Tanya P. Garcia, Ph.D.

University of North Carolina at Chapel Hill
(UNC-Chapel Hill)
Department of Biostatistics
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Education

Ph.D., Statistics, Texas A&M University, College Station, TX	2011
Dissertation: Efficient semiparametric estimators for biological, genetic, and measurement error applications.	
M.Sc., Statistics, University of Western Ontario, London, Ontario, Canada	2006
Thesis: Improving the PROMETHEUS model through parameter smoothing.	
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 Committe, 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, *Australian & New Zealand Journal of Statistics*	2021–Present
Associate Editor, *Biostatistics*	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 — 2011
    Awarded to top 10% of seniors and graduate students.

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 — 2003
   Awarded to top 5% of graduating seniors.

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

Phi Kappa Phi

Society for Neuroscience

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

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-aoas967.

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 (AD-VANCE 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	2018–2022
Next position: Assistant Professor at Baylor University.	
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

20. **Principal Investigator**, NIH NINDS R01NS131225S   01/2024–12/2025
    Diversity supplement for Mr. Jesus Vazquez.

19. **Principal Investigator**, NIH NINDS R01NS131225S   01/2024–12/2024
    Diversity supplement for Mr. Kyle Grosser.

18. **Principal Investigator**, NIH NINDS R01NS131225   06/2023–05/2028
    "Developing a robust and efficient strategy for censored covariates to improve clinical trial design for neurodegenerative diseases."

17. **Statistics Mentor**, NIH NIEHS T32ES007018   06/2021–05/2026
    "Biostatistics for research in environmental health," PI: Fry.

16. **Co-Investigator**, NIH NIBIB R21EB032059   08/2021–04/2024
    "Data-driven modeling and ultrasound-based control of afferent nerve stimulation for tremor suppression," PI: Sharma.

15. **Co-Investigator**, CDC 1U01DD001293   07/2021–06/2026
    "Component A: North Carolina - Advancing developmental research using SEED and SEED follow-up data," PI: Daniels.

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

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

Research Presentations

Invited Seminar Speaker

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, Schaumberg, 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

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

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

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 Department	2014

Scientific Reviewer for Research

Associate Editor, *Australian & New Zealand Journal of Statistics*	2021–Present
Associate Editor, *Biostatistics*	2019–Present
Journal Referee	2013–Present

    Annals of Statistics
    Australia New Zealand Journal of Statistics
    Bioinformatics
    Biometrics
    BMC Bioninformatics
    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* *Cancelled due to Zika virus.*	2016
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 4, 2024