## Tanya P. Garcia

UNC Chapel Hill Department of Biostatistics Email: tpgarcia@email.unc.edu Web: Gillings School of Global Public Health https://tpgarcia.github.io/ Chapel Hill, NC 27516 Education 08/2011 Ph.D., Statistics, Texas A&M University, College Station, TX Dissertation: Efficient semiparametric estimators for biological, genetic, and measurement error applications. M.Sc., Statistics, University of Western Ontario, London, ON, Canada 08/2006 Improving the PROMETHEUS model through parameter smoothing. M.S., Industrial Engineering and Operations Research, University of 05/2005California, Berkeley, Berkeley, CA B.S., Mathematics, University of California, Irvine, Irvine, CA 06/2003Professional Experience Associate Professor of Biostatistics (Tenured), Gillings School of Global 07/2020-Present Public Health, The University of North Carolina at Chapel Hill Affiliate of the Carolina Center for Population Aging and Health 04/2021-Present (CCPAH), The University of North Carolina at Chapel Hill Associate Professor of Statistics (Tenured), Texas A&M University 09/2018-07/2020 Assistant Professor of Biostatistics, Texas A&M School of Public Health 01/2013- 08/2018 Research Assistant Professor of Statistics, Texas A&M University 07/2011-12/2012 Visiting Scholar, The University of Sydney, Australia 11/2012 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 06/2010-08/2010 Research Assistant, MD Anderson Cancer Center, Houston, TX 07/2008-08/2008 Teaching Assistant, University of Neuchâtel, Neuchâtel, Switzerland 09/2006-06/2008 Teaching Assistant, University of Western Ontario, London, ON, Canada 09/2005-06/2006 Research Assistant, RWTH Institute of Operations Research and Logistics, 06/2004-08/2004 Aachen, Germany Research Assistant, University of California, Irvine, Irvine, CA 09/2002-06/2003 Teaching Assistant, University of California, Irvine, Irvine, CA 09/2001-06/2003

#### Honors and Awards

25. Featured in AMSTAT News Hispanic Heritage Month	2020
24. Sigma Xi Member, Texas A&M Chapter	2020
23. Plenary Speaker at the 39th International Symposium on Fore-	2019
casting, Thessaloniki, Greece	

22.	Mentoring Institute for Neuroscience Diversity Scholars (MINDS) Fellow	2017-2018
	NIH NINDS funded program that promotes the advancement of underrepresented independent researchers in neuroscience.	
21.	Southeastern Conference (SEC) Travel Grant Program Award, Texas A&M University*	2016-2017
	*Awarded but then unable to be used due to collaborator moving to non-SEC university.	
20.	14th Meeting of New Researchers in Statistics and Probability Travel Award, University of California, San Diego	2012
	Travel award to attend workshop which promotes interaction and networking among new researchers in statistics and probability.	
19.	SACNAS National Conference Travel Award, Seattle, WA	2012
18.	Roadmap for a Successful Academic Career Workshop Travel Award, 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 (\$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.	Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics Travel Award  Awarded to 100 applicants.	2011
1/1	William S. Connor Award, Texas A&M University	2010
14.	Awarded to the student whom the faculty deems the most outstanding among those students passing the preliminary examinations during the 2008-2009 academic year.	2010
13.	Building Future Faculty Travel Award, North Carolina State University	2010
	Awarded to 12 out of 100 applicants from graduate programs throughout the US.	
12.	Negotiating the Ideal Faculty Position Travel Award, Rice University	2010
	Awarded to 65 out of 1100 applicants from graduate programs throughout the US.	
11.	Ford Foundation Predoctoral Fellowship Honorable Mention	2010
10.	<b>Teaching Assistant of the Year in the Sciences</b> , University of Western Ontario	2006
9. \$	Summa Cum Laude, School of Physical Sciences, University of California, Irvine	2003

8. Mathematics Departmental Service/Undergraduate Service	2003
Award, University of California, Irvine	
7. Outstanding Senior in Mathematics, 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, University of California, Irvine	2000-2002
3. The National Dean's List, University of California, Irvine	2000-2003
2. National Society of Collegiate Scholars, University of California,	2001
Irvine	
1. National Hispanic Scholar Finalist, University of California, Irvine	2000

### **Professional Memberships**

American Statistical Association

**ENAR** 

Huntington Study Group

Institute of Mathematical Statistics

National Society of Collegiate Scholars

Phi Beta Kappa

Phi Kappa Phi

Society for Neuroscience

#### Research Interests

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

## **Books and Chapters**

- 31. 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.
- 30. 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.

#### Peer-Reviewed Publications

Underline denotes co-author is a student or postdoctoral researcher.

#### **Under Review**

- 29. <u>Kim, R.</u>, Pourahmadi, M., and **Garcia, T.P.** (2022<sup>+</sup>). A positive definite thresholding estimator of a covariance matrix and its asymptotic efficiency. pp. 1-15.
- 28. 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. (2022<sup>+</sup>). Associations between hypertensive disorders of pregnancy and cognitive decline, The Hispanic Community Health Study/Study of Latinos, 2008-2017, pp. 1-24.
- 27. 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. (2022<sup>+</sup>). Plasma metabolites associated with cognitive function across race/ethnicities affirming the importance of healthy nutrition, pp. 1-25.
- 26. 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. (2022<sup>+</sup>). Association of Neighborhood Segregation with 6-Year Incidence of Metabolic Syndrome in the Hispanic Community Health Study/ Study of Latinos. pp. 1-24.

#### Published/In Press

- 25. <u>Lotspeich, S., Grosser, K.F.</u>, and **Garcia, T.P.** (2021<sup>+</sup>). Correcting conditional mean imputation for censored covariates and improving usability. *Biometrical Journal*, pp. 1-5, doi: 10.1002/bimi.202100250
  - 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.
- 24. 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.
- 23. <u>Lee, U.</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.
- 22. **Garcia, T.P.** and Parast, L. (2020). Dynamic landmark prediction for mixture models. *Biostatistics*, doi:10.1093/biostatistics/kxz052.
- 21. 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.
- 20. 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.
- 19. **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.
- 18. 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.
- 17. 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.

- 16. **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.
- 15. **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.
- 14. **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.
- 13. **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.
- 12. 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.
- 11. **Garcia**, **T.P.** and Ma, Y. (2015). Optimal estimator for logistic model with distribution-free random intercept. *Scandinavian Journal of Statistics*, **43**, 156-171.
- 10. 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.
- 9. **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.
- 8. 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.
- 7. **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.
- 6. 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.
- 5. **Garcia**, **T.P.**, Kohli, P., Pourahmadi, M. (2012). Regressograms and mean-covariance models for incomplete longitudinal data. *The American Statistician*, **66**, 85-91.
- 4. 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.
- 3. **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.
- 2. 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.
- 1. **Garcia, T.**, Braun, J., Bryce, R., and Tymstra C. (2008). Smoothing and bootstrapping the PROMETHEUS fire growth model. *Environmetrics*, **19**, 1-13.

## **Courses Taught**

Courses Taught	
UNC Chapel Hill, Chapel Hill, NC	
Instructor, Probability and Statistical Inference II (Spring Semester, 35-40 students)	2022
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)	01/2013
University of Neuchâtel, Neuchâtel, Switzerland	,
Teaching Assistant, Calculus and Linear Models (taught in French, ( $\approx 60$ students)	Spring 2007, 200
Teaching Assistant, Linear Models (Graduate Level, $\approx 15$ students)	Fall 2007
Teaching Assistant, Econometrics ( $\approx 50 \text{ students}$ )	Fall 2006
University of Western Ontario, London, ON, Canada	
Teaching Assistant, Operations Research ( $\approx 30$ students)	Spring 2006
Teaching Assistant*, Applied Probability ( $\approx 50 \text{ students}$ )	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 ( $\approx 8$ students)	09/2001-06/2003
Advising and Formal Mentoring	
Postdoctoral Fellows Supervised	
Sarah Lotspeich, Postdoctoral Associate of T32, University of North Carolina Chapel Hill, Gillings School of Global Public Health, Department of Biostatistics.	06/2021-07/2022
Next position: Assistant Professor at Wake Forest University	
Unkyung Lee, Postdoctoral Associate of DHHS-NIH National Cancer Institute T32, Texas A&M University, Department of Statistics.	06/2017-09/2020
Next position: Postdoctoral Associate at FDA.	
Doctoral Students Supervised	
Jesús Vazquez, UNC Chapel Hill, Department of Biotatistics	09/2021-
D. G. HNG G. LIFE D. G.	00/2021

09/2021-

03/2021-

08/2020-

Peter Guan, UNC Chapel Hill, Department of Biotatistics

Co-Supervised with Michael Kosorok.

Helal M. El Zaatari, UNC Chapel Hill, Department of Biotatistics

Marissa Ashner, UNC Chapel Hill, Department of Biotatistics

<ul> <li>Kyle Grosser, UNC Chapel Hill, Department of Biotatistics</li> <li>Rakheon Kim, Texas A&amp;M University, Department of Statistics. Co-Supervised with Mohsen Pourahmadi.</li> <li>Next position: Assistant Professor at Baylor University.</li> <li>Satwik Acharyya, Texas A&amp;M University, Department of Statistics</li> </ul>	08/2020- 05/2018-07/2022 Fall 2015
	ran 2019
Master of Science Supervised	
<ul> <li>Alice Yu, UNC Chapel Hill, Department of Biotatistics</li> <li>Weixi Zhu, MS, Texas A&amp;M University, Department of Statistics</li> <li>Timothy Gibson, Honours (equivalent of Undergraduate Senior Diploma),</li> <li>The University of Sydney, Department of Statistics</li> </ul>	09/2021-12/2021 2018-2019 2016-2017
Sage Lane, MPH, Texas A&M Health Science Center, Department of Epidemiology and Biostatistics	Summer 2014
Undergraduate Students Supervised	
Chen Lin, BS, Visiting Undergraduate Scholar from Fudan University	07/2019-05/2020
Service on Doctoral and Master of Science Committees	
Doctoral Student Committees	
UNC Chapel Hill	
Department of Epidemiology	
Yitian Zhang (Chair: Julie Daniels)	2021-
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
Grants and Fellowships	
Active	
15. <b>Principal Investigator</b> , CEHS Pilot Project P30ES010126  "Creating robust disease trajectories to test when environmental factors could alter disease progression."	03/2022-02/2023
14. <b>Co-Investigator</b> , 5T32ES007018  "Biostatistics for Research in Environmental Health," PI: Fry.	06/2021-05/2026
Diostatistics for Research in Environmental Health, 11. Fly.	

13. <b>Co-Investigator</b> , R21EB032059  "Data-driven Modeling and Ultrasound-based Control of Afferent Nerve Stimulation for Tremor Suppression," PI: Sharma.	08/2021-04/2024
12. <b>Co-Investigator</b> , 1U01DD001293  "Component A: North Carolina - Advancing Developmental Re-	07/2021-06/2026
search using SEED and SEED Follow-up data," PI: Daniels.  11. Co-Investigator, 132323218 PO S9002633  "Study of Latinos - Investigation of Neurocognitive Aging 2," Study of Latinos, Ancillary study - SOL-INCA2, PI: Gonzalez.	07/2020-03/2025
10. <b>Principal Investigator</b> , NIH NINDS, K01NS099343, \$557,406 total "Innovative statistical models for development of first Huntington's disease progression risk assessment tool."	12/2016-12/2022
Completed	
9. <b>Biostatistician</b> , UL1 TR002489  "North Carolina Translational and Clinical Science Institute (NC TraCS) - Biostatistics, Epidemiology, and Research Design (BERD)," PI: Buse.	07/2020-12/2020
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  "Leveraging motor vehicle crash data for injury surveillance and research in AFF," PI: Shipp.	12/2016-11/2019
6. <b>Principal Investigator</b> , Texas A&M School of Public Health Research Enhancement and Development Initiative (REDI) Grant, \$25,000 total "Identifying high-dimensional neuroimaging biomarkers associated with Huntington's disease motor onset."	06/2015-08/2016
5. <b>Principal Investigator</b> , Huntington's Disease Society of America (HDSA) Research Fellowship, \$150,000 total "Improved definition and prediction of Huntington's disease motoronset using advanced statistical models."	11/2013-11/2015
4. <b>Principal Investigator</b> , National Consortium for Graduate Degrees for Minorities in Engineering and Science (GEM) PhD Fellowship, \$30,000 total	2010-2011
3. <b>Principal Investigator</b> , Philanthropic Educational Organization (P.E.O.) Scholar Award, \$15,000 total	2010-2011
2. <b>Principal Investigator</b> , 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. <b>Principal Investigator</b> , Chancellor's Opportunity Predoctoral Fellowship, University of California, Berkeley, \$67,000 total	2003-2005

# Conferences and Symposia

### **Invited Presentations**

<ul> <li>66. University of Memphis, Department of Mathematical Sciences, Memphis, TN</li> <li>65. 2022 Eastern North American Region (ENAR) Annual Meeting, Houston, TX</li> <li>64. 14th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2021), Statistics in Neuroscience, London, England</li> </ul>	$04/2022 \\ 03/2022 \\ 12/2021$
63. Southern Methodist University, Department of Statistical Sciences, Dallas, TX	12/2021
62. Penn State University, Department of Statistical Sciences, Danas, 1A	12/2021 $11/2021$
61. UFPE: Universidade Federal de Pernambuco (UFPE) Brasil, Department of Statistics	07/2021
60. Girls Talk Math Invited Honorarium Speaker	07/2021
59. Connecticut College, Department of Mathematics and Statistics, New London, CT	10/2020
58. Rice University, Department of Statistics, Houston, TX	10/2020
57. Statistical Challenges in the Identification, Validation, and Use of Surrogate Markers, Oaxaca, Mexico (cancelled due to COVID-19)	08/2020
56. 5th International Society for Non-Parametric Statistics (ISNPS) Meeting, Paphos, Cyprus (cancelled due to COVID-19)	06/2020
55. International Chinese Statistics Association (ICSA) 2020 Applied Statistics Symposium, Houston, TX (cancelled due to COVID-19)	05/2020
54. Texas A&M University, Louis Stokes Alliance for Minority Participation Seminar Speaker, College Station, TX	03/2020
53. University of Pennsylvania, Department of Biostatistics, Philadelphia, PA	02/2020
52. <b>Inaugural Speaker</b> at the Bioinformatics Research & Application Symposium, Texas A&M University, College Station, TX	10/2019
51. University of North Carolina at Chapel Hill, Department of Biostatistics, Chapel Hill, NC	09/2019
50. 3rd International Conference on Econometrics and Statistics, Taichung, Taiwan	06/2019
49. <b>Plenary Speaker</b> at the 39th International Symposium on Forecasting, Thessaloniki, Greece	06/2019
48. 2019 Eastern North American Region (ENAR) Annual Meeting, Philadelphia, PA	03/2019
47. Department of Statistical Science, Southern Methodist University, Dallas, TX	10/2018
46. 2018 Joint Statistical Meeting, Vancouver, Canada	08/2018
45. International Society for Non-Parametric Statistics (ISNPS) Meeting, Salerno, Italy	06/2018
44. Institute for Mathematics and its Applications "Frontiers in Forecasting", Minneapolis, MN	02/2018
43. 10th International Conference of the ERCIM WG on Computational and Methodological Statistics, University of London, UK	12/2017

49	Texas A&M University, Department of Statistics, College Station, TX	12/2017
	2017 Joint Statistical Meeting, Baltimore, MD	08/2017
	32nd Annual Huntington's Disease Society of America Annual Convention,	06/2017 $06/2017$
10.	Schaumberg, IL	00/2011
39.	International Conference on Econometrics and Statistics, Hong Kong Univer-	06/2017
2.0	sity of Science and Technology, Hong Kong	07/001
	2017 Conference on Lifetime Data Science, Storrs, CT	05/2017
	Baylor University, Department of Statistical Science, Waco, TX	02/2017
36.	Huntington Study Group, 10th Annual HD Clinical Research Symposium, Nashville, TN	11/2016
35.	Newest Developments and Urgent Issues in Measurement Error and Latent Variable Problems, Banff, Canada	08/2016
34.	2016 International Biometrics Conference, Victoria, Canada	07/2016
33.	2016 Eastern North American Region (ENAR) Annual Meeting, Austin, TX	03/2016
32.	2015 Joint Statistical Meeting, Seattle, WA	08/2015
31.	International Society for Non-Parametric Statistics (ISNPS) Meeting, Biosciences, Medicine, and Novel Non-Parametric Methods, Graz, Austria	07/2015
30.	International Chinese Statistical Association Applied Symposium, Fort Collins, CO	06/2015
29.	University of California, Riverside, Riverside, CA	06/2015
28.	University of North Carolina, Department of Biostatistics, Chapel Hill, NC	04/2015
27.	University of California, San Diego, Department of Family Medicine and Public Health, San Diego, CA	04/2015
26.	Manhattan College, Department of Mathematics, New York, NY	03/2015
25.	University of California, Berkeley, Department of Biostatistics, Berkeley, CA	01/2015
24.	University of California, Davis, Department of Statistics, Davis, CA	01/2015
	RAND Corporation, Santa Monica, CA	11/2014
22.	University of South Carolina, Department of Statistics, Columbia, SC	10/2014
21.	2014 Joint Statistical Meeting, Boston, MA	08/2014
20.	Australian Statistical Conference/Institute of Mathematical Statistics Annual Meeting, Australian Technology Park Sydney, Australia	07/2014
19.	The Ninth International Chinese Statistical Association (ICSA) International Conference: Challenges of Statistical Methods for Interdisciplinary Research and Big Data, Hong Kong Baptist University, Hong Kong	12/2013
18.	Columbia University, Department of Biostatistics, New York, NY	09/2013
	2013 Joint Statistical Meeting, Montréal, Québec, Canada	08/2013
	Western North American Region (WNAR) Conference, Los Angeles, CA	06/2013
	Sam Houston State University, Department of Mathematics and Statistics, Huntsville, TX	02/2013
14.	The Australian National University, Mathematical Sciences Institute, Canberra, New South Whales, Australia	11/2012
13.	The University of Melbourne, School of Mathematics and Statistics, Melbourne, Victoria, Australia	11/2012

12. The University of Sydney, School of Mathematics and Statistics, Sydney, New South Whales, Australia	11/2012
11. International Chinese Statistical Association (ICSA) Applied Symposium, Boston, MA	06/2012
10. 8th Annual Texas A&M University System (TAMUS) Louis Stokes Alliance for Minority Participation (LSAMP) Symposium, Corpus Christi, TX	02/2012
9. Statistical Inverse Problems Workshop, College Station, TX	05/2012
Contributed Presentations	
8. Huntington Study Group, 9th Annual HD Clinical Research Symposium, Tampa Bay, Fl	10/2015
7. Huntington Study Group, 8th Annual HD Clinical Research Symposium, Minneapolis, MN	11/2014
6. Western North American Region Conference, Honolulu, HI	06/2014
5. University of Florida Winter Workshop: Dimension Reduction and High Dimensional Inference, Gainesville, Fl	01/2014
4. Huntington Study Group, 7th Annual HD Clinical Research Symposium, Charlotte, NC	11/2013
3. Eastern Northern American Region (ENAR) 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
Master of Science Committees	
Texas A&M University	
Department of Statistics	2010
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

## Service to the Profession

Bioinformatics

Professional Organizations	
Speaker, GRAD-Future Workshop, NC State University	2022
Eastern Northern American Region/International Biometric Society (ENAR) Regional Committee Member	2021-2023
Eastern Northern American Region/International Biometric Society (ENAR) Regional Advisory Board (RAB) Co-Chair	2020-2021
Mentor for Joint Statistical Meeting Diversity Mentoring Program	2020-2021
Eastern Northern American Region/International Biometric Society (ENAR) Diversity Workshop Panelist	2020
Eastern Northern American Region/International Biometric Society (ENAR) Regional Advisory Board Member (RAB)	2019-2021
International Symposium on Forecasting Early Career Researcher Mentor	06/2019
American Statistical Association Biometrics Section Strategic Initiative Chair, "Developing the next Generation of Biostatisticians"	2018-
Biometrics Eastern Northern American Region/International Biometric Society (ENAR) Program Representative, Atlanta, GA	2017-2018
American Statistical Association Biometrics Section Strategic Initiative Co-Chair, "Developing the next Generation of Biostatisticians"	2016-2018
Student Paper Competition Judge, Western Northern American Region/Institute of Mathematical Sciences, Boise, ID	06/2015
Scientific Review Groups and Expert Panels	
Huntington Disease Society of America Scientific Advisory Board Member	2020-Present
UK Medical Research Council Grant Reviewer	2020
NI	
National Institutes of Health (NIH) Musculoskeletal Rehabilitation Sciences Study (MRS) Section Panel Member	2020
	2020 2019
Study (MRS) Section Panel Member	
Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member	2019
Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member National Science Foundation Statistics Panel Member Natural Sciences and Engineering Research Council of Canada (NSERC)	2019 2019
Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member National Science Foundation Statistics Panel Member Natural Sciences and Engineering Research Council of Canada (NSERC) Mathematics and Statistics Discovery Program E-Rare Transnational research projects on hypothesis-driven use of multi-omic integrated approaches for discovery of diseases causes and/or functional val-	2019 2019 2018
Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member National Science Foundation Statistics Panel Member Natural Sciences and Engineering Research Council of Canada (NSERC) Mathematics and Statistics Discovery Program E-Rare Transnational research projects on hypothesis-driven use of multi-omic integrated approaches for discovery of diseases causes and/or functional validation in the context of rare diseases	2019 2019 2018
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Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member National Science Foundation Statistics Panel Member Natural Sciences and Engineering Research Council of Canada (NSERC) Mathematics and Statistics Discovery Program E-Rare Transnational research projects on hypothesis-driven use of multi-omic integrated approaches for discovery of diseases causes and/or functional validation in the context of rare diseases  Editorial Service Associate Editor of Australian & New Zealand Journal of Statistics	2019 2019 2018 2018
Study (MRS) Section Panel Member National Science Foundation CAREER Panel Member National Science Foundation Statistics Panel Member Natural Sciences and Engineering Research Council of Canada (NSERC) Mathematics and Statistics Discovery Program E-Rare Transnational research projects on hypothesis-driven use of multi-omic integrated approaches for discovery of diseases causes and/or functional validation in the context of rare diseases  Editorial Service  Associate Editor of Australian & New Zealand Journal of Statistics Associate Editor of Biostatistics	2019 2019 2018 2018 04/2021- 01/2019-

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

#### **External Reviewer**

Tenure and Promotion Referee, The University of Sydney Tenure and Promotion Referee, Le Moyne College Doctoral dissertation of Jinqing Li, Macquarie University, Statistics Department, Australia	04/2019 04/2016 2014
Conference and Symposia Organization	
Co-Organizer, StatFest 2020, Indianapolis, IN	09/2020
Invited Session Organizer, "New directions for nonparametric methods in data science," International Society for Non-Parametric Statistics (ISNPS), Salerno, Italy	06/2018
Invited Session Organizer, "Rich data visualizations for informative health care decisions," Eastern Northern American Region/International Biometric Society (ENAR), Atlanta, GA	03/2018
Invited Session Organizer, "Dynamic modeling for timely health care decisions," Joint Statistical Meeting (JSM), Baltimore, MD	07/2017
Invited Session Organizer, "Innovative Techniques Towards More Precise Modeling," 61st Brazilian Regional Meeting, Salvador, Brazil*  * Cancelled due to Zika virus.	05/2016
Invited Session Organizer, "Innovative Techniques Towards Solving the Complexities of Biomarker Discovery," 2016 ENAR, Austin, TX	03/2016
Invited Session Organizer, "Navigating Your Career for Success at the NSF Career Award," 2015 SACNAS National Conference, National Harbor, MD	10/2015
Eastern Northern American Region/International Biometric Society (ENAR) Junior Researchers Workshop Co-Organizer, Miami, FL	03/2015

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	06/2015
Service to UNC Chapel Hill	
Neuroscience Executive Advisory Board Member	2021-
Girls Talk Math Invited Honorarium Speaker	07/2021
Service to Biostatistics Department at UNC Chapel Hill	
Developed student workshop on how to engage with "over-your-head" seminar talks	08/2021
Master Exam Committee Member	2021-
Search Committee Member for Director of Collaborative Studies Coordinating Center (CSCC)	2021-
Neuroscience Executive Advisory Board Member	2021-
Seminar Organizer Co-Chair	2020-
Awards Committee Member	2020-
Service to Texas A&M University	
ADVANCE Early Career Faculty Mentor	12/2019-12/2020
Irina Bobkova, Department of Mathematics, Texas A&M University	
Panel Speaker, The Texas A&M System AGEP Alliance "The next steps after the post-doc: The do's and must do's"	11/2019
Research Committee Member, Texas A&M School of Public Health	09/2013-07/2018
Panel Speaker, "Why I Chose the Post-Doc Route," Alliance for Graduate Education and the Professoriate (TAMUS AGEP) Program	11/2017
Association of Former Students' College-Level Teaching Awards Committee Reviewer	06/2010-05/2011
Panel Speaker, Advice on Graduate School Admittance, 5th Annual TAMUS LSAMP Symposium	02/2009
Service to Statistics Department at Texas A&M University	У
Faculty Advisory Committee Member	2019-2020
MS Program Committee Member (including online MS)	2018-2020
"Statistical Significance Workshop", Co-Organizer at Texas A&M University	2019
Undergraduate Commitee Member (including online MS)	2018-2019
Service to Biostatistics and Epidemiology Department at University	Texas A&M

01/2013-08/2018

2014-2018

Admissions Committee

Student Research Poster Competition Judge at Public Health Week

Department of Epidemiology and Biostatistics, Texas A&M School of Public	2013-2018
Health Seminar Organizer	
"Measurement Error and Complex Data Workshop" Co-Organizer Texas A&M	04/2016
University, College Station, TX	
Faculty Search Committee	2014-2015

## Skills

C++, Fortran 77/90,  $\LaTeX$  , Linux, MATLAB, R, Ruby, Stata.

Last updated: February 27, 2022