

## Qi Long, Ph.D.

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### Education

2005 Ph.D. in Biostatistics Department of Biostatistics, University of Michigan, Ann Arbor  
*Co-Advisors:* Professor Xihong Lin and Professor Roderick J.A. Little  
2003 M.S. in Biostatistics Department of Biostatistics, University of Michigan, Ann Arbor  
1998 B.S. in Biochemistry School of Gifted Young, University of Science and Technology of China

### Professional Experience

2016-present Professor (with tenure), Department of Biostatistics, Epidemiology and Informatics  
Perelman School of Medicine, University of Pennsylvania  
Faculty Member, Graduate Group in Epidemiology and Biostatistics  
Faculty Member, Graduate Group in Applied Mathematics and Computational Science  
Faculty Member, Graduate Group in Genomics and Computational Biology  
Senior Fellow, Penn Institute for Biomedical Informatics  
Affiliated Faculty Member, Penn Research in Machine Learning  
2011-2016 Associate Professor (with tenure), Department of Biostatistics and Bioinformatics  
Rollins School of Public Health, Emory University  
2015-2016 Associate Professor (secondary appointment), Department of Biomedical Informatics  
School of Medicine, Emory University  
2005-2011 Rollins Assistant Professor  
Department of Biostatistics and Bioinformatics, Emory University  
2013-2016 Senior Biostatistician, Emory Clinical Cardiovascular Research Institute  
2010-2016 Member, Winship Cancer Institute, Emory University  
2008-2017 Biostatistician (WOC), Atlanta VA Medical Center

### Administrative Leadership Positions

2020-present Founding Director, Center for Cancer Data Science  
Associate Director for Cancer Informatics, Penn Institute for Biomedical Informatics  
Perelman School of Medicine, University of Pennsylvania  
2016-present Director, Biostatistics and Bioinformatics Core (Biostatistics Core, prior to 2019)  
Abramson Cancer Center, University of Pennsylvania  
2015-2016 Director of Research, Department of Biostatistics and Bioinformatics, Emory University

### Honors and Awards

Elected Fellow, American Association for the Advancement of Science, 2020

## Qi Long, Ph.D.

Distinguished Paper Award, 2020 American Medical Informatics Association (AMIA) Annual Symposium

Elected Fellow, American Statistical Association, 2016

Elected Member, International Statistical Institute, 2015

NSF Travel Award for the 2018 International Congress of Mathematicians, 2018

Faculty Fellow, Faculty Fellowship Program in Israel, 2017

Nominee for Woodruff Leadership Academy Fellow, Emory University, 2015

Biostatistics Teaching Award, Rollins School of Public Health, Emory University, 2015

3rd Place, Poster Competition Award, Biopharmaceutical Section, American Statistical Association, 2015

Rollins Endowed Assistant Professorship, Emory University, 2005-2011

Distinguished Student Paper Award, International Biometric Society's Eastern North American Region (ENAR) Spring Meeting, 2005

Rackham Pre-doctoral Fellowship, University of Michigan at Ann Arbor, 2004-2005

Award for Best Performance in Ph.D. Qualifying Exams, Department of Biostatistics, University of Michigan, Ann Arbor, 2002

Jing Zhi Zhu Scholarship, University of Science and Technology of China, 1996-1997

First Prize Scholarship, University of Science and Technology of China, 1995-1996

Hua Wei Scholarship, University of Science and Technology of China, 1994-1995

Third Prize, Chinese Mathematical Olympiad, China, 1994

First Prize, National Contest in Mathematics for High School Students, China, 1993

### Research Interests

Mission Statement: To develop statistical and machine learning methods for advancing precision medicine and population health

Methodology: methods for analysis of big health data including -omics, electronic health records (EHRs), and mobile health (mHealth) data; missing data; causal inference; privacy and fairness; Bayesian modeling and methods; clinical trials

Subject-matter Application: cancer; cardiovascular diseases; neurological disorders and neurodegeneration; diabetes; kidney diseases; mental health

### Professional Activities and Services

#### Advisory and Leadership

- Treasurer (elected), Executive Committee, International Biometric Society/Eastern North American Region (ENAR), 2022-2023
- Member (elected), ENAR Regional Committee (RECOM), International Biometric Society/Eastern North American Region, 2017-2019
- Member, Statistical Methodology Group, International Consortium on Genetics of Subsequent Coronary Heart Disease (GENIUS-CHD), 2015-2018

- Member, Designing and Analyzing Clinical Trials for Personalized Medicine Working Group, NIH Clinical and Translational Science Award (CTSA) Program, 2015-2017
- Member, Committee on Scientific Freedom and Human Rights, American Statistical Association, 2014-2019
- Vice President (elected), Georgia Chapter, American Statistical Association, 2014-2016
- Member, Regional Advisory Board, International Biometric Society/Eastern North American Region, 2014-2016
- Member, Steering Committee, Georgia Coverdell Acute Stroke Registry, Georgia Department of Public Health, 2013-2016

### Editorial Services

- Senior Editor, *Cancer Research*, 2018-present
- Founding Topic Editor, *Research Methods in Medicine & Health Sciences*, 2019-present
- Associate Editor, *Statistical Analysis and Data Mining*, 2018-present; *Biometrics*, 2014-present; *BMC Medical Research Methodology*, 2012-2019
- Editorial Board Member: *Journal of the American Heart Association*, 2012-2017; *Scientific Reports*, 2016-2019
- Journal Referee
  - Methods Journals: Annals of Applied Statistics; Behavior Research Methods, Bioinformatics; Biometrical Journal; Biometrics; Biostatistics; BMC Medical Research Methodology; Briefings in Bioinformatics; Clinical Trials; Communications in Statistics; Contemporary Clinical Trials; Health Services and Outcomes Research Methodology; IEEE/ACM Transactions on Computational Biology and Bioinformatics; Journal of Educational and Behavioral Statistics; Journal of the National Cancer Institute; Journal of Statistical Computation and Simulation; Journal of Statistical Planning and Inference; Journal of the American Medical Informatics Association; Journal of the American Statistical Association; Scandinavian Journal of Statistics; Statistica Sinica; Statistics in Medicine; Statistical Methods in Medical Research; The American Statistician; The Canadian Journal of Statistics
  - Subject-matter Journals: JAMA Oncology; American Journal of Epidemiology; Annals of Epidemiology; Behavior Research Methods; British Journal of Surgery; Cancer Epidemiology Biomarkers & Prevention; Cancer Informatics; Circulation; Circulation Research; Computer Methods and Programs in Biomedicine; Journal of the American Heart Association; Journal of the National Cancer Institute; Neoplasia; PLoS ONE; Scientific Reports

### Grant Review Services

- Standing Member, NIH Biostatistical Methods and Research Design Study Section (BMRD), 2017-2021
- Co-Chair: NIH Special Emphasis Panel on Health Informatics, ZRG1 HDM-E (90), 08/2020
- Temporary Member, NIH Biostatistical Methods and Research Design Study Section (BMRD), 2015-2017
- Grant Reviewer, Congressionally Directed Medical Research Programs, Department of Defense, USA, 2014-present

### **Educational and Outreach Activities**

- Speaker, The 2018 Accelerating Anticancer Agent Development and Validation (AAADV) Workshop, FDA, Bethesda, MD, May 2-4, 2018
- Instructor, Short Course on Propensity Score Methods for Observational Studies, at the Centers for Disease Control and Prevention (CDC), USA, September 22, 2017
- Organizer and Instructor, Workshop Series on Handling Missing Data, at the Georgia Department of Public Health (also open to the Centers for Disease Control and Prevention), USA, September, 2015–March, 2016
- Mentor in Statistics and Methodology, American Psychiatric Association (APA) Research Colloquium for Junior Investigators, 2016

### **Conference Program**

- Member, Educational Advisory Committee, 2022 International Biometric Society/Eastern North American Region Spring Meeting, Houston, TX, USA
- Member, program committee, The 11th ICSA International Conference in 2019, International Chinese Statistical Association (ICSA), Hangzhou, China
- Program Co-Chair, 2017 Southern Regional Council on Statistics (SRCOS) Summer Research Conference, Jekyll Island, GA, USA
- Program Co-Chair, 2014 International Biometric Society/Eastern North American Region Spring Meeting, Baltimore, MD, USA
- Member, program committee, 2016 ICSA Applied Statistics Symposium, International Chinese Statistical Association (ICSA), Atlanta, GA, USA
- Member, program committee, 2010 ICSA Applied Statistics Symposium, International Chinese Statistical Association (ICSA), Indianapolis, IN, USA

### **Other Review Services**

- Reviewer for book proposal, Oxford University Press, 2016
- Member, Student Paper Competition Committee, Health Policy Statistics Section, American Statistical Association, 2015-2016
- Member, Student Paper Competition Committee, Section on Bayesian Statistical Science, American Statistical Association, 2013-2014
- Member, University Research Committee, Emory University, 2011-2012

**Consulting:** Bayer Corporation (2018-present); Eisai Inc. (2013-2014); Ideomed Inc. (2013); VA (2011-2013)

### **Research Funding**

#### **Active as PI/Core Director**

1. Advancing Analysis of Multi-omics Data in Alzheimer's Disease Research  
Role: Principal Investigator (PI)  
Funding Agency: NIH/NIA (RF1 AG063481)  
Period: 08/15/2019 – 03/31/2024  
Amount: \$3,635,365

2. Privacy-preserving Methods and Tools for Handling Missing Data in Distributed Health Data Networks  
Role: Principal Investigator (PI)  
Funding Agency: NIH/NIGMS (R01 GM124111)  
Period: 09/08/2017 – 06/30/2022  
Amount: \$2,302,416
3. Coordinating Center for Canine Immunotherapy Trials and Correlative Studies  
Role: Principal Investigator (MPI with Nicola Mason)  
Funding Agency: NIH/NCI (U24 CA224122)  
Period: 09/30/2017 – 08/31/2022  
Amount: \$2,811,859
4. Statistical Methods for Modeling Alzheimer’s Disease Progression Integrating Brain Imaging and -Omics Data  
Role: Principal Investigator (MPI with Suprateek Kundu)  
Funding Agency: NIH/NIA (R01 AG071174)  
Period: 03/01/2021 – 02/28/2026  
Amount: \$3,415,970
5. Development and Assessment of Decision Supporting System for Renal Studies  
Role: Principal Investigator at Penn  
Funding Agency: NIH/NIDDK (R01 DK108070)  
Period: 09/15/2016 – 07/31/2022  
Amount: \$1,739,780
6. Abramson Cancer Center Support Grant  
Role: Director of Biostatistics and Bioinformatics Core  
Funding Agency: NIH/NCI (P30 CA016520)  
Period: 12/01/2020 – 11/30/2025  
Amount: \$3,452,504 for Biostatistics and Bioinformatics Core
7. RURAL - Risk Underlying Rural Areas Longitudinal Study  
Role: Co-PI of Statistical and Data Coordinating Center (SDCC)  
Funding Agency: NIH/NHLBI (U01 HL146382)  
Period: 05/15/2019 – 04/30/2025  
Amount: \$35,356,200 (\$5,193,539 for SDCC)

**Recently Completed or Relinquished as PI/Core Director (selected)**

1. Statistical Methodologies and Analysis of Real World Data in Health Outcomes Research  
Role: Principal Investigator (PI)  
Funding Agency: Bayer Pharmaceutical Co  
Period: 09/01/2018 – 08/31/2020
2. Penn Pfizer Partnership to Accelerate Real World Evidence in Cancer  
Role: Co-Investigator  
Funding Agency: Pfizer  
Period: 11/01/2019 – 10/31/2020
3. Mechanisms of Esophageal Carcinogenesis  
Role: Co-Director of Administrative and Biostatistics Core  
Funding Agency: NIH/NCI (P01 CA098101)  
Period: 07/01/2014 – 06/30/2019

4. Statistical Methods for Missing Data in Large Observational Studies  
Role: Principal Investigator  
Funding Agency: Patient-Centered Outcomes Research Institute (ME-1303-5840)  
Period: 10/01/2013 – 05/31/2018
5. Statistical Methods for Causal Inference in Observational Studies  
Role: Principal Investigator  
Funding Agency: NIH/NINDS (R21 NS091630)  
Period: 02/01/2015 – 01/31/2019
6. Advancing mHealth using Big Data Analytics: Statistical and Dynamical Systems Modeling of Real-Time Adaptive m-Intervention for Pain  
Role: Principal Investigator (collaborative project with D. Abrams at Northwestern, C. Kang at University of Pittsburgh, J. Li at UCLA, and N. Shah at Duke)  
Funding Agency: NSF (DMS 1557712)  
Period: 09/15/2015 – 08/31/2016
7. Feature Selection for Genomic Data Using Known and Novel Biological Information  
Role: Principal Investigator  
Funding Agency: NIH/NCI (R03 CA183006)  
Period: 12/01/2013 – 11/30/2016
8. Coordinating Center for Infant Aphakia Treatment Study (IATS)  
[\*\* *relinquished in September, 2016 due to moving to another institution* \*\*]  
Role: Principal Investigator  
Funding Agency: NIH/NEI (UG1EY013287)  
Period: 09/01/2015 – 08/31/2019
9. Evaluating Prediction Models for Cancer Endpoints Subject to Dependent Censoring  
Role: Principal Investigator  
Funding Agency: NIH/NCI (R03 CA173770)  
Period: 02/01/2013 – 01/31/2016
10. Morehouse/Emory Cardiovascular (MECA) Center for Health Equity  
[\*\* *relinquished in September, 2016 due to moving to another institution* \*\*]  
Role: Director of Biostatistics, Bioinformatics and Data Coordinating Core  
Funding Agency: American Heart Association  
Period: 07/01/2015 – 06/30/2019
11. Mechanisms of Early Recurrence in Intracranial Atherosclerotic Disease (MyRIAD)  
[\*\* *relinquished in September, 2016 due to moving to another institution* \*\*]  
Role: Emory PI and Director of Statistical Coordinating Center  
Funding Agency: NIH/NINDS (R01 NS084288)  
Period: 03/01/2014 – 02/28/2019
12. Mental Stress Ischemia: Prognosis and Genetic Influences  
Role: Co-Director of Biostatistics and Data Management Core  
Funding Agency: NIH/NHLBI (P01 HL101398)  
Period: 09/01/2010 – 11/30/2016

## Publications and Manuscripts

(Mentees are underscored; ♣ senior/corresponding author; † equal contribution.)

### Peer-reviewed Journal Publications

- [1] Lama, V.N., Flaherty, K.R., Toews, G.B., Colby, T.V., Travis, W.D., **Long, Q.**, Murray, S., Kazerooni, E.A., Gross, B.H., Lynch, J.P., and Martinez, F.J. (2003) Prognostic value of desaturation during a 6-minute walk test in idiopathic interstitial pneumonia. *American Journal of Respiratory and Critical Care Medicine*, 168(9), 1084-1090.
- [2] Kim, K.K., Flaherty, K.R., **Long, Q.**, Hattori, N., Sisson, T.H., Colby, T.V., Travis, W.D., Martinez, J.F., Murray, S., and Simon, R.H. (2003) A plasminogen activator inhibitor-1 promoter polymorphism and idiopathic interstitial pneumonia. *Molecular Medicine*, 9, 52-56.
- [3] Flaherty, K.R., Colby, T.V., Travis, W.D., Lynch, J.P., King, T., Raghu, G., Kazerooni, E.A., Gross, B.H., **Long, Q.**, Murray, S., Toews, G.B., and Martinez, F.J. (2004) Idiopathic interstitial pneumonia: What is the effect of a multi-disciplinary approach to diagnosis? *American Journal of Respiratory and Critical Care Medicine*, 170(8), 904-910.
- [4] Clark, N.M., Janz, N.K., Dodge, J.A., Lin, X., **Long, Q.**, Little, R.J., Mosca, L., Wheeler, J.R.C., and Keteyian, S. (2008) The effect of patient choice of intervention on health outcomes. *Contemporary Clinical Trials*, 29(5), 679-686.
- [5] **Long, Q.**, Little, R.J., and Lin, X. (2008) Causal inference in hybrid intervention trials involving treatment choice. *Journal of the American Statistical Association*, 103(482), 474-484.
- [6] Fraser, L.A., Twombly, J.G., Zhu, M., **Long, Q.**, Hanfelt, J.J., Narayan, V.K.M., Wilson, P.W.F., and Phillips, L.S. (2009) Delay in diagnosis of diabetes is not the patient's fault. *Diabetes Care*, 33(1), e10.
- [7] Auyeung, S.F.<sup>†</sup>, **Long, Q.**<sup>†</sup>, Royster, E.B.<sup>†</sup>, Murthy, S., McNutt, M.D., Lawson, D., Miller, A., Manatunga, A., and Musselman, D. (2009) Sequential Multiple-Assignment Randomized Trial (SMART) Design of neurobehavioral treatment for patients with metastatic malignant melanoma treated with interferon. *Clinical Trials*, 6(5), 480-490.
- [8] Fedirko, V., Bostick, R.M., Flanders, W.D., **Long, Q.**, Sidelnikov, E., Shaukat, A., Daniel, C.R., Rutherford, R.E., and Woodard J.J. (2009) Effects of vitamin D and calcium on proliferation and differentiation in normal colon mucosa: a randomized clinical trial. *Cancer Epidemiology, Biomarkers & Prevention*, 18(11), 2933-2941.
- [9] Sidelnikov, E., Bostick, R.M., Flanders, W.D., **Long, Q.**, and Seabrook, M.E. (2009) Colorectal mucosal expression of MSH2 as a potential modifiable biomarker of risk for colorectal neoplasms. *Cancer Epidemiology, Biomarkers & Prevention*, 18(11), 2965-2973.
- [10] Hsu, C.H., **Long, Q.** and Alberts D.S. (2009) Estimation of colorectal adenoma recurrence with dependent censoring. *BMC Medical Research Methodology*, 9:66.
- [11] Little, R.J.<sup>†</sup>, **Long, Q.**<sup>†</sup>, and Lin, X. (2009) A comparison of methods for estimating the causal effect of a treatment in randomized clinical trials subject to noncompliance. *Biometrics*, 65, 640-649.
- [12] Sidelnikov, E., Bostick, R.M., Flanders, W.D., **Long, Q.**, Cohen, V.L., Dash, C. (2009) MutL-Homolog 1 expression and risk of incident sporadic colorectal adenoma: search for prospective biomarkers of risk for colorectal cancer. *Cancer Epidemiology, Biomarkers & Prevention*, 18(5), 1599-1609.
- [13] Little, R.J., **Long, Q.**, and Lin, X. (2009) Discussion of "Can Nonrandomized Experiments Yield Accurate Answers? A Randomized Experiment Comparing Random to Nonrandom Assignments" by Shadish, Clark and Steiner, *Journal of the American Statistical Association*, 103(484), 1344-1346.

- [14] Daniel, C.R., Bostick, R.M., Flanders, W.D., **Long, Q.**, Fedirko, V., Sidelnikov, E., Seabrook, M.E. (2009) TGF- $\alpha$  expression as a potential biomarker of risk within the normal-appearing colorectal mucosa of patients with and without incident sporadic adenoma. *Cancer Epidemiology, Biomarkers & Prevention*, 18, 65-73.
- [15] Fedirko, V., Bostick, R.M., Flanders, W.D., **Long, Q.**, Shaukat, A., Rutherford, R.E., Daniel, C.R., Cohen, V., Dash, C., and Woodard, J.J. (2009) Effects of vitamin D and calcium supplementation on markers of apoptosis in normal colon mucosa: A randomized, double-blind, placebo-controlled clinical trial. *Cancer Prevention Research*, 2(3), 213-223.
- [16] Hsu, C.H., Taylor, J.M.G., **Long, Q.**, and Alberts D.S. (2009) Analysis of colorectal adenoma recurrence data subject to informative censoring. *Cancer Epidemiology, Biomarkers & Prevention*, 18, 712-717.
- [17] Cooper, L., Gutman, D.A., **Long, Q.**, Johnson, B.A., Cholleti, S.R., Kurc, T., Saltz, J.H., Brat, D.J., and Moreno, C.S. (2010) The Proneural Molecular Signature is Enriched in Oligodendrogliomas and Predicts Improved Survival among Diffuse Gliomas. *PLoS ONE*, 5(9): e12548.
- [18] Sidelnikov, E., Bostick, R.M., Flanders, W.D., **Long, Q.**, Fedirko, V., Shaukat, A., Daniel, C.R., Rutherford, R.E. (2010) Effects of calcium and vitamin D on MLH1 and MSH2 expression in rectal mucosa of sporadic colorectal adenoma patients. *Cancer Epidemiology, Biomarkers & Prevention*, 19(4), 1022-1032.
- [19] Twombly, J.G., **Long, Q.**, Zhu, M., Wilson, P.W.F., Narayan, V.K.M., Fraser, L-A., Brian C. Webber, B.C., and Phillips, L.S. (2010) Diabetes care in black and white veterans in the southeastern United States. *Diabetes Care*, 33(5), 958-63.
- [20] **Long, Q.**, Little, R.J., and Lin, X. (2010) Estimating causal effects in multi-arm trials subject to noncompliance: A Bayesian framework. *Journal of the Royal Statistical Society, C*, 59(3), 513-531.
- [21] Zhang, X. and **Long, Q.** (2010) Stochastic modeling and prediction for patient accrual in clinical trials. *Statistics in Medicine*, 29(6), 649-658.
- [22] **Long, Q.**, Flanders, W.D., Fedirko, V., and Bostick, R.M. (2010) Robust statistical methods for analysis of biomarkers measured with batch/experiment specific errors. *Statistics in Medicine*, 29(3), 361-370.
- [23] Fedirko, V., Bostick, R.M., **Long, Q.**, Flanders, W.D., McCullough, M.L., Sidelnikov, E., Daniel, C.R., Rutherford, R.E., and Shaukat, A. (2010) Effects of vitamin D and calcium supplementation on marker of oxidative DNA damage in normal colon mucosa: A randomized clinical trial. *Cancer Epidemiology, Biomarkers & Prevention*, 19, 280-291.
- [24] Johnson, B.A., **Long, Q.**, and Chung, M. (2011) On path restoration for censored outcomes. *Biometrics*, 67, 1379-1388.
- [25] Hsu, C.H., Li, Y., **Long, Q.**, and Zhao, Q. (2011) Estimation of recurrence of colorectal adenomas with dependent censoring using weighted logistic regression. *PLoS ONE*, 6(10): e25141.
- [26] Wasse, H., Rivera A.A., Huang R., Martinson D.E., **Long, Q.**, McKinnon, W., Naqvi, N., Husain, A. (2011) Increased plasma chymase concentration and mast cell chymase expression in venous neointimal lesions of CKD and ESRD patients. *Seminars in Dialysis*, 24(6), 688-693.



- [27] **Long, Q.**, Chung, M., Moreno, C.S. and Johnson, B.A. (2011) Risk prediction for prostate cancer recurrence through regularized estimation with simultaneous adjustment for nonlinear clinical effects. *Annals of Applied Statistics*, 5(3), 2003-2023.
- [28] **Long, Q.**, Zhang, X. and Hsu, C.H. (2011) Nonparametric multiple imputation for ROC analysis when some biomarker values are missing. *Statistics in Medicine*, 30(26), 3149-61.
- [29] Johnson, B.A., and **Long, Q.** (2011) Survival ensembles by the sum of pairwise differences with application to lung cancer microarray studies. *Annals of Applied Statistics*, 5(2A), 1081-1101.
- [30] **Long, Q.**, Johnson, B.A., Osunkoya, A.O., Lai, Y., Zhou, W., Abramovitz, M., Xia, M., Bouzyk, M., Nam, R., Sugar, L., Stanimirovi, A., Leyland-Jones, B.R., Seth, A.K., Petros, J.A., Moreno, C.S. (2011) Protein-coding and microRNA biomarkers of recurrence of prostate cancer following radical prostatectomy. *American Journal of Pathology*, 179(1), 46-54.
- [31] **Long, Q.**, Zhang, X., and Johnson, B.A. (2011) Robust estimation of area under ROC curve using auxiliary variables in the presence of missing biomarker values. *Biometrics*, 67(2), 559-567.
- [32] **Long, Q.**, Zhang, X. and Bostick, R.M. (2011) Semiparametric estimation for joint modeling of colorectal cancer risk and functional biomarkers measured with errors. *Biometrical Journal*, 53(3), 393-410.
- [33] Wang, M. and **Long, Q.** (2011) Modified robust variance estimator for generalized estimating equations with improved small-sample properties. *Statistics in Medicine*, 30(11), 1278-1291.
- [34] Goodman, S., Rouse, M., **Long, Q.**, Ji, S., and Brand, S. (2011) Deconstructing antenatal depression: What is it that matters for neonatal behavioral functioning? *Infant Mental Health Journal*, 32(3), 339-361.
- [35] Twombly, J., **Long, Q.**, Zhu, M., Wilson, P.W.F., Venkat, N.K., and Phillips, L. (2011) Validity of the diagnosis of diabetes in veterans in the southeastern United States. *Diabetes Research and Clinical Practice*, 91(3), 395-400.
- [36] Ahearn, T.U., McCullough, M.L., Flanders, W.D., **Long, Q.**, Sidelnikov, E., Fedirko, V., Daniel, C.R., Rutherford, R.E., Shaukat, A., and Bostick, R.M. (2011) A randomized clinical trial of calcium and vitamin D3 supplementation on markers of their metabolism in normal colonic mucosa. *Cancer Research*, 71(2), 413-423.
- [37] Ji, S., **Long, Q.**<sup>♣</sup>, Newport, J., Na, H., Knight, B.T., Zach, E.B., Morris, N.J., Kutner, M., and Stowe, Z.N. (2011) Validity of depression rating scales during pregnancy and the postpartum period: Impact of trimester and parity. *Journal of Psychiatric Research*, 45(2), 213-219.
- [38] Monk, C., Newport, D.J., Korotkin, J.H., **Long, Q.**, Knight, B.T., and Stowe, Z.N. (2012) Uterine blood flow in a psychiatric clinical population: impact of maternal depression, anxiety, and psychotropic medication. *Biological Psychiatry*, 72(6), 483-490.
- [39] Zhang, X. and **Long, Q.**<sup>♣</sup> (2012) Modeling and prediction of subject accrual and event times in clinical trials: a systematic review. *Clinical Trials*, 9(6), 681-8.
- [40] Zhang, X. and **Long, Q.**<sup>♣</sup> (2012) Joint monitoring and prediction of accrual and event times in clinical trials. *Biometrical Journal*, 54(6), 735-749.
- [41] Wang, M., Flanders, W.D., Bostick, R.M., and **Long, Q.**<sup>♣</sup> (2012) A conditional likelihood approach for regression analysis using biomarkers measured with batch-specific error. *Statistics in Medicine*, 31(29), 3896-906.

[\*\* An earlier version won Ming Wang the R.L. Anderson Award at the 2011 Southern Regional Council on Statistics (SRCOS) Summer Research Conference and a Young Investigator Award from American Statistical Association's Section on Statistics in Epidemiology (SIE) in 2012 \*\*]

- [42] **Long, Q.** (2012) A note on generalized functional linear model and its application. *Journal of Statistical Planning and Inference*, 142(9), 2599-2606.
- [43] Newport, D.J., Ji, S., **Long, Q.**, Knight, B.T., Zach, E.B., Smith, E.N., Morris, N.J., and Stowe, Z.N. (2012) Maternal depression and anxiety differentially impact fetal exposures during pregnancy. *Journal of Clinical Psychiatry*, 73(2), 247-251.
- [44] Wasse, H., Huang, R., **Long, Q.**, Singapuri, S., Raggi, P., and Tangpricha, V. (2012) Efficacy and safety of a short course of very high dose cholecalciferol in hemodialysis. *The American Journal of Clinical Nutrition*, 95(2), 522-528.
- [45] **Long, Q.**, Hsu, C.H., and Li, Y. (2012) Doubly robust nonparametric multiple imputation for ignorable missing data. *Statistica Sinica*, 22, 149-172.
- [46] Huang, W., Shah, S., **Long, Q.**, Crankshaw, A.K., and Tangpricha, V. (2013) Improvement of pain, sleep, and quality of life in chronic pain patients with Vitamin D supplementation. *The Clinical Journal of Pain*, 29(4):341-7.
- [47] Chakkalakal, R.J., Higgins, S., Bernstein, L., Lundberg, K., Wu, V., **Long, Q.**, Doyle, J. (2013) Revisiting the role of gender in the initial evaluation of chest pain: Do physicians examine men and women differently? *Journal of General Internal Medicine*, 28(4), 561-6.
- [48] Wasse, H., Cardarelli, F., De Staercke, C., Hooper, C. and **Long, Q.** (2013) Accumulation of retained, nonfunctional arteriovenous grafts correlates with severity of inflammation in asymptomatic ESRD patients. *Nephrology Dialysis Transplantation*, 28(4), 991-7.
- [49] Torres, M.A., Pace, T.W., Liu, T., Felger, J.C., Mister, D., Doho, G., Kohn, J.N., Barsevick, A., **Long, Q.**, and Miller, A.H. (2013) Predictors of depression in breast cancer patients during and after radiotherapy: role of chemotherapy and the inflammatory response. *Cancer*, 119(11), 1951-9.
- [50] Chung, M., **Long, Q.**, and Johnson, B.A. (2013) A tutorial on rank-based coefficient estimation for censored data in small- and large-scale problems. *Statistics and Computing*, 23, 601-614.
- [51] Chatterjee, R., Narayan, K.M.V., Lipscomb, J., Jackson, S.L., **Long, Q.**, Zhu, M., and Phillips, L. (2013) Screening for diabetes and prediabetes should be cost-saving in high-risk patients. *Diabetes Care*, 36(7), 1981-7.
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- [137] Zheng, Q., Chen, S., **Long, Q.** and Su, W. (2021) Federated f-Differential Privacy. *The 24th International Conference on Artificial Intelligence and Statistics (AISTATS 2021)*, 2251-2259.
- [138] Chen, K., and **Long, Q.** Distributed Gaussian Differential Privacy Via Shuffling. *ICLR 2021 Workshop: Distributed and Private Machine Learning (DPML)*.
- [139] Bu, Z., Dai, Z., Zhang, Y., and **Long, Q.** (2021) MISNN: Multiple Imputation via Semi-parametric Neural Networks. *ICML 2021 Workshop: Subset Selection in Machine Learning: From Theory to Applications*.
- [140] Bu, Z., Wang, H., **Long, Q.**, and Su, W. (2021) On the Convergence of Deep Learning with Differential Privacy. *ICML 2021 Workshop: Theory and Practice of Differential Privacy*.
- [141] Bu, Z., Zhang, Q., Chen, K., and **Long, Q.** (2021) Differentially Private Bayesian Neural Network. *ICML 2021 Workshop: Theory and Practice of Differential Privacy*.

- [142] Zhang, Y., and Long, Q. (2021) Fairness in Missing Data Imputation. *ICML 2021 Workshop: Socially Responsible Machine Learning*.
- [143] Dai, Z., Bu, Z., and Long, Q. (2021) Multiple Imputation via Generative Adversarial Network for High-dimensional Blockwise Missing Value Problems. *ICMLA 2021 : 20th IEEE International Conference on Machine Learning and Applications*.
- [144] Zhang, Y., and Long, Q. (2021) Assessing Fairness in the Presence of Missing Data. *2021 Conference on Neural Information Processing Systems (NeurIPS 2021)*, accepted.

Manuscripts in revision

- [145] Chen, S., Zheng, Q., Long, Q., Su, W. (2021) A Theorem of the Alternative for Personalized Federated Learning. *Journal of Machine Learning Research*, invited revision.

**Invited Talks and Seminars (in past five years)**

**2022**

- [1] 2022 ENAR Spring Meeting, Houston, TX USA (March, 2022)

**2021**

- [2] Biostatistics and Bioinformatics Seminar, University of Illinois Chicago (December, 2021)
- [3] 2021 WNAR/IMS/KISS/JR Meeting, Anchorage, Alaska (June, 2021)
- [4] Biostatistics/Biomedical Informatics - Big Data (B3D) seminar, Harvard University (May, 2021)
- [5] Department of Bioinformatics and Biostatistics, Shanghai Jiaotong University, Shanghai, China (April, 2021)
- [6] 2021 ENAR Spring Meeting, Baltimore, MD, USA (March, 2021)

**2020**

- [7] 2020 ICSA Applied Statistics Symposium, Houston, TX (December, 2020)
- [8] 2020 Symposium on Clinical Research Enlighten and Transform Era, Shanghai Jiaotong University, China (December, 2020)
- [9] The Immuno-Oncology Translational Network (IOTN) Bioinformatics And Computational Biology Working Group Online Meeting (September, 2020)
- [10] 2020 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Rockville, MD, USA (September, 2020)
- [11] Penn Center for Cancer Care Innovation, University of Pennsylvania (May, 2020)
- [12] 2020 ENAR Spring Meeting, Nashville, TN, USA (March, 2020)
- [13] Division of Biostatistics, University of Minnesota, Twin Cities, MN (March, 2020)
- [14] Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania (February, 2020)
- [15] Department of Biostatistics and Data Science, University of Texas Health Science Center at Houston (January, 2020)
- [16] Department of Bioinformatics and Biostatistics, Shanghai Jiaotong University, Shanghai, China (January, 2020)

**2019**

- [17] 2019 ICSA International Conference, Hangzhou, China (December, 2019)

- [18] ASA Philadelphia Chapter (December, 2019)
  - [19] Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania (December, 2019)
  - [20] iBRIGHT 2019 Conference, The University of Texas MD Anderson Cancer Center, USA (November, 2019)
  - [21] Department of Statistics and Actuarial Science, University of Waterloo, Canada (October, 2019)
  - [22] Department of Biostatistics, Columbia University, USA (October, 2019)
  - [23] Department of Statistics, Xiamen University, China (August, 2019)
  - [24] Anhui Province Key Laboratory of Big Data Analysis and Application, The University of Science and Technology of China, Hefei, China (June, 2019)
  - [25] School of Computer Science, Central South University, China (May, 2019)
  - [26] 2019 Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China (May, 2019)
  - [27] Department of Biostatistics, Yale University, USA (April, 2019)
  - [28] 2019 ENAR Spring Meeting, Philadelphia, PA, USA (March, 2019)
  - [29] Division of Biostatistics, Washington University School of Medicine, USA (March, 2019)
  - [30] Division of Biostatistics, Sidney Kimmel Medical College, Thomas Jefferson University, USA (March, 2019)
  - [31] National Clinical Research Center for Mental Disorders, Central South University, Changsha, China (January, 2019)
- 2018**
- [32] Center for Data Science, Zhejiang University, Hangzhou, China (December, 2018)
  - [33] School of Medicine, Shanghai Jiaotong University, Shanghai, China (December, 2018)
  - [34] 11th International Conference of the ERCIM WG on Computational and Methodological Statistics, Pisa, Italy (December, 2018)
  - [35] Penn's Working Group on ICT and Governance, Democracy and Development, University of Pennsylvania (November, 2018)
  - [36] Working Group on Statistical Methods for Analyzing EHR Data, University of Pennsylvania (November, 2018)
  - [37] Medical Affairs SBU Oncology, Bayer U.S., Whippany NJ, USA (November, 2018)
  - [38] CMO/BIRS Workshop on Statistical and Computational Challenges in High-Throughput Genomics with Application to Precision Medicine, Oaxaca, Mexico (November, 2018)
  - [39] Biomedical Engineering Symposium, University of Science and Technology of China, Hefei, China (September, 2018)
  - [40] The Second Xiangya Hospital of Central South University, Changsha, China (September, 2018)
  - [41] Center for Statistical Science, Tsinghua University, Beijing, China (September, 2018)
  - [42] SAS Institute, Cary, North Carolina, USA (August, 2018)
  - [43] 2018 Joint Statistical Meetings, Vancouver, Canada (July, 2018)
  - [44] 2018 International Chinese Statistical Association (ICSA) China Conference, Qingdao, China (July, 2018)

- [45] The 4th International Symposium on Data Driven Health and Medicine, Shanghai, China (July, 2018)
- [46] 2018 Institute of Mathematical Statistics Asia Pacific Rim Meeting, Singapore (June, 2018)
- [47] ASA Princeton-Trenton Chapter Spring 2018 Symposium, Piscataway, New Jersey (May, 2018)
- [48] 2018 ENAR Spring Meeting, Atlanta, GA (March, 2018)
- [49] Didi Chuxing Inc., Beijing, China (March, 2018)
- [50] Department of Statistics, Chinese University of Hong Kong, Hong Kong (March, 2018)
- [51] School of Science, Hong Kong University of Science and Technology, Hong Kong (March, 2018)
- [52] Department of Biostatistics, University of North Carolina at Chapel Hill, USA (February, 2018)
- [53] Population Science Research Seminar, Abramson Cancer Center, University of Pennsylvania (January, 2018)

**2017**

- [54] SHJT-Yale Joint Center for Biostatistics, Shanghai Jiaotong University, Shanghai, China (December, 2017)
- [55] 2017 Academic Conference of the Association of Neurodegenerative Disease of the National Clinical Research Center for Geriatric Disorders, Changsha, China (December, 2017)
- [56] Department of Statistics and Probability, Michigan State University, USA (December, 2017)
- [57] School of Information Technology and Mathematical Science, University of South Australia, Adelaide, Australia (November, 2017)
- [58] Department of Epidemiology and Biostatistics, Memorial Sloan-Kettering Cancer Center, New York, USA (November, 2017)
- [59] Center for Cancer Biostatistics, University of Michigan, Ann Arbor, MI, USA (September, 2017)
- [60] Division of Biostatistics and Bioinformatics, Penn State University, USA (August, 2017)
- [61] 2017 Joint Statistical Meetings, Baltimore, MD, USA (August, 2017)
- [62] The First International Conference on the Theoretical Foundation of the Data Science, Beijing, China (July, 2017)
- [63] 2017 IMS-China International Conference on Statistics and Probability, Nanning, Guangxi, China (June, 2017)
- [64] Xiang-Ya School of Public Health, Central South University, Changsha, China (June, 2017)
- [65] Department of Mathematics, Southern University of Science and Technology, Shenzhen, China (June, 2017)
- [66] Statistics Workshop on High-dimensional and Spatial Data Analysis, Hong Kong Baptist University, Hong Kong (June, 2017)
- [67] The 1st International Conference on Econometrics and Statistics (EcoSta 2017), Hong Kong (June, 2017)
- [68] The 26th ICOSA Applied Statistics Symposium, Chicago, IL, USA (June, 2017)
- [69] 2017 Conference on Lifetime Data Science, Storrs, Connecticut, USA (May, 2017)
- [70] Division of Biostatistics and Epidemiology, Weill Cornell Medical College, Cornell University, USA (May, 2017)

- [71] Population Science Programs Retreat, Abramson Cancer Center, University of Pennsylvania, USA (April, 2017)
- [72] Biostatistics Workshop on Statistical Inference for Biomedical Big Data, University of Florida, USA (April, 2017)
- 2016**
- [73] Information Security and Big Data Research Institute, Central South University, China (December, 2016)
- [74] The 10th ICSA International Conference, Shanghai, China (December, 2016)
- [75] The 9th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2016), Seville, Spain (December, 2016)
- [76] SAMSI Workshop on Distributed and Parallel Data Analysis (DPDA), Raleigh, NC, USA (September, 2016)
- [77] PCORI Improving Methods Evidence-to-Action Network Webinar, Patient-Centered Outcomes Research Institute (July, 2016)
- [78] The Third Workshop on the Statistical Analysis of Multi-outcome Data, Beijing, China (July, 2016)
- [79] The Third Taihu International Statistics Forum, Shanghai, China (July, 2016)
- [80] The 2nd International Symposium on Data Driven Health and Medicine, Shanghai, China (July, 2016)
- [81] The 25th ICSA Applied Statistics Symposium, Atlanta, GA, USA (June, 2016)
- [82] Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania, Philadelphia, PA, USA (March, 2016)
- [83] Modeling and Computation Seminar, University of Arizona, Tucson, AZ, USA (March, 2016)
- [84] Department of Biomedical Informatics, University of California, San Diego, CA, USA (February, 2016)
- [85] Department of Biostatistics, University of California, Los Angeles, CA, USA (February, 2016)
- [86] Department of Biostatistics, Duke University, Durham, NC, USA (January, 2016)

## **Mentoring**

### **Research Associates (current)**

- Changgee Chang (PhD in Statistics, University of Chicago)
  - \* Young Researcher Travel Grant to the ISBA 2016 World Meeting
- Kefei Liu (PhD in EE from City University of Hong Kong, joint with Li Shen)

### **Postdoctoral Fellows (current)**

- Qiyiwen (Amber) Zhang (PhD in Statistics, Washington University in St. Louis)
- Chong Jin (PhD in Biostatistics, University of North Carolina at Chapel Hill)
- Wenrui Li (PhD in Statistics, Boston University)

### **Doctoral Dissertation Advisees (current)**

- Emily Getzen (Biostatistics, University of Pennsylvania)

- Yiliang Zhang (Applied Mathematics and Computational Science, University of Pennsylvania; joint with Weijie Su)
  - \* Student Paper Award, Statistical Learning and Data Science (SLDS) Section, American Statistical Association, 2020
- Zhiqi (Woody) Bu (Applied Mathematics and Computational Science, University of Pennsylvania; joint with Weijie Su)
- Zongyu Dai (Applied Mathematics and Computational Science, University of Pennsylvania)
- Ruitian Gao (Bioinformatics, Shanghai Jiao Tong University, joint with Zhangsheng Yu at SJTU)
- Kan Chen (Applied Mathematics and Computational Science, University of Pennsylvania)

**Postdoctoral Fellows (past)**

- Cong Fang, (PhD in Computer Science, Peking University; joint with Weijie Su)  
Current Position: Assistant Professor, Peking University
- Qinqing Zheng (PhD in Computer Science, University of Chicago; joint with Weijie Su)  
Current Position: Research Engineer at Facebook AI Research
- Eun Jeong Min (PhD in Statistics, North Carolina State University)  
Current Position: Assistant Professor, College of Medicine, Catholic University of Korea
- Siliang Gong (PhD in Statistics, University of North Carolina at Chapel Hill)  
Current Position: Biostatistician II, Foundation Medicine
- Sandra E. Safo (PhD in Statistics, University of Georgia)  
Current Position: Assistant Professor, University of Minnesota, Twin Cities
  - \* K12 Scholar in the NIH-supported Building Interdisciplinary Research Careers in Women’s Health (BIRCWH) Program at Emory, 2016-2017
  - \* Scholarship in the NIH-Supported Program to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE) at Washington the University, 2016-2018
- JiHwan Oh (PhD in Statistics, Purdue University)  
Current Position: Senior Scientist, Merck

**Doctoral Dissertation Advisees (past)**

- Wenli Sun (Ph.D. in 2019, University of Pennsylvania)  
Current Position: Senior Data Scientist, IQVIA
  - \* Best Flash Talk Award, The 2019 DBEI/CCEB Research Day
  - \* Best Student Poster Award, The 2018 GSK Quantitative Sciences Annual Conference
- Ziyi Li (Ph.D. in 2018, Emory)  
Current Position: Assistant Professor, The University of Texas MD Anderson Cancer Center
  - \* Michael and Pinina Haber Dissertation Award, Emory University, 2018
  - \* ENAR Poster Award, 2018 ENAR Spring Meeting
  - \* Student paper award, 2016 International Chinese Statistical Association Applied Statistics Symposium, 2016
  - \* 2nd place prize award, NSF/Anderson Student Poster Competition, the Southern Regional Council On Statistics (SRCOS) 2016 Summer Research Conference, 2016

- Yi Deng (Ph.D. in 2017, Emory)  
Current Position: Senior Data Scientist at Google
  - \* Student paper award, 2017 International Chinese Statistical Association Applied Statistics Symposium, 2017
  - \* 1st place team, the Atlanta Big Data Team Challenge, sponsored by Booz Allen Hamilton and hosted by Emory RSPH, 2016
  - \* 3rd place, Poster Competition Award, Biopharmaceutical Section, American Statistical Association, 2015
- Will Zhu (Ph.D. in 2017, joint with Amita Manatunga, Emory)  
Current Position: Statistician at the Centers for Disease Control and Prevention (CDC)
- Domonique Watson Hodge (Ph.D. in 2016, Emory)  
Current Position: Delivery Data Scientist at Microsoft
  - \* Emory Initiative for Maximizing Student Development (IMSD) Predoctoral Fellowship (funded by NIH to enhance diversity), 2013-2015
  - \* 2016 JSM Student Travel Award, Survey Research Methods Section, American Statistical Association, 2016
  - \* SAS Fellowship, 2015-2016
- Pallavi S. Mishra-Kalyani (Ph.D. in 2014, Emory, joint with Brent A. Johnson,)  
Current Position: Lead Mathematical Statistician at the US Food and Drug Administration (FDA)
  - \* Student Travel Award and Finalist for the Best Student Paper Award, 2014 International Indian Statistical Association (IISA) Conference
  - \* Student Paper Award Honorable Mention, Biopharmaceutical Section, American Statistical Association, 2014
  - \* Student Travel Award, American Statistical Association/National Science Foundation, 2014
  - \* Emory Graduate Diversity Fellowship, 2009-2014
- Yize Zhao (Ph.D. in 2014, Emory, joint with Jian Kang)  
Current Position: Assistant Professor, Yale University
  - \* David P. Byar Young Investigator Travel Award, Biometrics Section, American Statistical Association, 2014
  - \* Student Paper Award (Declined), Statistical Learning and Data Mining Section, American Statistical Association, 2014
  - \* Student Paper Award, Section on Bayesian Statistical Science, American Statistical Association, 2013
  - \* NSF travel award for the 9th Conference on Bayesian Nonparametrics (Declined), National Science Foundation, 2013
  - \* Nominated by Emory University for the Howard Hughes Medical Institute (HHMI) International Student Research Fellowship, 2012

### Masters Thesis Advisees

- Gary Hettinger (2021-present, University of Pennsylvania; jointly with Ravi Parikh)
- Vivek James (2020-present, University of Pennsylvania)
- Emily Getzen (2020-2021, University of Pennsylvania)

- Yuwen Xu (2019-2020, Drexel)
- Zhifan Sang (2016, Emory)  
Current Position: Software Engineer, AI/ML at Facebook, Inc.
- Chenchen Yu (joint with Yi-An Ko, 2015, Emory)  
Current Position: Scientific Data Analyst at the Centers for Disease Control and Prevention
- Jessica Vakili (2012, Emory)  
Current Position: Epidemiologist at the Tennessee Department of Health

#### **Research Assistants (graduate and undergraduate students)**

- Ming Wang, 2009-2013, Emory  
Current Position: Associate Professor, Pennsylvania State University  
Awards received under the supervision of Qi Long:
  - \* R.L. Anderson Award, SRCOS Summer Research Conference, 2011
  - \* Young Investigator Award, Section on Statistics in Epidemiology, American Statistical Association, 2012
- Jeong Hoon Jang, 2013-2019, Emory (Joint with Amita Manatunga)  
Current Position: Assistant Professor of Biostatistics, Indiana University School of Medicine
- University of Pennsylvania: Raul Torres Allende (2017-2018); Toshitha Kannan (2018-2019); Harrison Beard (2018); Shujian Zhang (2018-2019); Kai Lu (2018-present); Yucheng Ruan (2019-present); Jingxuan Bao (2020-present)
- Emory: Samantha Noreen, 2013-2017; Yunchuan Kong, 2016; Quran Wu, 2016; Zheyu Hu, 2014-2015; Lijia Wang, 2012-2016; Qing He, 2011-2014; Zhuxuan Jin, 2013-2014; Wenqiong Xue, 2011-2013; Ming Zhu, 2009-2011; Shuang Ji, 2008-2012

#### **Undergraduate Research Interns**

- Ashley Francisco (Dartmouth), 2019-2020

#### **Doctoral Dissertation Committees Served as Member or Chair**

- Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania: Jill Schnall, (2021-present); Jenny Shen (2021-present); Francesca Mandel, (2020-present); Lu Huang (Chair), 2018-2020; Le Wang, 2017-2018.
- Department of Biostatistics and Bioinformatics, Emory: Xin Lu, 2014-2015; Emily Mitchell, 2012-2013; Ming Wang, 2011-2013; Shannon McClintock, 2010-2012; Li Li, 2009-2011; Tielin Qin, 2009-2011; Yuemei Wang, 2007-2009; Jian Chen, 2008-2009; Megan Price, 2008-2009.
- Department of Epidemiology, Emory: Huakang Tu, 2012-2014; Lauren Christiansen-Lindquist, 2012; Edward Sidelnikov, 2007-2009.
- Nutrition and Health Sciences Program, Emory: Lisa Staimez, 2010-2013; Sandra L. Jackson 2012-2014.
- Emory Business School: Yi Wang, 2011-2012.

#### **Masters Thesis Served as Committee Member**

- Kevin Park (Biostatistics, Emory, 2018)



- Cherie James (Biostatistics, Emory, 2007)

#### **Ph.D. Qualifier Committee**

- Xinxian Shao (Department of Physics, Emory, 2012)

#### **Graduate Students Advised as Academic Advisor**

- Doctoral Students at University of Pennsylvania: Benny Ren, 2019-2020; Rebecca Deek, 2018-2019; Justin Lakkis, 2017-2018
- Doctoral Students at Emory: Xin Lu, 2010-2012; Xiaoyan Sun, 2009-2011; Yaping Wang, 2006-2008.
- Masters Students at Emory: Keun Ok Lee 2015-2016; Junhan Fang, 2014-2015; Zheyu Hu, 2014-2015; Alice Parish, 2012-2013; Tiffany William, 2010-2011; Sebastian D Perez, 2007-2008.

#### **Faculty Mentoring**

- Ian Barnett, University of Pennsylvania (2017-present)
- Yun Li, University of Pennsylvania (2019-present)
- Kristin Linn, University of Pennsylvania (2017-2019)
- Sandra Safo, Emory University (2016)
- Suprateek Kundu, Emory University (2015-2016)
- Yi-An Ko, Emory University (2014-2016)

#### **Visiting Scholars**

- Thuc Duy Le, Senior Lecturer, The University of South Australia, Adelaide, Australia (2019)
- Feng Lian, Associate Professor, Xi'an Jiaotong University, China (2017-2018)

#### **Teaching**

##### **University of Pennsylvania**

- Statistical Methods for Incomplete Data (BSTA 782), 2019-2020.
- Guest Lecture in BSTA 511 Biostatistics in Practice, 2018.

##### **Emory University**

- BIOS 709 (4 credit hours), Generalized Linear Models, Department of Biostatistics and Bioinformatics, 2013-2016.
- BIOS 709 (2 credit hours), Generalized Linear Models, Department of Biostatistics and Bioinformatics, 2009-2012.
- BIOS 708 (2 credit hours), Advanced Methods for Categorical Data, Department of Biostatistics and Bioinformatics, 2007-2011.
- BIOS 708 (4 credit hours), Categorical Data Analysis, Department of Biostatistics and Bioinformatics, 2006.
- BIOS 590R and 790R, Biostatistics Seminar, Department of Biostatistics and Bioinformatics, 2008 and 2014.

## Academic Committees and Activities

### National (not listed above)

- External Reviewer for Appointments and Promotions: American University of Beirut; Boston University; Columbia University; Duke University; Georgia State University; Hong Kong Baptist University; Johns Hopkins University; Thomas Jefferson University; University of Michigan; University of Pittsburgh; University of Texas MD Anderson Cancer Center; Washington University

### University of Pennsylvania

- Member, Flatiron and Penn Joint Steering Committee, Abramson Cancer Center, 2021-present
- Member, Immune Health Council, 2021-present
- Member, Advisory Committee for the Clinical Research Computing Unit (CRCU), Perelman School of Medicine, 2018-present
- Member, Advisory Committee for the Bioinformatics Core of the Institute for Biomedical Informatics, 2018-present
- Member, Strategic Planning Working Group for Clinical and Medical Bioinformatics, Abramson Cancer Center, 2018
- Member, Strategic Planning Working Group for Shared Resources, Abramson Cancer Center, 2018

### University of Pennsylvania, Department of Biostatistics, Epidemiology and Informatics (DBEI)

- Chair, Committee on Appointments and Promotions, 2021-present (Member, 2017-present)
- Co-Chair, Research Day Committee, 2018-2021 (Member, 2017-2018)
- Member, Admissions Committee for the Graduate Group in Applied Mathematics and Computational Science, 2020
- Member, DBEI Faculty Awards Committee, 2019-present
- Member, Biostatistics Advisory Committee, 2018-2019
- Member, Biostatistics Qualifying Exams Committee, 2017-2018
- Member, Biostatistics Faculty Awards Committee, 2017-present
- Member, Biostatistics Faculty Recruitment Committee, 2016-present

### Emory University

- Member, Research Advisory Committee at Rollins School of Public Health, Emory University, 2015-2016
- Member, Appointment, Promotion and Tenure Committee at Rollins School of Public Health, Emory University, 2014-2016
- Member, Search Committee for Founding Director of VA Analytics Center, 2016
- Member, Search Committee for Director of the Biostatistics and Bioinformatics at Winship Cancer Institute, Emory University, 2010
- Member, University Research Committee, Emory University, 2011-2012

- Member, Shepard Award Committee at Rollins School of Public Health, Emory University, 2007-2011

**Emory University, Department of Biostatistics and Bioinformatics**

- Organizer, Biostatistics Research Incubator Series, 2015-2016
- Chair, Research Strategic Planning Group, 2015
- Co-Chair, Admissions Committee, 2012-2014
- Chair, Tenured and Tenure-Track Faculty Meeting, 2010-2012
- Member, Curriculum Committee, 2009-2016
- Member, Collaborative Research Committee, 2014-2016
- Member, Faculty Search Committee, 2005-2007, 2015-2016
- Member, Brogan Lecture Committee, 2009-2015
- Member, Admissions Committee, 2006-2015
- Member, Kutner Alumni Award Selection Committee, 2013-2015
- Member, 50th Anniversary Celebration Planning Committee, 2013-2014
- Member, Computer Advisory Committee, 2006-2013
- Member, Qualifying Exams Committee, 2012
- Member, Technical Reports Committee, 2009-2012

**University of Michigan, Department of Biostatistics**

- Member, Student Activity Committee, 2003-2004
- Member, Student Computing Committee, 2003-2004

**Professional Memberships**

- Life Member, American Statistical Association, 2002-present
- Member, International Biometric Society (Eastern North American Region), 2003-present
- Permanent Member, International Chinese Statistical Association, 2007-present
- Life Member, Institute of Mathematical Statistics, 2007-present
- Lifetime Member, International Society for Bayesian Analysis, 2014-present
- Member, International Statistical Institute, 2015-present
- Member, American Association for the Advancement of Science, 2016-present
- Fellow, Royal Statistical Society, 2016-2018
- Member, Society for Clinical Trials, 2016-2018
- Member, Statistical Modelling Society, 2015-2016
- Member, Association for Computing Machinery's (ACM) Special Interest Group on Knowledge Discovery and Data Mining (SIGKDD), 2017-present
- Active Member, American Association for Cancer Research (AACR), 2018-present
- Full Member, American Society of Clinical Oncology (ASCO), 2018-2020
- Member, American Medical Informatics Association (AMIA), 2020-present