Qi Long, Ph.D.

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Education

2005	Ph.D. in Biostatistics	Department of Biostatistics, University of Michigan, Ann Arbor
	Co-Advisors:	Xihong Lin, PhD and Roderick J.A. Little, PhD
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

Other Professional Training

2023	Mack Technology Fellow	Penn Wharton Commercialization Workshop The Wharton School of the University of Pennsylvania

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 Faculty Member, Bioengineering Graduate Group Senior Fellow, Penn Institute for Biomedical Informatics Affiliated Faculty Member, Penn Research in Machine Learning Senior Scholar, Center for Clinical Epidemiology and Biostatistics
2023-present	Professor (secondary appointment), Department of Statistics and Data Science The Wharton School of the University of Pennsylvania
2022-present	Professor (secondary appointment), Department of Computer and Information Science School of Engineering and Applied Science, University of Pennsylvania
2022-present	Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania
2011-2016	Associate Professor (with tenure), Department of Biostatistics and Bioinformatics Rollins School of Public Health, Emory University
2015-2022	Associate Professor (secondary appointment), 2015-2016; Adjunct Professor, 2016-2022 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

2025-present	Associate Director for Quantitative Data Science, Abramson Cancer Center University of Pennsylvania
2024-present	Vice Chair of Faculty Professional Development Department of Biostatistics, Epidemiology and Informatics Perelman School of Medicine, University of Pennsylvania
2020-present	Founding Director, Center for Cancer Data Science University of Pennsylvania
2020-present	Associate Director, Penn Institute for Biomedical Informatics 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

First Place, 2024 Knowledge Discovery and Data Mining Innovation Award, American Medical Informatics Association (AMIA), 2024

Elected Fellow, American Medical Informatics Association (AMIA), 2023

Honorable Mention, NIH Long COVID Computational Challenge (L3C), 2023

Senior Member, Institute of Electrical and Electronics Engineers (IEEE), 2023

Elected Fellow, American Association for the Advancement of Science (AAAS), 2020

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

Elected Fellow, American Statistical Association, 2016

Elected Member, International Statistical Institute, 2015

NSF Travel Award for the 2018 International Congress of Mathematicians (ICM), 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 advance responsible statistical and AI/ML methods for intelligent precision medicine and health.

Methodology: Robust statistical and machine learning methods for analysis of big, complex health data including -omics, electronic health records (EHRs), imaging data, and mobile health (mHealth) data; missing data; causal learning; data privacy; bias and fairness in AI for medicine; Bayesian methods; nonparametric and semi-parametric methods; clinical trials

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

Professional Activities and Services

Advisory and Leadership

- At-Large Representative, Section U (Statistics Section) Steering Committee, American Association for the Advancement of Science (AAAS), 2023-2024
- Member, COPSS (Committee of Presidents of Statistical Societies) Emerging Leader Award (ELA) Committee, 2023-2026
- Treasurer (elected), Executive Committee, International Biometric Society/Eastern North American Region (ENAR), 2022-2025
- 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

- Executive Editor, *Statistical Analysis and Data Mining*, 2024–present
- Senior Editor, *Cancer Research*, 2018-present
- Founding Topic Editor, *Research Methods in Medicine & Health Sciences*, 2019-2023
- Associate Editor, *Statistical Analysis and Data Mining*, 2018-2024; *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 (incomplete list)

  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; PNAS; 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

- Reviewer, NCI Cancer Centers Study Section (A), NCI-A RTRB-G (E2), 2023
- Reviewer, NIH Director's Transformative Research Award Study Section, 2022
- Member, NIH Special Emphasis Panel on Tobacco Regulatory Science B, 2022
- Standing Member, NIH Biostatistical Methods and Research Design Study Section (BMRD), 2017-2021
- Co-Chair, NIH Special Emphasis Panel on Health Informatics, 2020
- Temporary Member, NIH Biostatistical Methods and Research Design Study Section (BMRD), 2015-2017
- Reviewer, Congressionally Directed Medical Research Programs, Department of Defense, USA, 2014-present

Educational and Outreach Activities

- Co-Instructor, Short Course on Statistical Inference in Large Language Models for Biomedical Applications, 2025 ENAR Spring Meeting, March 23, 2025
- 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

- Co-organizer, Workshop on Large Language Model and Generative AI for Health, The 39th Annual AAAI Conference on Artificial Intelligence (AAAI 2025).
- Member and ASA Representative, Program Committee, The Joint Mathematics Meetings (JMM), 2023-present.
- Member, Steering Committee, Multiomics in Precision Medicine 2023-2024.
- Member, Program committee, The ICSA 2023 China Conference, International Chinese Statistical Association (ICSA), Chengdu, China
- Program Co-Chair, 2022 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), Las Vegas, NV, USA
- Member, Senior Program Committee, 10th IEEE International Conference on Healthcare Informatics (ICHI) in 2022, Rochester, MN, USA
- 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 (2018-2021); Eisai Inc. (2013-2014); Ideomed Inc. (2013); VA (2011-2013)

Research Funding

Active as PI/Core Director

1. Safe and Explainable AI-enabled Decision Making for Personalized Clinical Decision Support

Role:	Co-PI
Funding Agency:	ARPA-H (D24AC00253-00)
Period:	08/30/2024 – 08/29/2028
Amount:	$\$7,000,000$

2. Robust privacy preserving distributed analysis platform for cancer research: addressing data bias and disparities
   Role: Principal Investigator (MPI with Xiaoqian Jiang)
   Funding Agency: NIH/NCI (U01 CA274576)
   Period: 06/01/2023 – 05/31/2026
   Amount: $1,449,765
3. Advancing the Coordinating Center for the Canine Cancer Immunotherapy Network
   Role: Principal Investigator (MPI with Nicola Mason)
   Funding Agency: NIH/NCI (U24 CA272267)
   Period: 09/01/2022 – 08/31/2027
   Amount: $3,046,875
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. Abramson Cancer Center Support Grant
   Role: Director of Biostatistics and Bioinformatics Core
   Funding Agency: NIH/NCI (P30 CA016520)
   Period: 12/01/2020 – 11/30/2027
   Amount: $4,833,505 for Biostatistics and Bioinformatics Core
6. 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)
7. University of Pennsylvania Patient-derived Xenograft Development and Trials Center
   Role: Director of Bioinformatics Core
   Funding Agency: NIH/NCI (U54 CA283759)
   Period: 07/05/2023 – 06/30/2028
   Amount: $6,394,375 ($690,625 for Bioinformatics Core)

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

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 – 06/30/2024
   Amount: $3,635,365
2. 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 – 08/31/2024
   Amount: $2,811,859
3. Methods for privacy and fairness in statistical and machine learning for AD research
   Role: Principal Investigator (PI)
   Funding Agency: NIH/NIA (RF1 AG063481-01A1S1)
   Period: 08/15/2020 – 06/30/2024

4. 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 – 06/30/2023
   Amount: $2,302,416
5. Development and Assessment of Decision Supporting System for Renal Studies
   Role: Co-PI (Penn PI)
   Funding Agency: NIH/NIDDK (R01 DK108070)
   Period: 09/15/2016 – 07/31/2023
6. 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
7. Penn Pfizer Partnership to Accelerate Real World Evidence in Cancer
   Role: Co-PI
   Funding Agency: Pfizer
   Period: 11/01/2019 – 10/31/2020
8. 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
9. 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
10. Statistical Methods for Causal Inference in Observational Studies
    Role: Principal Investigator
    Funding Agency: NIH/NINDS (R21 NS091630)
    Period: 02/01/2015 – 01/31/2019
11. 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
12. 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
13. 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

14. 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
15. 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
16. 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
17. 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

(Trainees are underscored; ♠joint 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, EA., 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.†, **Long, Q.**†, Royster, E.B.†, 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., andn 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.†, **Long, Q.**†, 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., Seabrook, M.E., and Fedirko, V. (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-α 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.**♠, 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.** (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.** (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.** (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*** ⋆⋆]

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Plenary and Keynote Talks

[1] "Advancing Data Science for Intelligent and Equitable Health", 2023 Statistical Practice in Cancer Conference, Tampa Bay, FL, USA (March, 2023)

[2] "Big Data in Precision Medicine and Population Health: Challenges and Opportunities", Academic Conference of the Association of Neurodegenerative Disease of the National Clinical Research Center for Geriatric Disorders, Changsha, China (December, 2017)

Invited Talks and Seminars (since 2016)

2025

[1] 2025 Joint Meeting of the Taipei International Statistical Symposium and the 13th ICSA International Conference (Joint2025), Taipei, Taiwan (December, 2025)

[2] ISI World Statistics Congress 2025, Hague, Netherlands (October, 2025)

[3] Department of Biostatistics, Virginia Commonwealth University, Richmond, VA (April, 2025)

[4] Department of Biostatistics, University of Michigan, Ann Arbor, MI (March, 2025)

[5] Department of Biostatistics, New York University School of Global Public Health, New York, NY (March, 2025)

[6] Innovation Advisory Board, Abramson Cancer Center, University of Pennsylvania (February, 2025)

[7] School of Computer Science and Engineering, Central South University, China (January, 2025)

2024

[8] 2024 Macau International Conference on Business Intelligence and Analytics, Macau, China (December, 2024)

[9] Computational Genomics and Bioinformatics Branch, Center for Biomedical Informatics and Information Technology, NCI (November, 2024)

[10] The 2024 ASA Conference on Statistical Learning and Data Science, Newport Beach, CA (November, 2024)

[11] Department of Biostatistics, Columbia University, New York, NY (October, 2024)

[12] Faculty of Computer Science and Control Engineering, Shenzhen University of Advanced Technology, China (September, 2024)

[13] The 2nd Joint Conference on Statistical and Data Science, Kunming, China (July, 2024)

[14] The 2024 Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China (July, 2024)

[15] 2024 ICSA China Conference, Wuhan, China (June, 2024)

[16] 2024 ICSA Applied Statistics Symposium, Nashville, TN, USA (June, 2024)

[17] The CTSI Analytics Colloquium, the University of Rochester Medical Center (April, 2024)

[18] The 7th International Symposium on Biopharmaceutical Statistics, Baltimore, MD (March, 2024)

[19] 2024 Wistar/Penn Cutaneous Oncology Annual Retreat, Philadelphia, PA (February, 2024)

[20] The 2024 DBEI Research Day, Perelman School of Medicine, University of Pennsylvania (February, 2024)

[21] SHJT Symposium Data Science in Clinical Research, Shanghai Jiaotong University School of Medicine, Shanghai, China (January, 2024)

2023

[22] Quantitative Science Grand Rounds, Moffitt Cancer Center, Tampa, FL (December, 2023)

[23] Department of Population Health Sciences, Weill Cornell Medicine, New York, NY (November, 2023)

[24] Oncology Grand Rounds, University of Florida Health Cancer Center, Gainesville, FL (November, 2023)

[25] Department of Statistics, Kansas State University (November, 2023)

[26] Clinical Research Institute, Shanghai Jiaotong University School of Medicine (November, 2023)

[27] Department of Biostatistics and Health Data Science, Indiana University, Indianapolis, IN (October, 2023)

[28] 2nd CANSSI-NISS Health Data Science Workshop, Waterloo, ON, Canada (August, 2023)

[29] 9th International Forum in Statistics, Beijing, China (July, 2023)

[30] 2023 ICSA Applied Statistics Symposium, Ann Arbor, MI (June, 2023)

[31] 36th New England Statistics Symposium, Boston, MA (June, 2023)

[32] Biomedical Data Science Grand Rounds, Dartmouth College (April, 2023)

[33] 2023 ENAR Spring Meeting, Nashville, TN USA (March, 2023)

[34] Center for AI-enabled systems: Safe, Explainable and Trustworthy (ASSET), School of Engineering and Applied Science, University of Pennsylvania (March, 2023)

[35] Division of Biostatistics, University of Maryland, School of Medicine (January, 2023)

2022

[36] The 8th International Forum on Statistical Genetics and Genomics, virtual (November, 2022)

[37] Department of Biostatistics, Bioinformatics and Biomathematics, Georgetown University, (November, 2022)

[38] Department of Biostatistics, University of Iowa, Iowa City (October, 2022)

[39] Department of Biostatistics, University of Michigan, Ann Arbor (September, 2022)

[40] 2022 ICSA Applied Statistics Symposium, Gainesville, FL (June, 2022)

[41] Symposium on Biostatistics, Data Science and Genomics, University of Michigan, Ann Arbor, MI, USA (May, 2022)

[42] 2022 ENAR Spring Meeting, Houston, TX USA (March, 2022)

2021

[43] Biostatistics and Bioinformatics Seminar, University of Illinois Chicago (December, 2021)

[44] 2021 WNAR/IMS/KISS/JR Meeting, Anchorage, Alaska (June, 2021)

[45] Biostatistics/Biomedical Informatics - Big Data (B3D) seminar, Harvard University (May, 2021)

[46] Department of Bioinformatics and Biostatistics, Shanghai Jiaotong University, Shanghai, China (April, 2021)

[47] 2021 ENAR Spring Meeting, Baltimore, MD, USA (March, 2021)

2020

[48] 2020 ICSA Applied Statistics Symposium, Houston, TX (December, 2020)

[49] 2020 Symposium on Clinical Research Enlighten and Transform Era, Shanghai Jiaotong University, China (December, 2020)

[50] The Immuno-Oncology Translational Network (IOTN) Bioinformatics And Computational Biology Working Group Online Meeting (September, 2020)

[51] 2020 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop, Rockville, MD, USA (September, 2020)

[52] Penn Center for Cancer Care Innovation, University of Pennsylvania (May, 2020)

[53] 2020 ENAR Spring Meeting, Nashville, TN, USA (March, 2020)

[54] Division of Biostatistics, University of Minnesota, Twin Cities, MN (March, 2020)

[55] Center for Clinical Epidemiology and Biostatistics , University of Pennsylvania (February, 2020)

[56] Department of Biostatistics and Data Science, University of Texas Health Science Center at Houston (January, 2020)

[57] Department of Bioinformatics and Biostatistics, Shanghai Jiaotong University, Shanghai, China (January, 2020)

2019

[58] 2019 ICSA International Conference, Hangzhou, China (December, 2019)

[59] ASA Philadelphia Chapter (December, 2019)

[60] Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania (December, 2019)

[61] iBRIGHT 2019 Conference, The University of Texas MD Anderson Cancer Center, USA (November, 2019)

[62] Department of Statistics and Actuarial Science, University of Waterloo, Canada (October, 2019)

[63] Department of Biostatistics, Columbia University, USA (October, 2019)

[64] Department of Statistics, Xiamen University, China (August, 2019)

[65] Anhui Province Key Laboratory of Big Data Analysis and Application, The University of Science and Technology of China, Hefei, China (June, 2019)

[66] School of Computer Science, Central South University, China (May, 2019)

[67] 2019 Hangzhou International Conference on Frontiers of Data Science, Hangzhou, China (May, 2019)

[68] Department of Biostatistics, Yale University, USA (April, 2019)

[69] 2019 ENAR Spring Meeting, Philadelphia, PA, USA (March, 2019)

[70] Division of Biostatistics, Washington University School of Medicine, USA (March, 2019)

[71] Division of Biostatistics, Sidney Kimmel Medical College, Thomas Jefferson University, USA (March, 2019)

[72] National Clinical Research Center for Mental Disorders, Central South University, Changsha, China (January, 2019)

2018

[73] Center for Data Science, Zhejiang University, Hangzhou, China (December, 2018)

[74] School of Medicine, Shanghai Jiaotong University, Shanghai, China (December, 2018)

[75] 11th International Conference of the ERCIM WG on Computational and Methodological Statistics, Pisa, Italy (December, 2018)

[76] Penn's Working Group on ICT and Governance, Democracy and Development, University of Pennsylvania (November, 2018)

[77] Working Group on Statistical Methods for Analyzing EHR Data, University of Pennsylvania (November, 2018)

[78] Medical Affairs SBU Oncology, Bayer U.S., Whippany NJ, USA (November, 2018)

[79] CMO/BIRS Workshop on Statistical and Computational Challenges in High-Throughput Genomics with Application to Precision Medicine, Oaxaca, Mexico (November, 2018)

[80] Biomedical Engineering Symposium, University of Science and Technology of China, Hefei, China (September, 2018)

[81] The Second Xiangya Hospital of Central South University, Changsha, China (September, 2018)

[82] Center for Statistical Science, Tsinghua University, Beijing, China (September, 2018)

[83] SAS Institute, Cary, North Caroline, USA (August, 2018)

[84] 2018 Joint Statistical Meetings, Vancouver, Canada (July, 2018)

[85] 2018 International Chinese Statistical Association (ICSA) China Conference, Qingdao, China (July, 2018)

[86] The 4th International Symposium on Data Driven Health and Medicine, Shanghai, China (July, 2018)

[87] 2018 Institute of Mathematical Statistics Asia Pacific Rim Meeting, Singapore (June, 2018)

[88] ASA Princeton-Trenton Chapter Spring 2018 Symposium, Piscataway, New Jersey (May, 2018)

[89] 2018 ENAR Spring Meeting, Atlanta, GA (March, 2018)

[90] Didi Chuxing Inc., Beijing, China (March, 2018)

[91] Department of Statistics, Chinese University of Hong Kong, Hong Kong (March, 2018)

[92] School of Science, Hong Kong University of Science and Technology, Hong Kong (March, 2018)

[93] Department of Biostatistics, University of North Carolina at Chapel Hill, USA (February, 2018)

[94] Population Science Research Seminar, Abramson Cancer Center, University of Pennsylvania (January, 2018)

2017

[95] SHJT-Yale Joint Center for Biostatistics, Shanghai Jiaotong University, Shanghai, China (December, 2017)

[96] 2017 Academic Conference of the Association of Neurodegenerative Disease of the National Clinical Research Center for Geriatric Disorders, Changsha, China (December, 2017)

[97] Department of Statistics and Probability, Michigan State University, USA (December, 2017)

[98] School of Information Technology and Mathematical Science, University of South Australia, Adelaide, Australia (November, 2017)

[99] Department of Epidemiology and Biostatistics, Memorial Sloan-Kettering Cancer Center, New York, USA (November, 2017)

[100] Center for Cancer Biostatistics, University of Michigan, Ann Arbor, MI, USA (September, 2017)

[101] Division of Biostatistics and Bioinformatics, Penn State University, USA (August, 2017)

[102] 2017 Joint Statistical Meetings, Baltimore, MD, USA (August, 2017)

[103] The First International Conference on the Theoretical Foundation of the Data Science, Beijing, China (July, 2017)

[104] 2017 IMS-China International Conference on Statistics and Probability, Nanning, Guangxi, China (June, 2017)

[105] Xiang-Ya School of Public Health, Central South University, Changsha, China (June, 2017)

[106] Department of Mathematics, Southern University of Science and Technology, Shenzhen, China (June, 2017)

[107] Statistics Workshop on High-dimensional and Spatial Data Analysis, Hong Kong Baptist University, Hong Kong (June, 2017)

[108] The 1st International Conference on Econometrics and Statistics (EcoSta 2017), Hong Kong (June, 2017)

[109] The 26th ICSA Applied Statistics Symposium, Chicago, IL, USA (June, 2017)

[110] 2017 Conference on Lifetime Data Science, Storrs, Connecticut, USA (May, 2017)

[111] Division of Biostatistics and Epidemiology, Weill Cornell Medical College, Cornell University, USA (May, 2017)

[112] Population Science Programs Retreat, Abramson Cancer Center, University of Pennsylvania, USA (April, 2017)

[113] Biostatistics Workshop on Statistical Inference for Biomedical Big Data, University of Florida, USA (April, 2017)

2016

[114] Information Security and Big Data Research Institute, Central South University, China (December, 2016)

[115] The 10th ICSA International Conference, Shanghai, China (December, 2016)

[116] The 9th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2016), Seville, Spain (December, 2016)

[117] SAMSI Workshop on Distributed and Parallel Data Analysis (DPDA), Raleigh, NC, USA (September, 2016)

[118] PCORI Improving Methods Evidence-to-Action Network Webinar, Patient-Centered Outcomes Research Institute (July, 2016)

[119] The Third Workshop on the Statistical Analysis of Multi-outcome Data, Beijing, China (July, 2016)

[120] The Third Taihu International Statistics Forum, Shanghai, China (July, 2016)

[121] The 2nd International Symposium on Data Driven Health and Medicine, Shanghai, China (July, 2016)

[122] The 25th ICSA Applied Statistics Symposium, Atlanta, GA, USA (June, 2016)

[123] Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania, Philadelphia, PA, USA (March, 2016)

[124] Modeling and Computation Seminar, University of Arizona, Tucson, AZ, USA (March, 2016)

[125] Department of Biomedical Informatics, University of California, San Diego, CA, USA (February, 2016)

[126] Department of Biostatistics, University of California, Los Angeles, CA, USA (February, 2016)

[127] Department of Biostatistics, Duke University, Durham, NC, USA (January, 2016)

Mentoring

Postdoctoral Fellow (current)

- Davoud Ataee Tarzanagh (PhD in Mathematics, University of Florida; joint with Li Shen)
- Jiancong Xiao (PhD in Computer and Information Engineering, Chinese University of Hongkong, Shenzhen; joint with Weijie Su)
- Xiang Li (PhD in Mathematics, Peking University; joint with Weijie Su)
- Yi Lian (PhD in Biostatistics, McGill University)
- Tim Lau (PhD in Statistics, Northwestern University; joint with Weijie Su)

Doctoral Dissertation Advising (current)

- Konstantinos Tsingas (Biostatistics, University of Pennsylvania)
- Travyse Edwards (Genomics and Computational Biology, University of Pennsylvania; joint with Li Shen)
- Jenna Ballard (Genomics and Computational Biology, University of Pennsylvania; joint with Li Shen)
- Jingxuan Bao (Genomics and Computational Biology, University of Pennsylvania; joint with Li Shen)

  - The First Place Award in Student Paper Competition, American Statistical Association Statistics in Imaging Section, 2023.

- Zhuoping Zhou (Applied Mathematics and Computational Science, University of Pennsylvania; joint with Li Shen)
  - Best Paper Award, 14th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM BCB), 2023
- Weiqing He (Applied Mathematics and Computational Science, University of Pennsylvania; joint with Li Shen)
- Xuyang Chen (Applied Math and Computational Science, University of Pennsylvania; joint with Weijie Su)
- Inyoung (Erica) Choi (Computer and Information Science, University of Pennsylvania)
- Jiayi Xin (Computer and Information Science, University of Pennsylvania)

Research Associate/Instructor (past)

- Changgee Chang (PhD in Statistics, University of Chicago)
  Current Position: Assistant Professor, Department of Biostatistics and Health Data Science, Indiana University School of Medicine
  - Young Researcher Travel Grant, 2016 ISBA World Meeting
- Kefei Liu (PhD in EE from City University of Hong Kong, joint with Li Shen)
  Current Position: Associate Professor, Suzhou Institute for Advanced Research, University of Science and Technology of China (USTC)

Postdoctoral Fellow (past)

- Wenrui Li (PhD in Statistics, Boston University)
  Current Position: Assistant Professor, Department of Statistics, University of Connecticut (starting in July, 2024)
- Qiyiwen Zhang ((PhD in Statistics, Washington University in St. Louis)
  Current Position: Assistant Professor, Department of Medicine, University of Pittsburgh (starting in July, 2024)
- Nilanjana Chakraborty (PhD in Statistics, University of Florida)
  Current Position: Assistant Professor, Department of Operations Management, Quantitative Methods and Information Systems at Indian Institute of Management Udaipur
- Yinjun Wu (PhD in Computer Science, University of Pennsylvania; joint with Mayur Naik)
  Current Position: Assistant Professor, School of Computer Science, Peking University
- Chong Jin, (PhD in Biostatistics, University of North Carolina at Chapel Hill)
  Current Position: Assistant Professor, Department of Mathematical Sciences, NJIT
- Cong Fang, (PhD in Computer Science, Peking University; joint with Weijie Su)
  Current Position: Assistant Professor, Department of Machine Intelligence, Peking University
- Qinqing Zheng (PhD in Computer Science, University of Chicago; joint with Weijie Su)
  Current Position: Research Engineer, The Fundamental AI Research (FAIR) at Meta
- 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: Senior Biostatistician, Foundation Medicine
- JiHwan Oh (PhD in Statistics, Purdue University)
  Current Position: Senior Scientist, Merck
- Sandra E. Safo (PhD in Statistics, University of Georgia)
  Current Position: Assistant Professor, Division of Biostatistics, 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

Doctoral Dissertation Advising (past)

- Emily Getzen (PhD in Biostatistics in 2024, University of Pennsylvania)
  Current Position: Machine Learning Scientist, Health, Apple Inc.
  * 2024 Andy Binns Impact Award for Outstanding Service to Graduate & Professional Student Life, University of Pennsylvania, 2024
  * Gertrude M. Cox Scholarship, American Statistical Association, 2023
  * Best Poster Award, the Penn Institute for Biomedical Informatics (IBI) and the Graduate Group in Genomics and Computational Biology (GCB) Joint Retreat, 2023
  * 2023 Student Scholarship Award, Biopharmaceutical Section, American Statistical Association, 2023
  * 2023 Exceptional Achievement Award for Graduate Students, Philadelphia Chapter, American Statistical Association, 2023
  * Best Poster Award, The 2nd Penn Conference on Big Data in Biomedical and Population Health Sciences, 2022
  * Best Flash Talk Award in Biostatistics, DBEI/CCEB Research Day, 2021
- Kan Chen (PhD in Applied Mathematics and Computational Science in 2023, University of Pennsylvania; joint with Dylan Small)
  Current Position: Postdoctoral Fellow in Dr. Xihong Lin's lab at Harvard
  * Jiann-Ping Hsu Pharmaceutical and Regulatory Sciences Student Paper Award, the International Chinese Statistical Association (ICSA), 2022.
  * Young Investigator Award, American Statistical Association Section on Statistics in Epidemiology, 2023.
- Zongyu Dai (PhD in Applied Mathematics and Computational Science in 2023, University of Pennsylvania)
  Current Position: Machine Learning Engineer, Meta Inc.
- Yiliang Zhang (PhD in Applied Mathematics and Computational Science in 2023, University of Pennsylvania; joint with Weijie Su)
  Current Position: Quantitative Researcher, DRW Holdings, LLC
  * Student Paper Award, Statistical Learning and Data Science (SLDS) Section, American Statistical Association, 2020

- Zhiqi (Woody) Bu (PhD in Applied Mathematics and Computational Science in 2021, University of Pennsylvania; joint with Weijie Su)
  Current Position: Applied Research Scientist, Amazon AWS AI
- Wenli Sun (PhD in Biostatistics 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 (PhD in Biostatistics in 2018, Emory)
  Current Position: Assistant Professor, Department of Biostatistics, 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 (PhD in Biostatistics in 2017, Emory)
  Current Position: Data Science Manager at Google
  - Jiann-Ping Hsu Pharmaceutical and Regulatory Sciences Student Paper Award, the International Chinese Statistical Association (ICSA), 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 (PhD in Biostatistics in 2017, joint with Amita Manatunga, Emory)
  Current Position: Statistician at the Centers for Disease Controla and Prevention (CDC)
- Domonique Watson Hodge (PhD in Biostatistics 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 (PhD in Biostatistics in 2014, Emory, joint with Brent A. Johnson,)
  Current Position: Deputy Director 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 (PhD in Biostatistics in 2014, Emory, joint with Jian Kang)
  Current Position: Associate Professor, Department of Biostatistics, 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 Advising

- Kewen Qu (2024-2025, University of Pennsylvania; joint with Wenrui Li)
- Konstantinos Tsingas (2023-2024, University of Pennsylvania; joint with Noam Auslander)
- Gary Hettinger (2021-2022, University of Pennsylvania; joint with Ravi Parikh)
- Emily Getzen (2020-2021, University of Pennsylvania)
- Yuwen Xu (2019-2020, Drexel)
- Zhifan Sang (2016, Emory)
  Current Position: Software Engineer, AI/ML at Apple, Inc.
- Chenchen Yu (joint with Yi-An Ko, 2015, Emory)
  Current Position: Data Scientist, LinkedIn
- Jessica Vakili (2012, Emory)
  Current Position: Epidemiologist at the Tennessee Department of Health

Undergraduate Student Mentoring

- Busra Coskun (University of Pennsylvania), 2024-present
- Rohit Jagga (Computer Science, University of Pennsylvania), Senior Capstone Thesis, 2024-present
- Ryan Liu (University of Pennsylvania), Research Assistant, 2023-present
- Sewon Park (Computer Science, University of Pennsylvania), Senior Capstone Thesis, 2021
- Abdullah Ali (Swarthmore College), Research Intern (as part of the Swarthmore Summer Scholars Program), 2022
- Tin Do (Computer Science, University of Pennsylvania), Research Intern, 2022
- Ashley Francisco (Computer Science, Dartmouth), Research Intern, 2019-2020
- Harrison Beard (University of Pennsylvania), 2018
- Shujian Zhang (Rochester University), Research Assistant, 2018-2019
- Kai Lu (University of Pennsylvania), Research Assistant, 2018-2021

High School Student Mentoring

- Michael Liu (MIssion San Jose High School, CA, USA), Research Intern, 2024–present ((joint with Inyoung Choi)

- Jeffrey Zhang (Concord College, United Kingdom), Research Intern, 2024 (joint with Qiyiwen Zhang)
- Ryan Liu (MIssion San Jose High School, CA, USA), Summer Research Intern, 2022–2023 (joint with Cong Jin)

Graduate Student Research Assistants Supervised

- Ming Wang, 2009-2013, Emory
  Current Position: Associate Professor, Case Western Reserve 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, Yonsei University, South Korea
- University of Pennsylvania: Raul Torres Allende (2017-2018); Toshitha Kannan (2018-2019); Yucheng Ruan (2019-2020); Jingxuan Bao (2020-2021); Qishuo Yin (2021-2023); Yuxuan Lin (2022-2023); Konstantinos Tsingas (2022-2023); Yihao Wang (2022-2024); Kewen Qu (2024-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

Doctoral Dissertation Committees Served as Member or Chair

- University of Pennsylvania:
  Chris Miller (GGEB, 2024-present); Anastasia Lucas (GCB, 2024-present); Jakob Woerner (GCB, Committee Chair), 2023-present; Rachit Kumar (GCB, Committee Chair), 2023-present; Alice Wang (GCB, Committee Chair), 2023-present; Qipeng Zhan (AMCS), 2023-present; Karl Keat (GCB, Committee Chair), 2022-present; Jenny Shen (GGEB, Committee Chair), 2022-2024; Benny Ren (GGEB, Committee Chair), 2021-2023; Jill Schnall (GGEB, Committee Chair), 2021-2022; Francesca Mandel (GGEB), 2020-2023; Lu Huang (GGEB, Committee Chair), 2018-2020; Le Wang (GGEB), 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: Hong Xiong, 2024-present; Konstantinos Tsingas, 2023-2024; 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 University of Pennsylvania: Konstantinos Tsingas, 2022-2023.

– 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

– Course Director, Applied Bayesian Analysis (BSTA 771), 2023

– Course Director, Statistical Methods for Incomplete Data (BSTA 782), 2019-2020, 2022, 2024

– Module Director (Fairness and Bias in AI for Medicine), Special Topics in Biomedical and Health Informatics (BMIN 504), 2022-present

– Guest Lecturer, Biostatistics in Practice (BSTA 511), 2018

Emory University

– Course Director, Generalized Linear Models and Extensions (BIOS 709, 4 credit hours), Department of Biostatistics and Bioinformatics, 2013-2016.

– Course Director, Generalized Linear Models (BIOS 709, 2 credit hours), Department of Biostatistics and Bioinformatics, 2009-2012.

- Course Director, Advanced Methods for Categorical Data (BIOS 708, 2 credit hours), Department of Biostatistics and Bioinformatics, 2007-2011.
- Course Director, Categorical Data Analysis (BIOS 708, 4 credit hours), Department of Biostatistics and Bioinformatics, 2006.
- Course Director, Biostatistics Seminar (BIOS 590R and 790R), 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; Harvard University; Hong Kong Baptist University; Georgia State University; Johns Hopkins University; Shanghai Jiao Tong University; Thomas Jefferson University; University of Michigan; University of Pittsburgh; University of Texas MD Anderson Cancer Center; University of Virginia; University of Wisconsin-Madison; Washington University

University of Pennsylvania

- Co-Chair, Strategic Planning Working Group for Data Science, Abramson Cancer Center, 2023-present
- Co-organizer, 2023 SEAS/PSOM Symposium on Trustworthy AI for Health Care, 2023
- Member, Organizing Committee, 2nd and 3rd Penn Conference on Big Data in Biomedical and Health Sciences, 2022-2023
- Member, Review Committee for Pilot Grants for Collaborative Research in Trustworthy AI for Medicine, PSOM/SEAS, 2022
- Co-organizer, SEAS/PSOM Workshop Series on Trustworthy AI for Medicine, 2021-2022
- 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, 2021-2023 (Member, 2017-2023)
- Chair, Biostatistics Faculty Awards Committee, 2021-present (Member, 2017-present)
- Member, Biostatistics Admissions Committee (2023-present)
- Co-Chair, DBEI/CCEB Research Day Committee, 2017-2021

- Member, Admissions Committee for the Graduate Group in Applied Mathematics and Computational Science, 2020
- Member, DBEI Faculty Awards Committee, 2019-present
- Member, Biostatistics Faculty Recruitment Committee, 2016-2023
- Member, Biostatistics Advisory Committee, 2018-2019
- Member, Biostatistics Qualifying Exams Committee, 2017-2018

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 Membership

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, 2022-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

Member, Institute of Electrical and Electronics Engineers (IEEE), 2022-present

Member, Association for Computing Machinery (ACM), 2023-present