Tanya P. Garcia

UNC Chapel Hill
Department of Biostatistics
Gillings School of Global Public Health
Chapel Hill, NC 27516

Office: McGavran-Greenberg 3104D
Email: tpgarcia@email.unc.edu
Web: https://tpgarcia.github.io/

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, ON, 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

Associate Professor of Biostatistics (Tenured), Gillings School of Global Public Health, The University of North Carolina at Chapel Hill — 2020-Present

Affiliate of the Carolina Center for Population Aging and Health (CCPAH), The University of North Carolina at Chapel Hill — 2021-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
Fully funded ($7,200 AUS) four-week invitation by Prof. Samuel Müller and Prof. Alan Welsh.

Research Assistant, Oak Ridge National Lab, 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, ON, 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

Other Professional Experience

Chair, Biometrics Section of the American Statistical Association — 2024-2025

Chair-Elect, Biometrics Section of the American Statistical Association — 2023-2024

Chair, Regional Advisory Board, Eastern Northern American Region/International Biometric Society — 2021-2023

Co-Chair, Regional Advisory Board, Eastern Northern American Region/International Biometric Society	2020-2021
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-Present
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	2020-2022

Honors and Awards

31.	**Visiting Scholar, International Visitor Program, The University of Sydney Mathematical Research Institute**, Sydney, Australia	2024
30.	**Lead Workshop Organizer, "Bridging statistical strategies for censored covariates,"** Banff International Research Station, Banff, Alberta, Canada	2024
29.	**Delta Omega Honorary Society Member**, UNC Chapel Hill	2023
28.	**Featured in UNC Research Endeavors**	2023
27.	**Fellow, Tyson Academic Leadership Program**, UNC Chapel Hill	2023-2024
	Eight fellows are selected annual to develop as future academic leaders.	
26.	**Carolina Women's Leadership Council Faculty Mentoring Award Recipient**	2022
	This award recognizes outstanding faculty members who go the extra mile to guide, mentor and teach. Awarded to 3 out of 100+ applications.	
25.	**Featured in AMSTAT News Hispanic Heritage Month**	2020
24.	**Sigma Xi Member**, Texas A&M Chapter	2020
23.	**Plenary Speaker, 39th International Symposium on Forecasting**, Thessaloniki, Greece	2019
22.	**Fellow, Mentoring Institute for Neuroscience Diversity Scholars (MINDS)**	2017-2018
	NIH NINDS funded program that promotes the advancement of underrepresented independent researchers in neuroscience.	
21.	**Travel Award Recipient, Southeastern Conference Grant, Texas A&M University**[*]	2016-2017
	[*]*Awarded but then unable to be used due to collaborator moving to non-SEC university.*	
20.	**Travel Award Recipient, 14th Meeting of New Researchers in Statistics and Probability**, University of California, San Diego	2012
	Travel award to attend workshop which promotes interaction and networking among new researchers in statistics and probability.	

19. **Travel Award Recipient, SACNAS National Conference**, Seattle, WA 2012

18. **Travel Award Recipient, Roadmap for a Successful Academic Career Workshop**, Texas A&M University 2012

   Designed for internal and external women postdoctoral researchers and assistant professors (2 years or less) in STEM fields.

17. **American Statistical Association Gertrude M. Cox Award Recipient** ($2,000) 2011

   Awarded to 2 out of 1200 female applicants from throughout the US and Canada.

16. **Phi Kappa Phi Member**, Texas A&M Chapter 2011

   Awarded to top 10% of seniors and graduate students at Texas A&M University.

15. **Travel Award Recipient, Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics** 2011

   Awarded to 100 applicants.

14. **William S. Connor Award Recipient**, Texas A&M University 2010

   Awarded to the student whom the faculty deems the most outstanding among those students passing the preliminary examinations during the 2008-2009 academic year.

13. **Fellow, Building Future Faculty Program**, North Carolina State University 2010

   Awarded to 12 out of 100 applicants from graduate programs throughout the US.

12. **Travel Award Recipient, Negotiating the Ideal Faculty Position**, Rice University 2010

   Awarded to 65 out of 1100 applicants from graduate programs throughout the US.

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 at University of California, Irvine.

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
Center for Environmental Health and Susceptibility at UNC Chapel Hill
Eastern North American Region
Huntington Study Group
Institute of Mathematical Statistics
International Biometrics Society
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 at the time the paper was developed.

Under Review

43. Grosser, K.F., Lotspeich, S.C., and **Garcia, T.P.** Mission Imputable: Correcting for Berkson Error When Imputing a Censored Covariate. pp. 1-25.

42. Ashner, M.C. and **Garcia, T.P.** Back to the basics: exploring the validity of the complete case analysis for regression models with a right-censored covariate. pp. 1-25.

41. Lotspeich, S.C. and **Garcia, T.P.** Escaping the trap: Replacing the trapezoidal rule to better impute censored covariates with their conditional means. pp. 1-25.

40. Loop, M.S., Lotspeich, S.C., **Garcia, T.P.**, and Meyer, M.L. Accounting for changing error-prone devices when estimating the relationship between change in an exposure and an outcome. pp. 1-14.

39. 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. Nonalcoholic fatty liver disease and longitudinal change in imaging and plasma biomarkers in Alzheimer's and vascular pathology. pp. 1-25.

38. 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. Liver integrity over the adult lifespan and the risk of Alzheimer's disease and related dementias. pp. 1-16.

37. 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. 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). pp. 1-15.

36. 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. pp. 1-15.

35. 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, pp. 1-24.

Published/In Press

34. Lotspeich, S.C., Ashner, M.C., Vazquez, J.E., Richardson, B.D., Grosser, K.F., Bodek, B.E., and **Garcia, T.P.** (2023). Making sense of censored covariates: Statistical methods for studies of Huntington's disease. *Annual Review of Statistics and Its Applications*, in press, pp. 1-25.

33. 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*, in press, pp. 1-15.

32. 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*, **00**, 1-11, doi: 10.1002/cam4.5863.

31. 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.

30. 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 ageing outcomes in the Hispanic Community Health Study/Study of Latinos, *eBioMedicine*, **87**, 104393, doi:10.1016/j.ebiom.2022.104393.

29. 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*, in press, pp. 1-25, doi:10.1002/alz.12786.

28. Lotspeich, S., Grosser, K.F., and **Garcia, T.P.** (2022). Correcting conditional mean imputation for censored covariates and improving usability. *Biometrical Journal*, pp. 1-5, doi: 10.1002/bimj.202100250

27. 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.

26. Parast, L., **Garcia, T.P.**, Carroll, R.J., and Ross, R.L. (2020). Robust methods to correct for measurement error when evaluating a surrogate marker. *Biometrics*, doi: 10.1111/biom.13386.

25. Lee, U., Carroll, R.J., Marder, K., Wang, Y., and **Garcia, T.P.** (2020). Estimating disease onset from change points of markers measured with error. *Biostatistics*, doi: 10.1093/biostatistics/kxz068.

24. **Garcia, T.P.** and Parast, L. (2020). Dynamic landmark prediction for mixture models. *Biostatistics*, doi:10.1093/biostatistics/kxz052.

23. 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*, **24**, 1378-1390.

22. 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.

21. **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.

20. 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.

19. **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.

18. **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.

17. **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.

16. **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.

15. **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.

14. 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.

13. **Garcia, T.P.** and Ma, Y. (2015). Optimal estimator for logistic model with distribution-free random intercept. *Scandinavian Journal of Statistics*, **43**, 156-171.

12. 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.

11. **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.

10. **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*, doi: 10.1093/bioinformatics/btt608.

9. **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*, DOI: 10.1093/biostatistics/kxt012.

8. 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.

7. **Garcia, T.P.**, Kohli, P., Pourahmadi, M. (2012). Regressograms and mean-covariance models for incomplete longitudinal data. *The American Statistician*, **66**, 85-91.

6. 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.

5. **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.

4. Barber, J., Bose, C., Bourlioux, A., Braun, J., Brunelle, E., **Garcia, T.**, Hillenk, T., and Ong, B. (2010). Burning issues with PROMETHEUS, the Canada's wildfire growth simulator. *Canadian Applied Mathematics Quarterly*, **16**, 337-378.

3. **Garcia, T.**, Braun, J., Bryce, R., and Tymstra C. (2008). Smoothing and bootstrapping the PROMETHEUS fire growth model. *Environmetrics*, **19**, 1-13.

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. pp. 1-15.

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.

Teaching

UNC Chapel Hill, Chapel Hill, NC

Instructor, Longitudinal Data Analysis (Spring Semester, 35-40 students)	2023
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, ≈ 50 students)	2013

University of Neuchâtel, Neuchâtel, Switzerland

Teaching Assistant, Calculus and Linear Models, Course taught in French (≈ 60 students)	Spring 2007, 2008
Teaching Assistant, Linear Models, Graduate Level (≈ 15 students)	Fall 2007
Teaching Assistant, Econometrics (≈ 50 students)	Fall 2006

University of Western Ontario, London, ON, Canada

Teaching Assistant, Operations Research (≈ 30 students)	Spring 2006
Teaching Assistant*, Applied Probability (≈ 50 students)	Fall 2005
*Awarded Teaching Assistant of the Year in the Sciences	

University of California, Irvine, Irvine, CA

Teaching Assistant, Statistics, Summer Bridge (≈ 20 students)	Summer 2002
Tutor, Mathematics, Learning and Academic Resource Center (≈ 8 students)	09/2001-06/2003

Advising and Formal Mentoring

Faculty Career Mentoring

Ethan Alt, Department of Biostatistics, UNC Chapel Hill	2022-Present
Irina Bobkova, Department of Mathematics, Texas A&M University (AD-VANCE Early Career Faculty Mentor)	2019-2020

Postdoctoral Fellows Supervised

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

Doctoral Students Supervised

Brian Richardson, Department of Biostatistics, UNC Chapel Hill	2022-Present
Benjamin Bodek, Department of Biostatistics, UNC Chapel Hill	2022-Present
Jesús Vazquez, Department of Biostatistics, UNC Chapel Hill	2021-Present
Peter Guan, Department of Biostatistics, UNC Chapel Hill	2021-2022
Helal M. El Zaatari, Department of Biostatistics, UNC Chapel Hill	2021-2022
Co-Supervised with Michael Kosorok.	
Marissa Ashner, Department of Biostatistics, UNC Chapel Hill	2020-Present
Kyle Grosser, Department of Biostatistics, UNC Chapel Hill	2020-Present

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

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 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

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 (Chair: 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

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**, T32ES007018   06/2021-05/2026
    "Biostatistics for Research in Environmental Health," PI: Fry.

16. **Co-Investigator**, R21EB032059   08/2021-04/2024
    "Data-driven Modeling and Ultrasound-based Control of Afferent Nerve Stimulation for Tremor Suppression," PI: Sharma.

15. **Co-Investigator**, 1U01DD001293   07/2021-06/2026
    "Component A: North Carolina - Advancing Developmental Research using SEED and SEED Follow-up data," PI: Daniels.

14. **Co-Investigator**, 132323218 PO S9002633   07/2020-03/2025
    "Study of Latinos - Investigation of Neurocognitive Aging 2," Study of Latinos, Ancillary study - SOL-INCA2, PI: Gonzalez.

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"

12. **Biostatistician**, Contract with Northwestern University   06/2022-12/2022
    "Impact of Spiritual Well-being on Huntington Disease Onset"

Completed

11. **Principal Investigator**, CEHS Pilot Project P30ES010126   03/2022-02/2023
    "Creating robust disease trajectories to test when environmental factors could alter disease progression."

10. **Principal Investigator**, NIH NINDS, K01NS099343, $557,406 total   12/2016-12/2022
    "Innovative statistical models for development of first Huntington's disease progression risk assessment tool."

9. **Biostatistician**, 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**, T32 DHHS-NIH-National Cancer Institute, 0% effort   08/2017-09/2020
    "Nutrition, Biostatistics and Bioinformatics," PI: Carroll.

7. **Co-Investigator**, U54 OH007541-16, Centers for Agricultural Safety and Health, 0% effort   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, $25,000 total   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, $150,000 total   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, $30,000 total   2010-2011

3. **Principal Investigator**, Philanthropic Educational Organization (P.E.O.) Scholar Award, $15,000 total   2010-2011

2. **Principal Investigator**, National Science Foundation's Texas A&M University System Louis Stokes Alliance for Minority Participation Bridge to the Doctorate Fellowship, $94,000 total   2008-2010

1. **Principal Investigator**, Chancellor's Opportunity Predoctoral Fellowship, University of California, Berkeley, $67,000 total   2003-2005

Research Presentations

Invited Seminar Speaker

83. Biostatistics Research Branch, National Institute of Allergy and Infectious Diseases, Rockville, MD   09/2023

82. Department of Biostatistics, University of Pennsylvania, Philadelphia, PA   04/2023

81. Department of Biostatistics and Bioinformatics, Duke University, Durham, NC   03/2023

80. Department of Biostatistics and Data Science, Wake Forest University, Winston-Salem, NC   02/2023

79. Winston-Salem State University Visit, University of North Carolina at Chapel Hill, Chapel Hill, NC — 11/2022

78. Public Health Foundation, University of North Carolina at Chapel Hill, Chapel Hill, NC — 10/2022

77. Sleep and Metabolism Lab, Colorado State University, Fort Collins, CO — 09/2022

76. Department of Mathematical Sciences, University of Memphis, Memphis, TN — 04/2022

75. Department of Statistical Sciences, Southern Methodist University, Dallas, TX — 12/2021

74. Department of Statistics, Penn State University, Centre County, PA — 11/2021

73. How to engage with over-your-head seminar talks, Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC — 08/2021

72. Department of Statistics, Universidade Federal de Pernambuco, Recife, Brazil — 07/2021

71. Department of Mathematics and Statistics, Connecticut College, New London, CT — 10/2020

70. Department of Statistics, Rice University, Houston, TX — 10/2020

69. Department of Biostatistics, University of Pennsylvania, Philadelphia, PA — 02/2020

68. Department of Biostatistics, University of North Carolina at Chapel Hill, Chapel Hill, NC — 09/2019

67. Department of Statistical Science, Southern Methodist University, Dallas, TX — 10/2018

66. Department of Statistics, Texas A&M University, College Station, TX — 12/2017

65. Department of Statistical Science, Baylor University, Waco, TX — 02/2017

64. Department of Statistics, University of California, Riverside, Riverside, CA — 06/2015

63. Department of Biostatistics, University of North Carolina, Chapel Hill, NC — 04/2015

62. Department of Family Medicine and Public Health, University of California, San Diego, San Diego, CA — 04/2015

61. Department of Mathematics, Manhattan College, New York, NY — 03/2015

60. Department of Biostatistics, University of California, Berkeley, Berkeley, CA — 01/2015

59. Department of Statistics, University of California, Davis, Davis, CA — 01/2015

58. RAND Statistics Group, RAND Corporation, Santa Monica, CA — 11/2014

57. Department of Statistics, University of South Carolina, Columbia, SC — 10/2014

56. Department of Biostatistics, Columbia University, New York, NY — 09/2013

55. Department of Mathematics and Statistics, Sam Houston State University, Huntsville, TX — 02/2013

54. Mathematical Sciences Institute, The Australian National University, Canberra, New South Whales, Australia — 11/2012

53. School of Mathematics and Statistics, The University of Melbourne, Melbourne, Victoria, Australia — 11/2012

52. School of Mathematics and Statistics, The University of Sydney, Sydney, New South Whales, Australia — 11/2012

51. Department of Biostatistics and Epidemiology, Texas A&M School of Public Health, College Station, TX — 06/2012

Invited Conference or Symposia Speaker

50. Eastern North American Region Annual Meeting, Nashville, TN — 03/2023

49. Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers, Oaxaca, Mexico — 08/2022

48. Joint Statistical Meeting, Washington, D.C. — 08/2022

47. Diversity Workshop and Mentoring Program, "Grappling with and Overcoming Isolation," Joint Statistics Meeting, Washington, D.C. — 08/2022

46. Data Science in Action, Harvard University, Boston, MA — 07/2022

45. International Society for Non-Parametric Statistics Meeting, Paphos, Cyprus — 06/2022

44. Eastern North American Region Annual Meeting, Houston, TX — 03/2022

43. GRAD-Future Workshop, NC State University, Raleigh, NC — 05/2022

42. 14th International Conference of the ERCIM WG on Computational and Methodological Statistics, Statistics in Neuroscience, London, England — 12/2021

41. **Honorarium Speaker**, Girls Talk Math, Chapel Hill, NC — 07/2021

40. International Chinese Statistics Association Applied Statistics Symposium, Houston, TX (cancelled due to COVID-19) — 05/2020

39. Louis Stokes Alliance for Minority Participation, 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, Texas A&M University, College Station, TX — 11/2019

37. **Inaugural Speaker**, 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. **Plenary Speaker**, International Symposium on Forecasting, Thessaloniki, Greece — 06/2019

34. Eastern North American Region Annual Meeting, Philadelphia, PA — 03/2019

33. Joint Statistical Meeting, Vancouver, Canada — 08/2018

32. International Society for Nonparametric Statistics Meeting, Salerno, Italy — 06/2018

31. Institute for Mathematics and its Applications, "Frontiers in Forecasting", Minneapolis, MN — 02/2018

30. 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, Texas A&M University, College Station, TX — 11/2017

28. Joint Statistical Meeting, 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, Banff, Alberta, Canada — 08/2016

22. International Biometrics Conference, Victoria, Canada — 07/2016

21. Eastern North American Region Annual Meeting, Austin, TX — 03/2016

20. Joint Statistical Meeting, Seattle, WA — 08/2015

19. International Society for Nonparametric Statistics Meeting, Graz, Austria	07/2015
18. International Chinese Statistical Association Applied Symposium, Fort Collins, CO	06/2015
17. Joint Statistical Meeting, 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 Meeting, Montréal, Québec, Canada	08/2013
13. Western North American Region Annual Meeting, Los Angeles, CA	06/2013
12. International Chinese Statistical Association Applied Symposium, Boston, MA	06/2012
11. **Plenary Speaker**, Texas A&M University System Louis Stokes Alliance for Minority Participation Symposium, Corpus Christi, TX	02/2012
10. Statistical Inverse Problems Workshop, College Station, TX	05/2012
9. Advice on Graduate School Admittance, Louis Stokes Alliance 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 Annual 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 Northern American Region Annual 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

Member, International Program Committee, International Biometric Conference 2024	2022-2024
Member, Executive Committee, Eastern Northern American Region/International Biometric Society Meeting	2021-2023
Chair, Eastern Northern American Region/International Biometric Society Regional Advisory Board	2021-2023
Co-Chair, Eastern Northern American Region/International Biometric Society Regional Advisory Board	2020-2021

Member, Eastern Northern American Region/International Biometric Society Regional Advisory Board	2019-2021
Mentor, Joint Statistical Meeting Diversity Mentoring Program	2020-2021
Panelist, Diversity Workshop at the Eastern Northern American Region/International Biometric Society Meeting	2020
Mentor, International Symposium on Forecasting Early Career Researchers Workshop	2019
Chair, "Developing the Next Generation of Biostatisticians," a program funded by the Biometrics Section of the American Statistical Association	2018-Present
Co-Chair, "Developing the Next Generation of Biostatisticians," a program funded by the Biometrics Section of the American Statistical Association	2016-2018
Program Representative, Biometrics Section of the Eastern Northern American Region/International Biometric Society Meeting, Atlanta, GA	2017-2018
Judge, Student Paper Competition at the Western Northern American Region/Institute of Mathematical Sciences Meeting, Boise, ID	2015

Scientific Reviewer for Grants and Awards

National Institutes of Health Analytics and Statistics for Population Research Panel A Study Section	2023
UNC Chapel Hill Creativity Hubs Pilot Award Program	2023
UNC Chapel Hill Carolina Women's Leadership Council Faculty Mentoring Award	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, Australia	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 Symposia Organization

Lead Workshop Organizer, "Bridging statistical strategies for censored covariates", Banff International Research Station, Banff, Alberta, Canada — 2024

Workshop Co-Organizer, StatFest 2020, Indianapolis, IN — 2020

Workshop Co-Organizer, "Statistical Significance Workshop", Department of Statistics, Texas A&M University — 2019

Invited Session Organizer, "New directions for nonparametric methods in data science," International Society for Non-Parametric Statistics (ISNPS), Salerno, Italy — 2018

Invited Session Organizer, "Rich data visualizations for informative health care decisions," Eastern Northern American Region/International Biometric Society (ENAR), Atlanta, GA — 2018

Invited Session Organizer, "Dynamic modeling for timely health care decisions," Joint Statistical Meeting (JSM), Baltimore, MD — 2017

Invited Session Organizer, "Innovative Techniques Towards More Precise Modeling," 61st Brazilian Regional Meeting, Salvador, Brazil* — 2016
*Cancelled due to Zika virus.

Workshop Co-Organizer, "Measurement Error and Complex Data Workshop," Texas A&M University, College Station, TX — 2016

Invited Session Organizer, "Innovative Techniques Towards Solving the Complexities of Biomarker Discovery," 2016 ENAR, Austin, TX — 2016

Invited Session Organizer, "Navigating Your Career for Success at the NSF Career Award," 2015 SACNAS National Conference, National Harbor, MD — 2015

| Workshop Co-Organizer, Eastern Northern American Region/International Biometric Society Junior Researchers Workshop, Miami, FL | 2015 |
| Invited Session Organizer, "Recent Advances in Spatial Statistics Techniques and their Applications to Public Health and Biological Sciences," Western Northern American Region/Institute of Mathematical Sciences, Boise, ID | 2015 |

Service to Institutes

UNC Chapel Hill

Member, Biostatistics Chair Search Advisory Committee	2023
Grant Reviewer, Gillings Study Section	2023
Grant Reviewer, Creativity Hubs Pilot Award Program	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, Organizing committee for Biostatistics department faculty retreat	2023
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
Co-Chair, Seminar Committee	2020-Present
Member, Awards Committee	2020-Present

Texas A&M University

Member, Research Committee, Texas A&M 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 Program	2018-2020
Member, Undergraduate Admissions Commitee	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

Tyson Academic Leadership Program, UNC Chapel Hill	2023-2024
Heroic Public Speaking Program, Amy and Michael Port, LLC	2023
Women ADVANCE Leadership Program, UNC Chapel Hill	2022-2023
Grant Foundry Coach Training Program, SciFoundry, LLC	2021-2023
SciFoundry Leadership Program, SciFoundry, LLC	2019-2023
Team Leadership In Research Program, Stefanie Robel Consulting, LLC	2020-2022
Research Success Alliance Program, SciFoundry, LLC	2018-2022
Grant Foundry Program, SciFoundry, LLC	2018-2019
Faculty Success Program, National Center for Faculty Development and Diversity, LLC	2016-2019