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Department of Neurology, School of Medicine and Department of Biostatistics & Informatics, School of Public Health

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Education

 2013 PhD, Department of Biostatistics & Informatics, School of Public Health, University of Colorado, Denver

• Dissertation Title: Regression Calibration with Instrumental Variables and Non-Parametric Regression for Longitudinal Data

 2007 MS, Department of Statistics, Colorado State University, Fort Collins, Colorado

 2005 BS (with high honors), Colorado School of Mines, Golden, Colorado

• Major: Engineering Physics

Academic Experience

 2014–Present University of Colorado, Department of Neurology, School of Medicine, and Department of Biostatistics & Informatics, School of Public Health,

• Research Instructor, Biostatistician (2014-2021)

• Assistant Professor, Biostatistician (2021-Present)

 2013–2014 University of Washington, Department of Biostatistics

 Collaborative Health Studies Coordination Center (CHSCC)

 • Senior Research Fellow

 2009–2013 University of Colorado, Department of Biostatistics & Informatics

• Statistical Research Consultant for Colorado Biostatistics Consortium (.5 FTE)

 2007-2008 Colorado State University, Department of Statistics and Department of Biochemistry

• Research Assistant for SAXS project, Departments of Statistics & Biochemistry

 2005-2007 Colorado State University, Department of Statistics

• TA various statistics courses

 2003-2005 Colorado School of Mines

• Tutor for various courses

Statistical and Technical Skills

General skills in statistics and computing. Specific expertise and interests in:

• Statistics: regression, logistic regression, generalized linear models, longitudinal data analysis, mixed models, covariate measurement error, generalized estimating equations (GEE) and generalized mixed models, generalized additive models, survival analysis, time series, spatial statistics, survey sampling, nonparametric methods, Bayesian statistics, multivariate statistics, clinical trial design

• Software: SAS, R, STATA, C, Mathematica, MathLab, PASS

• Experience with large NIH and CDC data sets: MESA, NHANES, and CHS

Honors and Awards

 2011 University of Colorado, School of Public Health Strother Walker Award for an Outstanding PhD Biostatistics Student

 2001-2005 Colorado School of Mines Presidential Scholarship

 2002-2005 Kappa Mu Epsilon Honor Society (Mathematics)

Professional Memberships

 Kappa Mu Epsilon Honor Society (Mathematics)

 American Statistical Association

Publications

McConnel BV, Kronberg E, Teale PD, **Sillau SH**, Fishback GM, Kaplan RI, Fought AJ, Dhanasekaren AR, Berman BD, Ramos AR, McClure RL, Bettcher BM. The Aging Slow Wave: A Shifting Amalgam of Distinct Slow Wave and Spindle Coupling Subtypes Define Slow Wave Sleep Across the Human Lifespan. *Sleep*. Epub 2021 May 17.

Kennedy PGE, Graner M, Pointon T, Li X, Tanimoto K, Dennison K, Im G, Fringuello A, Zhou W, Graner A, **Sillau S**, Vollmer T, Yu X. Aberrant Immunoglobulin G Glycosylation in Multiple Sclerosis. *Journal of Neuroimmune Pharmacology*. Epub 2021 May 3.

Archuleta S, Gharamti AA, **Sillau S**, Castellanos P, Chadalawada S, Mundo W, Bandali M, Onate J, Martinez E, Chastain DB, DeSanto K, Shapiro L, Schwartz IS, Franco-Paredes C, Henao-Martinez AF. Increased mortality associated with uncontrolled diabetes mellitus in patients with pulmonary cryptococcosis: a single US cohort study. *Therapeutic Advances in Infectious Disease*. Epub 2021 March 23.

Potter H, Woodcock JH, Boyd TD, Coughlan CM, O’Shaughnessy JR. Borges MT, Thaker AA, Raj BA, Adamszuk K, Scott D, Adame V, Anton P, Chial HJ, Gray H, Daniels J, Stocker ME, **Sillau SH**. Safety and efficacy of sargramostim (GM-CSF) in the treatment of Alzheimer’s disease. *Alzheimer’s and Dementia: Translational Research and Clinical Intervention*. Epub 2021 March 2021 17.

Groth CL, Brown M, Honce JM, Shelton E, **Sillau SH**. Berman BD. Cervical Dystonia Is Associated With Aberrant Inhibitory Signaling Within the Thalamus. *Frontiers in Neurology*. 2021 February 9. 11. PMID: 33381646.

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Simpson JR, Lin CT, Sieja A, **Sillau SH**, Pell J. Optimizing the electronic health record: An inpatient sprint addresses provider burnout and improves electronic health record satisfaction. Journal of American Medical Informatics Association. 2021 March 1. 28(3): 628-641. PMID: 33029643.

Leehey MA, Liu Y, Hart F, Epstein C, Cook M, **Sillau S**, Klawitter J, Newman H, Sempio C, Forman L, Seeberger L, Klepitskaya O, Baud Z, Bainbridge J. Safety and Tolerability of Cannabidiol in Parkinson Disease: An Open Label, Dose Escalation Study. *Cannabis and Cannabinoid Research*. 2020 December 15. 5(4): 326-336. PMID: 33485750.

Rietcheck HR, Maghfour J, Rundle CW, Husayn SS, Presley CL, **Sillau SH**, Liu Y, Leehey MA, Dunnick CA, Dellavalle RP. A Review of the Current Evidence Connecting Seborrheic Dermatitis and Parkinson’s Disease and the Potential Role of Oral Cannabis. *Dermatology*. Epub 2020 December. 17. PMID: 33333525.

Leppert MH, Ho PM, Burke J, Madsen TE, Kleindorfer D, **Sillau S**, Daugherty S, Bradley CJ, Poisson SN. Young Women Had More Strokes Than Young Men in a Large, United States Claims Sample. *Stroke*. 2020 November. 51(11): 3352-3355. PMID: 32942966.

Dress C, McDermott D, **Sillau S**, Abosch A, Ojemann S, Schwarz S, Brown MG. Seizure outcome with responsive neurostimulation (RNS) comparing strip versus depth leads. *Epilepsy and Behavior*. 2020 November. 112. Epub 2020 September 7. PMID: 32911300.

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Vollmer BL, Nair K, **Sillau S**, Corboy JR, Vollmer T, Alvarez E. Rituximab versus natalizumab, fingolimod, and dimethyl fumarate in multiple sclerosis treatment. *Annals of Clinical and Translational Neurology*. 2020 September 7. 7(9): 1466-1476. PMID: 32767538.

Prizer LP, Kluger BM, **Sillau S**, Katz M, Galifianakis NB, Miyasaki JM. The presence of a caregiver is associated with patient outcomes in patients with Parkinson’s disease and atypical parkinsonisms. *Parkinsonism and Related Disorders*. 2020 September. 78: 61-65. Epub 2020 July 11. PMID: 32736164.

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Trang I, Katz M, Galifianakis N, Fairclough D, **Sillau SH**, Miyasaki J, Kluger BM. Predictors of general and health-related quality of life in Parkinson’s disease and related disorders including caregiver perspectives. *Parkinsonism and Related Disorders*. 2020 August. 77: 5-10. Epub 2020 June 10. PMID: 32563809.

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Miyasaki JM. Kluger BM, **Sillau S**, Katz M, Galifianakis N, Prizer LP. Associations between spiritual well-being and quality of life in Parkinson disease. *Annals of Palliative Medicine*. 2020 May. 9(3): 1288-1289. Epub 2020 April 13. PMID: 32312061.

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Leppert MH, **Sillau S**, Lindrooth RC, Poisson SN, Campbell JD, Simpson JR. Relationship between early follow-up and readmission within 30 and 90 days after ischemic stroke. *Neurology*. 2020 March 24. 94(12): e1249-1258. Epub 2020 February 20. PMID: 32079738.

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Leppert MH, Poisson SN, **Sillau SH**, Campbell JD, Ho PM, Burke JF. Is Prevalence of Atherosclerotic Risk Factors Increasing Among Young Adults? It Depends on How You Ask. *Journal of the American Heart Association*. 2019 March 19. 8(6). PMID: 30857455.

Gross RH, **Sillau SH**, Miller AE, Farrell C, Krieger SC. The Multiple Sclerosis Severity Score: fluctuations and prognostic ability in a longitudinal cohort of patients with MS. *Multiple Sclerosis Journal – Experimental, Translation and Clinical*. 2019 March 18. 5(1). PMID: 30911402.

Honce JM, Nair KV, **Sillau S**, Valdez B, Miravalle A, Alvarez E, Schreiner T, Corboy JR, Vollmer TL. Rituximab vs placebo induction prior to glatiramer acetate monotherapy in multiple sclerosis. *Neurology*. 2019 February 12. 92(7): e723-e732. Epub: 2019 January 11. PMID: 30635477.

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Joshi C, Stillman C, Criteser S, Oliver J, Conley A, **Sillau S**, Zupec-Kania B. Yield of laboratory testing in pediatric ketogenic diet patients: Critical assessment of abnormal results and impact on clinical care. *Epilepsy Research*. 2018 November 16. 149: 70-75. Epub 2017 November. PMID: 30500489.

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Sebring K, Shattuck J, Berk J, Boersma I, **Sillau S**, Kluger BM. Assessing the validity of proxy caregiver reporting for potential palliative care outcome measures in Parkinson’s disease. *Palliative Medicine*. 2018 October. 32(9): 1522-1528. Epub 2018 July 2017. PMID: 30015552.

Klepitskaya O, Liu Y, Sharma S, **Sillau SH**, Tsai J, Walters AS. Deep brain stimulation improves restless legs syndrome in patients with Parkinson disease. *Neurology*. 2018 September 11. 91(11): e1013-e1021. Epub 2018 August 2015. PMID: 30111549.

Vollmer B, Ontaneda D, Bandyopadhyay A, Cohn S, Nair K, **Sillau S**, Bermel RA, Corboy JR, Fox RJ, Vollmer T, Cohen JA, Alvarez E, Hersh CM. Discontinuation and comparative effectiveness of dimethyl fumarate and fingolimod in 2 centers. *Neurology Clinical Practice*. 2018 August. 8(4): 292-301. PMID: 30140580.

Weinkle LJ, Hoyt B, Thompson JA, **Sillau S**, Tanabe J, Honce J, Klepitskaya O. Association of MRI Measurments with Cognitive Outcomes After STN-DBS in Parkinson’s Disease. *Movement Disorders Clinical Practice*. 2018 July 28. 5(4): 417-426. PMID: 30363383.

Vollmer B, Honce JM, **Sillau S**, Corboy JR, Vollmer T, Nair K, Alvarez E. The impact of very short transition times on switching from Natalizumab to Fingolimod on imaging and clinical effectiveness outcomes in multiple sclerosis. *Journal of Neurology Science*. 2018 July 15. 390: 89-93. Epub 2018 April 13. PMID: 29801915.

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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 Jan-Feb. 5(1). Epub 2017 September 22. PMID: 29662921

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Oushy S, **Sillau SH**, Ney DE, Damek DM, Youssef AS, Lellehei KO, Ormond DR. New-onset seizure during and after brain tumor excrision: a risk assessment analysis. *Journal of Neurosurgery*. 2018 June. 128(6): 1713-1718. Epub 2017 July 28. PMID: 28753117.

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Manuscripts in Preparation

**Sillau, Stefan**. Richard Kronmal, Julio A. Chirinos, Joao A. Lima, David A. Bluemke. Allometric Indexing of Left Ventricular Mass and Volume to Fat Free Mass and Fat Mass. Proposal Approved by the MESA P&P and Steering Committees.

**Sillau, Stefan**. Matthew Strand, Gary K. Grunwald, Nathan Rabinovitch. Extension to “Regression Calibration for Models with Two Variables Measured With Error and Interaction, Using Instrumental Variables and Longitudinal Data” for more variables and random effects.

Abstracts and Presentations

Vascular Complications Among Children and Adolescents with Acute Complicated Sinusitis. Poster Abstract Session: CNS Infecctions. IDWeek. San Francisco CA. October 4, 2018.

Exploring Cannabis use by Patients with Multiple Sclerosis in a state where Cannabis is legal. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 23, 2018.

Treatment satisfaction and illness perception in MS patients. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 27, 2018.

Atherosclerotic Risk Factor Prevalence in Young Adults with Stroke and Acute Myocardial Infarction. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 27, 2018.

Comparison of 12 month changes in Brain Volume among Long Term Users of Natalizumab versus Healthy Controls in Multiple Sclerosis: Year one Analysis of a Two-Year Longitudinal Observational Study. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 22, 2018.

Comparison of Rituximab vs Fingolimod, Dimethyl Fumarate and Natalizumab in the Treatment of Multiple Sclerosis: Two Year Experience. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 22, 2018.

Comparative Effectiveness and Discontinuation of Dimethyl Fumarate and Fingolimod in Two Large Academic Medical Centers at 24-Month Follow-Up: Sub-Group Analyses. Poster Presentation. American Academy of Neurology 70th Annual Meeting. Los Angelaes CA. April 22, 2018.

Watson M, Gadbaw J, Galperin D, Baud Z, **Sillau S**, Valdez B, Strom L. Healthcare Utilization in Non-Epileptic Seizures. Poster Presentation. American Epliepsy Society. Washington D.C. December 1-5, 2017.

Potter H, Woodcock J, Boyd T, **Sillau S**, Bettche B, Daniels J, Borges T, Gray H, Raj A. Interim Report of a Double Blind, Placebo Controlled, Phase 2 Pilot Safety & Efficacy Trial of Leukine in Mild-To-Moderate Alzheimer’s Disease. Poster Presentation. Alzheimer’s Association International Conference. London England. July 16-20, 2017.

Finseth TA. **S. Sillau**. BD. Berman. Parkinson Disease onset on non-dominant side predicts greater motor impairment. Poster Presentation. Movement Disorders Society, International Meeting, June 2016.

Vollmer, B., K. Nair, **S. Sillau**, J. Corboy, T. Vollmer, E. Alvarez. Comparison of fingolimod, and dimethyl fumarate in the treatment of multiple sclerosis: two year experience. Department of Neurology. University of Colorado. Neurology. April 5 , 2016.

Alvarez, E., B. Vollmer, **S. Sillau**, K. Nair, J. Corboy, T. Vollmer, J. Honce. The Impact of Very Short Transition Times on Switching from Tysabri to Gilenya on Imaging and Clincial Effectiveness Outcomes. Department of Neurology. University of Colorao. Neurology. April 5, 2016.

Vollmer, B.L., K. Nair, **S.H. Sillau**, M. Strobel, L. Robinson, J. Corboy, T. Vollmer, E. Alvarez. Comparison of fingolimod, and dimethyl fumarate in the treatment of multiple sclerosis: one year experience. Department of Neurology. University of Colorado. ECTRIMS. Barcelona, October 9 , 2015.

Alvarez, E., J. Seibert, B. Vollmer, J. Blackburn, M. Strobel, J. Freeman, **S. Sillau**, J. Honce, J.L. Bennett, A. Miravalle, T. Schreiner, J. Corboy, T. Vollmer, K. Nair. Assessing the efficacy, tolerability, and safety of rituximab, for the treatment of multiple sclerosis: experience in 313 patients at a large academic center. Department of Neurology. University of Colorado. ECTRIMS. Barcelona, October 9, 2015.

Miravalle, A., **S. Sillau**, B. Valdez, K. Jerkins, B. Flynn. A systematic approach for the evaluation of neurogenic bladder in MS patients. Department of Neurology. University of Colorado. ECTRIMS. Barcelona, October 9, 2015.

Strand, Matthew and **Stefan Sillau**. Measurement error and regression calibration methods, with application in longitudinal air pollution studies. University of Colorado. Colorado School of Public Health. Department of Biostatistics. Research Seminar. Anschutz Medical Campus. April 22, 2015.

Vollmer, Brandi, Julie Seibert, **Stefan H. Sillau**, Patrick Dowdle, John Corboy, Timothy Vollmer, Kavita Nair, Enrique Alvarez. Comparison of Fingolimod and Dimethyl Fumarate in the Treatment of Multiple Sclerosis: One year Experience. American Academy of Neurology 2015 Annual Meeting. Washington D.C. April 18-25, 2015.

Alvarez, Enrique, Brandi Vollmer, Blacburn Jace, John Corboy, Timothy Vollmer, **Stefan H. Sillau**, Kavita Nair, Julie Seibert. Effectiveness of Switching to Rituximab over Fingolimod or Dimethyl Fumarate after Natalizumab in Preventing Disease Activity in Multiple Sclerosis. American Academy of Neurology 2015 Annual Meeting. Washington D.C. April 18-25, 2015. (Submitted).

**Sillau, Stefan**. Regression analysis for binary outcomes with relative risks as effects. American Statistical Association. Colorado-Wyoming Chapter. Anschutz Medical Campus. Octorber 17, 2014. (Methods developed by Thomas Lumley, Richard Kronmal, and Shuangge Ma).

Kingdom, Todd T., MD, Sarah A. Gitomer, MD, **Stefan H. Sillau**, Rohit K. Katial, MD, Vijay R. Ramakrishnan, MD. Clinical Examination of Tissue Eosinophilia in Patients with Chronic Rhinosinusitis and Nasal Polyposis. AAO-HNSF 2014 Annual Meeting & OTO EXPO. Orlando, Florida. September 21-24, 2014.

Bertisch S, **Sillau S**, deBoer I, Siscovick D, Szklo M, Redline S. Variation of Serum 25-Hydroxyvitamin D Levels with Sleep Duration and Continuity across Ethnic Groups:

Multi-Ethnic Study of Atherosclerosis. Sleep 2014. Minneapolis, MN. May 31 – June 4, 2014.

Hsu, Jennifer L., Christopher Shelvock, **Stefan Sillau**, Robert Enzenauer, Rebecca S. Braverman. Net Weight Gain from Birth to Time of First Retinopathy of Prematurity (ROP) Examination as Sole Inclusion Criteria for Screening Examinations for ROP. Association for Research in Vision and Ophthalmology Annual Meeting 2013. Seattle, WA. May 5-9, 2013.

Hsu, Jennifer L., MD, **Stefan Sillau, MS,** Rebecca S. Braverman, MD, Robert E. Enzenauer, MD. Incidence of Retinopathy of Prematurity (ROP) in Infants Greater than 31 Weeks Gestational Age Undergoing Screening Examination for ROP. American Association for Pediatric Ophthalmology and Strabismus Annual Meeting 2013. Boston, MA. April 3-7, 2013.

**Sillau, Stefan, MS.** Performing Regression Calibration with Instrumental Variables for Longitudinal Data Models with Interaction. American Statistical Association. Colorado-Wyoming Chapter. Anschutz Medical Campus. November 2, 2012.

Wamboldt, Marianne, M.D., Anthony R. Cordaro Jr., M.D., **Stefan Sillau, M.S**. Reliability and Clinical Utility of Revised Criteria for Caregiver Child Relationship Problem. American Academy of Child & Adolescent Psychiatry, 59th Annual Meeting, San Francisco, CA. October 23-28, 2012.

Cote, Valerie, C. Liang, J. Perkins, A. Ruiz, **S. Sillau**, N. Friedman. Characteristics of Children Under 2 Years of Age with Obstructive Sleep Apnea. Resident Research Day. University of Colorado Denver. June 8, 2012.

Molina, Wilson, Fernando Kim, Joshua Spendlove, Alexandre Pompeo, David Sehrt, **Stefan Sillau**, Luiza Crompton. The S.T.O.N.E Score: A Novel Instrument to Predict Stone Free Rates in Ureteroscopy from Pre-operative Features. AUA Annual Meeting. Atlanta, GA. May 22, 2012.

Mitchell, K. Vance, **Stefan Sillau**, Steven Federico and Ellen Elias. Medical Education Regarding Health Care of Patients with Down Syndrome. Pediatric Academic Societies Annual Meeting, Boston, MA. April, 2012.

Taylor, Amy Lynne, D. Dunbar Ivy, **Stefan Sillau**, and Christopher M. Rausch. VE/VCO2 Slope and Functional Class in Pediatric Pulmonary Arterial Hypertension. ATS. Children's Hospital Research Forum, University of Colorado, 2012.

Frederick, Meredith, **Stefan Sillau**, David B. Arciniegas C. Alan Anderson, Katherine L. Howard, and Christopher M. Filley. Differentiation of Alzheimer’s Disease and Depression with Standard Cognitive Measures. 136th Annual Meeting of the American Neurological Association, San Diego, CA. September 25-27, 2011.

Brannon, S., W.T. Donahoo, W.S. Gozansky, **S.** **Sillau** and Coussons-Read, M.E Food For Thought: Behavioral and Neuroendocrine Factors Affecting Neurocognitive Health. Oral presentation at the International Society for PsychoNeuroEndocrinology, Berlin. August, 2011.

Nelson, Christina, **Stefan Sillau**, Elaine Daniloff, Mel Mattson, and Ralph Wilmoth. . Using STI Data to Identify and Reduce High-Risk Sexual Behavior in HIV+ Individual. National STD Prevention Conference. Atlanta GA. March 8 -11, 2011.

Cordaro, Anthony Raymond Jr., **Stefan H. Sillau**, Marianne Z. Wambolt. Linguistic Analysis of Five Minute Speech Samples: A Novel Method to Analyze an Expressed Emotion Measure. American Academy of Child and Adolescent Psychiatry. New York City. October, 2010.

van der Woerd, Mark J., Donald Estep, Simon Tavener, F. Jay Breidt, **Stefan Sillau**, James Bieman, Michelle Strout, Christopher Wilcox, Sanjay Rajopadhye and Karolin Luger. A Simulation Study of Scattering from Molecular Models with Random Physical Variations Applied to Protein Models. Derived from SAXS Data. American Crystallographic Association Annual Meeting, Knoxville, Tennessee. May 31–June 5, 2008.

Publications, Abstracts, and Presentations (Acknowledged for Statistical Contribution)

Fridman, Vera. Distribution of CMT Subtypes and Disease Burden in Patients Enrolled in the INC Natural History Study (6601) from 2009-2013. Inherited Neurpathies Consortium Investigator’s Meeting

Alvarez, Enrique. Using Rituximab in the Treatment of Multiple Sclerosis. Neurology Grand Rounds. University of Colorado. Anschutz Medical Campus. July 15, 2015.

Fridman, Vera. Distribution of CMT Subtypes and Disease Burden in Patients Enrolled in the INC Natural History Study (6601) from 2009-2013. Peripheral Nerve Society Annual Meeting. Quebec. July 2015.

Mayer, Florian Michael. Electrophysiological Characterization of Inhibitory Inputs to the Medical Nucleus of the Trapezoid Body. A thesis submitted to University of Colorado. Physiology and Biophysics Program. 2013.

Alvarez, Bryan, MD, Rosine Angbanzan, MPH. Mercury Public Health Surveillance in Colorado: 2010 Annual Report. December 2011.

McConnell, Brice V, Karen Koto, and Arthur Gutierrez-Hartmann. Nuclear and Cytoplasmic LIMK1 Enhances Human Breast Cancer Progress. Molecular Cancer. 10:75, June 18. 2011.

Bierling, Sandra. Cross-sectional study of abstract quality Cochrane Colloquium, Madrid Spain: Oral Session on Knowledge, Translation, and Communicating Evidence, 2011.

Lovgren, T.R., C. Coulson, L. Ross, A. Fuller. Incidence of Coagulopathy in Postpartum Hemorrhage. 43rd Meeting of the Society for Obstetric Anesthesia and Perinatology. April 2011.

Pending Grants

Corboy, John R., MD. Discontinuation of Disease Modifying Therapies (DMTs) in Multiple Sclerosis (MS). PCORI. 9/28/2015. Biostatistician.

Potter, Huntington, PhD. Contribution of the Innate Immune Response to Alzehimer’s Disease Pathogenesis. NIH. 9/1/2015-8/31/2020. Biostatistician.

Nagel, Maria A., MD. Varicella Zoster Virus Infection in Giant Cell Arteritis. NIH. 7/1/2015-6/30/2020. Biostatistician.

Kluger, Benzi M., MD. Does Outpatient Palliative Care Improve Patient-Centered Outcomes in Parkinson’s Disease? PCORI. 7/1/2015-6/30/2008. Biostatistician.

Vollmer, Timothy L., MD. Examining the relationship between Patient Reported Outcomes and Disability due to Brain Atrophy in Patients with MS to inform future comparative effectiveness trials between Disease Modifying Therapies in MS. PCORI. 8/1/2015-7/31/2017. Biostatistician.

Berman, Brian D., MD, MS. Effect of Repetitive Transcranial Magnetic Stimulation on Inhibitory and Sensorimotor Network Function in Cervical Dystonia. DOD. 4/1/2015-3/31/2018. Biostatistician.

A randomized, double-blind, placebo-controlled crossover study of tolerability and efficacy of Canniabidiol (CBD) on tremor in Parkinson's disease. CDPHE. 1/1/2015-12/31/2018. Biostatistician. (Awarded, has not started.)

Conferences

2016 American Statistical Association Conferene on Statistical Practice. San Diego, CA. 2016 Feburary 18-20. Attended.