

Kevin Rubenstein

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Rockville, MD 20852

Summary

- Over ten years of experience in biomedical data analysis and statistical methods research
- Skilled in data management and statistical computing using R, SQL, SAS, and Stata
- Demonstrates excellent oral and written communication skills through primary authorship of peer-reviewed publications, teaching, consulting, and collaborations

Education

University of Washington
M.S. Biostatistics

Seattle, WA
December, 2011

Cornell University
B.S. Biometry and Statistics, cum laude

Ithaca, NY
May, 2008

Experience

Mid-Atlantic Permanente Research Institute, Kaiser Permanente
Biostatistical Analyst III

Rockville, MD
September, 2014–Present

- Collaborate with principal investigators, data analysts, and subject matter experts in developing and executing statistical analysis plans for medical research studies
- Present study results to audiences with and without formal statistical backgrounds, including co-authoring peer-reviewed publications and conference presentations
- Co-principal investigator of a collaborative project with Johns Hopkins Medicine to compare changes in liver fibrosis measures between treatment-naive patients and treatment-experienced patients with Hepatitis C virus
- Evaluated the effectiveness of a new Hepatitis C care pathway using time dependent survival analysis methods, contributing to our team winning the James A. Vohs regional Quality Award
- Wrote SAS code used by multiple sites for a biobanking research project to inform diverse recruiting efforts
- Created and maintain a chronic kidney disease database used by medical group stakeholders for operations and research
- Mentor junior data analysts
- Compared rate of kidney function decline in patients with and without Hepatitis C virus using longitudinal data methods and competing risks survival methods

Statistical Genetics Laboratory, University of Washington
Research Assistant

Seattle, WA
September, 2008–September, 2014

- Conducted statistical analyses of family-based genetic data, mapping genetic loci linked to learning disabilities using Bayesian Markov Chain Monte Carlo methods
- Primary author responsible for two peer-reviewed publications
- Collaborated with researchers in medical genetics and educational psychology on grant applications and peer-reviewed publications

Department of Biostatistics, University of Washington

Seattle, WA

Biostatistics PhD Student Researcher

February, 2012–June, 2014

- Developed theory and methods for controlling the expected number of false positive tests in big data sets using an approach motivated by decision theory
- Presented quarterly on various modern statistical methods in machine learning, including predictive modeling and model selection

Teaching Assistant, Medical Biometry III (Biost 513)

March, 2011–June, 2011

- Lectured and prepared Stata exercises for three weekly discussion sections with 25 graduate students each

Genetics Coordinating Center, University of Washington

Seattle, WA

Research Assistant

June, 2009–September, 2009

- Developed tools for identifying population structure in genome-wide association studies, later implemented in the R software package “GWASTools”

Learning Strategies Center Statistics Laboratory, Cornell University

Ithaca, NY

Statistics Tutor

September, 2005–May, 2008

- Tutored 50–100 students seeking help with any of six introductory undergraduate statistics courses at Cornell University on a walk-in basis each semester

Department of Biological Statistics and Computational Biology, Cornell University

Ithaca, NY

Teaching Assistant, Biological Statistics I (Btry 301)

August, 2007–December, 2007

- Instructed 20 undergraduate students in weekly R computing labs

Publications

Vupputuri, S., **Rubenstein, K. B.**, Derus, A. J., Loftus, B. C., Horberg, M. A. (2019). “Factors Contributing to Racial Disparities in Influenza Vaccinations.” *PloS one*, 14(4), e0213972.

Horberg, M. A., Blank, J. G., **Rubenstein, K. B.**, Certa, J. M., Hurley, L. B., Kadlecik, P. M., Klein, D. B., Silverberg, M. J. (2018). “Impact of Alternative Encounter Types on HIV Viral Suppression Rates in an Integrated Health System.” *AIDS Patient Care and STDs*, 32(11), 425–431.

Tartof, S. Y., Hsu, J. W., Wei R., **Rubenstein, K. B.**, Hu, H., Arduino, J. M., Horberg, M. A., Derose, S. F., Qian, L., Rodriguez, C. V. (2018). “Kidney Function Decline in Patients with CKD and Untreated Hepatitis C Infection.” *Clinical Journal of the American Society of Nephrology*, 13(10), 1471–1478.

Rodriguez, C. V., **Rubenstein, K. B.**, Linas, B., Hu, H., Horberg, M. A. (2018). "Increasing Hepatitis C Screening in a Large Integrated Health System: Science and Policy in Concert." *American Journal of Managed Care*, 24(5), e134-e140.

Mane, K. K., **Rubenstein, K. B.**, Nassery, N., Sharp, A. L., Shamim, E. A., Sangha, N. S., Hassoon, A., Fanai, M., Wang, Z., Newman-Toker, D. E. (2018). "Diagnostic Performance Dashboards: Tracking Diagnostic Errors Using Big Data." *BMJ Quality & Safety*, 27(7), 567–570.

Rubenstein, K., Raskind, W.H., Berninger, V.W., Matsushita, M., Wijsman, E.M. (2014). "Genome scan for cognitive trait loci of dyslexia: rapid naming and rapid switching of letters, numbers, and colors." *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, 165(4), 345–356.

Rubenstein, K., Matsushita, M., Berninger, V. W., Raskind, W. H., Wijsman, E. M. (2011). "Genome scan for spelling deficits: effects of verbal IQ on models of transmission and trait gene localization." *Behavior Genetics*, 41(1), 31–42.

Presentations

Conference Oral Presentations

Rodriguez, C. V., **Rubenstein, K. B.**, Jonas, M. C., Sun, Y., Horberg, M. A., Loftus, B. C. "Streamlining Hepatitis C (HCV) Screening to Treatment in the Mid-Atlantic Region." Health Care Systems Research Network Conference (HCSRN) 2018. April, 2018.

Rodriguez, C. V., Jonas, M. C., **Rubenstein, K. B.**, Sun, Y., Horberg, M. A., Loftus, B. C. "Streamlining Screening to Treatment: The Hepatitis C Care Cascade in the Mid-Atlantic Region." Kaiser Permanente 2017 National Quality Conference. June, 2017.

Nassery, N., Mane, K., Liu, F., Sangha, N. X., Sharp, A. L., Shamim, E. A., **Rubenstein, K. B.**, Kharrazi, H., Nagy, P., Kanter, M. H., Horberg, M. A., Ford, D., Pronovost, P. J., Newman-Toker, D. E. "Measuring Missed Strokes Using Administrative and Claims Data: Towards a Diagnostic Performance Dashboard to Monitor Diagnostic Errors." *Diagnostic Errors in Medicine (DEM)* 2016. November, 2016.

Rodriguez, C. V., **Rubenstein, K. B.**, Hu, H., Linus, B., Horberg, M. A. "Increasing Hepatitis C Virus (HCV) Screening and Confirmatory Testing in a Large Integrated Health System." 2015 National Summit on HCV and HIV. June, 2015.

Seminars and Guest Lectures

"Decision Theoretic Soft Thresholding for Inference." Student seminar, Department of Biostatistics, University of Washington. September, 2013.

Guest Lecturer for Computing and Research class, Department of Biostatistics, University of Washington. June, 2013

“Data Errors in a Genome Scan for Learning Disabilities.” Statistical Genetics Seminar, Department of Biostatistics, University of Washington. May, 2012.

“Genome Scans for Diagnostic Measures of Dyslexia.” Statistical Genetics Seminar, Department of Biostatistics, University of Washington. May, 2011.

“Genome Scan for Spelling Deficits: Effects of Verbal IQ on Models of Transmission and Trait Gene Localization.” Student seminar, Department of Biostatistics, University of Washington. February, 2010.

Posters

Rodriguez, C. V., **Rubenstein, K. B.**, Watson, E. S., Mezina, A., Chen, P., Woreta, T. A. “Variability in Liver Stiffness Measurements among Patients with Viral Hepatitis.” 2018 American Association of Liver Diseases (AASLD) 69th Annual Meeting. November, 2018.

Rodriguez, C. V., **Rubenstein, K. B.**, Watson, E. S., Mezina, A., Chen, P., Woreta, T. A. “Longitudinal Change in Liver Stiffness Measurements among Patients with Hepatitis C.” 2018 American Association of Liver Diseases (AASLD) 69th Annual Meeting. November, 2018.

Vupputuri, S., Boonyasai, R., **Rubenstein, K. B.***, Derus, A. J., Truong, C. “Racial Disparities in Hypertension (RADISH): Decomposing the Effects of Risk Factor Distribution and Risk Factor Impact on Racial Disparities.” Health Care Systems Research Network Conference (HCSRN) 2018. April, 2018.

* Presenting Author

Horberg, M. A., Blank, J. G., **Rubenstein, K. B.**, Hurley, L. B., Kadlecik, P. M., Klein, D. B., Silverberg, M. J. “Beyond Viral Suppression: Broadening Quality Measures (QM) for Total HIV Patient Care.” Conference on Retroviruses and Opportunistic Infections (CROI). March, 2018.

Horberg, M. A., Blank, J., **Rubenstein, K. B.**, Kadlecik, P., Hurley, L., Silverberg, M. “Changes in Antiretroviral Therapy (ART) and Maximal Viral Suppression over Time by Age, Sex, Race/Ethnicity, and HIV Risk Among HIV-Infected Patients in an Integrated Health System in the United States.” 9th International AIDS Society (IAS) Conference on HIV Science. July, 2017.

Horberg, M. A., Blank, J., **Rubenstein, K. B.**, Hurley, L., Kadlecik, P., Klein, D., Silverberg, M. “Do HIV Viral Suppression Rates Vary by Frequency and Type of Healthcare Visits in an Integrated Health System?” International Association of Providers of AIDS Care (AIPAC) 12th International Conference on HIV Treatment and Prevention Adherence. June, 2017.

Nassery, N., Mane, K., Liu, F., Sangha, N. X., Sharp, A. L., Shamim, E. A., **Rubenstein, K. B.**, Kharrazi, H., Nagy, P., Kanter, M. H., Horberg, M. A., Ford, D., Pronovost, P. J., Newman-Toker, D. E. “Measuring Missed Strokes Using Administrative and Claims Data: Towards a Diagnostic

Performance Dashboard to Monitor Diagnostic Errors.” Armstrong Institute Diagnostic Excellence Summit 2017. April, 2017.

Yishak, A. A., Clark, E. D., Sun, J., **Rubenstein, K. B.**, Vupputuri, S. “Characteristics of Pre-Emptive and Non-Pre-Emptive Kidney Transplants.” International Society of Nephrology (ISN) 2017 World Congress of Nephrology. April, 2017.

Rodriguez, C. V., **Rubenstein, K. B.**, Arduino, J. M., Hsu, J. W., Hu, H., Wei, R., Horberg, M. A., Derose, S., Tartof, S. Y. “The Impact of Hepatitis C Virus Cure on Progression of Renal Disease.” American Association of Liver Diseases (AASLD). The Liver Meeting 2016. November, 2016.

Tartof, S. Y., Arduino, J. M., Wei R., Hsu, J. W., **Rubenstein, K. B.**, Hu, H., Horberg, M. A., Derose, S., Rodriguez, C. V. “The Impact of Untreated Hepatitis C Infection on Progression of Renal Decline among Patients with Chronic Kidney Disease.” Infectious Diseases Society of America (IDSA) ID Week 2016. October, 2016.

Rodriguez, C. V., Arduino, J. M., Hsu, J. W., **Rubenstein, K. B.**, Wei R., Hu, H., Horberg, M. A., Derose, S., Tartof, S. Y. “The Impact of Chronic Kidney Disease on Hepatic and Extra Hepatic Outcomes among Patients with Hepatitis C Infection.” Infectious Diseases Society of America (IDSA) ID Week 2016. October, 2016.

Rodriguez, C. V., Arduino, J. M., Hsu, J. W., **Rubenstein, K. B.**, Wei R., Hu, H., Horberg, M. A., Derose, S., Jacobsen, S. J., Tartof, S. Y. “The Impact of Hepatitis C Virus on Kidney-Related Outcomes among Patients with Chronic Kidney Disease.” International Society For Pharmacoeconomics and Outcomes Research (ISPOR) 21st Annual International Meeting. May, 2016.

Tartof, S. Y., Arduino, J. M., Wei R., Hsu, J. W., **Rubenstein, K. B.**, Hu, H., Horberg, M. A., Derose, S., Rodriguez, C. V. “The Additional Impact of Hepatitis C Infection on Cardiovascular Outcomes and Death among Patients with Chronic Kidney Disease.” Digestive Disease Week (DDW) 2016. May, 2016.

Yishak, A. A., Clark, E. D., Sun, J., **Rubenstein, K. B.**, Vupputuri, S. “Comparison of Pre-emptive Kidney Transplant (PKT) to Non-PKT (NPKT).” American Transplant Congress (ATC) 2016. June, 2016.

Tartof, S. Y., Rodriguez, C. V., Wei R., Hsu, J. W., **Rubenstein, K. B.**, Hu, H., Horberg, M. A., Derose, S., Arduino, J. M. “The Additional Impact of Chronic Kidney Disease on Cardiovascular Outcomes and Death among HCV Patients.” The International Liver Congress 2016, 51st Annual Meeting of the European Association for the Study of the Liver (EASL). April, 2016.

Derus, A., **Rubenstein, K. B.**, Vupputuri, S. “Geographic Disparities in Influenza Vaccination Among Patients at Kaiser Permanente Mid-Atlantic States, 2014-2015.” Advancing Population Health: New Models and the Role of Research, 22nd Annual Health Care Systems Research Network Meeting (HCSRN). April, 2016.

Horberg, M.A., Blank, J., **Rubenstein, K. B.**, Hurley, L., Marcus, J., Klein, D., Kadlecik, P., Silverberg, M. J. "Differences in HIV Viral Suppression by Frequency and Type of Healthcare Visits." Conference on Retroviruses and Opportunistic Infections (CROI). February, 2016.

Rodriguez, C. V., **Rubenstein, K. B.**, Hu, H., Linus, B., Horberg, M. A. "Times They are a Changing: HCV Treatment Trends in a Large integrated Health System." 2015 American Association of Liver Diseases (AASLD) 66th Annual Meeting. November, 2015.

Rodriguez, C. V., **Rubenstein, K. B.**, Hu, H., Linus, B., Horberg, M. A. "Increasing Hepatitis C Virus (HCV) Screening and Linkage to Care in a Large Integrated Health System." 2015 American Association of Liver Diseases (AASLD) 66th Annual Meeting. November, 2015.

Rubenstein, K., Rice, K., Shojaie, A. "Decision Theoretic Soft Thresholding for Inference." Impact of Large-Scale Genomic Data on Statistical and Quantitative Genetics Conference. Department of Biostatistics, University of Washington. November, 2013.

Rubenstein, K., Rice, K., Shojaie, A. "Decision Theoretic Soft Thresholding for Inference." International Workshop on the Perspectives on High-dimensional Data Analysis III. Pacific Institute for the Mathematical Sciences. May, 2013.

Raskind, W.H., **Rubenstein, K.**, Matsushita, M., Berninger, V.W., Wijsman, E.M. "Genome scan for Cognitive Trait Loci of Dyslexia: Rapid Naming and Rapid Switching of Colors, Letters, and Numbers." The American Society of Human Genetics 62nd Annual Meeting. November, 2012.

Raskind, W.H., **Rubenstein, K.**, Matsushita, M., Berninger, V.W., Wijsman, E.M. "Genome Scan for Spelling Deficits: Effects of Verbal IQ on Models of Transmission and Trait Gene Localization." The American Society of Human Genetics 60th Annual Meeting. November, 2010.

Service

Institutional Review Board (IRB) member, Kaiser Permanente Mid-Atlantic States	April, 2017–Present
Student seminar co-organizer, University of Washington, Department of Biostatistics	2010–2012
Student-Faculty relations committee, University of Washington, Department of Biostatistics	2011

Software and Programming Languages

Proficiency in R, SAS, SQL, and LaTeX
Experience with Stata, Minitab, Linux, Perl, and C

Awards

James A. Vohs Regional Quality Award
National Institute of Health Statistical Genetics Training Grant
Robert C. Byrd Honors Scholarship

2018
2008–2011
2004–2008