuster J, Goldstone AP, He G, Driscoll DJ, Liu Y. Sylvian fissure morphology in Prader-Willi syndrome and early-onset morbid obesity. *Genet. Med.* Aug 2007;9(8):536-543. PMID: 17700392
- 40.** Stevenson DA, Heinemann J, Angulo M, Butler MG, Loker J, Rupe N, Kendell P, Cassidy SB, Scheimann A. Gastric rupture and necrosis in Prader-Willi syndrome. *J. Pediatr. Gastroenterol. Nutr.* Aug 2007;45(2):272-274. PMID: 17667731, PMCID: PMC3241991
- 41.** Sahoo T, Bacino CA, German JR, Shaw CA, Bird LM, Kimonis V, Anselm I, Waisbren S, Beaudet AL, Peters SU. Identification of novel deletions of 15q11q13 in Angelman syndrome by array-

CGH: molecular characterization and genotype-phenotype correlations. *Eur. J. Hum. Genet.* Sep 2007;15(9):943-949. PMID: 17522620

42. Bittel DC, Kibiryeva N, Butler MG. Methylation-specific multiplex ligation-dependent probe amplification analysis of subjects with chromosome 15 abnormalities. *Genet. Test.* Winter 2007;11(4):467-475. PMID: 18294067
43. Jiang YH, Wauki K, Liu Q, Bressler J, Pan Y, Kashork CD, Shaffer LG, Beaudet AL. Genomic analysis of the chromosome 15q11-q13 Prader-Willi syndrome region and characterization of transcripts for GOLGA8E and WHCD1L1 from the proximal breakpoint region. *BMC Genomics.* 2008;9:50. PMID: 18226259, PMCID: PMC2268926
44. Scheimann AO, Butler MG, Gourash L, Cuffari C, Klish W. Critical analysis of bariatric procedures in Prader-Willi syndrome. *J. Pediatr. Gastroenterol. Nutr.* Jan 2008;46(1):80-83. PMID: 18162838
45. Dindot SV, Antalffy BA, Bhattacharjee MB, Beaudet AL. The Angelman syndrome ubiquitin ligase localizes to the synapse and nucleus, and maternal deficiency results in abnormal dendritic spine morphology. *Hum. Mol. Genet.* Jan 1 2008;17(1):111-118. PMID: 17940072
46. Brandau DT, Theodoro M, Garg U, Butler MG. Follicle stimulating and leutinizing hormones, estradiol and testosterone in Prader-Willi syndrome. *Am. J. Med. Genet. A.* Mar 1 2008;146A(5):665-669. PMID: 18241068
47. Butler MG, Fischer W, Kibiryeva N, Bittel DC. Array comparative genomic hybridization (aCGH) analysis in Prader-Willi syndrome. *Am. J. Med. Genet. A.* Apr 1 2008;146(7):854-860. PMID: 18266248
48. Key AP, Dykens EM. 'Hungry Eyes': visual processing of food images in adults with Prader-Willi syndrome. *J. Intellect. Disabil. Res.* Jun 2008;52(Pt 6):536-546. PMID: 18422527
49. Sahoo T, del Gaudio D, German JR, Shinawi M, Peters SU, Person RE, Garnica A, Cheung SW, Beaudet AL. Prader-Willi phenotype caused by paternal deficiency for the HBII-85 C/D box small nucleolar RNA cluster. *Nat. Genet.* Jun 2008;40(6):719-721. PMID: 18500341, PMCID: PMC2705197
50. Haas KF, Broadie K. Roles of ubiquitination at the synapse. *Biochim. Biophys. Acta.* Aug 2008;1779(8):495-506. PMID: 18222124, PMCID: PMC2668815
51. Dykens EM, Roof E. Behavior in Prader-Willi syndrome: relationship to genetic subtypes and age. *J. Child Psychol. Psychiatry.* Sep 2008;49(9):1001-1008. PMID: 18665884
52. Goldstone AP, Holland AJ, Hauffa BP, Hokken-Koelega AC, Tauber M. Recommendations for the diagnosis and management of Prader-Willi syndrome. *J. Clin. Endocrinol. Metab.* Nov 2008;93(11):4183-4197. PMID: 18697869
53. Cassidy SB, Driscoll DJ. Prader-Willi syndrome. *Eur. J. Hum. Genet.* Jan 2009;17(1):3-13. PMID: 18781185, PMCID: PMC2985966
54. Holsen LM, Zarcone JR, Chambers R, Butler MG, Bittel DC, Brooks WM, Thompson TI, Savage CR. Genetic subtype differences in neural circuitry of food motivation in Prader-Willi syndrome. *Int. J. Obes.* Feb 2009;33(2):273-283. PMID: 19048015, PMCID: PMC2643328
55. Butler MG, Brandau DT, Theodoro M, Garg U. Cortisol levels in Prader-Willi syndrome support changes in routine care. *Am. J. Med. Genet. A.* Feb 2009;149A(2):138-139. PMID: 19133690

- 56.** Scheimann A, Butler MG, Stevenson D, Miller JL, Cuffari C, Klish WJ. "Efficacy of laparoscopic sleeve gastrectomy as a stand-alone technique for children with morbid obesity" and "BioEnterics intragastric balloon for treatment of morbid obesity in Prader-Willi syndrome: specific risks and benefits". *Obes. Surg.* May 2009;19(5):671-672; author reply 673. PMID: 18982398
- 57.** Ben-Shachar S, Lanpher B, German JR, Qasaymeh M, Potocki L, Nagamani SC, Franco LM, Malphrus A, Bottenfield GW, Spence JE, Amato S, Rousseau JA, Moghaddam B, Skinner C, Skinner SA, Bernes S, Armstrong N, Shinawi M, Stankiewicz P, Patel A, Cheung SW, Lupski JR, Beaudet AL, Sahoo T. Microdeletion 15q13.3: a locus with incomplete penetrance for autism, mental retardation, and psychiatric disorders. *J. Med. Genet.* Jun 2009;46(6):382-388. PMID: 19289393, PMCID: PMC2776649
- 58.** Butler MG, Brandau DT, Theodoro MF, Garg U. Morning melatonin levels in Prader-Willi syndrome. *Am. J. Med. Genet. A.* Aug 2009;149A(8):1809-1813. PMID: 19606476
- 59.** Geer JS, Skinner SA, Goldin E, Holden KR. Mucolipidosis type IV: a subtle pediatric neurodegenerative disorder. *Pediatr. Neurol.* Mar 2010;42(3):223-226. PMID: 20159435, PMCID: PMC2824620
- 60.** Gentile JK, Tan WH, Horowitz LT, Bacino CA, Skinner SA, Barbieri-Welge R, Bauer-Carlin A, Beaudet AL, Bichell TJ, Lee HS, Sahoo T, Waisbren SE, Bird LM, Peters SU. A neurodevelopmental survey of Angelman syndrome with genotype-phenotype correlations. *J. Dev. Behav. Pediatr.* Sep 2010;31(7):592-601. PMID: 20729760, PMCID: PMC2997715
- 61.** Tan WH, Bacino CA, Skinner SA, Anselm I, Barbieri-Welge R, Bauer-Carlin A, Beaudet AL, Bichell TJ, Gentile JK, Glaze DG, Horowitz LT, Kothare SV, Lee HS, Nespeca MP, Peters SU, Sahoo T, Sarco D, Waisbren SE, Bird LM. Angelman syndrome: Mutations influence features in early childhood. *Am. J. Med. Genet. A.* Jan 2011;155A(1):81-90. PMID: 21204213, PMCID: PMC3563320
- 62.** Peters SU, Kaufmann WE, Bacino CA, Anderson AW, Adapa P, Chu Z, Yallampalli R, Traipe E, Hunter JV, Wilde EA. Alterations in white matter pathways in Angelman syndrome. *Dev. Med. Child Neurol.* Apr 2011;53(4):361-367. PMID: 21121904, PMCID: PMC3059217
- 63.** Butler MG, Sturich J, Lee J, Myers SE, Whitman BY, Gold JA, Kimonis V, Scheimann A, Terrazas N, Driscoll DJ. Growth standards of infants with Prader-Willi syndrome. *Pediatrics.* Apr 2011;127(4):687-695. PMID: 21402637, PMCID: PMC3065075
- 64.** Miller JL, Lynn CH, Driscoll DC, Goldstone AP, Gold JA, Kimonis V, Dykens E, Butler MG, Shuster JJ, Driscoll DJ. Nutritional phases in Prader-Willi syndrome. *Am. J. Med. Genet. A.* May 2011;155A(5):1040-1049. PMID: 21465655, PMCID: PMC3285445
- 65.** Dykens EM, Roof E, Bittel D, Butler MG. TPH2 G/T polymorphism is associated with hyperphagia, IQ, and internalizing problems in Prader-Willi syndrome. *J. Child Psychol. Psychiatry.* May 2011;52(5):580-587. PMID: 21418060, PMCID: PMC3353323
- 66.** Bird LM, Tan WH, Bacino CA, Peters SU, Skinner SA, Anselm I, Barbieri-Welge R, Bauer-Carlin A, Gentile JK, Glaze DG, Horowitz LT, Mohan KN, Nespeca MP, Sahoo T, Sarco D, Waisbren SE, Beaudet AL. A therapeutic trial of pro-methylation dietary supplements in Angelman syndrome. *Am. J. Med. Genet. A.* Dec 2011;155A(12):2956-2963. PMID: 22002941, PMCID: PMC3222728

- 67.** Beaudet AL. Angelman syndrome: Drugs to awaken a paternal gene. *Nature*. Jan 12 2012;481(7380):150-152. PMID: 22190038, PMCID: PMC3638729
- 68.** Peters SU, Horowitz L, Barbieri-Welge R, Taylor JL, Hundley RJ. Longitudinal follow-up of autism spectrum features and sensory behaviors in Angelman syndrome by deletion class. *J. Child Psychol. Psychiatry*. Feb 2012;53(2):152-159. PMID: 21831244
- 69.** Kim SJ, Miller JL, Kuipers PJ, German JR, Beaudet AL, Sahoo T, Driscoll DJ. Unique and atypical deletions in Prader-Willi syndrome reveal distinct phenotypes. *Eur. J. Hum. Genet*. Mar 2012;20(3):283-290. PMID: 22045295, PMCID: PMC3283188
- 70.** Henkhaus RS, Kim SJ, Kimonis VE, Gold JA, Dykens EM, Driscoll DJ, Butler MG. Methylation-specific multiplex ligation-dependent probe amplification and identification of deletion genetic subtypes in Prader-Willi syndrome. *Genetic testing and molecular biomarkers*. Mar 2012;16(3):178-186. PMID: 21977908, PMCID: PMC3306590
- 71.** Vendrame M, Loddenkemper T, Zarowski M, Gregas M, Shubaiber H, Sarco DP, Morales A, Nespeca M, Sharpe C, Haas K, Barnes G, Glaze D, Kothare SV. Analysis of EEG patterns and genotypes in patients with Angelman syndrome. *Epilepsy Behav*. Mar 2012;23(3):261-265. PMID: 22341959
- 72.** Meng L, Person RE, Beaudet AL. Ube3a-ATS is an atypical RNA polymerase II transcript that represses the paternal expression of Ube3a. *Hum. Mol. Genet*. Jul 1 2012;21(13):3001-3012. PMID: 22493002, PMCID: PMC3465693
- 73.** Rethmeyer JA, Tan X, Manzardo A, Schroeder SR, Butler MG. Comparison of biological specimens and DNA collection methods for PCR amplification and microarray analysis. *Clin. Chem. Lab. Med.* May 2013;51(5):e79-83. PMID: 23241593, PMCID: PMC3660108
- 74.** Butler MG, Roberts J, Hayes J, Tan X, Manzardo AM. Growth hormone receptor (GHR) gene polymorphism and Prader-Willi syndrome. *Am. J. Med. Genet. A*. Jul 2013;161A(7):1647-1653. PMID: 23696513, PMCID: PMC3689873
- 75.** Yazdi PG, Su H, Ghimbovschi S, et al. Differential gene expression reveals mitochondrial dysfunction in an imprinting center deletion mouse model of prader-willi syndrome. *Clin. Transl. Sci.* Oct 2013;6(5):347-355. PMID: 24127921, PMCID: PMC3815468
- 76.** Dykens EM. Leisure activities in Prader-Willi syndrome: implications for health, cognition and adaptive functioning. *J. Autism Dev. Disord*. Feb 2014;44(2):294-302. PMID: 22484792, PMCID: PMC3473107
- 77.** Heymsfield SB, Avena NM, Baier L, et al. Hyperphagia: current concepts and future directions proceedings of the 2nd international conference on hyperphagia. *Obesity (Silver Spring, Md.)*. Feb 2014;22 Suppl 1:S1-S17. PMID: 24574081, PMCID: PMC4159941
- 78.** Khare M, Gold JA, Wencel M, et al. Effect of genetic subtypes and growth hormone treatment on bone mineral density in Prader-Willi syndrome. *J. Pediatr. Endocrinol. Metab*. May 2014;27(5-6):511-518. PMID: 24515997
- 79.** Butler MG, Wang K, Marshall JD, et al. Coding and noncoding expression patterns associated with rare obesity-related disorders: Prader-Willi and Alstrom syndromes. *Advances in genomics and genetics*. 2015;2015(5):53-75. PMID: 25705109, PMCID: PMC4334166
- 80.** Butler MG, Lee J, Manzardo AM, et al. Growth charts for non-growth hormone treated prader-willi syndrome. *Pediatrics*. Jan 2015;135(1):e126-135. PMID: 25489013, PMCID: PMC4279067

- 81.** Kweh FA, Miller JL, Sulsona CR, et al. Hyperghrelinemia in Prader-Willi syndrome begins in early infancy long before the onset of hyperphagia. *Am. J. Med. Genet. A*. Jan 2015;167A(1):69-79. PMID: 25355237, PMCID: PMC4391201
- 82.** Miodrag N, Peters S. Parent stress across molecular subtypes of children with Angelman syndrome. *J. Intellect. Disabil. Res.* Sep 2015;59(9):816-826. PMID: 25833412
- 83.** Miller JL, Tamura R, Butler MG, et al. Oxytocin treatment in children with Prader-Willi syndrome: A double-blind, placebo-controlled, crossover study. *Am J Med Genet A*. 2017;173(5):1243-1250. PMID: 28371242

Special Projects

- 1.** Williams CA, Dagli A. Angelman Syndrome. 2008; <http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=gene&part=angelman>.
- 2.** Butler MG, Welch J, Riske M, Vogel R, Troxell R, Rope A. Prader-Willi Syndrome. *Medical Home Portal* 2009; <http://www.medicalhomeportal.org/diagnoses-and-conditions/prader-willi-syndrome/description>.

Bone Marrow Failure Consortium

Abstracts Presented at Conferences

- 1.** Epling-Burnette P, Xhen X, Bai F, Lubomir S, Ku E, Painter J, JianXiang Z, Edwards T, Julie D, Lynn M, Loughran T, S W. Aberrant NK receptor signaling associated with large granular lymphocyte and primary pulmonary hypertension. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
- 2.** Sekeres M, List A, Cuthbertson D, Paquette R, Loughran T, Maciejewski J. Preliminary Results from a Phase I study of Revlimid (Lenalidomide) in combination with Vidaza (Azacitidine) in patients with advanced myelodysplastic syndromes (MDS). Paper presented at: American Society of Hematology; December 8-11, 2007; Altanta, GA.
- 3.** Epling-Burnette P, Sokol L, Moscinski L, Elkabani M, Bai F, Blaskovich M, Zou J, Painter J, Sebti S, Loughran T. First clinical report on Tipifarnib for the treatment of T-large granular lymphocyte (LGL) leukemia. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
- 4.** Wei S, Rocha K, Williams A, Chen X, Burnette P, Djeu J, Liu Q, Byrd J, Sokol L, Lawrence N, Pireddu R, Dewald G, Maciejewski J, List A. Gene dosage of the cell cycle regulatory phosphatases Cdc25C and PP2A determines sensitivity to lenalidomide in del(5q) MDS. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
- 5.** Bai F, Zou J, Wei S, Painter J, Blaskovich M, Sebti S, Loughran T, Epling-Burnette P. Th2 polarization induced by the farnesyltransferase inhibitor Tipifarnib (Zarnestra, R115777) through suppression of t-bet. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
- 6.** Painter J, Costellanos A, Bai F, Wei S, Loughran T, Epling-Burnette P. Constitutive activation of ras and mitogen-activated protein kinase (MAPK/ERK) in LGL leukemia unrelated to activating

mutations in N and KRas genes. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta.

7. Nyland S, Cuthbertson D, Loughran T. Elevated fas ligand and BA21 serorecognition as disease correlates in bone marrow failure disorders: taking advantage of the LGL leukemia model. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
8. Gondek L, Tiu R, Wlodarski M, O'Keefe C, McDevitt M, Maciejewski J. Enhancement of cytogenetic diagnosis of myeloid disorders through application of SNP-array-based karyotyping. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
9. O'Keefe C, Gondek L, Woodarski M, Karp J, McDevitt M, Maciejewski J. Can genomic copy number variants be a part of complex genetic traits predisposing to marrow failure? Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta.
10. Gondek L, Dunbar A, O'Keefe C, McDevitt M, Batista D, Theil K, Maciejewski J. SNP-A karyotyping facilitates improved mapping of deletions and uniparental disomy within the long arm of Chromosome 5 in myeloid disorders. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
11. Serio B, Ramsingh G, Tiu R, Risitano A, Sekeres M, Maciejewski J. Immunogenetic analysis reveals the association of INF (+874 A/T) hypersecretor genotype in AA and a low frequency of KIR-2DL3/C1 mismatch in responders to immunosuppression. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.

Journal Articles

1. Nearman ZP, Wlodarski M, Jankowska AM, Howe E, Narvaez Y, Ball E, Maciejewski JP. Immunogenetic factors determining the evolution of T-cell large granular lymphocyte leukaemia and associated cytopenias. *Br. J. Haematol.* Jan 2007;136(2):237-248. PMID: 17156396
2. Sekeres MA, Fu AZ, Maciejewski JP, Golshayan AR, Kalaycio ME, Kattan MW. A Decision analysis to determine the appropriate treatment for low-risk myelodysplastic syndromes. *Cancer.* Mar 15 2007;109(6):1125-1132. PMID: 17265521
3. Golshayan AR, Jin T, Maciejewski J, Fu AZ, Bershadsky B, Kattan MW, Kalaycio ME, Sekeres MA. Efficacy of growth factors compared to other therapies for low-risk myelodysplastic syndromes. *Br. J. Haematol.* Apr 2007;137(2):125-132. PMID: 17391492
4. Wlodarski MW, Nearman Z, Jiang Y, Lichtin A, Maciejewski JP. Clonal predominance of CD8(+) T cells in patients with unexplained neutropenia. *Exp. Hematol.* Mar 2008;36(3):293-300. PMID: 18279717, PMCID: PMC2643087
5. Uchida K, Nakata K, Suzuki T, Luisetti M, Watanabe M, Koch DE, Stevens CA, Beck DC, Denson LA, Carey BC, Keicho N, Krischer JP, Yamada Y, Trapnell BC. Granulocyte/macrophage colony-stimulating factor autoantibodies and myeloid cell immune functions in healthy individuals. *Blood.* Oct 9 2008. PMID: 20224064, PMCID: PMC2902758
6. Sekeres MA, Schoonen WM, Kantarjian H, List A, Fryzek J, Paquette R, Maciejewski JP. Characteristics of US patients with myelodysplastic syndromes: results of six cross-sectional physician surveys. *J. Natl. Cancer Inst.* Nov 5 2008;100(21):1542-1551. PMID: 18957672, PMCID: PMC2579314

7. Epling-Burnette PK, Sokol L, Chen X, Bai F, Zhou J, Blaskovich MA, Zou J, Painter JS, Edwards TD, Moscinski L, Yoder JA, Djeu JY, Sebti S, Loughran TP, Jr., Wei S. Clinical improvement by farnesyltransferase inhibition in NK large granular lymphocyte leukemia associated with imbalanced NK receptor signaling. *Blood*. Dec 1 2008;112(12):4694-4698. PMID: 18791165, PMCID: PMC2597136
8. Dunbar AJ, Gondek LP, O'Keefe CL, Makishima H, Rataul MS, Szpurka H, Sekeres MA, Wang XF, McDevitt MA, Maciejewski JP. 250K single nucleotide polymorphism array karyotyping identifies acquired uniparental disomy and homozygous mutations, including novel missense substitutions of c-Cbl, in myeloid malignancies. *Cancer Res*. Dec 15 2008;68(24):10349-10357. PMID: 19074904, PMCID: PMC2668538
9. Sekeres MA, Maciejewski JP, Giagounidis AA, Wride K, Knight R, Raza A, List AF. Relationship of treatment-related cytopenias and response to lenalidomide in patients with lower-risk myelodysplastic syndromes. *J. Clin. Oncol.* Dec 20 2008;26(36):5943-5949. PMID: 19018091, PMCID: PMC2645116
10. Sekeres MA, Elson P, Kalaycio ME, Advani AS, Copelan EA, Faderl S, Kantarjian HM, Estey E. Time from diagnosis to treatment initiation predicts survival in younger, but not older, acute myeloid leukemia patients. *Blood*. Jan 1 2009;113(1):28-36. PMID: 18827183, PMCID: PMC2614639
11. Uchida K, Nakata K, Suzuki T, Luisetti M, Watanabe M, Koch DE, Stevens CA, Beck DC, Denson LA, Carey BC, Keicho N, Krischer JP, Yamada Y, Trapnell BC. Granulocyte/macrophage-colony-stimulating factor autoantibodies and myeloid cell immune functions in healthy subjects. *Blood*. Mar 12 2009;113(11):2547-2556. PMID: 19282464, PMCID: PMC2656275
12. Zou JX, Rollison DE, Boulware D, Chen DT, Sloand EM, Pfannes LV, Goronzy JJ, Bai F, Painter JS, Wei S, Cosgrove D, List AF, Epling-Burnette PK. Altered naive and memory CD4+ T-cell homeostasis and immunosenescence characterize younger patients with myelodysplastic syndrome. *Leukemia*. Jul 2009;23(7):1288-1296. PMID: 19282834, PMCID: PMC3252820
13. Mohan SR, Clemente MJ, Afable M, Cazzolli HN, Bejanyan N, Wlodarski MW, Lichtin AE, Maciejewski JP. Therapeutic implications of variable expression of CD52 on clonal cytotoxic T cells in CD8+ large granular lymphocyte leukemia. *Haematologica*. Oct 2009;94(10):1407-1414. PMID: 19794084, PMCID: PMC2754957
14. Sekeres MA, Steensma DP. Defining prior therapy in myelodysplastic syndromes and criteria for relapsed and refractory disease: implications for clinical trial design and enrollment. *Blood*. Sep 24 2009;114(13):2575-2580. PMID: 19605847, PMCID: PMC2756119
15. Jasek M, Gondek LP, Bejanyan N, Tiu R, Huh J, Theil KS, O'Keefe C, McDevitt MA, Maciejewski JP. TP53 mutations in myeloid malignancies are either homozygous or hemizygous due to copy number-neutral loss of heterozygosity or deletion of 17p. *Leukemia*. Jan 2010;24(1):216-219. PMID: 19759556, PMCID: PMC2806506
16. Uchida K, Carey B, Suzuki T, Nakata K, Trapnell B. Response: Granulocyte/macrophage colony-stimulating factor autoantibodies and myeloid cell immune functions in healthy persons. *Blood*. Jan 14 2010;115(2):431-433. PMID: 20075172, PMCID: PMC2808163
17. Nyland SB, Krissinger DJ, Clemente MJ, et al. Seroreactivity to LGL leukemia-specific epitopes in aplastic anemia, myelodysplastic syndrome and paroxysmal nocturnal hemoglobinuria: results

of a bone marrow failure consortium study. *Leuk. Res.* May 2012;36(5):581-587. PMID: 22386729, PMCID: PMC3312981

Cholestatic Liver Disease Consortium

Abstracts Presented at Conferences

1. Shneider B, Brown M, Sokol R, Whitington P, Schwarz K, Squires R, Bucuvalas J, Haber B, Sheperd R, Rosenthal P, Robuck P, BARC. A multi-center analysis of outcome at 24 months of age in children with biliary atresia in the United States. Paper presented at: Annual Meeting of the American Association for the Study of Liver Diseases; November, 2004; Boston, MA.
2. Haber B, Brown M, Shneider B, Sokol R, Whitington P, DeRusso P, Squires R, Bezerra J, Sheperd R, Rosenthal P, Robuck P, BARC. Patient demographics and clinical practices in a US multi-center study of biliary atresia. Paper presented at: Annual Meeting of the American Association for the Study of Liver Diseases; November 2004; Boston, MA.
3. DeRusso P, Ye W, Haber B, Shneider B, Sokol R, Whitington P, Squires R, Bezerra J, Shepherd R, Rosenthal P, Hoofnagle J. Early growth failure after portoenterostomy is associated with liver transplantation or death in infants with biliary atresia. Paper presented at: 56th Annual Meeting of the American Association for the Study of Liver Diseases; November, 2005; San Francisco, CA.
4. Shneider B, Norton K, Superina R, Erlichman J, Magee J, Bucuvalas J, Whitington P, Rosenthal P, Squires R, Benson J, Karpen S, Shepherd R, Sokol R. Diagnostic imaging in neonatal cholestasis: a multi-center prospective analysis. Paper presented at: AASLD Annual Meeting; October, 2006; Boston, MA.
5. Russo P, Boitnott J, Bove K, Brown M, Finegold M, J H, Jaffe R, Kim G, Magee J, Magid M, Melin-Aldana H, Sokol R, White F. A multi-institutional study of interobserver agreement on the histologic diagnosis of biliary obstruction in liver biopsies of cholestatic infants less than six months of age. Paper presented at: AASLD Annual Meeting; October, 2006; Boston, MA.
6. Shneider B, Shepherd R, Magee J, Bucuvalas J, Haber B, Karpen S, Rosenthal P, Schwarz K, Suchy F, Whitington P, Sokol R. Discriminating features of biliary atresia-a prospective multi-centered analysis. Paper presented at: AASLD Annual Meeting2007; Boston, MA.
7. Miethke A, Matte U, Liu C, Balistreri W, Ryckman F, Bezerra J. Gene mutations and clinical outcome after biliary diversion surgery for intractable pruritus in children with intrahepatic cholestasis. Paper presented at: NASPGHAN annual meeting; October, 2007; Salt Lake City, UT.
8. Gondek L, Tiu R, Wlodarski M, O'Keefe C, McDevitt M, Maciejewski J. Enhancement of cytogenetic diagnosis of myeloid disorders through application of SNP-array-based karyotyping. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.
9. Gondek L, Dunbar A, O'Keefe C, McDevitt M, Batista D, Theil K, Maciejewski J. SNP-A karyotyping facilitates improved mapping of deletions and uniparental disomy within the long arm of Chromosome 5 in myeloid disorders. Paper presented at: American Society of Hematology; December 8-11, 2007; Atlanta, GA.

- 10.** Haber B, Fredericks E, Magee J, Bezerra JA, Karpen S, Kerkar N, Rosenthal P, Schwarz K, Shepherd R, Schneider B, Whitington P, Robuck P, Sokol R, BARC. Predictors of neurodevelopmental outcome in non-transplanted children with biliary atresia at one year of age. Paper presented at: AASLD Annual Meeting; November 2008.
- 11.** Schwarz K, Shepherd R, Magee J, Rosenthal P, Mack C, Raghunathan T, Bezerra J, Haber B, Karpen S, Suchy F, Whitington P, Robuck P, Sokol R, BARC. Clinical and demographic features of three major biliary atresia phenotypes in the BARC study. Paper presented at: AASLD Annual Meeting; November 2008.
- 12.** Heubi J, Setchell K, Rosenthal P, Shah S, Buckley D, Jha P, Zhang W, Potter C, Suskind D, Bull L. Oral glycocholic acid treatment of patients with bile acid amidation defects improves growth and fat-soluble vitamin absorption; 2009, 2009.
- 13.** Sokol R, Hines J. The Cholestatic Liver Disease Consortium (CLiC): a multi-institutional collaboration to better understand and treat liver disease in children. Paper presented at: NIH conference “Advancing Rare Diseases Research through Networks and Collaboration.”; July 16, 2009; Bethesda, MD.
- 14.** Hahn C, Sokol R, Hines J. The patient advocacy group committee of the Cholestatic Liver Disease Consortium: giving families, parents and patients a partnership with researchers. Paper presented at: NIH conference “Advancing Rare Diseases Research through Networks and Collaboration.” July 16, 2009; Bethesda, MD.
- 15.** Bass LM, Xie H, Yu S, Malladi P, Bento-Soares M, Whitington P. Expression in progressive familial intrahepatic cholestasis. Paper presented at: AASLD Liver Meeting; Oct. 30-Nov. 1, 2009; Boston, MA.
- 16.** Sundaram S, Fredericks E, Kamath B, Haber B, Raghunathan T, Magee J, Bezerra J, Karpen S, Kerkar N, Rosenthal P, Schwarz K, Shepherd R, Schneider B, Whitington P, Robuck P, Sokol R, BARC. Cross sectional assessment of quality of life in biliary atresia patients ages 2-25 years. Paper presented at: AASLD Annual Meeting; November, 2009; Boston, MA.
- 17.** Sokol R, Magee J, Hahn C, Robuck P. The new Childhood Liver Disease Research and Education Network (ChiLDREN): a new cooperative effort between NIDDK, academic centers and patient advocacy groups. Paper presented at: NASPGHAN Annual Meeting; November 2009; National Harbor, MD.
- 18.** Schneider B, Abel R, Raghunathan T, Magee J, Bezerra J, Haber B, Karpen S, Rosenthal P, Schwarz K, Shepherd R, Suchy F, Whitington P, Robuck P, Sokol R, BARC. A prospective multi-centered investigation of vitamin supplementation in infants with biliary atresia: interim analysis from the Biliary Atresia Research Consortium (BARC). Paper presented at: AASLD Annual Meeting; November 2009; Boston, MA.
- 19.** Schneider B, Abel R, Haber B, Karpen S, Magee J, Romero R, Schwartz K, Bass L, Kerkar N, Miethke A, Rosenthal P, Turmelle Y, Sokol R. Multi-center analysis of portal hypertension in 163 children with biliary atresia. Paper presented at: Annual Meeting of the American Association for the Study of Liver Disease; November 2010; Boston, MA.

Conference Proceedings

1. Bass LM, Malladi P, Whitington P. FXR response in cholestatic liver disease. AASLD Abstracts 676–894. *Hepatology*. 2008;48(S1):609A-706A.

Journal Articles

1. Sokol RJ. New North American research network focuses on biliary atresia and neonatal liver disease. *J. Pediatr. Gastroenterol. Nutr.* Jan 2003;36(1):1. PMID: 12537011
2. Hoofnagle J. Biliary Atresia Research Consortium (BARC). *Hepatology*. 2004;39(4). PMID: 15057888
3. Sokol RJ, Mack CL. Optimizing outcomes and bridging biliary atresia into adulthood. *Hepatology*. Feb 2005;41(2):231-233. PMID: 15657917
4. Mack CL, Sokol RJ. Unraveling the pathogenesis and etiology of biliary atresia. *Pediatr. Res.* May 2005;57(5 Pt 2):87R-94R. PMID: 15817506
5. Schneider BL, Brown MB, Haber B, Whitington PF, Schwarz K, Squires R, Bezerra J, Shepherd R, Rosenthal P, Hoofnagle JH, Sokol RJ. A multicenter study of the outcome of biliary atresia in the United States, 1997 to 2000. *J. Pediatr.* Apr 2006;148(4):467-474. PMID: 16647406
6. Warthen DM, Moore EC, Kamath BM, Morrisette JJ, Sanchez P, Piccoli DA, Krantz ID, Spinner NB. Jagged1 (JAG1) mutations in Alagille syndrome: increasing the mutation detection rate. *Hum. Mutat.* May 2006;27(5):436-443. PMID: 16575836
7. McDaniell R, Warthen DM, Sanchez-Lara PA, Pai A, Krantz ID, Piccoli DA, Spinner NB. NOTCH2 mutations cause Alagille syndrome, a heterogeneous disorder of the notch signaling pathway. *Am. J. Hum. Genet.* Jul 2006;79(1):169-173. PMID: 16773578, PMCID: PMC1474136
8. Sokol RJ, Devereaux M, Dahl R, Gumprecht E. "Let there be bile"--understanding hepatic injury in cholestasis. *J. Pediatr. Gastroenterol. Nutr.* Jul 2006;43 Suppl 1:S4-9. PMID: 16819400
9. Setchell KD, Heubi JE. Defects in bile acid biosynthesis--diagnosis and treatment. *J. Pediatr. Gastroenterol. Nutr.* Jul 2006;43 Suppl 1:S17-22. PMID: 16819396
10. Liu C, Aronow BJ, Jegga AG, Wang N, Miethke A, Mourya R, Bezerra JA. Novel resequencing chip customized to diagnose mutations in patients with inherited syndromes of intrahepatic cholestasis. *Gastroenterology*. Jan 2007;132(1):119-126. PMID: 17241866, PMCID: PMC2190109
11. He M, Rutledge SL, Kelly DR, et al. A new genetic disorder in mitochondrial fatty acid beta-oxidation: ACAD9 deficiency. *Am. J. Hum. Genet.* Jul 2007;81(1):87-103. PMID: 17564966, PMCID: PMC1950923
12. Heubi JE, Setchell KD, Bove KE. Inborn errors of bile acid metabolism. *Semin. Liver Dis.* Aug 2007;27(3):282-294. PMID: 17682975
13. Lee WS, Sokol RJ. Liver disease in mitochondrial disorders. *Semin. Liver Dis.* Aug 2007;27(3):259-273. PMID: 17682973, PMCID: PMC3888320
14. Sokol RJ, Shepherd RW, Superina R, Bezerra JA, Robuck P, Hoofnagle JH. Screening and outcomes in biliary atresia: summary of a National Institutes of Health workshop. *Hepatology*. Aug 2007;46(2):566-581. PMID: 17661405, PMCID: PMC3888317
15. DeRusso PA, Ye W, Shepherd R, Haber BA, Schneider BL, Whitington PF, Schwarz KB, Bezerra JA, Rosenthal P, Karpen S, Squires RH, Magee JC, Robuck PR, Sokol RJ. Growth failure and outcomes in infants with biliary atresia: a report from the Biliary Atresia Research Consortium. *Hepatology*. Nov 2007;46(5):1632-1638. PMID: 17929308, PMCID: PMC3881187

16. Sundaram SS, Bove KE, Lovell MA, Sokol RJ. Mechanisms of disease: Inborn errors of bile acid synthesis. *Nat. Clin. Pract. Gastroenterol. Hepatol.* Aug 2008;5(8):456-468. PMID: 18677977, PMCID: PMC3888787
17. Pawlikowska L, Strautnieks S, Jankowska I, Czubkowski P, Emerick K, Antoniou A, Wanty C, Fischler B, Jacquemin E, Wali S, Blanchard S, Nielsen IM, Bourke B, McQuaid S, Lacaille F, Byrne JA, van Eerde AM, Kolho KL, Klompmacher L, Houwen R, Bacchetti P, Lobritto S, Hupertz V, McClean P, Mieli-Vergani G, Schneider B, Nemeth A, Sokal E, Freimer NB, Knisely AS, Rosenthal P, Whitington PF, Pawlowska J, Thompson RJ, Bull LN. Differences in presentation and progression between severe FIC1 and BSEP deficiencies. *J. Hepatol.* Jul 2010;53(1):170-178. PMID: 20447715, PMCID: PMC3042805

Chronic Graft Versus Host Disease Consortium

Conference Proceedings

1. Khera N, Xiaoyu C, Duong H, et al. Prospective Longitudinal Study of Late Acute Graft Versus Host Disease after Hematopoietic Cell Transplantation: A Report from Chronic GVHD Consortium. Paper presented at: BMT Tandem Meetings2015; San Diego, CA.
2. Palmer J, Chai X, Martin P, et al. Physician-Reported CR+PR at 6 Months Predicts Subsequent Survival in Patients with Chronic GVHD. Paper presented at: BMT Tandem Meetings2015; San Diego, CA.
3. Wood W, Lee S, Chai X, et al. Survival without Progressive Impairment As a Novel Endpoint in Chronic Graft-Versus-Host Disease. Paper presented at: BMT Tandem Meetings2015; San Diego, CA.
4. Yu J, Storer B, Daguindau E, et al. A Biomarker Panel for Chronic Graft-Versus-Host Disease. Paper presented at: BMT Tandem Meetings2015; San Diego, CA.

Journal Articles

1. Chronic Graft Versus Host Disease Consortium. Rationale and design of the chronic GVHD cohort study: improving outcomes assessment in chronic GVHD. *Biol. Blood Marrow Transplant.* Aug 2011;17(8):1114-1120. PMID: 21664473, PMCID: PMC4016312
2. Pidala J, Kurland BF, Chai X, Vogelsang G, Weisdorf DJ, Pavletic S, Cutler C, Majhail N, Lee SJ. Sensitivity of changes in chronic graft-versus-host disease activity to changes in patient-reported quality of life: results from the Chronic Graft-versus-Host Disease Consortium. *Haematologica.* Oct 2011;96(10):1528-1535. PMID: 21685473, PMCID: PMC3186315
3. Mitchell SA, Jacobsohn D, Thormann Powers KE, et al. A multicenter pilot evaluation of the National Institutes of Health chronic graft-versus-host disease (cGVHD) therapeutic response measures: feasibility, interrater reliability, and minimum detectable change. *Biol. Blood Marrow Transplant.* Nov 2011;17(11):1619-1629. PMID: 21536143, PMCID: PMC3158826
4. Pidala J, Vogelsang G, Martin P, Chai X, Storer B, Pavletic S, Weisdorf DJ, Jagasia M, Cutler C, Palmer J, Jacobsohn D, Arai S, Lee SJ. Overlap subtype of chronic graft-versus-host disease is associated with an adverse prognosis, functional impairment, and inferior patient-reported

- outcomes: a Chronic Graft-versus-Host Disease Consortium study. *Haematologica*. Mar 2012;97(3):451-458. PMID: 22058206, PMCID: PMC3291602
5. Pidala J, Chai X, Martin P, et al. Hand grip strength and 2-minute walk test in chronic graft-versus-host disease assessment: analysis from the Chronic GVHD Consortium. *Biol. Blood Marrow Transplant*. Jun 2013;19(6):967-972. PMID: 23542686, PMCID: PMC3966477
 6. Jacobsohn DA, Kurland BF, Pidala J, et al. Correlation between NIH composite skin score, patient-reported skin score, and outcome: results from the Chronic GVHD Consortium. *Blood*. Sep 27 2012;120(13):2545-2552; quiz 2774. PMID: 22773386, PMCID: PMC3460679
 7. Inamoto Y, Martin PJ, Chai X, et al. Clinical benefit of response in chronic graft-versus-host disease. *Biol. Blood Marrow Transplant*. Oct 2012;18(10):1517-1524. PMID: 22683612, PMCID: PMC3443259
 8. Inamoto Y, Storer BE, Lee SJ, et al. Failure-free survival after second-line systemic treatment of chronic graft-versus-host disease. *Blood*. Mar 21 2013;121(12):2340-2346. PMID: 23321253, PMCID: PMC3606068
 9. Arora M, Pidala J, Cutler CS, et al. Impact of prior acute GVHD on chronic GVHD outcomes: a chronic graft versus host disease consortium study. *Leukemia*. Apr 2013;27(5):1196-1201. PMID: 23047477, PMCID: PMC3942496
 10. Pidala J, Chai X, Kurland BF, et al. Analysis of gastrointestinal and hepatic chronic grant-versus-host disease manifestations on major outcomes: a chronic grant-versus-host disease consortium study. *Biol. Blood Marrow Transplant*. May 2013;19(5):784-791. PMID: 23395601, PMCID: PMC3896215
 11. Inamoto Y, Storer BE, Petersdorf EW, et al. Incidence, risk factors, and outcomes of sclerosis in patients with chronic graft-versus-host disease. *Blood*. Jun 20 2013;121(25):5098-5103. PMID: 23547053, PMCID: PMC3689252
 12. Pidala J, Sarwal M, Roedder S, Lee SJ. Biologic markers of chronic GVHD. *Bone Marrow Transplant*. Jul 22 2013. PMID: 23872737, PMCID: PMC3976639
 13. Inamoto Y, Martin PJ, Storer BE, et al. Association of severity of organ involvement with mortality and recurrent malignancy in patients with chronic graft-versus-host disease. *Haematologica*. 2014;99(10):1618-1623. PMID: 24997150, PMCID: PMC4181259
 14. Duarte RF, Greinix H, Rabin B, et al. Uptake and use of recommendations for the diagnosis, severity scoring and management of chronic GVHD: an international survey of the EBMT-NCI Chronic GVHD Task Force. *Bone Marrow Transplant*. Jan 2014;49(1):49-54. PMID: 23955633, PMCID: PMC3947261
 15. Kitko CL, Levine JE, Storer BE, et al. Plasma CXCL9 elevations correlate with chronic GVHD diagnosis. *Blood*. Jan 30 2014;123(5):786-793. PMID: 24363401, PMCID: PMC3907763
 16. Palmer J, Williams K, Inamoto Y, et al. Pulmonary symptoms measured by the national institutes of health lung score predict overall survival, nonrelapse mortality, and patient-reported outcomes in chronic graft-versus-host disease. *Biol. Blood Marrow Transplant*. Mar 2014;20(3):337-344. PMID: 24315845, PMCID: PMC3973401
 17. Allen JL, Tata PV, Fore MS, et al. Increased BCR responsiveness in B cells from patients with chronic GVHD. *Blood*. Mar 27 2014;123(13):2108-2115. PMID: 24532806, PMCID: PMC3968393

- 18.** Inamoto Y, Jagasia M, Wood WA, et al. Investigator feedback about the 2005 NIH diagnostic and scoring criteria for chronic GVHD. *Bone Marrow Transplant*. Apr 2014;49(4):532-538. PMID: 24464142, PMCID: PMC3975688
- 19.** Inamoto Y, Pidala J, Chai X, et al. Assessment of joint and fascia manifestations in chronic graft-versus-host disease. *Arthritis & rheumatology (Hoboken, N.J.)*. Apr 2014;66(4):1044-1052. PMID: 24757155, PMCID: PMC4014356
- 20.** Inamoto Y, Flowers ME, Sandmaier BM, et al. Failure-free survival after initial systemic treatment of chronic graft-versus-host disease. *Blood*. Aug 21 2014;124(8):1363-1371. PMID: 24876566, PMCID: PMC4141518
- 21.** El-Jawahri A, Pidala J, Inamoto Y, et al. Impact of Age on Quality of Life, Functional Status, and Survival in Patients with Chronic Graft-versus-Host Disease. *Biol. Blood Marrow Transplant*. Sep 2014;20(9):1341-1348. PMID: 24813171, PMCID: PMC4127362
- 22.** Sun YC, Chai X, Inamoto Y, et al. Impact of Ocular Chronic Graft-versus-Host Disease on Quality of Life. *Biol. Blood Marrow Transplant*. 2015;21(9):1687-1691. PMID: 26033283, PMCID: PMC4537831
- 23.** Inamoto Y, Sun YC, Flowers ME, et al. Bandage Soft Contact Lenses for Ocular Graft-versus-Host Disease. *Biol. Blood Marrow Transplant*. 2015;21(11):2002-2007. PMID: 26189353, PMCID: PMC4604037
- 24.** Krupski C, Jagasia M. Quality of Life in the Chronic GVHD Consortium Cohort: Lessons Learned and the Long Road Ahead. *Curr. Hematol. Malig. Rep.* Sep 2015;10(3):183-191. PMID: 26303672
- 25.** Arai S, Pidala J, Pusic I, et al. A Randomized Phase II Crossover Study of Imatinib or Rituximab for Cutaneous Sclerosis after Hematopoietic Cell Transplantation. *Clin Cancer Res*. 2016;22(2):319-327. PMID: 26378033, PMCID: PMC4715914
- 26.** Cheng GS, Storer B, Chien JW, et al. Lung Function Trajectory in Bronchiolitis Obliterans Syndrome after Allogeneic Hematopoietic Cell Transplant. *Annals of the American Thoracic Society*. 2016;13(11):1932-1939. PMID: 27513368
- 27.** Kariminia A, Holtan SG, Ivison S, et al. Heterogeneity of chronic graft-versus-host disease biomarkers: association with CXCL10 and CXCR3+ NK cells. *Blood*. 2016;127(24):3082-3091. PMID: 27020088, PMCID: PMC4911864
- 28.** Lazaryan A, Weisdorf DJ, DeFor T, et al. Risk Factors for Acute and Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Cell Transplantation with Umbilical Cord Blood and Matched Sibling Donors. *Biol Blood Marrow Transplant*. 2016;22(1):134-140. PMID: 26365153, PMCID: PMC4787268
- 29.** Liu X, Yue Z, Yu J, et al. Proteomic Characterization Reveals That MMP-3 Correlates With Bronchiolitis Obliterans Syndrome Following Allogeneic Hematopoietic Cell and Lung Transplantation. *Am J Transplant*. 2016;16(8):2342-2351. PMID: 26887344, PMCID: PMC4956556
- 30.** Merkel PA, Manion M, Gopal-Srivastava R, et al. The partnership of patient advocacy groups and clinical investigators in the rare diseases clinical research network. *Orphanet J. Rare Dis*. 2016;11(1):66. PMID: 27194034, PMCID: PMC4870759

- 31.** Merkel EC, Mitchell SA, Lee SJ. Content Validity of the Lee Chronic Graft-versus-Host Disease Symptom Scale as Assessed by Cognitive Interviews. *Biol Blood Marrow Transplant*. 2016;22(4):752-758. PMID: 26751003, PMCID: PMC4850024
- 32.** Muller JA, Zirafi O, Roan NR, Lee SJ, Munch J. Evaluation of EPI-X4 as a urinary peptide biomarker for diagnosis and prognosis of late acute GvHD. *Bone Marrow Transplant*. 2016;51(8):1137-1139. PMID: 27042833, PMCID: PMC4972659
- 33.** Williams KM, Cheng GS, Pusic I, et al. Fluticasone, Azithromycin, and Montelukast Treatment for New-Onset Bronchiolitis Obliterans Syndrome after Hematopoietic Cell Transplantation. *Biol Blood Marrow Transplant*. 2016;22(4):710-716. PMID: 26475726, PMCID: PMC4801753
- 34.** Yu J, Storer BE, Kushekhar K, et al. Biomarker Panel for Chronic Graft-Versus-Host Disease. *J Clin Oncol*. 2016;34(22):2583-2590. PMID: 27217465, PMCID: PMC5012688
- 35.** Palmer J, Chai X, Pidala J, et al. Predictors of survival, nonrelapse mortality, and failure-free survival in patients treated for chronic graft-versus-host disease. *Blood*. Jan 7 2016;127(1):160-166. PMID: 26527676, PMCID: PMC4705606
- 36.** Arora M, Cutler CS, Jagasia MH, et al. Late Acute and Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Cell Transplantation. *Biol. Blood Marrow Transplant*. Mar 2016;22(3):449-455. PMID: 26541363, PMCID: PMC4787270
- 37.** Hamilton BK, Rybicki L, Arai S, et al. Association of Socioeconomic Status with Chronic Graft-versus-Host Disease Outcomes. *Biol Blood Marrow Transplant*. 2017. PMID: 29032275
- 38.** Lee SJ. Classification systems for chronic graft-versus-host disease. *Blood*. 2017;129(1):30-37. PMID: 27821503, PMCID: PMC5216262
- 39.** Lee SJ, Nguyen TD, Onstad L, et al. Success of Immunosuppressive Treatments in Patients with Chronic Graft-versus-Host Disease. *Biol Blood Marrow Transplant*. 2017. PMID: 29133250
- 40.** Martin PJ, Storer BE, Inamoto Y, et al. An endpoint associated with clinical benefit after initial treatment of chronic graft-versus-host disease. *Blood*. 2017;130(3):360-367. PMID: 28495794, PMCID: PMC5520473
- 41.** Holtan SG, DeFor TE, Panoskaltsis-Mortari A, et al. Amphiregulin modifies the Minnesota Acute Graft-versus-Host Disease Risk Score: results from BMT CTN 0302/0802. *Blood advances*. 2018;2(15):1882-1888. PMID: 30087106, PMCID: PMC6093743

Clinical Research Consortium for Spinocerebellar Ataxias

Book Chapters

1. Paulson H. Molecular genetics of the ataxias. In: Watts R, Standaert D, Obeso J, eds. *Movement Disorders*. 3rd ed: McGraw-Hill Professional; 2009.

Abstracts Presented at Conferences

1. Figueroa K, Gomez C, Paulson H, Perlman S, Schmahmann J, Subramony SH, Wilmot G, Zesiewicz T, Ashizawa T, Pulst S. Prior Molecular Diagnostic Accuracy and Age of Disease Onset Variation in the CRC-SCA, a Multicenter Study of Spinocerebellar Ataxias. Paper presented at: American Academy of Neurology 64th Annual Meeting; April 21-28, 2012; New Orleans, LA.

- 2.** Ashizawa T, Perlman S, Gomez C, Wilmot G, Schmahmann J, Ying S, Zesiewicz T, Paulson H, Shakkottai VG, Bushara K, Mazzoni P, Kuo S, Pulst S, Figueroa K, Xia G, Krischer J, Cuthbertson D, Holbert AR, Ferguson J, Galpern W, Subramony SH. Clinical Characteristics of Spinocerebellar Ataxias 1, 2, 3 and 6. Paper presented at: American Academy of Neurology 64th Annual Meeting; April 21-28, 2012; New Orleans, LA.

Journal Articles

- 1.** Thyagarajan B, Bower M, Berger M, Jones S, Dolan M, Wang X. A novel polymorphism in the FMR1 gene: implications for clinical testing of fragile X syndrome. *Arch. Pathol. Lab. Med.* Jan 2008;132(1):95-98. PMID: 18181681
- 2.** Liu T, Xu D, Ashe J, Bushara K. Specificity of inferior olive response to stimulus timing. *J. Neurophysiol.* Sep 2008;100(3):1557-1561. PMID: 18632890, PMCID: PMC2544464
- 3.** Williams AJ, Paulson HL. Polyglutamine neurodegeneration: protein misfolding revisited. *Trends Neurosci.* Oct 2008;31(10):521-528. PMID: 18778858, PMCID: PMC2580745
- 4.** Shakkottai VG, Xiao M, Xu L, Wong M, Nerbonne JM, Ornitz DM, Yamada KA. FGF14 regulates the intrinsic excitability of cerebellar Purkinje neurons. *Neurobiol. Dis.* Jan 2009;33(1):81-88. PMID: 18930825, PMCID: PMC2652849
- 5.** Todi SV, Winborn BJ, Scaglione KM, Blount JR, Travis SM, Paulson HL. Ubiquitination directly enhances activity of the deubiquitinating enzyme ataxin-3. *EMBO J.* Feb 18 2009;28(4):372-382. PMID: 19153604, PMCID: PMC2646149
- 6.** Williams AJ, Knutson TM, Colomer Gould VF, Paulson HL. In vivo suppression of polyglutamine neurotoxicity by C-terminus of Hsp70-interacting protein (CHIP) supports an aggregation model of pathogenesis. *Neurobiol. Dis.* Mar 2009;33(3):342-353. PMID: 19084066, PMCID: PMC2662361
- 7.** Paulson HL. The spinocerebellar ataxias. *J. Neuroophthalmol.* Sep 2009;29(3):227-237. PMID: 19726947, PMCID: PMC2739122
- 8.** Shakkottai VG, Paulson HL. Physiologic alterations in ataxia: channeling changes into novel therapies. *Arch. Neurol.* Oct 2009;66(10):1196-1201. PMID: 19822774, PMCID: PMC2762109
- 9.** D'Abreu A, Franca MC, Jr., Paulson HL, Lopes-Cendes I. Caring for Machado-Joseph disease: current understanding and how to help patients. *Parkinsonism Relat. Disord.* Jan 2010;16(1):2-7. PMID: 19811945, PMCID: PMC2818316
- 10.** Todd PK, Paulson HL. RNA-mediated neurodegeneration in repeat expansion disorders. *Ann. Neurol.* Mar 2010;67(3):291-300. PMID: 20373340, PMCID: PMC2852186
- 11.** Elrick MJ, Pacheco CD, Yu T, Dadgar N, Shakkottai VG, Ware C, Paulson HL, Lieberman AP. Conditional Niemann-Pick C mice demonstrate cell autonomous Purkinje cell neurodegeneration. *Hum. Mol. Genet.* Mar 1 2010;19(5):837-847. PMID: 20007718, PMCID: PMC2816612
- 12.** Oz G, Nelson CD, Koski DM, Henry PG, Marjanska M, Deelchand DK, Shanley R, Eberly LE, Orr HT, Clark HB. Noninvasive detection of presymptomatic and progressive neurodegeneration in a mouse model of spinocerebellar ataxia type 1. *J. Neurosci.* Mar 10 2010;30(10):3831-3838. PMID: 20220018, PMCID: PMC2846771

- 13.** Friedman LS, Farmer JM, Perlman S, Wilmot G, Gomez CM, Bushara KO, Mathews KD, Subramony SH, Ashizawa T, Balcer LJ, Wilson RB, Lynch DR. Measuring the rate of progression in Friedreich ataxia: implications for clinical trial design. *Mov. Disord.* Mar 15 2010;25(4):426-432. PMID: 20063431, PMCID: PMC2954653
- 14.** Oz G, Hutter D, Tkac I, Clark HB, Gross MD, Jiang H, Eberly LE, Bushara KO, Gomez CM. Neurochemical alterations in spinocerebellar ataxia type 1 and their correlations with clinical status. *Mov. Disord.* Jul 15 2010;25(9):1253-1261. PMID: 20310029, PMCID: PMC2916651
- 15.** Iltis I, Hutter D, Bushara KO, Clark HB, Gross M, Eberly LE, Gomez CM, Oz G. (1)H MR spectroscopy in Friedreich's ataxia and ataxia with oculomotor apraxia type 2. *Brain Res.* Oct 28 2010;1358:200-210. PMID: 20713024, PMCID: PMC2949538
- 16.** Wu X, Nestrasil I, Ashe J, Tuite P, Bushara K. Inferior olive response to passive tactile and visual stimulation with variable interstimulus intervals. *Cerebellum.* Dec 2010;9(4):598-602. PMID: 20730634
- 17.** Teive HA, Munhoz RP, Raskin S, Arruda WO, de Paola L, Werneck LC, Ashizawa T. Spinocerebellar ataxia type 10: Frequency of epilepsy in a large sample of Brazilian patients. *Mov. Disord.* Dec 15 2010;25(16):2875-2878. PMID: 20818609, PMCID: PMC3000879
- 18.** Scharner J, Brown CA, Bower M, Iannaccone ST, Khatri IA, Escolar D, Gordon E, Felice K, Crowe CA, Grosmann C, Meriggioli MN, Asamoah A, Gordon O, Gnocchi VF, Ellis JA, Mendell JR, Zammit PS. Novel LMNA mutations in patients with Emery-Dreifuss muscular dystrophy and functional characterization of four LMNA mutations. *Hum. Mutat.* Feb 2011;32(2):152-167. PMID: 20848652
- 19.** Oz G, Tkac I. Short-echo, single-shot, full-intensity proton magnetic resonance spectroscopy for neurochemical profiling at 4 T: validation in the cerebellum and brainstem. *Magn. Reson. Med.* Apr 2011;65(4):901-910. PMID: 21413056, PMCID: PMC3827699
- 20.** Oz G, Iltis I, Hutter D, Thomas W, Bushara KO, Gomez CM. Distinct neurochemical profiles of spinocerebellar ataxias 1, 2, 6, and cerebellar multiple system atrophy. *Cerebellum.* Jun 2011;10(2):208-217. PMID: 20838948, PMCID: PMC3089811
- 21.** Bower MA, Bushara K, Dempsey MA, Das S, Tuite PJ. Novel mutations in siblings with later-onset PLA2G6-associated neurodegeneration (PLAN). *Mov. Disord.* Aug 1 2011;26(9):1768-1769. PMID: 21520282
- 22.** Moscovich M, Munhoz RP, Teive HA, Raskin S, Carvalho Mde J, Barbosa ER, Ranvaud R, Liu J, McFarland K, Ashizawa T, Lees AJ, Silveira-Moriyama L. Olfactory impairment in familial ataxias. *J. Neurol. Neurosurg. Psychiatry.* Oct 2012;83(10):970-974. PMID: 22791905, PMCID: PMC3521149
- 23.** Xia G, Santostefano KE, Goodwin M, Liu J, Subramony SH, Swanson MS, Terada N, Ashizawa T. Generation of neural cells from DM1 induced pluripotent stem cells as cellular model for the study of central nervous system neuropathogenesis. *Cellular reprogramming.* Apr 2013;15(2):166-177. PMID: 23550732, PMCID: PMC3616452
- 24.** Ashizawa T, Figueroa KP, Perlman SL, et al. Clinical characteristics of patients with spinocerebellar ataxias 1, 2, 3 and 6 in the US; a prospective observational study. *Orphanet J. Rare Dis.* Nov 13 2013;8(1):177. PMID: 24225362, PMCID: PMC3843578

Consortium for Clinical Investigation of Neurologic Channelopathies

Abstracts Presented at Conferences

1. Herr B, Malloy J, Cleland J, Krischer J. Automated tools for data collection and management in clinical research studies of Andersen-Tawil syndrome: improving protocol compliance and data quality. Paper presented at: Inventory and Evaluation of Clinical Research Networks; May 31, 2006; Washington, DC.
2. Herr B, Richesson R, Krischer J, Griggs RC, Consortium tC. A research network for the experimental therapeutics of rare neurologic disorders. Paper presented at: 9th Annual Meeting of the American Society for Experimental NeuroTherapeutics (ASENT); March 8-10, 2007; Washington, DC.
3. Walsh R, Statland J, Wang Y, Bundy B, Barohn RJ, group tCs. The nondystrophic myotonias: genotype-phenotype correlation and longitudinal study. Clinical phenotype characterization. Paper presented at: 59th American Academy of Neurology Meeting; April 28-May 5, 2007; Boston, MA.
4. Wang Y, Statland J, Walsh R, Barohn RJ, Group CS. Interactive voice response diary and objective myotonia measurement as endpoints for clinical trials in nondystrophic myotonia. Paper presented at: 59th American Academy of Neurology Meeting; April 28-May 5, 2007; Boston, MA.
5. Trivedi J, Statland J, Cannon S, Bundy B, Wang Y, Barohn R. Nondystrophic myotonic disorders: assessment of myotonia and warm-up phenomenon in various subtypes. Paper presented at: American Academy of Neurology; April 12-19, 2008; Chicago, IL.
6. Venance SL, LaDonna KA, Matthews E, Y W, B B, Barohn R. Nondystrophic myotonias: measuring quality of life in a longitudinal natural history study. *Neurology*. 2009;72(Supplement 3).
7. Cialfoni E, Rajakuledran S, Sansone V, Trivedi J, Venance S, Tristani-Firouzi M, Bundy B, Hart K, Meola G, Griggs R, CINCH Consortium. Preliminary results of Andersen-Tawil Syndrome genotype-phenotype longitudinal study from the Consortium for Clinical Investigation of Neurologic Channelopathies (CINCH). Paper presented at: World Congress of Neurology; November 12-17, 2011; Marrakesh, Morocco.
8. Graves T, Cha Y, Hahn A, Barohn RJ, Amato A, Griggs R, Bundy B, Jen JC, Baloh R, Hanna M. Episodic ataxia type 1: Characterization of the disease and its effect on quality of life. Paper presented at: American Academy of Neurology; April 21-28, 2012; New Orleans.
9. Graves T, Fialho D, Smith S, Cha Y, Amato A, Griggs R, Bundy B, Jen JC, Baloh R, Hanna M. EEG abnormalities in the episodic ataxias. Paper presented at: American Academy of Neurology; April 21-28, 2012; New Orleans, LA.
10. Trivedi J, Bundy B, Rayan DR, Salajegheh M, Statland JM, Venance S, Wang Y, Fialho D, Hart K, Gorham N, Herbelin L, Amato A, Hanna M, Griggs R, Barohn RJ. Clinical and molecular characterization of non-dystrophic myotonia. Paper presented at: American Academy of Neurology; April 25, 2012; New Orleans, LA.
11. Statland JM, Salajegheh M, Bundy B, Wang Y, Rayan DR, Trivedi J, Sansone V, Venance S, Cialfoni E, Matthews E, Meola G, Zanolini A, Ciocca M, Herbelin L, Griggs R, Barohn RJ, Hanna M, CINCH Consortium. Phase II therapeutic trial of Mexiletine in non-dystrophic myotonia:

secondary outcomes show improvement in symptoms and signs of myotonia. Paper presented at: American Academy of Neurology; April 26, 2012; New Orleans, LA.

Journal Articles

1. Jen J, Kim GW, Baloh RW. Clinical spectrum of episodic ataxia type 2. *Neurology*. Jan 13 2004;62(1):17-22. PMID: 14718690
2. Venance SL, Herr BE, Griggs RC. Challenges in the design and conduct of therapeutic trials in channel disorders. *Neurotherapeutics*. Apr 2007;4(2):199-204. PMID: 17395129
3. Cha YH, Baloh RW. Migraine associated vertigo. *J Clin Neurol*. Sep 2007;3(3):121-126. PMID: 19513278, PMCID: PMC2686840
4. Jen JC, Graves TD, Hess EJ, Hanna MG, Griggs RC, Baloh RW. Primary episodic ataxias: diagnosis, pathogenesis and treatment. *Brain*. Oct 2007;130(Pt 10):2484-2493. PMID: 17575281
5. Craig K, Elliott HR, Keers SM, Lambert C, Pyle A, Graves TD, Woodward C, Sweeney MG, Davis MB, Hanna MG, Chinnery PF. Episodic ataxia and hemiplegia caused by the 8993T->C mitochondrial DNA mutation. *J. Med. Genet*. Dec 2007;44(12):797-799. PMID: 18055910, PMCID: PMC2652821
6. Jen JC. Recent advances in the genetics of recurrent vertigo and vestibulopathy. *Curr. Opin. Neurol*. Feb 2008;21(1):3-7. PMID: 18180645
7. Jen JC. Hereditary episodic ataxias. *Ann. N. Y. Acad. Sci*. Oct 2008;1142:250-253. PMID: 18990130
8. Fialho D, Kullmann DM, Hanna MG, Schorge S. Non-genomic effects of sex hormones on CLC-1 may contribute to gender differences in myotonia congenita. *Neuromuscul. Disord*. Nov 2008;18(11):869-872. PMID: 18815035
9. Griggs RC, Batshaw M, Dunkle M, Gopal-Srivastava R, Kaye E, Krischer J, Nguyen T, Paulus K, Merkel PA. Clinical research for rare disease: opportunities, challenges, and solutions. *Mol. Genet. Metab*. Jan 2009;96(1):20-26. PMID: 19013090, PMCID: PMC3134795
10. de Vries B, Mamsa H, Stam AH, Wan J, Bakker SL, Vanmolkot KR, Haan J, Terwindt GM, Boon EM, Howard BD, Frants RR, Baloh RW, Ferrari MD, Jen JC, van den Maagdenberg AM. Episodic ataxia associated with EAAT1 mutation C186S affecting glutamate reuptake. *Arch. Neurol*. Jan 2009;66(1):97-101. PMID: 19139306
11. Meola G, Hanna MG, Fontaine B. Diagnosis and new treatment in muscle channelopathies. *J. Neurol. Neurosurg. Psychiatry*. Apr 2009;80(4):360-365. PMID: 19289476
12. Cha YH, Lee H, Santell LS, Baloh RW. Association of benign recurrent vertigo and migraine in 208 patients. *Cephalgia*. May 2009;29(5):550-555. PMID: 19170697, PMCID: PMC2820365
13. Jen JC, Baloh RW. Familial episodic ataxia: a model for migrainous vertigo. *Ann. N. Y. Acad. Sci*. May 2009;1164:252-256. PMID: 19645908
14. Matthews E, Labrum R, Sweeney MG, Sud R, Haworth A, Chinnery PF, Meola G, Schorge S, Kullmann DM, Davis MB, Hanna MG. Voltage sensor charge loss accounts for most cases of hypokalemic periodic paralysis. *Neurology*. May 5 2009;72(18):1544-1547. PMID: 19118277, PMCID: PMC2848101

15. Rajakulendran S, Tan SV, Matthews E, Tomlinson SE, Labrum R, Sud R, Kullmann DM, Schorge S, Hanna MG. A patient with episodic ataxia and paramyotonia congenita due to mutations in KCNA1 and SCN4A. *Neurology*. Sep 22 2009;73(12):993-995. PMID: 19770477, PMCID: PMC2754337
16. Tomlinson SE, Hanna MG, Kullmann DM, Tan SV, Burke D. Clinical neurophysiology of the episodic ataxias: insights into ion channel dysfunction in vivo. *Clin. Neurophysiol.* Oct 2009;120(10):1768-1776. PMID: 19734086
17. Platt D, Griggs R. Skeletal muscle channelopathies: new insights into the periodic paralyses and nondystrophic myotonias. *Curr. Opin. Neurol.* Oct 2009;22(5):524-531. PMID: 19571750, PMCID: PMC2763141
18. Cha YH. Mal de debarquement. *Semin. Neurol.* Nov 2009;29(5):520-527. PMID: 19834863, PMCID: PMC2846419
19. Matthews E, Fialho D, Tan SV, Venance SL, Cannon SC, Sternberg D, Fontaine B, Amato AA, Barohn RJ, Griggs RC, Hanna MG. The non-dystrophic myotonias: molecular pathogenesis, diagnosis and treatment. *Brain*. Jan 2010;133(Pt 1):9-22. PMID: 19917643, PMCID: PMC2801326
20. Ryan DP, da Silva MR, Soong TW, Fontaine B, Donaldson MR, Kung AW, Jongjaroenprasert W, Liang MC, Khoo DH, Cheah JS, Ho SC, Bernstein HS, Maciel RM, Brown RH, Jr., Ptacek LJ. Mutations in potassium channel Kir2.6 cause susceptibility to thyrotoxic hypokalemic periodic paralysis. *Cell*. Jan 8 2010;140(1):88-98. PMID: 20074522, PMCID: PMC2885139
21. Zhou H, Lillis S, Loy RE, Ghassemi F, Rose MR, Norwood F, Mills K, Al-Sarraj S, Lane RJ, Feng L, Matthews E, Sewry CA, Abbs S, Buk S, Hanna M, Treves S, Dirksen RT, Meissner G, Muntoni F, Jungbluth H. Multi-minicore disease and atypical periodic paralysis associated with novel mutations in the skeletal muscle ryanodine receptor (RYR1) gene. *Neuromuscul. Disord.* Mar 2010;20(3):166-173. PMID: 20074522, PMCID: PMC2885139
22. Cha YH. Migraine-associated vertigo: diagnosis and treatment. *Semin. Neurol.* Apr 2010;30(2):167-174. PMID: 20352586
23. Rajakulendran S, Graves TD, Labrum RW, Kotzadimitriou D, Eunson L, Davis MB, Davies R, Wood NW, Kullmann DM, Hanna MG, Schorge S. Genetic and functional characterisation of the P/Q calcium channel in episodic ataxia with epilepsy. *J. Physiol.* Jun 1 2010;588(Pt 11):1905-1913. PMID: 20156848, PMCID: PMC2901979
24. Matthews E, Hanna MG. Muscle channelopathies: does the predicted channel gating pore offer new treatment insights for hypokalaemic periodic paralysis? *J. Physiol.* Jun 1 2010;588(Pt 11):1879-1886. PMID: 20123788, PMCID: PMC2901976
25. Hess EJ, Jen JC, Jinnah HA, Benarroch EE. Neuronal voltage-gated calcium channels: brief overview of their function and clinical implications in neurology. *Neurology*. Sep 7 2010;75(10):937; author reply 937-938. PMID: 20820007
26. Tomlinson SE, Tan SV, Kullmann DM, Griggs RC, Burke D, Hanna MG, Bostock H. Nerve excitability studies characterize Kv1.1 fast potassium channel dysfunction in patients with episodic ataxia type 1. *Brain*. Dec 2010;133(Pt 12):3530-3540. PMID: 21106501, PMCID: PMC2995887

- 27.** Griggs RC. The AAN disciplinary process: indispensable to neurologists. *Neurology*. Dec 14 2010;75(24):2148-2149. PMID: 21084691
- 28.** Statland JM, Wang Y, Richesson R, Bundy B, Herbelin L, Gomes J, Trivedi J, Venance S, Amato A, Hanna M, Griggs R, Barohn RJ, The CINCH Consortium. An interactive voice response diary for patients with non-dystrophic myotonia. *Muscle Nerve*. 2011;44(1):30-35. PMID: 21674518, PMCID: PMC3233757
- 29.** Tan SV, Matthews E, Barber M, Burge JA, Rajakulendran S, Fialho D, Sud R, Haworth A, Koltzenburg M, Hanna MG. Refined exercise testing can aid DNA-based diagnosis in muscle channelopathies. *Ann. Neurol.* Feb 2011;69(2):328-340. PMID: 21387378, PMCID: PMC3051421
- 30.** Matthews E, Miller JA, MacLeod MR, Ironside J, Ambler G, Labrum R, Sud R, Holton JL, Hanna MG. Sodium and chloride channelopathies with myositis: coincidence or connection? *Muscle Nerve*. Aug 2011;44(2):283-288. PMID: 21698652, PMCID: PMC3136616
- 31.** Matthews E, Portaro S, Ke Q, Sud R, Haworth A, Davis MB, Griggs RC, Hanna MG. Acetazolamide efficacy in hypokalemic periodic paralysis and the predictive role of genotype. *Neurology*. Nov 29 2011;77(22):1960-1964. PMID: 22094484, PMCID: PMC3235354
- 32.** Platt D, Griggs RC. Use of acetazolamide in sulfonamide-allergic patients with neurologic channelopathies. *Arch. Neurol.* Apr 2012;69(4):527-529. PMID: 22158718, PMCID: PMC3785308
- 33.** Raja Rayan DL, Haworth A, Sud R, Matthews E, Fialho D, Burge J, Portaro S, Schorge S, Tuin K, Lunt P, McEntagart M, Toscano A, Davis MB, Hanna MG. A new explanation for recessive myotonia congenita: exon deletions and duplications in CLCN1. *Neurology*. Jun 12 2012;78(24):1953-1958. PMID: 22649220, PMCID: PMC3369509
- 34.** Tan SV, Z'Graggen W J, Boerio D, Rayan DL, Howard R, Hanna MG, Bostock H. Membrane dysfunction in Andersen-Tawil syndrome assessed by velocity recovery cycles. *Muscle Nerve*. Aug 2012;46(2):193-203. PMID: 22806368
- 35.** Murphy SM, Puwanant A, Griggs RC. Unintended effects of orphan product designation for rare neurological diseases. *Ann. Neurol.* Oct 2012;72(4):481-490. PMID: 23109143, PMCID: PMC3490440
- 36.** Statland JM, Bundy BN, Wang Y, Trivedi JR, Raja Rayan D, Herbelin L, Donlan M, McLin R, Eichinger KJ, Findlater K, Dewar L, Pandya S, Martens WB, Venance SL, Matthews E, Amato AA, Hanna MG, Griggs RC, Barohn RJ. A quantitative measure of handgrip myotonia in non-dystrophic myotonia. *Muscle Nerve*. Oct 2012;46(4):482-489. PMID: 22987687, PMCID: PMC3564214
- 37.** Statland JM, Bundy BN, Wang Y, Rayan DR, Trivedi JR, Sansone VA, Salajegheh MK, Venance SL, Ciafaloni E, Matthews E, Meola G, Herbelin L, Griggs RC, Barohn RJ, Hanna MG. Mexiletine for symptoms and signs of myotonia in nondystrophic myotonia: a randomized controlled trial. *JAMA*. Oct 3 2012;308(13):1357-1365. PMID: 23032552, PMCID: PMC3564227
- 38.** Ke Q, Luo B, Qi M, Du Y, Wu W. Gender differences in penetrance and phenotype in hypokalemic periodic paralysis. *Muscle Nerve*. Jan 2013;47(1):41-45. PMID: 23019082
- 39.** Trivedi JR, Bundy B, Statland J, et al. Non-dystrophic myotonia: prospective study of objective and patient reported outcomes. *Brain*. Jul 2013;136(Pt 7):2189-2200. PMID: 23771340, PMCID: PMC3692030

Rare Genetic Steroid Disorders

Journal Articles

1. Ergun-Longmire B, Auchus R, Papari-Zareei M, Tansil S, Wilson RC, New MI. Two novel mutations found in a patient with 17alpha-hydroxylase enzyme deficiency. *J. Clin. Endocrinol. Metab.* Oct 2006;91(10):4179-4182. PMID: 16849412
2. New MI. Extensive clinical experience: nonclassical 21-hydroxylase deficiency. *J. Clin. Endocrinol. Metab.* Nov 2006;91(11):4205-4214. PMID: 16912124
3. Nimkarn S, Lin-Su K, Berglind N, Wilson RC, New MI. Aldosterone-to-renin ratio as a marker for disease severity in 21-hydroxylase deficiency congenital adrenal hyperplasia. *J. Clin. Endocrinol. Metab.* Jan 2007;92(1):137-142. PMID: 17032723
4. Wilson RC, Nimkarn S, Dumanian G, Obeid J, Azar MR, Najmabadi H, Saffari F, New MI. Ethnic-specific distribution of mutations in 716 patients with congenital adrenal hyperplasia owing to 21-hydroxylase deficiency. *Mol. Genet. Metab.* Apr 2007;90(4):414-421. PMID: 17275379, PMCID: PMC1885892
5. Meyer-Bahlburg HF, Dolezal C. The female sexual function index: a methodological critique and suggestions for improvement. *J. Sex Marital Ther.* May-Jun 2007;33(3):217-224. PMID: 17454519
6. Meyer-Bahlburg HF, Dolezal C, Baker SW, New MI. Sexual orientation in women with classical or non-classical congenital adrenal hyperplasia as a function of degree of prenatal androgen excess. *Arch. Sex. Behav.* Feb 2008;37(1):85-99. PMID: 18157628

Rare Thrombotic Diseases Consortium

Journal Articles

1. Ortel TL. Thrombosis and the antiphospholipid syndrome. *Hematology Am Soc Hematol Educ Program.* 2005:462-468. PMID: 16304421
2. Potti A, Ramiah V, Ortel TL. Thrombophilia and thrombosis in thrombotic thrombocytopenic purpura. *Semin. Thromb. Hemost.* Dec 2005;31(6):652-658. PMID: 16388416
3. Lewis DA, Pound ML, Ortel TL. The reactivity of paired plasma and serum samples are comparable in the anticardiolipin and anti-beta2-glycoprotein-1 ELISAs. *J. Thromb. Haemost.* Jan 2006;4(1):265-267. PMID: 16409482
4. Arepally GM, Ortel TL. Clinical practice. Heparin-induced thrombocytopenia. *N. Engl. J. Med.* Aug 24 2006;355(8):809-817. PMID: 16928996
5. Ortel TL. The antiphospholipid syndrome: what are we really measuring? How do we measure it? And how do we treat it? *J. Thromb. Thrombolysis.* Feb 2006;21(1):79-83. PMID: 16475047
6. Potti A, Bild A, Dressman HK, Lewis DA, Nevins JR, Ortel TL. Gene-expression patterns predict phenotypes of immune-mediated thrombosis. *Blood.* Feb 15 2006;107(4):1391-1396. PMID: 16263789, PMCID: PMC1895419

7. Perry SL, O'Shea SI, Byrne S, Szczech LA, Ortel TL. A multi-dose pharmacokinetic study of dalteparin in haemodialysis patients. *Thromb. Haemost.* Dec 2006;96(6):750-755. PMID: 17139369
8. Welsby IJ, Jones WL, Arepally G, De Lange F, Yoshitani K, Phillips-Bute B, Grocott HP, Becker R, Mackensen GB. Effect of combined anticoagulation using heparin and bivalirudin on the hemostatic and inflammatory responses to cardiopulmonary bypass in the rat. *Anesthesiology.* Feb 2007;106(2):295-301. PMID: 17264724
9. Hoffman M, Colina CM, McDonald AG, Arepally GM, Pedersen L, Monroe DM. Tissue factor around dermal vessels has bound factor VII in the absence of injury. *J. Thromb. Haemost.* Jul 2007;5(7):1403-1408. PMID: 17425666
10. Krakow EF, Goudar R, Petzold E, Suvarna S, Last M, Welsby IJ, Ortel TL, Arepally GM. Influence of sample collection and storage on the detection of platelet factor 4-heparin antibodies. *Am. J. Clin. Pathol.* Jul 2007;128(1):150-155. PMID: 17580283
11. Whitlatch NL, Perry SL, Ortel TL. Anti-heparin/platelet factor 4 antibody optical density values and the confirmatory procedure in the diagnosis of heparin-induced thrombocytopenia. *Thromb. Haemost.* Oct 2008;100(4):678-684. PMID: 18841292, PMCID: PMC2575642
12. Ortel TL. Heparin-induced thrombocytopenia: when a low platelet count is a mandate for anticoagulation. *Hematology Am Soc Hematol Educ Program.* Jan. 1 2009:225-232. PMID: 20008202
13. Perry SL, Whitlatch NL, Ortel TL. Heparin-dependent platelet factor 4 antibodies and the impact of renal function on clinical outcomes: a retrospective study in hospitalized patients. *J. Thromb. Thrombolysis.* Aug 2009;28(2):146-150. PMID: 18839279, PMCID: PMC2713799
14. Kuderer NM, Ortel TL, Francis CW. Impact of venous thromboembolism and anticoagulation on cancer and cancer survival. *J. Clin. Oncol.* Oct 10 2009;27(29):4902-4911. PMID: 19738120, PMCID: PMC2799059
15. Arepally GM, Ortel TL. Heparin-induced thrombocytopenia. *Annu. Rev. Med.* 2010;61:77-90. PMID: 20059332

Salivary Gland Carcinomas Consortium

Journal Articles

1. Santarpia L, Myers JN, Sherman SI, Trimarchi F, Clayman GL, El-Naggar AK. Genetic alterations in the RAS/RAF/mitogen-activated protein kinase and phosphatidylinositol 3-kinase/Akt signaling pathways in the follicular variant of papillary thyroid carcinoma. *Cancer.* Jun 15 2010;116(12):2974-2983. PMID: 20564403
2. Mitani Y, Li J, Rao PH, Zhao YJ, Bell D, Lippman SM, Weber RS, Caulin C, El-Naggar AK. Comprehensive analysis of the MYB-NFIB gene fusion in salivary adenoid cystic carcinoma: Incidence, variability, and clinicopathologic significance. *Clin. Cancer Res.* Oct 1 2010;16(19):4722-4731. PMID: 20702610
3. Su X, Chakravarti D, Cho MS, Liu L, Gi YJ, Lin YL, Leung ML, El-Naggar A, Creighton CJ, Suraokar MB, Wistuba I, Flores ER. TAp63 suppresses metastasis through coordinate regulation of Dicer and miRNAs. *Nature.* Oct 21 2010;467(7318):986-990. PMID: 20962848, PMCID: PMC3055799

4. Bell D, Roberts D, Kies M, Rao P, Weber RS, El-Naggar AK. Cell type-dependent biomarker expression in adenoid cystic carcinoma: Biologic and therapeutic implications. *Cancer*. Dec 15 2010;116(24):5749-5756. PMID: 20824717, PMCID: PMC2998592
5. Wang Y, Suh YA, Fuller MY, Jackson JG, Xiong S, Terzian T, Quintas-Cardama A, Bankson JA, El-Naggar AK, Lozano G. Restoring expression of wild-type p53 suppresses tumor growth but does not cause tumor regression in mice with a p53 missense mutation. *J. Clin. Invest.* Mar 1 2011;121(3):893-904. PMID: 21285512, PMCID: PMC3049366
6. Mitani Y, Li J, Weber RS, Lippman SL, Flores ER, Caulin C, El-Naggar AK. Expression and regulation of the DeltaN and TA_p63 isoforms in salivary gland tumorigenesis clinical and experimental findings. *Am. J. Pathol.* Jul 2011;179(1):391-399. PMID: 21703418, PMCID: PMC3123859
7. Bell D, Roberts D, Karpowicz M, Hanna EY, Weber RS, El-Naggar AK. Clinical significance of Myb protein and downstream target genes in salivary adenoid cystic carcinoma. *Cancer Biol. Ther.* Oct 1 2011;12(7):569-573. PMID: 21785271, PMCID: PMC3218383
8. Mitani Y, Rao PH, Futreal PA, Roberts DB, Stephens PJ, Zhao YJ, Zhang L, Mitani M, Weber RS, Lippman SM, Caulin C, El-Naggar AK. Novel chromosomal rearrangements and break points at the t(6;9) in salivary adenoid cystic carcinoma: association with MYB-NFIB chimeric fusion, MYB expression, and clinical outcome. *Clin. Cancer Res.* Nov 15 2011;17(22):7003-7014. PMID: 21976542, PMCID: PMC3225955
9. Jin L, Xu L, Song X, Wei Q, Sturgis EM, Li G. Genetic variation in MDM2 and p14ARF and susceptibility to salivary gland carcinoma. *PLoS ONE*. 2012;7(11):e49361. PMID: 23145162, PMCID: PMC3492289
10. Xu L, Doan PC, Wei Q, Liu Y, Li G, Sturgis EM. Association of BRCA1 functional single nucleotide polymorphisms with risk of differentiated thyroid carcinoma. *Thyroid*. Jan 2012;22(1):35-43. PMID: 22136207, PMCID: PMC3263304
11. Santarpia L, Lippman SM, El-Naggar AK. Targeting the MAPK-RAS-RAF signaling pathway in cancer therapy. *Expert Opin. Ther. Targets*. Jan 2012;16(1):103-119. PMID: 22239440, PMCID: PMC3457779
12. Sen B, Peng S, Woods DM, et al. STAT5A-mediated SOCS2 expression regulates Jak2 and STAT3 activity following c-Src inhibition in head and neck squamous carcinoma. *Clin. Cancer Res.* Jan 1 2012;18(1):127-139. PMID: 22090359, PMCID: PMC3251692
13. Bell D, Bell A, Roberts D, Weber RS, El-Naggar AK. Developmental transcription factor EN1--a novel biomarker in human salivary gland adenoid cystic carcinoma. *Cancer*. Mar 1 2012;118(5):1288-1292. PMID: 21800291, PMCID: PMC3208084
14. Lewis CM, Glisson BS, Feng L, et al. A phase II study of gefitinib for aggressive cutaneous squamous cell carcinoma of the head and neck. *Clin. Cancer Res.* Mar 1 2012;18(5):1435-1446. PMID: 22261807
15. Thariat J, Ang KK, Allen PK, et al. Prediction of neck dissection requirement after definitive radiotherapy for head-and-neck squamous cell carcinoma. *Int. J. Radiat. Oncol. Biol. Phys.* Mar 1 2012;82(3):e367-374. PMID: 22284033

- 16.** Xu L, Li G, Wei Q, El-Naggar AK, Sturgis EM. Family history of cancer and risk of sporadic differentiated thyroid carcinoma. *Cancer*. Mar 1 2012;118(5):1228-1235. PMID: 21800288, PMCID: PMC3208119
- 17.** El-Naggar AK, Westra WH. p16 expression as a surrogate marker for HPV-related oropharyngeal carcinoma: a guide for interpretative relevance and consistency. *Head Neck*. Apr 2012;34(4):459-461. PMID: 22180304
- 18.** Jackson JG, Pant V, Li Q, Chang LL, Quintas-Cardama A, Garza D, Tavana O, Yang P, Manshouri T, Li Y, El-Naggar AK, Lozano G. p53-mediated senescence impairs the apoptotic response to chemotherapy and clinical outcome in breast cancer. *Cancer Cell*. Jun 12 2012;21(6):793-806. PMID: 22698404, PMCID: PMC3376352
- 19.** Adelstein DJ, Koyfman SA, El-Naggar AK, Hanna EY. Biology and management of salivary gland cancers. *Semin. Radiat. Oncol.* Jul 2012;22(3):245-253. PMID: 22687949
- 20.** Li N, Xu L, Zhao H, El-Naggar AK, Sturgis EM. A comparison of the demographics, clinical features, and survival of patients with adenoid cystic carcinoma of major and minor salivary glands versus less common sites within the Surveillance, Epidemiology, and End Results registry. *Cancer*. Aug 15 2012;118(16):3945-3953. PMID: 22179977, PMCID: PMC3412946
- 21.** McHugh CH, Roberts DB, El-Naggar AK, et al. Prognostic factors in mucoepidermoid carcinoma of the salivary glands. *Cancer*. Aug 15 2012;118(16):3928-3936. PMID: 22180391
- 22.** Kies MS, Boatright DH, Li G, et al. Phase II trial of induction chemotherapy followed by surgery for squamous cell carcinoma of the oral tongue in young adults. *Head Neck*. Sep 2012;34(9):1255-1262. PMID: 22009800
- 23.** Xu L, Doan PC, Wei Q, Li G, Sturgis EM. Functional single-nucleotide polymorphisms in the BRCA1 gene and risk of salivary gland carcinoma. *Oral Oncol.* Sep 2012;48(9):842-847. PMID: 22503699, PMCID: PMC3408797
- 24.** Xu L, Mugartegui L, Li G, Sarlis NJ, Wei Q, Zafereo ME, Sturgis EM. Functional polymorphisms in the insulin-like binding protein-3 gene may modulate susceptibility to differentiated thyroid carcinoma in Caucasian Americans. *Mol. Carcinog.* Oct 2012;51 Suppl 1:E158-167. PMID: 22415807, PMCID: PMC3473095
- 25.** Mitani Y, Roberts DB, Fatani H, et al. MicroRNA profiling of salivary adenoid cystic carcinoma: association of miR-17-92 upregulation with poor outcome. *PLoS ONE*. 2013;8(6):e66778. PMID: 3825564, PMCID: PMC3692530
- 26.** Bell D, El-Naggar AK. Molecular heterogeneity in mucoepidermoid carcinoma: conceptual and practical implications. *Head and neck pathology*. Mar 2013;7(1):23-27. PMID: 23459841, PMCID: PMC3597160
- 27.** Sano D, Gule MK, Rosenthal DI, et al. Early postoperative epidermal growth factor receptor inhibition: safety and effectiveness in inhibiting microscopic residual of oral squamous cell carcinoma in vivo. *Head Neck*. Mar 2013;35(3):321-328. PMID: 22367702, PMCID: PMC3836367
- 28.** Guan X, Sturgis EM, Song X, et al. Pre-microRNA variants predict HPV16-positive tumors and survival in patients with squamous cell carcinoma of the oropharynx. *Cancer Lett.* Apr 28 2013;330(2):233-240. PMID: 23219900, PMCID: PMC3563870

- 29.** Bell D, J NM, Rao PH, El-Naggar AK. t(3;8) as the sole chromosomal abnormality in a myoepithelial carcinoma ex pleomorphic adenoma: a putative progression event. *Head Neck*. Jun 2013;35(6):E181-183. PMID: 22287457
- 30.** Ow TJ, Hanna EY, Roberts DB, et al. Optimization of long-term outcomes for patients with esthesioneuroblastoma. *Head Neck*. Jun 18 2013. PMID: 23780581
- 31.** Zhang L, Mitani Y, Caulin C, et al. Detailed genome-wide SNP analysis of major salivary carcinomas localizes subtype-specific chromosome sites and oncogenes of potential clinical significance. *Am. J. Pathol.* Jun 2013;182(6):2048-2057. PMID: 23583282, PMCID: PMC3668022
- 32.** Pickering CR, Zhang J, Yoo SY, et al. Integrative genomic characterization of oral squamous cell carcinoma identifies frequent somatic drivers. *Cancer discovery*. Jul 2013;3(7):770-781. PMID: 23619168, PMCID: PMC3858325
- 33.** Stephens PJ, Davies HR, Mitani Y, et al. Whole exome sequencing of adenoid cystic carcinoma. *J. Clin. Invest.* Jul 1 2013;123(7):2965-2968. PMID: 23778141
- 34.** Ivanov SV, Panaccione A, Nonaka D, et al. Diagnostic SOX10 gene signatures in salivary adenoid cystic and breast basal-like carcinomas. *Br. J. Cancer*. Jul 23 2013;109(2):444-451. PMID: 23799842, PMCID: PMC3721393
- 35.** Gillenwater AM, Frank SJ, Fatani H, El-Naggar AK. Primary intestinal-like adenocarcinoma of major salivary glands: 2 instances of previously undocumented phenotype. *Head Neck*. Aug 2013;35(8):E234-236. PMID: 23108630
- 36.** Liu X, Bishop J, Shan Y, et al. Highly prevalent TERT promoter mutations in aggressive thyroid cancers. *Endocr. Relat. Cancer*. Aug 2013;20(4):603-610. PMID: 23766237
- 37.** Ivanov SV, Panaccione A, Brown B, et al. TrkC signaling is activated in adenoid cystic carcinoma and requires NT-3 to stimulate invasive behavior. *Oncogene*. Aug 8 2013;32(32):3698-3710. PMID: 23027130
- 38.** Bell D, Holsinger FC, Ordonez N, El-Naggar AK. Intestinal-type adenocarcinoma of the larynx: Report of a rare aggressive phenotype and discussion of histogenesis. *Head Neck*. Aug 28 2013. PMID: 24038722
- 39.** Sandulache VC, Ow TJ, Daram SP, et al. Residual nodal disease in patients with advanced-stage oropharyngeal squamous cell carcinoma treated with definitive radiation therapy and posttreatment neck dissection: Association with locoregional recurrence, distant metastasis, and decreased survival. *Head Neck*. Oct 2013;35(10):1454-1460. PMID: 23018868
- 40.** Gelbard A, Hale KS, Takahashi Y, et al. Molecular profiling of sinonasal undifferentiated carcinoma. *Head Neck*. Jan 2014;36(1):15-21. PMID: 23633104
- 41.** Bell D, Hanna EY, Miele L, Roberts D, Weber RS, El-Naggar AK. Expression and significance of notch signaling pathway in salivary adenoid cystic carcinoma. *Ann. Diagn. Pathol.* Feb 2014;18(1):10-13. PMID: 24238845
- 42.** Reitzel LR, Nguyen N, Li N, Xu L, Regan SD, Sturgis EM. Trends in thyroid cancer incidence in Texas from 1995 to 2008 by socioeconomic status and race/ethnicity. *Thyroid*. Mar 2014;24(3):556-567. PMID: 24063701, PMCID: PMC3949437
- 43.** Mitani Y, Rao PH, Maity SN, et al. Alterations associated with androgen receptor gene activation in salivary duct carcinoma of both sexes: potential therapeutic ramifications. *Clin. Cancer Res.* Dec 15 2014;20(24):6570-6581. PMID: 25316813, PMCID: PMC4268116

- 44.** Gao R, Cao C, Zhang M, et al. A unifying gene signature for adenoid cystic cancer identifies parallel MYB-dependent and MYB-independent therapeutic targets. *Oncotarget*. Dec 30 2014;5(24):12528-12542. PMID: 25587024, PMCID: PMC4350357
- 45.** Wang Z, Ling S, Rettig E, et al. Epigenetic screening of salivary gland mucoepidermoid carcinoma identifies hypomethylation of CLIC3 as a common alteration. *Oral Oncol*. 2015;51(12):1120-1125. PMID: 26490796, PMCID: PMC4663116
- 46.** Xu L, Tang H, El-Naggar AK, Wei P, Sturgis EM. Genetic variants in DNA double-strand break repair genes and risk of salivary gland carcinoma: a case-control study. *PLoS ONE*. 2015;10(6):e0128753. PMID: 26035306, PMCID: PMC4452711
- 47.** Xu L, Tang H, Chen DW, El-Naggar AK, Wei P, Sturgis EM. Genome-wide association study identifies common genetic variants associated with salivary gland carcinoma and its subtypes. *Cancer*. Jul 15 2015;121(14):2367-2374. PMID: 25823930; PMCID: PMC4564998