

Tanya P. Garcia, Ph.D.

University of North Carolina at Chapel Hill
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Department of Biostatistics
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Education

Ph.D., Statistics , Texas A&M University, College Station, TX Dissertation: Efficient semiparametric estimators for biological, genetic, and measurement error applications.	2011
M.Sc., Statistics , University of Western Ontario, London, Ontario, Canada Thesis: Improving the PROMETHEUS model through parameter smoothing.	2006
M.S., Industrial Engineering and Operations Research , University of California, Berkeley, Berkeley, CA	2005
B.S., Mathematics , University of California, Irvine, Irvine, CA	2003

Positions and Employment

Affiliate , Carolina Center for Population Aging and Health, UNC-Chapel Hill	2021–Present
Associate Professor of Biostatistics (Tenured) , Gillings School of Global Public Health, UNC-Chapel Hill	2020–Present
Adjunct Associate Professor of Statistics , Texas A&M University	2020–Present
Associate Professor of Statistics (Tenured) , Texas A&M University	2018–2020
Assistant Professor of Biostatistics , Texas A&M School of Public Health	2013–2018
Research Assistant Professor of Statistics , Texas A&M University	2011–2012
Visiting Scholar , The University of Sydney, Australia	2012
Research Assistant , Oak Ridge National Laboratory, Oak Ridge, TN	Summer 2010
Research Assistant , MD Anderson Cancer Center, Houston, TX	Summer 2008
Teaching Assistant , University of Neuchâtel, Neuchâtel, Switzerland	2006–2008
Teaching Assistant , University of Western Ontario, London, Ontario, Canada	2005–2006
Research Assistant , RWTH Institute of Operations Research and Logistics, Aachen, Germany	Summer 2004
Research Assistant , University of California, Irvine, Irvine, CA	2002–2003
Teaching Assistant , University of California, Irvine, Irvine, CA	2001–2003

Leadership Experience

Past-Chair , Biometrics Section of the American Statistical Association	2026
Chair , Biometrics Section of the American Statistical Association	2025
Chair-Elect , Biometrics Section of the American Statistical Association	2024

Chair , Invited Scientific Program, Eastern North American Region of the International Biometric Society	2024–2025
Chair , Regional Advisory Board, Eastern North American Region of the International Biometric Society	2021–2023
Co-Chair , Regional Advisory Board, Eastern North American Region of The International Biometric Society	2020–2021
Chair , Seminar Committee, Department of Biostatistics at UNC-Chapel Hill	2020–Present
Science Advisory Board Member , Huntington’s Disease Society of America	2020–Present
Chair , “Developing the Next Generation of Biostatisticians,” a program funded by the Biometrics Section of the American Statistical Association	2018–2023
Co-Chair , “Developing the Next Generation of Biostatisticians,” a program funded by the Biometrics Section of the American Statistical Association	2016–2018
Associate Editor , <i>Australian & New Zealand Journal of Statistics</i>	2021–Present
Associate Editor , <i>Biostatistics</i>	2019–Present
Grant Writing Coach , Grant Foundry, SciFoundry, LLC	2019–2023

Honors and Awards

36. Provost Distinguished Leader , UNC-Chapel Hill	2023–2025
35. Visiting Scholar , International Visitor Program, The University of Sydney Mathematical Research Institute	2024
34. Lead Workshop Organizer , “Bridging statistical strategies for censored covariates,” Banff International Research Station	2024
33. Featured in Carolina Scientific , UNC-Chapel Hill	2023
32. Delta Omega Honorary Society Member , UNC-Chapel Hill	2023
31. Featured in UNC Research Endeavors , UNC-Chapel Hill	2023
30. Tyson Academic Leader , UNC-Chapel Hill	2023–2024
29. Carolina Women’s Leadership Council Faculty Mentoring Award Recipient , UNC-Chapel Hill	2022
28. Honorarium Speaker , Girls Talk Math Workshop	2021
27. Featured in AMSTAT News Hispanic Heritage Month	2020
26. Sigma Xi Member , Texas A&M Chapter	2020
25. Inaugural Speaker , Bioinformatics Research & Application Symposium, Texas A&M University	2019
24. Plenary Speaker , 39th International Symposium on Forecasting	2019
23. Fellow , Mentoring Institute for Neuroscience Diversity Scholars	2017–2018
22. Travel Award Recipient , Southeastern Conference Grant, Texas A&M University*	2016–2017
*Awarded but then unable to be used due to collaborator moving to a non-Southeastern Conference university.	
21. Travel Award Recipient , 14th Meeting of New Researchers in Statistics and Probability	2012

20. Travel Award Recipient , Society for Advancement of Chicanos/Hispanics & Native Americans in Science National Conference	2012
19. Plenary Speaker , Louis Stokes Alliances for Minority Participation Symposium, Texas A&M University System	2012
18. Travel Award Recipient , Roadmap for a Successful Academic Career Workshop, Texas A&M University	2012
17. Gertrude M. Cox Award Recipient , American Statistical Association	2011
16. Phi Kappa Phi Member , Texas A&M Chapter Awarded to top 10% of seniors and graduate students.	2011
15. Travel Award Recipient , Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics	2011
14. William S. Connor Award Recipient , Texas A&M University	2010
13. Travel Award Recipient , Building Future Faculty Program, North Carolina State University	2010
12. Travel Award Recipient , Negotiating the Ideal Faculty Position, Rice University	2010
11. Honorable Mention , Ford Foundation Predoctoral Fellowship	2010
10. Teaching Assistant of the Year in the Sciences Award Recipient , University of Western Ontario	2006
9. Summa Cum Laude Graduate , School of Physical Sciences, University of California, Irvine	2003
8. Mathematics Departmental Service/Undergraduate Service Award Recipient , University of California, Irvine	2003
7. Outstanding Senior in Mathematics Award Recipient , University of California, Irvine	2003
6. Phi Beta Kappa Member , University of California, Irvine Awarded to top 5% of graduating seniors.	2003
5. Ronald E. McNair Scholar , University of California, Irvine	2002–2003
4. Leadership Scholarship Award Recipient , University of California, Irvine	2000–2002
3. The National Dean's List Award Recipient , University of California, Irvine	2000–2003
2. National Society of Collegiate Scholar , University of California, Irvine	2001
1. National Hispanic Scholar , University of California, Irvine	2000

Professional Memberships

American Statistical Association

UNC Center for Environmental Health and Susceptibility

Eastern North American Region of the International Biometric Society

Huntington Study Group

Institute of Mathematical Statistics

National Society of Collegiate Scholars

Phi Beta Kappa

Research Interests

Neurodegenerative Diseases, Nonparametric Models, Prediction Models, Semiparametric Models, Survival Analysis Longitudinal Data Analysis, High-Dimensional Variable Selection

Peer-Reviewed Publications

Underline denotes co-author was a trainee.

Under Review

50. Van Mullekom, J., Baker, J., Burke, S., Enders, F., **Garcia, T.P.**, Hanlon, A., Lozano, A., Lyons, G.R., Mandrekar, S., Ortega-Villa, A., Ratcliffe, S.J., Weiss, H., Ronnie, S., Pomann, G.M., and Davidson, M.A. Power and respect dynamics.
49. Bradley, C., Ashner, M.C., Kepner, M. **Garcia, T.P.**, Grosser, K.F., Hightshoe, K., Moody, E., Powell, P., Reyes, N., Rosenberg, S., Tapia, A., Wiggins, L., and Daniels, J. Changes over time in maternal ideas about the causes of autism or developmental problems.
48. Zhao, B., Zeng, D., **Garcia, T.P.**, Li, H., Xie, W., Tang, Y., Lopez, J.S., and Cai, J. Multi-level modelling for analyzing correlated data with complex sampling design in the Hispanic Community Health Study/Study of Latinos.
47. Sokol, L., Ashner, M.C., Bega, D., Kluger, B., Marder, K., and **Garcia, T.P.** Spiritual well-being and phenoconversion in Huntington disease: Analysis from PHAROS.
46. Grosser, K.F., Lotspeich, S.C., Ma, Y., and **Garcia, T.P.** Mission Imputable: Correcting for error when imputing a censored covariate.
45. Lotspeich, S.C. and **Garcia, T.P.** Extrapolation before imputation reduces bias when imputing censored covariates.
44. Holcomb, D.A., Blackwood, A.D., Clerkind, T., Christensen, A., Guidrye, V.T., Harris, A., Hoffman, K., Kotlarz, N., Lee, A., Noble, R.T., Reckling, S., de los Reyes III, F.L., Serre, M.L., **Garcia, T.P.***, and Engel, L.S.* (*shared senior authorship). Estimating rates of change to interpret quantitative wastewater surveillance of disease trends.
43. Dichter, G., Grosser, K.F., Cummings, K., Bradley, C., **Garcia, T.P.**, Tapia, A.L., Pretzel, B., Moody, E.M., Barger, B., Reyes, N.M., Wiggins, L., Fallin, D., Daniels, J.L. Changes in autism traits from early childhood to adolescence in the Study to Explore Early Development.
42. Liu, M.M., Wassim, T., Li, L., Dow, W.H., Llibre, J., Gallo, L., Perreira, K.M., Lamar, M., Daviglus, M.L., Testai, F., **Garcia, T.P.**, Isasi, C., Lipton, R., Hector, G., and Stickel, A. Influence of birthplace and age at migration on cognitive performance and decline among Hispanic/Latino populations in the U.S.: Study of Latinos-Investigation of Neurocognitive Aging (SOL-INCA).
41. Zhang, Y., Daniels, J., Engel, S., Marshall, S., O'Shea, M., **Garcia, T.P.**, and Schieve, L. Malpresentation and autism spectrum disorders in the Study to Explore Early Development.

40. Elfassy, T., Dodds, L., Mesa, R.A., Rundek, T., Sharashidze, V., Paidas, M., Daviglus, M., Kominiarek, M.A., Perreira, K.M., Kobayashi, M.A., Stickel, A., **Garcia, T.P.**, Isasi, C.R., Lipton, R.B., and Kulandavelu, S. Associations between hypertensive disorders of pregnancy and cognitive decline, The Hispanic Community Health Study/Study of Latinos, 2008–2017.

Published/In Press

Methodology Papers

39. Loop, M.S., Lotspeich, S.C., **Garcia, T.P.**, and Meyer, M.L. (2024). Accounting for changing error-prone devices when estimating the relationship between change in an exposure and an outcome. *American Journal of Epidemiology*, in press.
38. Lotspeich, S.C., Ashner, M.C., Vazquez, J.E., Richardson, B.D., Grosser, K.F., Bodek, B.E., and **Garcia, T.P.** (2024). Making sense of censored covariates: Statistical methods for studies of Huntington’s disease. *Annual Review of Statistics and Its Applications*, in press.
37. Ashner, M.C. and **Garcia, T.P.** (2023). Understanding the implications of a complete case analysis for regression models with a right-censored covariate. *The American Statistician*, doi: 10.1080/00031305.2023.2282629.
36. Kim, R., Pourahmadi, M., and **Garcia, T.P.** (2023). A positive definite thresholding estimator of a covariance matrix and its asymptotic efficiency. *Journal of Multivariate Statistics*, **197**, 105186, doi: 10.1016/j.jmva.2023.105186.
35. Lotspeich, S., Grosser, K.F., and **Garcia, T.P.** (2022). Correcting conditional mean imputation for censored covariates and improving usability. *Biometrical Journal*, **64**, 858-862, doi: 10.1002/bimj.202100250.
34. Parast, L., **Garcia, T.P.**, Carroll, R.J., and Ross, R.L. (2022). Robust methods to correct for measurement error when evaluating a surrogate marker. *Biometrics*, **78**, 9-23, doi: 10.1111/biom.13386.
33. Kim, R., Müller, S., and **Garcia, T.P.** (2021). svReg: Structural varying-coefficient regression to differentiate how regional brain atrophy affects motor impairment for Huntington disease severity groups. *Biometrical Journal*, **63**, 1254–1271, doi: 10.1002/bimj.202000312.
32. Lee, U., Carroll, R.J., Marder, K., Wang, Y., and **Garcia, T.P.** (2021). Estimating disease onset from change points of markers measured with error. *Biostatistics*, **22**, 819-835, doi: 10.1093/biostatistics/kxz068.
31. **Garcia, T.P.** and Parast, L. (2021). Dynamic landmark prediction for mixture models. *Biostatistics*, **22**, 558-574, doi: 10.1093/biostatistics/kxz052.
30. **Garcia, T.P.**, Marder, K. and Wang, Y. (2019). Time-varying proportional odds model for mega-analysis of clustered event times, *Biostatistics*, **20**, 129-146. doi: 10.1093/biostatistics/kxx065.
29. Wei, Y., Ma, Y., **Garcia, T.P.** and Sinha, S. (2019). Consistent estimator for logistic mixed effect models. *The Canadian Journal of Statistics*, **47**, 140-156. doi: 10.1002/cjs.11482.
28. **Garcia, T.P.** and Ma, Y. (2017). Simultaneous treatment of unspecified heteroskedastic model error distribution and mismeasured covariates for restricted moment models. *The Journal of Econometrics*, **200**, 194–206, doi: 10.1016/j.jeconom.2017.06.005.
27. **Garcia, T.P.**, Ma, Y., Marder, K. and Wang, Y. (2017). Robust mixed-effects model for clustered failure time data: application to Huntington’s disease event measures. *Annals of Applied Statistics*, **11**, 1085–1116, doi: 10.1214/17-AOAS1038.

26. **Garcia, T.P.** and Müller, S. (2016). Cox regression with exclusion frequency-based weights to identify neuroimaging markers relevant to Huntington’s disease onset. *Annals of Applied Statistics*, **10**, 2130-2156, doi: 10.1214/16-aos967.
25. Kohli, P., **Garcia, T.P.** and Pourahmadi, M. (2016). Linear models for cholesky factors of covariance matrices of multivariate longitudinal data. *Journal of Multivariate Analysis*, **145**, 87-100, doi: 10.1016/j.jmva.2015.11.014.
24. **Garcia, T.P.** and Ma, Y. (2016). Optimal estimator for logistic model with distribution-free random intercept. *Scandinavian Journal of Statistics*, **43**, 156-171, doi: 10.1111/sjos.12170.
23. Qin, J.*, **Garcia, T.P.*** (*shared first authorship), Ma, Y., Tang, M.X., Marder, K. and Wang, Y. (2014). Combining isotonic regression and EM algorithm to predict genetic risk under monotonicity constraint and unknown genotypes. *Annals of Applied Statistics*, **8**, 1182–1208, doi: 10.1214/14-AOAS730.
22. **Garcia, T.P.** and Müller, S. (2014). Influence of measures of significance-based weights in the weighted Lasso. *Journal of the Indian Society of Agricultural Statistics* (Invited paper), **68**, 131-144.
21. **Garcia, T.P.**, Müller, S., Carroll, R.J., and Walzem, R.L. (2014). Identification of important regressor groups, subgroups, and individuals via regularization methods: application to gut microbiome data. *Bioinformatics*, **15**, 831-837, doi: 10.1093/bioinformatics/btt608.
20. **Garcia, T.P.**, Müller, S., Carroll, R.J., Dunn, T.N., Thomas, A.P., Adams, S.H., Pillai, S.D., and Walzem, R.L. (2013). Structured variable selection with q -values. *Biostatistics*, **14**, 695-707, doi: 10.1093/biostatistics/kxt012.
19. Wang, Y., **Garcia, T.P.**, and Ma, Y. (2012). Nonparametric estimation for censored mixture data with application to the Cooperative Huntington’s Observational Research Trial. *Journal of the American Statistical Association*, **107**, 1324-1338, doi: 10.1080/01621459.2012.
18. **Garcia, T.P.**, Kohli, P., Pourahmadi, M. (2012). Regressograms and mean-covariance models for incomplete longitudinal data. *The American Statistician*, **66**, 85-91, doi: 10.1080/00031305.2012.695935.
17. Ye, F., **Garcia, T.P.**, Pourahmadi, M., and Lord, D. (2012). Extension of a negative binomial GARCH model: analyzing the effects of gasoline price and VMT on DUI fatal crashes in Texas. *Transportation Research Record: Journal of the Transportation Research Board*, **2279**, 31-39, doi: 10.3141/2279-04.
16. **Garcia, T.P.**, Ma, Y., and Yin, G. (2011). Efficiency improvement in a class of survival models through model-free covariate incorporation. *Lifetime Data Analysis*, **17**, 552-565, doi: 10.1007/s10985-011-9195-z.
15. Barber, J., Bose, C., Bourlioux, A., Braun, J., Brunelle, E., **Garcia, T.**, Hillen, T., and Ong, B. (2008). Burning issues with PROMETHEUS, the Canada’s wildfire growth simulator. *Canadian Applied Mathematics Quarterly*, **16**, 337-378.
14. **Garcia, T.**, Braun, J., Bryce, R., and Tymstra C. (2008). Smoothing and bootstrapping the PROMETHEUS fire growth model. *Environmetrics*, **19**, 1-13, doi: 10.1002/env.907.

Application Papers

13. Lu, Y., Pike, J., Hoogeveen, R., Walker, K.A., Raffield, L., Selvin, E., Avery, C., Engel, S.E., Mielke, M.M., **Garcia, T.P.**, and Palta, P. (2024). Nonalcoholic fatty liver disease and longitudinal change in imaging and plasma biomarkers in Alzheimer’s and vascular pathology, *Neurology*, in press.

12. Senn, M.K., Momin, S.R., Ramesh, G., Allison, M.A., Graff, M., Young, K.L., Goodarzi, M.O., Talvera, G.A., McClain, A.C., Mossavar-Rahmani, Y., **Garcia, T.P.**, and Wood, A.C. (2024). Preliminary evidence that habitual avocado intake is associated with better postprandial, but not fasting, glycemic control in individuals with Type 2 diabetes: Cross-sectional results from the Hispanic Community Health Study / Study of Latinos (HCHS/SOL). *Nutrition, Metabolism and Cardiovascular Diseases*, **33**, 2428-2439, doi: 10.1016/j.numecd.2023.08.002.
11. Lu, Y., Pike, J., Hoogeveen, R., Walker, K.A., Raffield, L., Selvin, E., Avery, C., Engel, S.E., Mielke, M.M., **Garcia, T.P.**, and Palta, P. (2023). Liver integrity over the adult lifespan and the risk of Alzheimer’s disease and related dementias. *Alzheimer’s & Dementia*, doi: 10.1002/alz.13601.
10. Parada, H. Jr., Pichardo, M., Gallo, L.C., Talavera, G.A., McDaniels-Davidson, C., Penedo, F.J., Lee, D.J., Tarraf, W., **Garcia, T.P.**, Daviglus, M.L., González, H.M. (2023). Neurocognitive test performance following cancer among middle-aged and older adults in the Hispanic Community Health Study/Study of Latinos (HCHS/SOL) and the SOL-Investigation of Neurocognitive Aging Ancillary Study. *Cancer Medicine*, **12**, 11860–11870, doi: 10.1002/cam4.5863.
9. Pichardo, C.M., Pichardo, M.S., Gallo, L.C., Talavera, G.A., Sanchez-Johnsen, L.A.P, Pirzada, A., Chambers, E.C., Roy, A.L., Castañeda, S.F., Durazo-Arvizu, R.A., Perreira, K.M., **Garcia, T.P.**, Rodriguez, C., Allison, M., Carlson, J. Daviglus, M.L., and Plascak, J.J. (2023). Association of neighborhood segregation with 6-year incidence of metabolic syndrome in the Hispanic Community Health Study/Study of Latinos. *Annals of Epidemiology*, **78**, 1-8, doi: 10.1016/j.annepidem.2022.11.003.
8. Zhang, Y., Elgart, M., Granot-HersHKovitz, E., Wang, H., Tarraf, W., Ramos, A.R., Stickel, A.M., Zeng, D., **Garcia, T.P.**, Testai, F.D., Wassertheil-Smoller, S., Isasi, C.R., Daviglus, M.L., Kaplan, R., Fornage, M., DeCarli, C., Redline, S., González, H.M., and Sofer, T. (2023). Genetic associations between sleep traits and cognitive aging outcomes in the Hispanic Community Health Study/Study of Latinos, *eBioMedicine*, **87**, 104393, doi: 10.1016/j.ebiom.2022.104393.
7. Granot-HersHKovitz, E., He, S., Bressler, J., Yu, B., Boerwinkle, E., Tarraf, W., Rebholz, C.M., Mosley, T., Kristal, B., DeCarli, C., Fornage, M., Chen, G., Qi, Q., Kaplan, R., **Garcia, T.P.**, Gonzalez, H.M., Sofer, T. (2023). Plasma metabolites associated with cognitive function across race/ethnicities affirming the importance of healthy nutrition, *Alzheimer’s and Dementia: The Journal of the Alzheimer’s Association*, **19**, 1331-1342, doi: 10.1002/alz.12786.
6. Lee, U., **Garcia, T.P.**, Carroll, R.J., Gilbreath, K. and Wu, G. (2019). Analysis of repeated measures data in nutrition research. *Frontiers in Bioscience, Landmark Edition*, **24**, 1378-1390, doi: 10.2741/4785.
5. Shipp, E., Vasudeo, S., Trueblood, A. and **Garcia, T.P.** (2019). Single logging vehicle crashes and variables associated with injury in Louisiana. *Journal of Agromedicine*, **24**, 177-185. doi: 10.1080/1059924X.2019.1567422.
4. **Garcia, T.P.**, Wang, Y., Shoulson, I., Paulsen, J.S., and Marder, K. (2018). Disease progression in Huntington Disease: an analysis of multiple longitudinal outcomes. *Journal of Huntington Disease*, **7**, 337-344. doi: 10.3233/JHD-180297.

3. **Garcia, T.P.** and Marder, K. (2017). Statistical approaches to longitudinal data analysis in neurodegenerative diseases: Huntington’s Disease as a model. *Current Neurology and Neuroscience Reports*, **17**:14, doi: 10.1007/s11910-017-0723-4.

Books and Chapters

2. Dutra, J.R.*, **Garcia, T.P.*** (*shared first authorship), Marder, K. (2020). Huntington’s Disease. In Oxford Textbook of Neurological and Neuropsychiatric Epidemiology, editors Carol Brayne, Valery Feigin, Lenore Launer, and Giancarlo Logroscino, doi: 10.1093/med/9780198749493.001.0001.
1. **Garcia, T.P.**, Marder, K. and Wang, Y. (2017). Statistical modeling of Huntington disease onset. In Handbook of Clinical Neurology, vol 144: 47-61, 3rd Series, editors Andrew Feigin and Karen E. Anderson. doi: 10.1016/b978-0-12-801893-4.00004-3.

Workshops and Tutorials

Tutorial Creator & Speaker, “Mentoring in Statistical Writing: Tools for Teaching and Energizing the Statistical Writing of Your Mentees,” Eastern North American Region of the International Biometric Society Meeting	2024
Lead Workshop Organizer, “Bridging statistical strategies for censored covariates”, Banff International Research Station	2024
Tutorial Creator & Speaker, “How to Engage with ‘Over-Your-Head’ Research Talks,” UNC-Chapel Hill	2021, 2023
Tutorial Creator, “Spicy Writing,” UNC-Chapel Hill	2021
Workshop Co-Organizer, StatFest 2020	2020
Workshop Co-Organizer, “Statistical Significance Workshop,” Department of Statistics, Texas A&M University	2019
Workshop Co-Organizer, “Measurement Error and Complex Data Workshop,” Department of Statistics, Texas A&M University	2016
Workshop Co-Organizer, Junior Researchers Workshop, Eastern North American Region of the International Biometric Society Meeting	2015

Teaching

UNC-Chapel Hill , Chapel Hill, NC	
Instructor, Longitudinal Data Analysis (Spring Semester, 35-40 students)	2023, 2024
Instructor, Probability and Statistical Inference II (Spring Semester, 35-40 students)	2022
Instructor, Biostatistics Seminars (50-60 students)	2020–2023
Texas A&M University , College Station, TX	
Instructor, Statistical Methods (Spring Semester, 91-100 students)	2020
Instructor, Statistical Methods (Spring Semester, 91-100 students)	2019
Texas A&M Health Science Center , College Station, TX	
Instructor, Biostatistics II Online (Spring Semester, 9-32 students)	2014–2018

Instructor, Biostatistics II In-Person (Spring Semester, 45-52 students)	2013–2015
Instructor, Statistics II, College of Medicine (one day course, \approx 50 students)	2013
University of Neuchâtel , Neuchâtel, Switzerland	
Teaching Assistant, Calculus and Linear Models, Course taught in French (\approx 60 students)	Spring 2007, 2008
Teaching Assistant, Linear Models, Graduate Level (\approx 15 students)	Fall 2007
Teaching Assistant, Econometrics (\approx 50 students)	Fall 2006
University of Western Ontario , London, Ontario, Canada	
Teaching Assistant, Operations Research (\approx 30 students)	Spring 2006
Teaching Assistant, Applied Probability (\approx 50 students)	Fall 2005
University of California, Irvine , Irvine, CA	
Teaching Assistant, Statistics, Summer Bridge (\approx 20 students)	Summer 2002
Tutor, Mathematics, Learning and Academic Resource Center (\approx 8 students)	09/2001–06/2003

Advising and Formal Mentoring

Early Career Mentoring

Ethan Alt , Department of Biostatistics, UNC-Chapel Hill	2022–Present
David Holcomb , Department of Epidemiology, UNC-Chapel Hill	2022–Present
Lina Montoya , Department of Biostatistics, UNC-Chapel Hill	2021–Present
Adaobi Anakwe , Department of Epidemiology, Saint Louis University (Diversity Mentoring Program of the American Statistical Association)	2020–2021
Irina Bobkova , Department of Mathematics, Texas A&M University (ADVANCE Early Career Faculty Mentor)	2019–2020
Irina Gaynanova , Department of Statistics, Texas A&M University	2018–2021
Ibraheem Karaye , Department of Epidemiology and Biostatistics, Texas A&M School of Public Health	2015–2020

Postdoctoral Fellows Supervised

Sarah Lotspeich , Department of Biostatistics, UNC-Chapel Hill Next position: Assistant Professor at Wake Forest University	2021–2022
Unkyung Lee , Department of Statistics, Texas A&M University Next position: Postdoctoral Associate at U.S. Food and Drug Administration.	2017–2020

Doctoral Students Supervised

Jesus Vazquez , Department of Biostatistics, UNC-Chapel Hill	2023–Present
Abigail Foes , Department of Biostatistics, UNC-Chapel Hill	2023–Present
Emmanuel Rockwell , Department of Biostatistics, UNC-Chapel Hill	2023–Present
Brian Richardson , Department of Biostatistics, UNC-Chapel Hill	2022–Present
Kyle Grosser , Department of Biostatistics, UNC-Chapel Hill	2020–Present

Marissa Ashner , Department of Biostatistics, UNC-Chapel Hill Next position: Biostatistician III and Graduate Instructor at BERD (Biostatistics, Epidemiology, and Research Design), Duke University	2020–2023
Peter Guan , Department of Biostatistics, UNC-Chapel Hill	2021–2022
Helal M. El-Zaatari , Department of Biostatistics, UNC-Chapel Hill Co-Supervised with Michael Kosorok.	2021–2022
Rakheon Kim , Department of Statistics, Texas A&M University, Co-Supervised with Mohsen Pourahmadi Next position: Assistant Professor at Baylor University.	2018–2022
Satwik Acharyya , Department of Statistics, Texas A&M University	Fall 2015

Master of Science Students Supervised

Benjamin Bodek , Department of Biostatistics, UNC-Chapel Hill	2022–Present
Jesus Vazquez , Department of Biostatistics, UNC-Chapel Hill	2021–2023
Alice Yu , Department of Biostatistics, UNC-Chapel Hill	Fall 2021
Weixi Zhu , Department of Statistics, Texas A&M University	2018–2019
Sage Lane , Department of Epidemiology and Biostatistics, Texas A&M School of Public Health	Summer 2014

Undergraduate Students Supervised

Chen Lin , Visiting Undergraduate Scholar at Texas A&M University from Fudan University	2019–2020
Timothy Gibson , Department of Statistics, The University of Sydney	2016–2017

Service on Doctoral and Master of Science Committees

Doctoral Student Committees

UNC-Chapel Hill

Department of Biostatistics

Haotian Zou (Chair: Donglin Zeng)	2022–2023
Richard Sizelove (Chair: Danyu Lin)	2022–2023
Kushal Shah (Chair: Michael Kosorok)	2022–2023

Department of Epidemiology

Michelle Delahanty (Chair: Julie Daniels)	2023–Present
Jahnelle Jackson (Chair: Jonathan Berg)	2023–Present
Yifei Lu (Chair: Priya Palta)	2022–2023
Yitian Zhang (Chair: Julie Daniels)	2021–2022

Texas A&M University

Department of Statistics

Eli Kravitz (Chair: Raymond J. Carroll)	2019
Shuai Chen (Co-Chairs: Hongwei Zhao and Lan Zhou)	2015

Department of Epidemiology and Biostatistics

Xiaohuan Zhu (Chair: Hongwei Zhao)	2019–2021
Shubhangi Vasudeo (Chair: Eva Shipp)	2017–2022

Master of Science Committees

Texas A&M University

Department of Statistics

Leo Lazcano	2019
Vanessa McMahan	2019
Genti Ndrevataj	2019
Timothy Parker	2019
Carroll Patton	2019
Michelle Perez	2019
Christopher Phelan	2019
Weixi Zhu	2019

Department of Epidemiology and Biostatistics

Karen Fischer	2016
Timothy Erickson	2015
John Coppin	2014
I-Chia Liao	2014

Grants and Fellowships

Active

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| 20. Principal Investigator , NIH NINDS R01NS131225S
Diversity supplement for Mr. Jesus Vazquez. | 01/2024–12/2025 |
| 19. Principal Investigator , NIH NINDS R01NS131225S
Diversity supplement for Mr. Kyle Grosser. | 01/2024–12/2024 |
| 18. Principal Investigator , NIH NINDS R01NS131225
“Developing a robust and efficient strategy for censored covariates to improve clinical trial design for neurodegenerative diseases.” | 06/2023–05/2028 |
| 17. Statistics Mentor , NIH NIEHS T32ES007018
“Biostatistics for research in environmental health,” PI: Fry. | 06/2021–05/2026 |
| 16. Co-Investigator , NIH NIBIB R21EB032059
“Data-driven modeling and ultrasound-based control of afferent nerve stimulation for tremor suppression,” PI: Sharma. | 08/2021–04/2024 |
| 15. Co-Investigator , CDC 1U01DD001293
“Component A: North Carolina - Advancing developmental research using SEED and SEED follow-up data,” PI: Daniels. | 07/2021–06/2026 |

14. **Co-Investigator**, NIH NIA 132323218 PO S9002633 07/2020–03/2025
“Study of Latinos - Investigation of neurocognitive aging 2,” Study of Latinos, Ancillary study - SOL-INCA2, PI: Gonzalez.

Completed

13. **Biostatistician**, North Carolina Department of Health and Human Services (NCDHHS) 06/2022–05/2023
“Expansion in 2022–2023 of NC DHHS/CDC national wastewater surveillance system within the UNC system,” PI: Noble.
12. **Principal Investigator**, CEHS Pilot Project, NIH NIEHS P30ES010126 03/2022–02/2023
“Creating robust disease trajectories to test when environmental factors could alter disease progression.”
11. **Biostatistician**, Contract with Northwestern University 06/2022–12/2022
“Impact of spiritual well-being on Huntington Disease onset,” PI: Sokol.
10. **Principal Investigator**, NIH NINDS, K01NS099343 12/2016–12/2022
“Innovative statistical models for development of first Huntington’s disease progression risk assessment tool.”
9. **Biostatistician**, NIH NCATS UL1 TR002489 07/2020–12/2020
“North Carolina Translational and Clinical Science Institute (NC TraCS) - Biostatistics, Epidemiology, and Research Design (BERD),” PI: Buse.
8. **Statistics Mentor**, NIH NCI T32CA090301 08/2017–09/2020
“Nutrition, biostatistics and bioinformatics training grant,” PI: Carroll.
7. **Co-Investigator**, NIOSH U54 OH007541-16 12/2016–11/2019
“Leveraging motor vehicle crash data for injury surveillance and research in AFF,” PI: Shipp.
6. **Principal Investigator**, Texas A&M School of Public Health Research Enhancement and Development Initiative (REDI) Grant 06/2015–08/2016
“Identifying high-dimensional neuroimaging biomarkers associated with Huntington’s disease motor onset.”
5. **Principal Investigator**, Huntington’s Disease Society of America (HDSA) Research Fellowship 11/2013–11/2015
“Improved definition and prediction of Huntington’s disease motor-onset using advanced statistical models.”
4. **Principal Investigator**, National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) PhD Fellowship 08/2010–08/2011
3. **Principal Investigator**, Philanthropic Educational Organization (P.E.O.) Scholar Award 08/2010–08/2011
2. **Principal Investigator**, National Science Foundation’s Texas A&M University System Louis Stokes Alliances for Minority Participation Bridge to the Doctorate Fellowship 08/2008–08/2010

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| 1. Principal Investigator , Chancellor's Opportunity Predoctoral Fellowship, University of California, Berkeley | 08/2003–06/2005 |
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Research Presentations

Invited Seminar Speaker

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| 95. Department of Statistics, University of California, Irvine, Irvine, CA | 05/2024 |
| 94. Department of Biostatistics and Data Science, Wake Forest University School of Medicine, Winston-Salem, NC | 05/2024 |
| 93. Biostatistics Division, Albert Einstein College of Medicine, Bronx, NY | 02/2024 |
| 92. Department of Mathematics, University of California, Irvine, Irvine, CA | 01/2024 |
| 91. Biostatistics Research Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD | 12/2023 |
| 90. Biostatistics Research Branch, National Cancer Institute, Rockville, MD | 12/2023 |
| 89. Department of Biostatistics, Vanderbilt University, Nashville, TN | 12/2023 |
| 88. Department of Preventive Medicine, Northwestern University, Chicago, IL | 10/2023 |
| 87. National Agricultural Statistics Service, United States Department of Agriculture, Washington, DC | 09/2023 |
| 86. Department of Biostatistics, University of Pennsylvania, Philadelphia, PA | 04/2023 |
| 85. Department of Biostatistics and Bioinformatics, Duke University, Durham, NC | 03/2023 |
| 84. Department of Biostatistics and Data Science, Wake Forest University, Winston-Salem, NC | 02/2023 |
| 83. Undergraduate Visit Day, Department of Biostatistics, UNC-Chapel Hill, Chapel Hill, NC | 11/2022 |
| 82. Public Health Foundation, UNC-Chapel Hill, Chapel Hill, NC | 10/2022 |
| 81. Sleep and Metabolism Lab, Colorado State University, Fort Collins, CO | 09/2022 |
| 80. Department of Mathematical Sciences, University of Memphis, Memphis, TN | 04/2022 |
| 79. Department of Statistical Sciences, Southern Methodist University, Dallas, TX | 12/2021 |
| 78. Department of Statistics, Penn State University, Centre County, PA | 11/2021 |
| 77. Department of Statistics, Universidade Federal de Pernambuco, Recife, Brazil | 07/2021 |
| 76. Department of Mathematics and Statistics, Connecticut College, New London, CT | 10/2020 |
| 75. Department of Statistics, Rice University, Houston, TX | 10/2020 |
| 74. Department of Biostatistics, University of Pennsylvania, Philadelphia, PA | 02/2020 |
| 73. Department of Biostatistics, UNC-Chapel Hill, Chapel Hill, NC | 09/2019 |
| 72. Department of Statistical Science, Southern Methodist University, Dallas, TX | 10/2018 |
| 71. Department of Statistics, Texas A&M University, College Station, TX | 12/2017 |
| 70. Department of Statistical Science, Baylor University, Waco, TX | 02/2017 |
| 69. Department of Statistics, University of California, Riverside, Riverside, CA | 06/2015 |
| 68. Department of Biostatistics, UNC-Chapel Hill, Chapel Hill, NC | 04/2015 |
| 67. Department of Family Medicine and Public Health, University of California, San Diego, San Diego, CA | 04/2015 |
| 66. Department of Mathematics, Manhattan College, New York, NY | 03/2015 |

65. Department of Biostatistics, University of California, Berkeley, Berkeley, CA	01/2015
64. Department of Statistics, University of California, Davis, Davis, CA	01/2015
63. RAND Statistics Group, RAND Corporation, Santa Monica, CA	11/2014
62. Department of Statistics, University of South Carolina, Columbia, SC	10/2014
61. Department of Biostatistics, Columbia University, New York, NY	09/2013
60. Department of Mathematics and Statistics, Sam Houston State University, Huntsville, TX	02/2013
59. Mathematical Sciences Institute, The Australian National University, Canberra, New South Wales, Australia	11/2012
58. School of Mathematics and Statistics, The University of Melbourne, Melbourne, Victoria, Australia	11/2012
57. School of Mathematics and Statistics, The University of Sydney, Sydney, New South Wales, Australia	11/2012
56. Department of Biostatistics and Epidemiology, Texas A&M School of Public Health, College Station, TX	06/2012

Invited Conference, Symposium, Meeting, or Workshop Speaker

55. Challenges in Neuroimaging Data Analysis, Institute for Mathematical and Statistical Innovation, Chicago, IL	08/2024
54. Women in Science Conference, Northeastern Illinois University, Chicago, IL	03/2024
53. Excellence in Faculty Mentoring Workshop, UNC-Chapel Hill, Chapel Hill, NC	11/2023
52. Women in Statistics and Data Science Conference, Bellevue, WA	10/2023
51. GRAD-Future Workshop, North Carolina State University, Raleigh, NC	06/2023
50. Eastern North American Region of the International Biometric Society Meeting, Nashville, TN	03/2023
49. Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers Workshop, Oaxaca, Mexico	08/2022
48. Joint Statistical Meetings, Washington, D.C.	08/2022
47. Diversity Workshop and Mentoring Program, “Grappling with and Overcoming Isolation,” Joint Statistical Meetings, Washington, D.C.	08/2022
46. Data Science in Action Workshop, Harvard University, Boston, MA	07/2022
45. International Symposium on Nonparametric Statistics, Paphos, Cyprus	06/2022
44. GRAD-Future Workshop, NC State University, Raleigh, NC	05/2022
43. Eastern North American Region of the International Biometric Society Meeting, Houston, TX	03/2022
42. International Conference of the ERCIM WG on Computational and Methodological Statistics, Statistics in Neuroscience, London, England	12/2021
41. Girls Talk Math Workshop, Chapel Hill, NC	07/2021
40. International Chinese Statistical Association Applied Statistics Symposium, Houston, TX (cancelled due to COVID-19)	05/2020
39. Louis Stokes Alliances for Minority Participation Conference, Texas A&M University, College Station, TX	03/2020

38. “The next steps after the post-doc: The do’s and must do’s” Alliance for Graduate Education and the Professoriate Program Conference, Texas A&M University, College Station, TX 11/2019
37. Bioinformatics Research & Application Symposium, Texas A&M University, College Station, TX 10/2019
36. International Conference on Econometrics and Statistics, Taichung, Taiwan 06/2019
35. International Symposium on Forecasting, Thessaloniki, Greece 06/2019
34. Eastern North American Region of the International Biometric Society Meeting, Philadelphia, PA 03/2019
33. Joint Statistical Meetings, Vancouver, British Columbia, Canada 08/2018
32. International Symposium on Nonparametric Statistics, Salerno, Italy 06/2018
31. Institute for Mathematics and its Applications, “Frontiers in Forecasting” Workshop, Minneapolis, MN 02/2018
30. th International Conference of the ERCIM WG on Computational and Methodological Statistics, University of London, UK 12/2017
29. “Why I Chose the Post-Doc Route,” Alliance for Graduate Education and the Professoriate Program Conference, Texas A&M University, College Station, TX 11/2017
28. Joint Statistical Meetings, Baltimore, MD 08/2017
27. Huntington’s Disease Society of America Annual Convention, Schaumburg, IL 06/2017
26. International Conference on Econometrics and Statistics, Hong Kong University of Science and Technology, Hong Kong 06/2017
25. Lifetime Data Science Conference, Storrs, CT 05/2017
24. Huntington Study Group Annual Clinical Research Symposium, Nashville, TN 11/2016
23. Newest Developments and Urgent Issues in Measurement Error and Latent Variable Problems Workshop, Banff, Alberta, Canada 08/2016
22. International Biometrics Conference, Victoria, British Columbia, Canada 07/2016
21. Eastern North American Region of the International Biometric Society Meeting, Austin, TX 03/2016
20. Joint Statistical Meetings, Seattle, WA 08/2015
19. International Symposium on Nonparametric Statistics, Graz, Austria 07/2015
18. International Chinese Statistical Association Applied Symposium, Fort Collins, CO 06/2015
17. Joint Statistical Meetings, Boston, MA 08/2014
16. Australian Statistical Conference/Institute of Mathematical Statistics Annual Meeting, Australian Technology Park Sydney, Australia 07/2014
15. International Chinese Statistical Association International Conference, Hong Kong Baptist University, Hong Kong 12/2013
14. Joint Statistical Meetings, Montréal, Québec, Canada 08/2013
13. Western North American Region of the International Biometric Society Meeting, Los Angeles, CA 06/2013
12. International Chinese Statistical Association Applied Symposium, Boston, MA 06/2012
11. Statistical Inverse Problems Workshop, College Station, TX 05/2012

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| 10. Texas A&M University System Louis Stokes Alliances for Minority Participation Symposium, Corpus Christi, TX | 02/2012 |
| 9. Advice on Graduate School Admittance, Louis Stokes Alliances for Minority Participation Symposium, Texas A&M University, College Station, TX | 02/2009 |

Contributed Presentations

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| 8. Huntington Study Group Annual Clinical Research Symposium, Tampa Bay, FL | 10/2015 |
| 7. Huntington Study Group Annual Clinical Research Symposium, Minneapolis, MN | 11/2014 |
| 6. Western North American Region of the International Biometric Society Meeting, Honolulu, HI | 06/2014 |
| 5. University of Florida Winter Workshop: Dimension Reduction and High Dimensional Inference, Gainesville, FL | 01/2014 |
| 4. Huntington Study Group Annual Clinical Research Symposium, Charlotte, NC | 11/2013 |
| 3. Eastern North American Region of the International Biometric Society Meeting, Miami, FL | 03/2011 |
| 2. Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics, Washington, DC | 02/2011 |
| 1. The National GEM Consortium Annual Meeting, Vienna, VA | 08/2010 |

Service to the Profession

Professional Organizations

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| Judge, DataFest, Eastern North American Region of The International Biometric Society | 2024 |
| Member, International Program Committee, International Biometric Conference 2024 | 2022–2024 |
| Member, Executive Committee, Eastern North American Region of The International Biometric Society | 2021–2023 |
| Member, Eastern North American Region of the International Biometric Society Regional Advisory Board | 2019–2021 |
| Mentor, Joint Statistical Meetings Diversity Mentoring Program | 2020–2021 |
| Panelist, Diversity Workshop at the Eastern North American Region of the International Biometric Society Meeting | 2020 |
| Mentor, International Symposium on Forecasting Early Career Researchers Workshop | 2019 |
| Program Representative, Biometrics Section of the Eastern North American Region of the International Biometric Society | 2017–2018 |
| Judge, Student Paper Competition at the Western North American Region of the International Biometric Society Meeting | 2015 |

Scientific Reviewer for Grants and Awards

Byar Award, Biometrics Section of the American Statistical Association	2024
National Institutes of Health Analytics and Statistics for Population Research Panel A Study Section	2023
Creativity Hubs Pilot Award Program, UNC-Chapel Hill	2023
Carolina Women's Leadership Council Faculty Mentoring Award, UNC-Chapel Hill	2023
Vanderbilt Biostatistics Development Awards	2022
UK Medical Research Council Grants Panel	2020
National Institutes of Health Musculoskeletal Rehabilitation Sciences Study Section Panel	2020
National Science Foundation CAREER Panel	2019
National Science Foundation Statistics Panel	2019
Natural Sciences and Engineering Research Council of Canada (NSERC) Mathematics and Statistics Discovery Program	2018
E-Rare Transnational Research Projects	2018

External Reviewer for Career Advancement

Tenure and Promotion Referee, University of Minnesota	2022
Tenure and Promotion Referee, The University of Sydney	2019
Tenure and Promotion Referee, Le Moyne College	2016
Doctoral dissertation of Jinqing Li, Macquarie University, Statistics Depart- ment	2014

Scientific Reviewer for Research

Associate Editor, <i>Australian & New Zealand Journal of Statistics</i>	2021–Present
Associate Editor, <i>Biostatistics</i>	2019–Present
Journal Referee	2013–Present
Annals of Statistics	
Australia New Zealand Journal of Statistics	
Bioinformatics	
Biometrics	
BMC Bioinformatics	
BMC Medical Research Methodology	
The Canadian Journal of Statistics	
Computational Statistics and Data Analysis	
Hacettepe Journal of Mathematics and Statistics	
Journal of the American Statistical Association	
Journal of Multivariate Analysis	
PLOS One	
Science Reports	
Statistica Sinica	

Statistics
 Statistics and Probability Letters
 Statistics in Medicine
 The American Statistician
 The Canadian Journal of Statistics
 Transportation Research Part A: Policy and Practice

Conference and Symposium Organization

Invited Session Organizer, “Charting the course through coarsened data ,” CM-Statistics, Berlin, Germany	2023
Invited Session Organizer, “New directions for nonparametric methods in data science,” International Symposium on Nonparametric Statistics, Salerno, Italy	2018
Invited Session Organizer, “Rich data visualizations for informative health care decisions,” Eastern North American Region of the International Biometric Society Meeting, Atlanta, GA	2018
Invited Session Organizer, “Dynamic modeling for timely health care decisions,” Joint Statistical Meetings, Baltimore, MD	2017
Invited Session Organizer, “Innovative Techniques Towards More Precise Modeling,” 61st Brazilian Regional Meeting, Salvador, Brazil*	2016
<i>* Cancelled due to Zika virus.</i>	
Invited Session Organizer, “Innovative Techniques Towards Solving the Complexities of Biomarker Discovery,” Eastern North American of the International Biometric Society Meeting, Austin, TX	2016
Invited Session Organizer, “Navigating Your Career for Success at the NSF Career Award,” 2015 Society for Advancement of Chicanos/Hispanics & Native Americans in Science National Conference, National Harbor, MD	2015
Invited Session Organizer, “Recent Advances in Spatial Statistics Techniques and their Applications to Public Health and Biological Sciences,” Western North American Region of the International Biometric Society Meeting, Boise, ID	2015

Service to Universities and Departments

UNC-Chapel Hill

Member, Biostatistics Chair Search Advisory Committee	2023
Grant Reviewer, Gillings School of Global Public Health Study Section	2023
Member, Selection Committee for the Carolina Women’s Leadership Council Faculty Mentoring Award	2023
Member, Hispanic Community Health Study / Study of Latinos Diversity Committee	2022–Present
Executive Advisory Board Member, Neuroscience Program	2021–Present

UNC Biostatistics Department

Member, Faculty Search Committee	2023–2024
Member, Organizing Committee for Department Faculty Retreat	2023
Member, Doctoral Exam Committee	2023–Present
Member, Search Committee for Executive Events Coordinator	2022–2023
Member, Master Exam Committee	2021–2022
Member, Search Committee for the Director of Collaborative Studies Coordinating Center	2021
Member, Awards Committee	2020–Present

Texas A&M University

Member, Research Committee, School of Public Health	2013–2018
Reviewer, Association of Former Students' College-Level Teaching Awards	2010–2011

Texas A&M Statistics Department

Member, Faculty Advisory Committee	2019–2020
Member, Master of Science Admissions	2018–2020
Member, Undergraduate Admissions Committee	2018–2019

Texas A&M Biostatistics and Epidemiology Department

Member, Admissions Committee	2013–2018
Judge, Student Research Poster Competition at Public Health Week	2014–2018
Seminar Organizer, Department of Epidemiology and Biostatistics	2013–2018
Member, Faculty Search Committee	2014–2015

Professional Development

Heroic Public Speaking, Amy and Michael Port, LLC	2023
Leadership Development Program, Center for Creative Leadership	2023
Racial Equity Institute, ThirdSpace Action Lab	2023
Women ADVANCE Leadership Program, UNC-Chapel Hill	2022–2023
Grant Foundry Coach Training Program, SciFoundry, LLC	2021–2022
SciFoundry Leadership, SciFoundry, LLC	2019–2023
Team Leadership In Research, Stefanie Robel Consulting, LLC	2020–2022
Research Success Alliance, SciFoundry, LLC	2018–2022
Grant Foundry, SciFoundry, LLC	2018–2019
Faculty Success Program, National Center for Faculty Development and Diversity, LLC	2016–2019

Last updated: February 11, 2024