#### **CURRICULUM VITAE**

# BHRAMAR MUKHERJEE, PhD

#### **CONTACT INFORMATION**

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Citizenship Status US Citizen

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#### **CAREER STATEMENT:**

I am a public health statistician focusing on integration of genetic, environmental and outcome data towards improved precision and population health. I spend considerable time in mentoring the next generation and towards diversifying the data science workforce. I am passionate about leadership in Statistics and strive for a future where cutting-edge data science and artificial intelligence techniques are practiced with ethics, equity and humanism.

### **CURRENT ACADEMIC POSITIONS**

2024-	Anna M. R. Lauder Professor of Biostatistics	School of Public Health Yale University
2024-	Professor of Chronic Disease Epidemiology	School of Public Health Yale University
2024-	Professor of Statistics and Data Science (Secondary)	School of Public Health Yale University
2024-	Senior Associate Dean for Public Health Data Science and Data Equity	School of Public Health Yale University
2024-	Fellow	Benjamin Franklin College Yale University.
2024-	Member	Institute for the Foundation of Data Science (FDS Yale University
2024-	Member	MacMillan Center for International and Area Studies at Yale, South Asian Studies Counci
2024-	Member	Yale Cancer Center Executive Committee and Director's Cabinet
2023-	Honorary Senior Visiting Fellow	MRC Biostatistics Unit University of Cambridge, UK
2024-	Overseas Fellow	Churchill College University of Cambridge, UK
2024-	Adjunct Professor	Department of Biostatistics University of Michigan, Ann Arbor.

# PAST ACADEMIC POSITIONS

2025-

2018-2024	Chair	Department of Biostatistics University of Michigan
2020-2024	Associate Director	Quantitative Data Sciences Rogel Cancer Center, Michigan Medicine
2023-2024	John D. Kalbfleisch Distinguished University Professor	Department of Biostatistics University of Michigan
2023-2024	Assistant Vice President For Research	Office of the Vice President for Research University of Michigan
2023-2024	Siobán D. Harlow Collegiate Professor of Public Health	University of Michigan School of Public Health
2018-2022	Associate Workgroup Director For Cohort Development	Precision Health University of Michigan
2017-2024	Professor Global Public Health	School of Public Health University of Michigan
2016-2019	Associate Director	Cancer Control and Population Sciences, Michigan Medicine, Rogel Cancer Center
2016-2024	Research Professor and Core Faculty Member	Michigan Institute of Data Science (MIDAS) University of Michigan
2015-2018	Co-director Global Statistics Core	Office of Global Public Health University of Michigan
2015-2023	John D. Kalbfleisch Collegiate Professor of Biostatistics	Department of Biostatistics University of Michigan
2014-2024	Professor	Department of Epidemiology University of Michigan
2014-2018	Associate Chair	Department of Biostatistics University of Michigan
2013-2024	Professor	Department of Biostatistics University of Michigan
2013-2015	Associate Director University of Michigan	Cancer Biostatistics T32 Training Grant

2009-2013	Associate Professor	Department of Biostatistics University of Michigan			
2008-2009	John G. Searle Assistant Professor	Department of Biostatistics University of Michigan			
2006-2008	Assistant Professor	Department of Biostatistics University of Michigan			
2002-2006	Assistant Professor	Department of Statistics University of Florida			
OTHER EMPLOYMENT/POSITIONS					
2022 Fall	Visiting by Fellow	Churchill College University of Cambridge, UK			
2022 Fall	Visiting Scholar	MRC Biostatistics Unit University of Cambridge, UK			
2015	Short Term Visiting Researcher	Department of Biostatistics Harvard T.H. Chan School of Public Health			
2010	Visiting Scholar	Institut d'Investigaci Biomdica de Bellvitge, Institut Catal d'Oncologia, Unitat de Bioestadistica Bioinformtica (Recipient of a visiting scholar grant awarded by the Agency for Administration of University and Research Grants (AGAUR), Spain.			
2006, 2009	Visiting Scholar	Department of Mathematics Statistics and Computer Science Victoria University Wellington, New Zealand			
2006	Visitor	Division of Cancer Epidemiology and Genetics, The National Cancer Institute			
2004	Visiting Scholar	Applied Statistics Unit Indian Statistical Institute Kolkata, India			
2002	Visiting Scholar	Stanford University			
2001 2004-2005	Visiting Assistant Professor	Department of Statistics Purdue University			
1996-2001	Teaching assistant Statistical Consultant Research Assistant	Department of Statistics Purdue University			
2000	Summer Intern	Statistics Division, Eli Lilly and Company Indianapolis			

#### **EDUCATION**

2001 Ph.D. (Statistics)

Advisor: William J. Studden

Thesis Title: Optimal designs for estimating the path of a stochastic process.

Purdue University, West Lafayette, Indiana.

1999 M.S (Mathematical Statistics)

Purdue University, West Lafayette, Indiana.

1994-1996 M. Stat (Applied Statistics and Data Analysis)

Indian Statistical Institute, Calcutta, India.

1991-1994 B.Sc. (Statistics)

Presidency College, Calcutta, India.

# **HONORS AND AWARDS**

National Scholarship, India, 1989, 1991.

Best student among Statistics majors award, Presidency College, Calcutta, 1993-1994.

Outstanding academic performance prizes, Indian Statistical Institute, Calcutta, 1994-1996.

Debesh-Kamal scholarship for studying abroad, The Ramakrishna Mission, India, 1996.

<u>Teaching award for outstanding classroom performance</u>, Purdue University, 1998.

Purdue Research Foundation grant, 1998-2000.

<u>I.W.Burr award</u> for an outstanding doctoral student, Purdue University, 2001.

New Researcher's summer fellowship, Stanford University, 2002.

Travel award, SAMSI, 2003.

Travel award, to attend conference on new directions in experimental design, 2003.

Travel award to attend New Researchers' Conference, 2003.

Travel award to attend Pathways to Future Workshop for Women, 2003.

Travel award to attend Fifth International Workshop on Objective Bayes Methodology, 2005.

Poster award, In Fifth International Workshop on Objective Bayes Methodology, 2005.

Young Investigator Grant, National Security Agency, 2005-2007.

Center for Research on Learning and Teaching faculty development award for integrating public health applications in BIOSTAT 503, University of Michigan, 2008.

<u>John G. Searle Assistant Professorship</u>, Awarded to an Assistant Professor with significant contribution, Department of Biostatistics, University of Michigan, 2008-2009

Elizabeth C. Crosby research award for women investigators in science, NSF ADVANCE program, The University of Michigan, 2008.

Elected Member, The International Statistical Institute, 2011.

<u>Excellence in Teaching award</u>, Awarded annually to one School of Public Health faculty member for outstanding teaching achievements, School of Public Health, University of Michigan, 2012.

Fellow of the American Statistical Association, 2012.

Outstanding Alumna Award, Department of Statistics, Purdue University, 2012.

Gilbert Whitaker Stage I grant for Improvement of Teaching, Center for Research, Learning and Teaching, University of Michigan, 2013.

Outstanding young researcher award (applications category), International Indian Statistical Association (IISA), 2014.

Faculty Recognition Award for outstanding contribution by a mid-career faculty:

University-wide award presented by the Rackham Graduate School and Office of the Provost at the University of Michigan. 2015.

John D. Kalbfleisch Collegiate Professorship, University of Michigan, 2015.

Gilbert Whitaker grant for Improvement of Teaching. Center for Research, Learning and Teaching, University of Michigan, 2015.

Gertrude Cox Award, Washington Statistical Society, 2016.

Elected Senior Fellow, Michigan Society of Fellows, 2016. <a href="http://societyoffellows.umich.edu">http://societyoffellows.umich.edu</a>

Fellow, American Association for the Advancement of Science, 2017.

Rackham Distinguished Faculty Achievement Award, University of Michigan, 2018.

Fellow, Executive Leadership for Women in Academic Medicine (ELAM), 2018-2019.

Rogel Scholar Award, University of Michigan Rogel Cancer Center, 2019.

L. Adrienne Cupples Award, Boston University School of Public Health, 2020.

Distinguished Woman Scholar Award, Purdue University, 2021.

20th Annual Janet L. Norwood Award, The University of Alabama at Birmingham, 2021.

20th Myra Samuels Memorial Lecture and Award, Department of Statistics, Purdue University, 2022.

Sarah Goddard Power Award, Academic Women's Caucus, University of Michigan, 2022.

Visiting By Fellow, Churchill College, University of Cambridge, UK, Fall, 2022.

Elected Member of the US National Academy of Medicine, 2022.

Karl E. Peace Award for betterment of Society, American Statistical Association, 2023.

Sacks Award, National Institute of Statistical Sciences, 2023.

2023 Data for Good Challenge in Biostatistics, Amstat News with the American Statistical Association, 2023.

John D Kalbfleisch Distinguished University Professorship, University of Michigan, 2023.

Siobán D. Harlow Collegiate Professor of Public Health, University of Michigan, 2023.

Distinguished Alumna in College of Science Award, Purdue University, 2024.

Marvin Zelen Leadership Award in Statistical Science, Harvard University, 2024.

David A. Sprott Lectureship, Department of Statistics, University of Waterloo, 2024.

Anna MR Lauder Professorship, Department of Biostatistics, Yale University, 2024.

Inaugural Pranab K Sen Memorial Lecture, Department of Statistics, University of Calcutta, 2024.

Elected Member, Connecticut Academy of Science and Engineering (CASE), 2025.

Fellow of the Institute of Mathematical Statistics (IMS), 2025.

# PROFESSIONAL ACTIVITY

# **Editorial Boards:**

**Statistics Editor**, *The American Journal of Preventive Medicine*, 2013-2014.

**Associate Editor**, *Statistics in Medicine*; 2015-2018.

**Associate Editor**, *Biometrics*; 2008-2018.

**Associate Editor**, *The American Statistician*; 2008-2011.

**Associate Editor**, *Journal of Statistical Planning and Inference*; 2012-2014.

Editorial Board Member, Sankhya, Ser B; 2008-2012.

**Editorial Board Member**, *International Statistical Review*; 2011-2015.

**Editorial Board Member**, Epidemiologic Methods; 2011-2018.

Editorial Board Member, Genetic Epidemiology; 2011-2020.

Editorial Board Member, Harvard Data Science Review; 2018-2021.

Editorial Board Member, Science Advances, 2021-2024

Editor in Chief, Springer Book Series "Indian Statistical Institute Series". 2024-

Guest Editor, Genetics & G3 special issue on Biobank Data Analysis, 2024.

# Reviewer for the following journals:

The Annals of Statistics, Biometrika, Statistical Methodology, Journal of Statistical Planning and Inference Journal of American Statistical Association, Biometrics, Statistica Sinica, The Scandinavian Journal of Statistics Geoderma, Human Heredity, Statistics in Medicine, Computational Statistics and Data Analysis, PNAS, BMC Medical Research Methodology, Epidemiologic Perspective and Innovation, Lifetime Data Analysis Communications in Statistics, Journal of the National Cancer Institute, Genetic Epidemiology, Journal of Biopharmaceutical Statistics, Annals of Human Genetics, Epidemiology, European Journal for Human Genetics The Annals of Applied Statistics, Epidemiologic Method, Bioinformatics, Biostatistics, Genome Medicine The American Journal of Epidemiology, IEEE Transactions on Computational Biology and Bioinformatics PLoS One. PloS Medicine, PLoS Genetics, Journal of Medical Genetics, Journal of Clinical Oncology, Statistics in the Biosciences, Journal of Agricultural Biological and Environmental Statistics, Environmental Research Indian Journal of Medical Research, The American Journal of Human Genetics, The British Journal of Cancer Science, Nature Genetics, Nature Communications, Nature Human Behavior, Science Advances, Nature, JAMA, New England Journal of Medicine

# **Study Section and Grant Review Panel:**

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, June 16-17, 2009.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, March 1-3, 2010.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, January 24-26, 2011.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, February 2-3, 2012.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, October 3-4, 2012.

Grant Review Panel, National Science Foundation, Division of Mathematical Sciences, 2012.

Special Emphasis Review Panel, NIH Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) Study Section, June 24-26, 2013.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, December 10-11, 2013.

Invited Reviewer: Health Effects Institute Project Report, 2014, 2015.

Review panel for U54: Big Data to Knowledge Centers of Excellence, NIH, April 10-11, 2014.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, May 22-23, 2014.

Reviewer, Strategic Skills Fellowship Panel, Medical Research Council, UK, 2014.

Grant Review Panel, National Science Foundation, Division of Mathematical Sciences, 2014.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, Jan 27-29, 2015.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, October 15-16, 2015.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, June 8, 2016.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, October 5, 2016.

Special Emphasis Review Panel, BD2K K07/K22 Training Grants, October 25, 2016.

External Review Committee, Biostatistics and Computational Biology Branch, Division of Intramural Research at NIEHS, November 13-15, 2016.

NIEHS R35 Review Panel: Research Triangle Park, April 6, 2017.

Cancer Immunology Trial Network Review, NCI, May, 2017.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, NCI, June 7-8, 2017.

Statistics Review Panel: Division of Mathematical Statistics, The National Science Foundation, February 14-16, 2018.

Cancer, Heart, Sleep Epidemiology Panel (B): NIH, October 25-26, 2018.

Early Stage Postdoctoral Career Development Review Committee, NIH/NCI, June, 2019.

Special Emphasis Panel: Review of NIGMS R25 Innovative Programs to Enhance Research Training (IPERT) Applications, NIH/NIGMS, July, 2019.

Specialized Programs of Research Excellence (SPOREs) (P50) III Review Committee, NIH/NCI, January, 2020.

Special Emphasis Review Panel, Cancer Prevention, Control and Population Sciences, P01 grants, NIH/NCI, February, 2020.

Statistics Review Panel, The National Science Foundation, October 26-28, 2020.

Special Emphasis Review Panel, National Cancer Institute, Big Data IT for Cancer Research, November 5-6, 2020.

Biostatistical Methods and Research Design (BMRD) Study Section, NIH December 10, 2020.

Special Emphasis Review Panel, Information Technology in Cancer Research, NIH/NCI, March, 2021.

National Cancer Institute, Biostatistics Branch Site Visit, May 2022.

National Cancer Institute, Program Project P01 Review Meeting, June 2022.

National Cancer Institute Special Emphasis Panel, NCI ZCA1 RTRB-R (J1) Transition Career Development Award and Institutional Research Training Grants, National Cancer Institute, 2023.

National Science Foundation Statistics Grant Review Panel, National Science Foundation, 2023.

PCORI 23C2 Improving Methods Merit Review Panel, PCORI, 2023.

NIGMS Review of Applications for Innovative Programs to Enhance Research Training (IPERT) (R25), MOSAIC (UE5), and Conference (R13), National Institutes of Health, 2024.

Statistics Panel of the National Science Foundation Division of Mathematical Sciences Grant Review Panel, National Science Foundation, 2024.

Standing Member, NIGMS Training and Workforce Development Panel, 2024-2025.

NCI Epidemiology Cohort Review Meeting, 2024.

# **Federal Advisory Committee:**

National Institute of Environmental Health Sciences, Environmental Health Sciences Review Committee, 2015-2018.

National Academies of Sciences, Engineering and Medicine: Committee on Inorganic Arsenic, 2015.

National Academies of Sciences, Engineering and Medicine: Review Panel on IOM Vitamin D intake report, 2017.

National Academies of Sciences, Engineering and Medicine: Workshop on Envisioning Data Science Training for Undergraduates, 2017.

National Academies of Sciences, Engineering and Medicine Committee on Rising Midlife Mortality Rates and Socioeconomic Disparities, 2019-2020.

National Academies of Sciences, Engineering and Medicine: Emerging Advances in Artificial Intelligence for Environmental Research and Decisions: A Workshop, 2019. (Workshop participant and member of the planning committee).

Appointed Member, Health Effects Institute- Energy Research Committee, 2019-2020.

National Academies of Sciences, Engineering and Medicine: Committee on Reassessment of the Department of Veterans Affairs Airborne Hazards and Open Burn Pit Registry, 2020-2022.

National Academies of Sciences, Engineering and Medicine: Committee on Applied and Theoretical Statistics (CATS) 2021-.

National Academies of Sciences, Engineering and Medicine Committee on Utilizing Advanced Environmental Health and Geospatial Data and Tech to Inform Community Investment, 2023-2024.

National Academies of Sciences, Engineering and Medicine Committee on Toxic Exposures Effect of Mental Health of Veterans, National Academy of Medicine, 2024-

# External Advisory Committee, Steering Committee, Executive Committee, Mentoring Committee, and Consultant:

Scientific Advisory for Analysis Committee, Colorectal Cancer GWAS Consortium (GECCO), PI Ulrike Peters, The Fred Hutchinson Cancer Research Center, 2010.

American Chemistry Council Working Group on Biomarker Discovery, organized by NIH/NICHD. Lead Coordinators: Paul S. Albert and Enrique Schisterman, Division of Biostatistics and Epidemiology, NICHD, 2010-11

Steering committee member, Robert Wood Johnson Health and Society Scholars Program, 2011-13.

Executive committee, NIEHS P30 center on "Lifestage exposure and adult diseases", University of Michigan, Department of Environment Health Sciences, 2011-15.

External member, Junior faculty mentoring program, Division of Family Medicine and Public Health Sciences, Wayne State University, 2013-2016.

External advisory board (EAB) member, <u>NIEHS-supported Superfund Research Program</u> at University of New Mexico, 2018-2019.

External advisory board (EAB) member, <u>NIEHS-supported Superfund Research Program</u> at Columbia University, 2018-.

External Review Committee, Department of Biostatistics, Yale University, December 2020.

External advisory board (EAB) member, Indiana University Simon Comprehensive Cancer Center, 2020-2023.

External Review Committee, Statistical Sciences at Academia Sinica, Taiwan, August, 2021.

World Health Organization (WHO) and the United Nations Department of Economic and Social Affairs (UN DESA): Technical Advisory Group on COVID-19 Mortality Assessment, September 2021-2024.

External advisory board (EAB) member, Koita Centre for Digital Health, IIT Bombay, December 2021-

Joint Selection Committee for Recruitment of Statisticians in the Theoretical Statistics and Mathematics Division (TSMD) and Applied Statistics Division (ASD) of the Indian Statistical Institute (ISI) April 2022.

External Academic Program Review Committee, Department of Statistics, Texas A&M University, April 2022.

Fred Hutchinson, University of Washington, Seattle Children's Cancer Consortium, External Advisory Board Member, 2022-.

Observation and Safety Monitoring Board Member, Heartshare: Accelerating Medicines Partnership, Northwestern University, Chicago, Illnois, 2022-

Advisory Committee, Koita Centre for Digital Health (KCDH-A), Ashoka University, India, 2023-

Member, Advisory Board, Zoonotic Vector Borne Disease Research and Training Centre (ZVBDC), Indian Institute of Public Health, Shillong.

Steering Committee Member, LSHTM Centre for Data and Statistical Science for Health (DASH), London School of Hygiene & Tropical Medicine, University of London, UK, 2024-

External Advisory Board Member, Ethics Committee of Kolkata Municipal Corporation Health Department, Kolkata, India, 2024.

External Academic Program Review Committee, North Carolina State University Statistics Department Departmental Review, April 2024.

Advisory Board Member: Khushi Baby, A digital health platform for community workers, 2024-

External Advisory Board Member: Gateway Exposome Coordinating Center (GECC), USC, 2024-

External Review of Ph.D. qualifying exam policy and procedures –Department of Biostatistics, Harvard University, 2025.

#### PROFESSIONAL MEMBERSHIP

American Statistical Association (ASA) (Member of Sections on Epidemiology, Bayesian Statistics, Environmental Statistics, Statistical Genetics, Biometrics, Teaching Statistics in Health Sciences and Nonparametric Statistics)

Institute of Mathematical Statistics (IMS)

International Indian Statistical Association (IISA)

International Biometric Society (ENAR)

International Statistical Institute (ISI)

American Association for Advancement of Science (AAAS)

National Academy of Medicine (NAM/NASEM).

American Society for Clinical Oncology (ASCO), 2016-2019.

### **PUBLICATIONS (Peer Reviewed)**

\*The first author was a graduate student of Dr. Mukherjee at the time of this research.

- 1. Bose M, **Mukherjee B**. Cross-over design in the presence of higher order carry overs. *Australian and New Zealand Journal of Statistics*, **42**:235-44, 2000.
- 2. **Mukherjee B**. Exactly optimal sampling designs for processes with a product covariance structure. *The Canadian Journal of Statistics*, **31**:1-19, 2003.
- 3. Bose M, and **Mukherjee B.** Cross-over designs under a general model. *Statistics and Probability Letters*, **62**:413-18, 2003.
- 4. **Mukherjee B.** On sampling designs for estimating the integral of a stochastic process. *Communications in Statistics, Theory and Methods,* **32**:1647-63, 2003.
- 5. Sinha S, **Mukherjee B** and Ghosh M. Bayesian analysis of matched case-control studies with multiple disease states. *Biometrics*, **60**:41-49, 2004.

<sup>\*\*</sup>Co first-author stated in the manuscript.

- 6. \*Sinha S, **Mukherjee B**, Ghosh M, Mallick BK, and Raymond JC. Bayesian semi-parametric analysis of matched case-control studies with missing exposure. *Journal of the American Statistical Association*, **100**:591-601, 2005. (*This paper received one of the ENAR student paper awards in 2004*).
- 7. Ghosh M, and **Mukherjee B**. Non-parametric sequential Bayes estimation of the distribution function. *Sequential Analysis*, **24**:389-409, 2005.
- 8. **Mukherjee B**, Sinha S, and Ghosh M. Bayesian Analysis for case-control studies. In Handbook of Statistics, Vol 25. *Bayesian Thinking: Modeling and Computation*, Eds Dey, D. and Rao, C. R., 793-819, 2005.
- 9. Ghosh M, Zhang L, and **Mukherjee B**. Equivalence of posteriors in the Bayesian analysis of the multinomial-Poisson transform. *Metron*, **64**:19-28, 2006.
- 10. Sinha S, and **Mukherjee B**. A score test for determining sample size for a matched case-control study with categorical exposure. *Biometrical Journal*, **48**:35-53, 2006.
- 11. **Mukherjee B.** A note on sampling designs for random processes with no quadratic mean derivative. *Australian and New Zealand Journal of Statistics*, **48**:305-19, 2006.
- 12. Ghosh YN, and **Mukherjee B.** On properties of conditional medians and quantiles. Statistics and *Probability Letters*, **76**(16):1775-80, 2006.
- 13. Ghosh M, and **Mukherjee B**. Data adaptive sequential design for case-control studies. *Statistica Sinica*, **16**(3):697-719, 2006.
- 14. \*Zhang L, **Mukherjee B**, Ghosh M, and Wu R. Accounting for population substructure in case-control studies of disease-gene association: A Bayesian approach. *Statistical Modeling*, **6**(4):352-72, 2006.
- 15. Khuri A, **Mukherjee B**, Sinha B, and Ghosh M. Design issues for generalized linear models. *Statistical Science*, **21**(3):376-99, 2006.
- 16. **Mukherjee B**, Zhang L, Ghosh M, and Sinha S. Semiparametric Bayesian analysis of case-control data under conditional gene-environment independence. *Biometrics*, **63**(3):834-844, 2007, PMID: 17489972.
- 17. **Mukherjee B**, Liu I, and Sinha S. Analysis of Matched case-control data with ordinal disease states: possible choices and comparisons. *Statistics in Medicine*, **26**(17):3240-3257, 2007, PMID: 17206600.
- 18. \*Sinha S, **Mukherjee B**, and Ghosh M. Modeling association among multivariate exposures in a matched case-control study. *Sankhya*, **64**(3):379-404, 2007.
- 19. Dorazio RM, **Mukherjee B**, Zhang L, Ghosh M, Jelks H, and Jordan F. Modeling Unobserved Sources of Heterogeneity in Animal Abundance Using a Dirichlet Process Prior. *Biometrics*, **64**(2):635-644, 2008, PMID: 17680831.
- 20. \*Zhang L, **Mukherjee B**, Ghosh M, Gruber S and Moreno V. Accounting for error due to misclassification exposures in case-control studies of gene-environment interaction. *Statistics in Medicine*, **27**(15):2756-2783, 2008, PMID: 17879261.

- 21. **Mukherjee B** and Chatterjee N. Exploiting gene-environment independence for analysis of case-control studies: An empirical-Bayes type shrinkage estimator to trade off between bias and efficiency. *Biometrics*, **64**(3):685-694, 2008, PMID: 18162111. (*This paper appeared in a special Virtual Issue of 15 classic papers in Biometrics which was put together to celebrate the international year of statistics in 2013 by Wiley.)*
- 22. Chatterjee N, and **Mukherjee B**. Statistical approaches to studies of gene-gene and gene-environment Interactions. *Molecular Epidemiology in Cancer*, 145-69 Editors Rebbeck, Ambrosone and Shields, *Informa Healthcare*, 2008.
- 23. Liu I, and **Mukherjee B**. The Proportional Odds Model. *Wiley Encyclopedia for clinical trials*. 1-8, 2008.
- 24. **Mukherjee B**, Ahn J, Rennert G, Gruber SB, Moreno V, and Chatterjee N. Testing gene-environment interaction from case-control data: A novel study of Type-1 error, power and designs. *Genetic Epidemiology*, **32**(7):615-626, 2008, PMID: 18473390.
- 25. Sinha S, Gruber SB, **Mukherjee B** and Rennert G. Inference on haplotype effects in matched case-control studies using unphased genotype data. *International Journal of Biostatistics*, **4**(1): article 6, 2008, PMCID: PMC2835450.
- 26. **Mukherjee B**, Ahn J, Liu I, Rathouz P, and Sanchez B. On elimination of nuisance parameters in a stratified proportional odds model by amalgamating conditional likelihoods. *Statistics in Medicine*, **27**(24):4950-4971, 2008, PMCID: PMC3085191.
- 27. Aguado A, Guino E, **Mukherjee B**, Sicras A, Serrat J, Acedo M, Ferro JJ, and Moreno V. Variability in prescription drug expenditures explained by adjusted clinical groups (ACG) case-mix. A cross-sectional study of patient electronic records in primary care. *BMC Health Services Research*, **8**:53, 2008, PMCID: PMC2292169.
- 28. Polydorides AD, **Mukherjee B**, Gruber SB, McKenna BJ, Appelman HD, and Greenson JK. Adenoma-Infiltrating Lymphocytes (AILs) Are a Potential Marker of Hereditary Non-Polyposis Colorectal Cancer. *American Journal of Surgical Pathology*, **32**(11):1661-1666, 2008, PMCID: PMC3500084.
- 29. Lampe BJ, Park SK, Robins T, **Mukherjee B**, Litonjua AA, Amarasiriwardena C, Sparrow D, Hu H. Association between 24-Hour Urinary Cadmium and Pulmonary Function: The VA Normative Aging Study. *Environmental Health Perspective*, **116**(9):1226-1230, 2008, PMCID: PMC2535626.
- 30. **Mukherjee B** and Liu I. A note on bias due to fitting prospective multivariate generalized linear models to categorical outcomes ignoring retrospective sampling schemes. *Journal of Multivariate Analysis*, **100**(3):459-472, 2009. PMCID: PMC8240662.
- 31. Liu I, **Mukherjee B**, Suesse T, Sparrow D and Park SK. Graphical model-checking methods for the proportional odds model. *Statistics in Medicine*, **28**(3):412-429, 2009, PMID: 18693299.
- 32. Zhang L, \*\*Mukherjee B, Hu B, Moreno V, and Cooney K. Semiparametric Bayesian modeling of random genetic effects in family based association studies. *Statistics in Medicine*, **28**(1):113-139, 2009, PMCID: PMC2684653.
- 33. Luo S, **Mukherjee B**, Chen J, and Chatterjee N. Shrinkage estimation for robust and efficient screening of HWE in genomewide association studies. *Genetic Epidemiology*, **33**(8):740-750, 2009, PMCID: PMC3103068.
- 34. Ghosh M, **Mukherjee B** and Santra U. Probability matching priors for ratio of variances of the bivariate normal distribution. *The International Journal of Statistical Sciences*, **9**:255-271, 2009.

- 35. \*Ahn J, **Mukherjee B**, Banerjee M and Cooney K. Bayesian inference for the stereotype regression model: Application to a case-control study of prostate cancer. *Statistics in Medicine*, **28**(25):3139-3157, 2009, PMCID: PMC3103066.
- 36. Gruber SB, and **Mukherjee B**. Anticipation in Lynch syndrome: Still waiting for the answer. *Journal of Clinical Oncology*, **27**(3):326-327, 2009, PMID: 19075261.
- 37. Vilar E, **Mukherjee B**, Kuick R, Raskin L, Misek D, Taylor JMG, Giordano TJ, Hanash SM, Fearon ER, Rennert G, and Gruber SB. Gene Expression Patterns in Mismatch Repair-Deficient Colorectal Cancers Highlight the Therapeutic Role of Inhibitors of the PI3K-AKT-mTOR pathway. *Clinical Cancer Research*. **15**(8):2829-2839, 2009, PMCID: PMC3425357.
- 38. D'Souza J, Jia C, **Mukherjee B** and Batterman S. Determinants of VOC exposures: The Importance of Ethnicity, Housing and Personal Factors. *Atmospheric Environment*, **43**(18):2884-92, 2009.
- 39. Batterman S, Eisenberg J, Hardin R, Kruk M, Lemos MC, Michalak A, **Mukherjee B**, Renne E, Stein H, Watkins C, Wilson M. Sustainable Control of Water-Related Infectious Diseases: A Review and Proposal for Interdisciplinary Health-Based Systems Research. *Environmental Health Perspectives*, **117**(7):1023-32, 2009, PMCID: PMC2717125.
- 40. Stoffel E, \*\*Mukherjee B, Raymond VM, Tayob N, Kastrinos F, Sparr J, Wang F, Bandipalliam P, Syngal S, Gruber SB. Calculation of Risk of Colorectal and Endometrial Cancer Among Patients with Lynch Syndrome. *Gastroenterology*, **137**(5):1621-27,2009, PMCID: PMC2767441.
- 41. Park SK, \*\*Mukherjee B, Xia X, Sparrow D, Weisskopf M, Nie H, Hu H. Bone Lead Level Prediction Models and Their Application to Examining the Relationship of Lead Exposure and Hypertension in the Third National Health and Nutrition Examination Survey. *Journal of Occupational and Environmental Medicine*, 51(12):1422-1436, 2009, PMCID: PMC2939477.
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#### **OTHER ARTICLES**

- 1. **Mukherjee, B**. Evolution of Bayesian Statistics in India, *ISBA bulletin*, Vol **15**, No. 3, pp 12-14. (2008).
- 2. **Mukherjee, B** and Li, Y. Leadership in large-scale collaborative studies: Does gender play a role?, In *Leadership and Women in Statistics*, Edited by Olkin, Golbeck and Gel, Taylor and Francis (2014).
- 3. **Mukherjee, B** and Dempsey W. Reflecting on "A Statistician in Medicine" in 2020, *Statistics in Medicine*, Vol **40**, No. 1, pp 42-48. (2020).
- 4. Ray D, Bhattacharyya R, **Mukherjee B.** Discussion on "The timing and effectiveness of implementing mild interventions of COVID-19 in large industrial regions via a synthetic control method" by Tian et al. *Statistics and Its Interface*, Vol **14**, No. 1, pp 25-28. (2021).
- 5. **Mukherjee B**. In Conversation with Sir David Spiegelhalter and Professor Sylvia Richardson. *Statist. Sci.* 39(1): 209-220 February 2024. DOI: 10.1214/23-STS897 <a href="https://doi.org/10.1214/23-STS897">https://doi.org/10.1214/23-STS897</a>

#### RESEARCH FUNDING

#### **CURRENT FUNDING:**

- 1. 1-R25-HL161795-01 (PI Mukherjee): Transforming Analytical Learning in the Era of Big Data: A Summer Institute in Biostatistics and Data Science. NIH, \$1,210,165, 07/01/2022-05/31/2027.
- 2. 1-UG3CA267907-01(PI Dolinoy, Mukherjee, Pearce): MI-CARES: *The Michigan Cancer and Research on the Environment Study.* NCI, \$13,731,793, 09/2021-08/31/2024. Role: MPI.

- 3. 2-P42ES017198-10 (PI Meeker): PROJECT 1 Puerto Rico Testsite for Exploring Contamination Threats (PROTECT)-Data Core. NIH, \$326,500, 04/01/2020-03/31/2025. Role: Co-Investigator
- 4. 1 R01 ES032203-01 (PI Meeker): Pregnancy Exposures to Chemical Mixtures and Later Metabolic Health and Endocrine Function Among Women in the Puerto Rico PROTECT Cohort. NIH/NIEHS, \$1,991,852, 08/21/2020-05/31/2025.
- 5. 1-R01AG070897-01 (PI Park): The Study of the Environment and Alzheimer's disease and related Dementias (SEAD). NIH, \$3,302, 876, 03/15/2021-02/28/2026, Role Co-Investigator.
- 6. 1-R01 ES031591 (PI Meeker): Applying and advancing modern approaches for studying the joint impacts of environmental chemicals on pregnancy outcomes. NIH, \$3,056,116, 01/2021-10/31/2025, Role Co-Investigator.
- 7. AI Course Revision Grant (PI Mukherjee): Yale Poorvu Center for Teaching and Learning. \$20,000. 07/2025-06/2026.

#### **PAST FUNDING:**

- 1. H98230-06-1-0033 (PI Mukherjee): Young Investigator Grant: Design and inference for case-control studies. NSA, \$29,983, 08/01/2007-07/31/2008. Role: PI,
- 2. R03 CA130045-01 (PI Mukherjee): Synergism of Gene and Environment in Cancer Studies: A New Bayesian Approach: NIH/NCI, \$143,680, 8/1/2007-12/31/2009. Role: PI.
- 3. DMS 07-06935 (PI Mukherjee): NSF Statistical Methodology Grant: Bayesian Analysis for Studies of Gene-Environment Interaction. NSF, \$134,503 9/1/2007-5/31/2010. Role: PI.
- 4. Elizabeth C. Crosby research award for women faculty in science: Bayesian methods for Haplotype Based Interaction Analysis: Role: PI, NSF/ADVANCE program at the University of Michigan, \$15,000, 2009-2010.
- 5. NSF DMS-1007494 (PI Mukherjee PI): Collaborative proposal: Case-Control Studies; New Directions and Applications. 6/1/2010-5/31/2012. Role: PI.
- 6. 1-R03-CA-156608-01 (PI Mukherjee): Two-phase cancer studies of gene-environment interaction: NIH, \$448,252, 7/1/2011-6/31/2013. Role: PI
- 7. RC0632384UM (PI Mukherjee): great lakes air center for integrative environmental research (GLACIER): EPA (Biostatistics Core), \$176,954, 7/1/2011-6/30/2015. Role: PI and Core Director.
- 8. R21-ES-020811-01 (PI Mukherjee): Efficient design and analytic strategies for enhancing the power of G X E studies. (this grant was awarded under a special program announcement for Statistical Methods for Gene-Environment Studies across multiple NIH institutes and is cofunded by NCI), \$118,863, 9/1/2012-8/31/2015. Role: PI.
- 9. M-Cubed Diamond Award (PI Mukherjee): Developing an interactive tool for maternal and child health care monitoring and routine assessment to be used by iKure community health workers. Sponsored by the Trehan Foundation. 3/1/2015-9/1/2016. Role: PI.
- 10. 1R25-EB-022363-01 (PI Mukherjee): NIH BD2K R25 Courses and skills development grant: Transforming analytical learning in the era of big data: an undergraduate summer institute in biostatistics. NIH, \$445,807, 9/01/2015-8/31/2019, Role: PI.

- 11. 35-R25-EB-022363-02-S1 (PI Mukherjee): NIH BD2K R25 Courses and skills development grant: Administrative Supplement Request for Transforming analytical learning in the era of big data: an undergraduate summer institute in biostatistics. NIH, \$147,555, 9/30/2015-8/31/2018, Role: PI.
- 12. Administrative Supplement to P30-CA-046592 (PI Mukherjee): Integrating an Open Repository of Polygenic Risk Scores for Major Cancer Sites with a Visual Catalog. NCI, \$150,000, 09/01/2018-08/31/2020. Role: PI.
- 13. DMS 14-06712: (PI Mukherjee): Set-based tests for genetic association and gene-environment interaction in longitudinal studies. NSF, \$102,945, 7/1/2014-6/31/2017. Role: PI (multiple PI grant with Min Zhang, University of Michigan).
- 14. DMS 02-29028 (PI George Casella): Conference in mathematical sciences on functional data. NSF, Bhramar Mukherjee, award amount \$ 19,920. (Funding for the fifth annual winter workshop at the Department of Statistics, University of Florida). 10/01/2002-9/30/2003, Role: Co -PI with Alexandre Trindade.
- 15. DMS 03-37163 (PI George Casella): Conference in mathematical sciences on data mining and bioinformatics. NSF, award amount \$ 24,120. (Funding for the sixth annual winter workshop at the Department of Statistics, University of Florida). 8/15/2003-8/14/2004, Role: Co-PI Bhramar Mukherjee with Michael Daniels.
- 16. R01CA081488 (PI Gruber): Molecular Epidemiology of Colorectal Cancer. NIH, \$20,000, 12/01/2004 11/30/2009. Role: Co-I.
- 17. M01 RR000042-46 (PI Kelch): Biostatistical support for general clinical research center. NIH-NCRR, \$160,146 03/01/2006 02/28/2011. Role: Co-I.
- 18. FY 07-3523 (PI Batterman): Asthma Morbidity as EH Indicator of Air Pollution Levels. EPA, \$7,905, 06/01/2007-05/31/2010. Role: Co-I.
- 19. R01 ES014677-01A2 (PI Robins): Role of Diesel and Other Vehicular Exhaust in Exacerbation of Childhood Asthma. NIH, \$733, 550, 07/01/2007-06/30/12. Role: Co-I.
- 20. RD-83374001 (PI Batterman): Childhood Health Effects from Road Effects and Urban Pollution Burden Study. EPA, \$1,199,500, 03/01/2008-02/28/2011. Role: Co-I.
- 21. R03-HS017461-01A1 (PI Erickson): Developing a co-morbidity index for health-related quality of life studies. NIH, \$88,206, 09/01/2008-08/31/2009. Role: Co-I.
- 22. R01-ES-016769-01-A1 (PI Lewis): Interactions of diesel exhaust and respiratory viruses in asthmatic children. NIH/NIEHS, \$6,557, 01/13/2010 to 11/30/2014. Role: Co-I.
- 23. U19 NCI-895700 (PI Gruber): Trans-disciplinary Studies of Genetic Variation in Colorectal Cance.r 06/1/2010-05/31/2014. NIH/NCI Role: Co-I, Currently PI of the administrative core.
- 24. R01 HL101161-01A1 (PI Diez Roux): Stress, Gene-Environment Interaction and Cardiovascular Disease. NIH, \$700,527, 07/01/2010 06/31/2014. Role: Co-PI
- 25. R01 ES-018872 (PI Meeker): Bisphenol A and Phthalate Exposure in Relation to Fetal Growth and Preterm Birth. NIH, \$260,360, 07/10/2010-06/13/2015. Role: Co-I.
- 26. R01-ES019616: (PI Rajagopalan): Environmental triggers of cardiometabolic disease. NIH, \$41,786, 07/01/2011-06/30/2015. Role: Co-I.
- 27. 2-R01-CA-129102-04 (PI Taylor): Statistical Methods for Cancer Biomarker Discovery and Cancer Risk Prediction. NIH, \$179,097, 01/01/2012-12/31/2015. Role: Co-I.

- 28. P42 ES-017818-04 (PI Meeker): Phthalate exposure and mechanistic pathway markers in preterm birth among women in Puerto Rico. Northeastern University/NIH, \$10,106, 04/12/2012-03/31/2014. Role: Co-I.
- 29. 1U01CA162147-01A1 (PI Carethers): Inflammatory differentiation of colorectal cancer among African Americans. NIH, \$1,487,601. 09/01/2012 to 08/31/2017, Role: Co-I.
- 30. 200-2013-56856 (PI Feldman): Identification and validation of ALS environmental risk factors. CDC, \$527,743, 09/01/2013 to 08/31/2017, Role: Biostatistician.
- 31. R21-OH-010482-01 (PI Neitzel): Development of a US/Canadian Job Exposure Matrix for Noise. CDC, \$200,099, 09/01/2013 to 08/31/2016, Role: Co-I.
- 32. 500461-78050 (PI Meeker): Project#1: Molecular epidemiology study of phthalate exposure and preterm birth in Puerto Rico. NIH, \$213,447, 04/01/2014-03/31/2020, Role: Co-I.
- 33. R34-MH101997 (PI Bauermeister): Development of a tailored HIV prevention intervention for young men. NIH, \$150,000, 12/01/2014-03/31/2018. Role: Co-I.
- 34. 83563701-0 (PI Batterman): Environmental quality, health and learning in conventional and high performance school buildings. EPA, \$697,684, 11/01/2014-11/19/2018. Role: Co-I.
- 35. BOE15AMP (PI Boehnke): Accelerating medicines partnership: enhancement of the Type 2 diabetes knowledge portal. Foundation of National Institutes of Health, \$2,232,908, 10/01/2015-8/31/2017. Role: Co-I.
- 36. 500610-78050 (PI Meeker): Biomarker epidemiology of in utero environmental exposures and child development. Northeastern University/NIH, \$37,788 07/01/2016-08/31/2020. Role: Co-I
- 37. 505112-78050 (PI Meeker): Biomarker epidemiology of in utero environmental exposures and child development. Northeastern University/EPA, \$20,346, 07/01/2018-06/30/2020.Role: Co-I.
- 38. 5-R01CA206010-04 (PI Carethers): (PQ3) Immune modulation of DNA mismatch repair in colorectal cancer. NIH, \$238,477, 04/1/2019-03/31/2021. Role: Co-I.
- 39. 5P30-CA-046592 (PI Fearon): Comprehensive cancer center administrative core grant NIH/NCI, \$4,284,352, 07/13/2018-05/31/2023. Role: Associate Director of Cancer Control and Population Sciences.
- 40. 1-P30-ES017885-03 (PI Loch-Caruso): Lifestage exposures and adult disease. NIH, \$822,977. 07/01/2011-06/30/2015. Role: Core Director.
- 41. UL1 RR024986-01 (PI Clauw): Michigan Institute for Clinical and Health Research (MICHR): Clinical and Translational Sciences Award. NIH/NCRR, \$49,463,084, 11/10-2007-10/10/2012. Role: Member of Biostatistics Core.
- 42. 5P30-CA-046592 (PI Fearon): Comprehensive cancer center core grant: biostatistics core (PI Taylor). NIH, \$4,285,130, 06/01/2018-05/31/2023. Role: Member, Biostatistics Core.
- 43. EF 0811934 (PI Eisenberg): Collaborative Research: Agricultural Antibiotic and Human Health: A Multiscale Ecological Approach to the Development and Spread of Antibiotic Resistance. NSF, \$351,651. 09/01/2008-08/31/2014. Role: Biostatistics Consultant.
- 44. UM-Health Disparities Focus RFA (PI Gruber): Discovering new drugs to target Microsatellite Instable Colorectal Cancer using connections between gene expression profiles. UM, \$75,000. 2009-2010. Role: Biostatistics consultant.
- 45. R01 ES014566-01A1 (PI Parker): A CBPR Intervention for Childhood Asthma Using Air Filters and Air Conditioners. NIH, \$5,355, 04/01/2007-03/31/2012. Role: Biostatistician.

- 46. N01-CN-43302 (PI Gruber): Preclinical in Vitro and In Vivo Screening Assays for Cancer Preventive Agent Development. NIH, \$7,622, 11/01/2008 10/30/2010. Role: Biostatistician.
- 47. 5P30ES017885-08 (PI Loch-Caruso): Michigan center of life stage environmental exposures and disease. NIH/NIEHS, \$1,045,140 04/1/2019-03/31/2021. Role: Biostatistician.
- 48. Gilbert Whitaker Stage I grant for Improvement of Teaching. Center for Research, Learning and Teaching, University of Michigan. 5/1/2013-12/31/2014.
- 49. 20SFRN35370008/20SFRN35360220 (PI Nallamothu): Wearables In Reducing Risk and Enhancing Daily Life-style (WIRED-L)-SFRN. American Heart Association, \$2,500,000, 04/01/2020 03/31/2024.
- 50. 1-R01-HG008773-01(PI Mukherjee): *Statistical and computational methods for rare variant association analysis*. NIH, \$1, 871,775, 05/17/2016-04/30/2022, Role: PI.
- 51. 5-R01TS000289-02 (PI: Feldman): *Metabolomic Signatures Linking ALS to Persistent Organic Pollutant Exposures.* CDC, \$1,000,000, 09/30/2018-09/29/2022. Role: Co-Investigator.
- 52. 5-R01ES026578-04 (PI Park): *Exposure to Multipollutants and Obesity, Type-2 Diabetes and Metabolic Syndrome*. NIH, \$2,447,324, 08/01/2016-04/30/2022. Role: Co-Investigator.
- 53. 5-R01ES026964-03 (PI Park): A longitudinal study of endocrine disruptor mixtures and reproductive aging. NIH, \$2,442,826, 08/01/2016-01/31/2023. Role: Co Investigator.
- 54. DMS 1712933 (PI Mukherjee): *High Dimensional Mediation Analysis with Multi-Omics Data.* NSF, \$351, 765, 09/1/2017-08/31/2023, Role: PI.
  - DMS 1712933-004 (PI Mukherjee): Supplement, High Dimensional Mediation Analysis with Multi-Omics Data. NSF, \$89, 269, 09/01/2017-08/31/2023, Role: PI.
  - DMS 1712933-005 (PI Mukherjee): AGEP-GRS Supplement, High Dimensional Mediation Analysis with Multi-Omics Data, NSF, \$82,496, 09/01/2017-08/31/2023. Role: PI.
- 55. 5R01CA129102-10 (PI Taylor): *Statistical Methods for Cancer Biomarkers*. NIH, \$1,366,355, 01/01/2009-06/30/2022. Role Co-Investigator.
- 56. 1R01HL141292-02 (PI: Smith): *A Social Epigenomic Approach to Health Disparities in Cardiovascular Risk Factors*. NIH, \$2,878,306, 04/01/2018-03/31/2023. Role: Co-Investigator.
- 57. 500669-78061 (PI Meeker): Environmental influences on child health outcomes in Puerto Rico (ECHO-PRO). NIH, \$447,187, 09/01/2019-08/31/2023. Role: Co Investigator.
- 58. 1-R25-HL147207-01 (PI Mukherjee): *Transforming Analytical Learning in the Era of Big Data.* NIH, \$752,922, 03/15/2018-06/30/2022, Role: PI.
- 59. 2-P42ES017198-10 (PI Meeker): PROJECT 1 Puerto Rico Testsite for Exploring Contamination Threats (PROTECT). NIH, \$50,566, 04/01/2020-03/31/2022. Role: Co-Investigator
- 60. 5R01MD011721-03 (PI Needham): Race Ethnicity, DNA Methylation and Disparities in Cardiovascular Mortality: NHANES 1999-2001. NIH, \$3,064,487, 08/16/2017-05/31/2024. Role: Co-Investigator
- 61. 5P30-CA-046592 (PI Fearon): Cancer Center Support Grant- Cancer Data Sciences Shared Resource. NHLBI, \$4,704,994, 06/2023-05/31/2028. Role: Co-Investigator
- 62. R01 ES030049-01A1 (PI Feldman): *Mapping the ALS Exposome to Gain New Insights into Disease Risk and Pathogenesis.* NIH, \$3,265,535, 09/01/2019-10/31/2024. Role Co-Investigator

- 63. 1-R01-NS127188 (PI Feldman): Developing novel strategies for personalized treatment and prevention of ALS: Leveraging the global exposome, genome, epigenome, metabolome, and inflammasome with data science in a case/control cohort. NIH, \$3,429,869, 09/2021-06/30/2025, Role Co-Investigator.
- 64. 1-R01-AG074347 (PI Conlon): Extreme Weather-Related Events and Environmental Exposures in the Risk for Alzheimer's Disease and Related Dementia. NIH/UC Davis, \$402,255, 06/15/2022-05/31/2027, Role Co-Investigator.
- 65. UG3OD023251 (PI Alshawabkeh): *ECHO PROTECT Cohort in Puerto Rico*. NIH/Northeastern University, \$\$2,972,794, 09/01/2023-08/31/2030, Role Co-Investigator.

#### **SOFTWARE**

R-package, kin-cohort: Victor Moreno, Nilanjan Chatterjee and Bhramar Mukherjee, developed in 2007 (available at R-CRAN website).

R-package, LGWAS and LGEWIS for set-based analysis of genetic association and geneenvironment interaction in longitudinal studies: Zihuai He, Shawn Lee, Min Zhang and Bhramar Mukherjee, developed in 2015 (available at R-CRAN website).

R-Package, bama, for performing Bayesian mediation analysis in the presence of high-dimensional mediators based on the potential outcome framework: Bhramar Mukherjee, Min Zhang and Xiang Zhou, developed in 2018 (available at R-CRAN website).

R-Package, subgxe, for performing p-value assisted subset testing for association: Bhramar Mukherjee, Xiang Zhou, Seunggeun Shawn and Youfei Yu, developed in 2019 (available at R-CRAN website.)

R-Package, snif, for performing Selection of Nonlinear Interactions by a Forward Stepwise Algorithm: Bhramar Mukherjee, Richard Gonzalez, John Meeker, Yin-Hsiu Chen, Naveen Narisetty, and Alexander Rix, developed in 2019 (available at R-CRAN website).

R-Package, Lodi, for imputing observed values below the limit of detection in single-pollutant models via censored likelihood multiple imputation: Seunggeun Shawn Lee, Bhramar Mukherjee, Min Zhang and Jonathan Boss, developed in 2019 (available at R-CRAN website).

R-Package, SAMBA for Selection and Misclassification Bias Adjustment for Logistic Regression Models: Lauren Beesley and Bhramar Mukherjee, developed in 2020 (available at R-CRAN website).

R-package, HiGLASSO, a general framework to identify noteworthy nonlinear main and interaction effects in the presence of group structures among a set of exposures: Jonathan Boss, Alexander Rix and Bhramar Mukherjee, developed in 2020 (available at R-CRAN website)

R-Package, MIselect, for performing variable selection for multiply imputed data: Bhramar Mukherjee and Alexander Rix, developed in 2020 (available at R-CRAN website).

Shiny-App, SAMBA-EHR, for exploring sampling and misclassification biases in associated analyses from GWAS/PheWAS using Electronic Health Records (EHR): Lauren Beesley and Bhramar Mukherjee, developed in 2019, (available at http://shiny.sph.umich/edu/SAMBA-EHR/).

PRSweb: interactive PheWAS results from analyses conducted using Michigan Genomics Initiative and UK Biobank data: Lars G. Fritsche, Snehal Patil, Lauren J. Beesley, Peter VandeHaar, Maxwell Salvatore, Ying Ma, Robert B. Peng, Daniel Taliun, Xiang Zhou and Bhramar Mukherjee, developed in 2019 (available at <a href="https://prsweb.sph.umich.edu:8443/">https://prsweb.sph.umich.edu:8443/</a>).

R-Package, MedScan, for performing large-scale, one at a time mediator testing, 2022: (available at R-CRAN website).

R-Package, hdmed, for performing high dimensional mediation analysis, 2022: (available at R-CRAN website).

R-Package, gigg, Bayesian variable selection with correlated predictors, 2022: (available at R-CRAN website

R-Package, CompMix, for performing comprehensive environmental Mixtures analysis, 2024: (available at R-CRAN website).

R-Package, CIMPLE, for addressing clinically informative missingness in Electronic Health Records: (available at R-CRAN website).

R-Package, EHR-MuSe, Handling multi-cohort selection bias in EHR. (available at R-CRAN website).

## PLENARY, KEYNOTE AND SPECIAL LECTURES

Plenary Speaker, Methodological and Statistical issues in Gene-Environment Research, University of Georgia, Center for Contextual Genetics and Prevention Sciences, June, 2012.

Eighth annual invited lecture in Biostatistics, Department of Biostatistics, Bioinformatics and Epidemiology, University of California San Francisco, 2014.

Grand Rounds in the Sick Kids Program, University of Toronto, April, 2014.

Special Annual Invited Lecture, Department of Biostatistics and Epidemiology, University of California at San Francisco, May, 2014.

Special Invited Lecture, International Indian Statistical Association Conference, Pune, India, December, 2015.

Oliver Lecturer and Class of 1960 Speaker, Department of Mathematics and Statistics, Williams College, September, 2016.

Keynote speaker: UP-STAT conference, University of Rochester, April, 2018.

Special Invited Lecture, International Indian Statistical Association Conference, Gainesville, May, 2018.

Keynote Speaker, Healthcare Data & Analytics Association Annual Meeting, University of Michigan, October, 2019.

Keynote Speaker, San Francisco Bay Area Chapter of the American Statistical Association, University of California San Francisco, January 2020.

Keynote Speaker, Math Day Symposium, The University of North Carolina at Charlotte, October 2020.

Virtual COVID-19 Plenary Session, Classification and Data Analysis Group (CLADAG) September, 2021.

27th Myra Samuels Memorial Lecture, Department of Statistics, Purdue University, April 2022.

Invited Presentation, RB Memorial Conference, Koita Center for Digital Health, India, April 2022.

Keynote Speaker, Bioconductor Conference, Virtual, July 2022.

Keynote Speaker, ISCB Annual Conference, Newcastle, UK, August 2022.

Keynote Speaker, University of Pittsburgh, Pittsburgh, PA, March 2023.

Moderator and Panelist, Thomas Francis Jr. Medal Ceremony, University of Michigan, March 2023.

Plenary Speaker, AMNS, Pokhara, Nepal, May 2023.

Keynote Speaker, University of Southern California, Los Angeles, Norris Comprehensive Cancer Center Retreat, California, September 2023.

Keynote Speaker, Data Science for Health Equity Conference, University College London, London, UK, November 2023.

Keynote Speaker, Statistical and Machine Learning Applications in Biomedical Sciences Seminar, University of California Irvine, Irvine, California, February 2024.

Keynote Speaker, Workshop on Translational Research on Data Heterogeneity, Washington University St. Louis, St. Louis, Missouri, April 2024.

Henry Seely Lecture, Vassar College, Poughkeepsie, NY, April, 2024.

Marvin Zelen Statistical Leadership Award Lecture, Harvard University, Boston, Massachusetts, May 2024.

Keynote Speaker, Southern Regional Council on Statistics Annual Summer Conference, Clemson University, Clemson, South Carolina, June 2024.

David Sprott Distinguished Lecture, University of Waterloo, Ontario, Canada, June 2024.

Keynote Lecture, Bayes 2024, Washington DC, October, 2024.

Opening Keynote, Indian Symposium on Machine Learning, Goa, India, December, 2024.

Plenary Lecture, 8th International Conference on The Role of Statistics and Data Science in 4IR, Rajshahi, Bangladesh, December, 2024.

Inaugural PK Sen Memorial Lecture, Calcutta Triennial, Kolkata, India, December, 2024.

Plenary Lecture, Annual Meeting of the International Indian Statistical Association, Kochi, India, December, 2024

Col. Inderjit Sing Memorial Keynote Lecture, 9<sup>th</sup> International Conference on Data Management, Analytics & Innovation, Kolkata, India, January, 2025.

Distinguished Speaker Series in Data Science, Boston University School of Public Health, March, 2025.

Distinguished Lecture in Statistics and Biostatistics, Wake Forest University, April, 2025.

Keynote Speaker, Columbia University School of Public Health Biostatistics Annual Symposium, April, 2025.

Keynote at International Chinese Statistical Association's Applied Statistics Symposium, Storrs, June, 2025.

Keynote at International Forum on Statistics, Renmin University, Beijing, July, 2025.

#### **INVITED TALKS**

P.C. Mahalanobis memorial lecture by selected graduating students, Indian Statistical Institute, Calcutta, India, July 1996.

Seminar organized by diabetic care division, Eli Lilly and Company, July 2000.

Statistics Seminar, Eli Lilly and Company, August, 2000.

Graduate Student Seminar, Purdue University, October 2000.

Statistics Consulting Seminar, Purdue University, November 2000 and March 2001.

Statistics Seminar: University of Florida, January 2001.

Statistics Seminar: Virginia Tech, January 2001.

Statistics Seminar: Rand Corporation, January 2001.

Statistics Seminar: North Carolina State University, February 2001.

Statistics Seminar: Merck Research Labs, February 2001.

Statistics Seminar: Iowa State University, February 2001.

Statistics Seminar: Harvard University, February 2001.

Statistics Seminar: Eli Lilly and Company, February 2001.

Purdue University Technical Assistance Program Seminar, May 2001.

Seminar on optimal design theory, Department of Statistics, Purdue University, December 2001.

Statistics Seminar: Stanford University, July 2002.

New Directions in Experimental Design, Chicago, May 2002.

New Researchers' Conference, UC Davis, July 2003.

Pathways to Future Workshop, San Francisco, July 2003.

Joint Statistical Meetings, San Francisco, August 2003.

IISA conference on Statistics and Probability, May 2004.

Statistics Colloquium, Indian Statistical Institute, Kolkata, July 2004.

Statistics Colloquium, Department of Mathematics, IUPUI, September 2004.

Statistics Colloquium, Department of Health Studies, University of Chicago, October 2004.

Statistics Colloquium, Purdue University, October 2004.

Statistics Colloquium, Texas A & M University, February 2005.

Statistics Seminar, MD Anderson Cancer Research Center, February 2005.

Statistics Colloquium, University of Georgia, April 2005.

ASA Central Indiana local chapter meeting, May 2005.

Joint Statistical Meeting, Minneapolis, August 2005.

Statistics Colloquium, Michigan State University, September 2005.

Biostatistics Seminar, Michigan State University, September 2005.

Statistics Colloquium, University of Connecticut, November 2005.

Biostatistics Colloquium, University of Michigan, January 2006.

Mathematics and Statistics Seminar, Victoria University, Wellington, New Zealand, May, 2006.

Statistics Seminar, University of Auckland, New Zealand, May, 2006.

Weekly Seminar, Division of Cancer Epidemiology and Genetics, The National Cancer Institute, July, 2006.

Joint Statistical Meetings, Seattle, August, 2006.

University of Michigan, Undergraduate Math Club Seminar, November, 2006.

University of Michigan, Dept of Biostatistics, Cancer Research Seminar, November, 2006.

University of Michigan Cancer Center, Cancer Epidemiology Working Group Seminar, December, 2006.

Sixth International Triennial Calcutta Symposium on Probability and Statistics, December, 2006.

IISA conference on Statistics and Probability, January 2007.

Biostatistics Colloquium, University of Minnesota, April, 2007.

WNAR meetings, UC Irvine, June, 2007.

Bayesian Inference for Stochastic Processes (BISP 5), Valencia, June 2007.

Workshop on Nonparametric Bayesian Regression Models, Isaac Newton Institute for Mathematical Sciences, Cambridge, August, 2007.

Current and Future Trends in Non-Parametrics, Columbia, South Carolina, October, 2007.

Michigan Undergraduate Mathematics Conference, MSU, October, 2007.

Department of Biostatistics, UNC, Chapel Hill, February, 2008.

MECC Investigator's meeting: Haifa, Israel, 2008 (Presentation via Web broadcasting). ENAR, Crystal City, Virginia, 2008.

International Conference on Interdisciplinary Mathematical and Statistical Techniques, Memphis. Tennessee, May, 2008.

WNAR Invited Session, JSM, Denver, Colorado, August, 2008.

Statistics Seminar, University of Windsor, April, 2009.

Biostatistics Colloquium, Boston University, April, 2009.

Environmental Statistics Seminar, Department of Biostatistics, Harvard School of Public Health, April, 2009.

Statistics Colloquium, Harvard University, April, 2009.

JSM, Washington DC, August, 2009.

Seventh International Triennial Calcutta Symposium on Probability and Statistics, December, 2009.

Statistics Seminar, Presidency College, Kolkata, January 2010.

IISA conference on Statistics and Probability, Vizag, January 2010.

Statistics Colloquium, Temple University, Philadelphia, April, 2010.

Biostatistics Colloquium, University of Washington, Seattle, June, 2010.

Statistics Seminar, The Fred Hutchinson Cancer Research Center, Seattle, June, 2010.

Special Biostatistics and Bioinformatics seminar, Institut Catalan d' Oncologica, Barcelona, Spain, July, 2010.

Roundtable luncheon on Bayesian Methods in Genomics, JSM, Vancouver, August 2010.

Statistics Colloquium, Ohio State University, October, 2010.

The Eighth IISA International conference on Probability and Statistics, North Carolina State University, Raleigh, April 21-24, 2011.

Joint Statistical Meetings, Miami Beach, August, 2011.

Workshop on Design issues for Health Studies, Isaac Newton Institute of Mathematical Sciences, August, 2011.

Bioinformatics/Statistical Genetics Seminar, Purdue University, November, 2011.

Statistical Concepts and Methods for the Modern World, Colombo, Sri Lanka, December, 2011.

Contemporary Issues and Application of Statistics, Indian Statistical Institute, Kolkata, January, 2012.

Introductory Seminar on Biostatistics at Public Health Foundation of India, January, 2012 ENAR, Washington DC, March, 2012.

NIEHS, Weekly Seminar, Research Triangle Park, North Carolina, March, 2012. Biostatistics Colloquium, University of Wisconsin-Madison, April, 2012.

Eighth Purdue international symposium on statistics, June, 2012. ISBA Meeting, Kyoto, Japan, June, 2012.

Biostatistics Symposium, Beijing, July, 2012.

Joint Statistical Meetings, San Diego, July, 2012.

Roundtable luncheon on Bayesian methods in genetic and environmental epidemiology, JSM, San Diego, July, 2012.

Outstanding Statistics Alumna Seminar, Purdue University, September, 2012.

Biostatistics Colloquium, Department of Preventive Medicine, University of Southern California, November, 2012.

Young Statistician's Meeting, Burdwan University, India, December, 2012.

Eighth International Triennial Calcutta Symposium on Probability and Statistics, December, 2012.

IISA conference in statistics and probability, January, 2013.

ISBA satellite meeting in Varanasi, India, January, 2013.

Statistics Seminar, University of Florida, February, 2013.

Biostatistics Seminar, Emory University, February, 2013.

ENAR Meetings, Orlando, March, 2013.

Rice University, Summer Institute in Statistics, July, 2013.

Department of Biostatistics and Epidemiology, Memorial Sloan-Kettering Cancer Center, July, 2013.

Joint Statistical Meetings, Montreal, August, 2013.

Department of Statistics, Northwestern University, November, 2013.

Ordered Data Analysis, Models and Health Research Methods: An International Conference in Honor of H.N. Nagaraja for His 60th Birthday, Dallas, Texas, March 2014.

ENAR Spring Meetings, Baltimore, Maryland, March 2014.

Midwest Statistics Conference, University of Chicago, March, 2014.

Department of Biostatistics, University of Toronto, School of Public Health, April, 2014.

Invited Panel Member, Annual Health Effects Institute conference, May, 2014.

Invited Panelist, Celebrating women in statistics, North Carolina, May, 2014.

Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data Honoring Professor Malay Ghosh, May, 2014.

International Biometric Conference, Florence, Italy, July 2014.

Bayesian Biostatistics, Zurich, Switzerland, July 2014.

International Indian Statistical Association Conference on Statistics and Probability, Riverside, California, July, 2014.

Student Research Day, Department of Statistics, Biostatistics and Epidemiology, Michigan State University, October, 2014.

Gene-Environment Interaction Satellite Workshop, San Diego, October, 2014.

Biostatistics Seminar, Department of Epidemiology and Biostatistics, George Washington University, November, 2014.

Statistics Seminar, Public Health Foundation of India, New Delhi, December, 2014.

Statistics Seminar, Indian Statistical Institute, New Delhi, December, 2014.

International conference on statistics and its applications, Colombo, Sri Lanka, December, 2014.

Statistics Seminar, Department of Mathematics, University of Maryland College Park, February, 2015.

Roundtable luncheon speaker, invited poster presenter, invited discussant, ENAR Spring Meetings, March, 2015.

Biostatistics Colloquium, Department of Biostatistics and Epidemiology, University of Pennsylvania, April, 2015.

Workshop on Gene-Environment Interaction, Department of Biostatistics, University of Pennsylvania, April 2015.

Annual Meeting of the Society for Epidemiologic Research (SER), Denver, June, 2015.

NIEHS Workshop on Statistical Methods for exposure to environmental mixtures, Durham, July, 2015.

Statistics Colloquium, Division of Biostatistics, UCSF, July, 2015.

Joint Statistical Meetings, Seattle, August, 2015.

Biostatistics Seminar, Department of Biostatistics, Columbia University, August 2015.

Biostatistics Seminar, Department of Biostatistics and Bioinformatics, Georgetown University, October, 2015.

Weekly Colloquium, Department of Mathematics and Statistics, University of South Alabama, November, 2015.

IISA conference on statistics and probability, Pune, December, 2015.

The Second International Conference on Theory and Applications of Statistics, Dhaka, Bangladesh, December, 2015.

Ninth International Triennial Calcutta Symposium on Probability and Statistics, Kolkata, December, 2015.

New England Statistics Symposium, Yale University, April, 2016.

Cancer Control and Population Sciences Seminar Series, Henry Ford Health System, May, 2016.

International Biometrics Society, Brazilian Chapter Meeting, May, 2016.

Workshop on Statistical Methods and Analysis of Environmental Health Data, Mumbai, India, May, 2016.

Gertrude Cox Award Lecture, Washington Statistical Society, June, 2016.

Joint Statistical Meetings, Chicago, July, 2016.

Symposium on Statistical and Computational Methods for Pharmacogenetic Epidemiology of Cancer, Memorial Sloan Kettering Cancer Center, New York, August, 2016.

International Indian Statistical Association Meeting, Corvallis, August, 2016.

Biostatistics Seminar, Dartmouth College, October, 2016.

Biostatistics Seminar, University of North Carolina, Chapel Hill, November, 2016.

Transforming Analytical Learning in the Era of Big Data, National Academy of Sciences, Washington DC, December, 2016.

Interdisciplinary Seminar Series in Quantitative Methods, University of Michigan, February, 2017.

Council of Emerging and New Statisticians invited panel at ENAR Spring Meetings, March, 2017.

Analysis of Biomedical Big Data Workshop, West China Hospital, Sichuan University, Chengdu, May, 2017.

Biostatistics Research Seminar, Vanderbilt University, June 2017.

ISI World Science Congress, Marakech, Morocco, July, 2017.

Building statistical toolbox for cancer research, Dharmais Cancer Center, Jakarta, Indonesia, August, 2017.

ASA Symposium on Statistical Inference, Washington DC, October, 2017.

Women in Statistics and Data Science, La Jolla, October, 2017.

Departmental Colloquium, Biostatistics, McGill University, October, 2017.

Departmental Colloquium, Biostatistics, Emory University, November, 2017.

Departmental Seminar, Biostatistics, University of Pennsylvania, November, 2017.

Program in Quantitative Genetics Seminar, Harvard University, December, 2017.

Conference in Statistics, Colombo, Sri Lanka, December, 2017.

Biostatistics Colloquium, University of Rochester, April, 2018.

Data Science Panel, ASA Chairs Workshop, June 2018.

ISBA World Meeting, Edinburgh, UK, June 2018.

ICSA Conference with the Focus on Data Science, Qindao, China, July 2018

Joint Statistical Meetings, Vancouver, August, 2018.

New York City Exposome Conference, NYC, November, 2018.

Tenth International Triennial Calcutta Symposium on Probability and Statistics, Kolkata, India, December 2018.

Biostatistics Seminar Series, University of Birmingham, March, 2019.

Omics in Environmental Health Research Symposium, University of Southern California, March, 2019.

Data Science Seminar, University of Washington, April, 2019.

Statistics Colloquium, University of Connecticut, April 2019.

Graduate Research Day, University of Toronto, April 2019.

Seventh Workshop on Biostatistics and Bioinformatics, Atlanta, May, 2019.

Analysis of Biomedical Big Data Workshop, West China Hospital, Sichuan University, Chengdu, May 2019.

National Academy of Science Workshop on Environmental Health, Machine Learning and AI, Washington DC, June 2019.

Joint Statistical Meetings, Denver, July, 2019.

All India Institute of Medical Sciences, New Delhi, August, 2019.

George Institute of Global Public Health, New Delhi, August, 2019.

Novartis Pharmaceuticals, Hyderabad, August 2019.

Indian School of Business, Hyderabad, August, 2019.

Boston University Symposium on Statistics in Life Sciences and Health, November, 2019.

Departmental Colloquium, University of Chicago, Department of Biostatistics, November, 2019.

IISA conference on Innovations in Data and Statistical Sciences, Mumbai, December 2019.

Data Sciences for Public Health Summit, Columbia University, January, 2020.

Statistics seminar, Texas A&M University, January, 2020.

ENAR Spring Meeting, Nashville Tennessee, via Web, March, 2020.

L. Adrienne Cupples Award Lecture, Boston University School of Public Health, (Virtually) April, 2020.

National Institute of Statistical Sciences (NISS) Virtual Career Fair, April 2020.

National Council of Applied Economic Research (NCAER) Webinar, April 2020.

University of Michigan, India Advisory Board, April 2020.

Webinar, University of Michigan, Michigan Institute for Data Science (MIDAS), May 2020

Webinar, American Association of Physicians of Indian Origins (AAPI), May 2020.

Webinar, Chennai International Centre, May 2020

Webinar, University of Connecticut, May 2020.

University of Michigan Biosciences Symposium, June 2020.

Indian Scientists Response to COVID-19 (ISRC) Online Symposia, June 2020.

Webinar, China Data Institute, July 2020.

The 30<sup>th</sup> International Biometric Conference, IBC 2020, August, 2020.

Webinar, Barasat Government College, September 2020.

Multi Omics in Environmental Health Workshop, Columbia Mailman School of Public Health, September 2020.

Department Seminar, University of North Carolina at Chapel Hill, September, 2020.

Biostatistics Research and Career Day, McGill University, September 2020.

SAS Day, Oakland University, October 2020.

Biostatistics Seminar, University of Southern Carolina Keck School of Medicine, October 2020.

Statistical Science Seminar, Duke University, October 2020.

Data Science Initiative, Brown University, October 2020.

Conference, Institute for Mathematical and Statistical Innovation (IMSI), University of Chicago, October 2020.

ENAR Webinar Series (WebENARs), November 2020.

Virtual Panel Discussion, Central University of Rajasthan, November 2020.

NIEHS Epidemiology Branch Retreat, December 2020.

ISI 90<sup>th</sup> Foundation Day, December 2021.

Data Science Colloquium, Chennai Mathematical Institute, January 2021.

Colloquium, College of Literature Science and the Arts, University of Michigan, February 2021.

AAAS Annual Meeting, February 2021.

Department Seminar, MSKCC, February 2021.

Calcutta Statistical Association, February 2021.

Data for Public Good Symposium, University of Michigan, February 2021.

Undergraduate Bioinformatics Conference, University of San Francisco California, February 2021.

Data Science Webinar, COPSS/NISS, March 2021.

Department Seminar, Biostatistics and Bioinformatics, Pennsylvania State College of Medicine, March 2021.

NDPH Symposium, University of Oxford, March 2021.

Invited Speaker, Michigan Institute for Data Science, University of Michigan, April 2021.

Virtual ISPOR, Pre-Release Session, April 2021.

Virtual EMR Conference, April 2021.

Biostatistics Colloquium, Harvard University, April 2021.

Cancer Center Grand Rounds, MD Anderson Cancer Center, April 2021.

Michigan Institute for Computational Discovery and Engineering Symposium, University of Michigan, May 2021.

Center for The Advanced Study of India, Perelman School of Medicine, University of Pennsylvania, May 2021.

Workshop, Indian Institute of Technology, Bombay India, May 2021.

Seminar, Tufts University, Boston MA, May 2021.

Symposium, National Academies of Sciences Engineering and Medicine, June 2021.

WNAR Annual Meeting, June 2021.

Virtual, IISA Invited Session, JSM Annual meeting, August 2021

Virtual, JASA Invited Session, JSM Annual meeting, August 2021

Invited Lecture, Department of Zoology, DBT Star College, West Bengal, India, August 2021

COVID-19 in South Asia Workshop, Center for Contemporary South Asia, Watson Institute, Brown University, September 2021

20th Annual Janet L. Norwood Award Lecture, University of Alabama at Birmingham, September 2021

Invited Lecture, School of Public Policy and Governance Tata Institute of Social Sciences, Hyderabad India, September 2021

Invited Lecture, Indian Institute of Public Health Gandhinagar (IIPHG), India, September 2021

Connecticut Valley Colloquium, October 2021

Invited Lecture, GBDM Chennai-Manila Guest Lecture Series, Pfizer, India, December 2021

Invited Lecture, Annual Conference of the Jindal School of Government and Public Policy, India, December 2021

Invited Lecture, Department of Political Science, Jamia Millia Islamia University, India, January 2022

Virtual Symposium, Centre for Statistical Methodology, Centre for the Mathematical Modelling of Infectious Diseases, Centre for Epidemic Preparedness and Response, London School of Hygiene & Tropical Medicine, United Kingdom, February 2022.

Virtual Ares Seminar, Department of Statistical Sciences and CANSI Ontario, University of Toronto, April 2022.

Virtual Invited Presentation, 2022 Joint Mathematics Meeting, American Mathematical Society, April 2022.

Invited Presentation, UIUC and Purdue Statistics Joint Seminar, University of Illinois Urbana-Champaign, Purdue University, April 2022.

Virtual Invited Lecture, Department of Statistics, Colorado State University, April 2022.

Virtual Invited Seminar, Department of Biostatistics and Data Science (BADS), The University of Texas Health Science Center at Houston, April 2022.

Virtual Invited Presentation, Waterloo Conference in Statistics, Actuarial Science, and Finance, University of Waterloo, April 2022.

Virtual Invited Presentation, The International Lecture Series, The Alan Turing Institute, May 2022.

Virtual Invited Presentation, The Wake Forest 2022 Conference on Analytics Impact, May 2022.

Invited Panelist, New Researchers Conference, George Mason University, August 2022

Virtual Invited Panelist, Workshop on Data Sharing for Good Health & Well-Being: India's Way Forward to Achieving Sustainable Development Goal #3, September 2022

Invited Panelist: National Institute of Statistical Sciences (NISS) Virtual Career Fair, October 2022

Invited Seminar, MRC Biostatistics Unit, University of Cambridge, UK, October 2022

Invited Seminar, Division of Biostatistics, Medical University of Vienna, November 2022

Invited Presentation, A symposium celebrating 50 years of the Cox Model, London School of Hygiene & Tropical Medicine (LSHTM), November 2022

Invited Seminar, Data Science Institute, Universiteit Hasselt, CenStat

Invited Seminar, Department of Biostatistics, University of Warwick, UK, November 2022

Invited Talk and Panel, IISA Annual Conference, Bengaluru, 2022.

Invited Talk, ICHPS, Scotsdale, Arizona, January, 2023.

Keynote talk on Research Day, School of Public Health, Pittsburgh, Pennsylvania, March, 2023.

Webinar, University of Plymouth, Devon, UK, March, 2023.

Invited Talk, Peter Hall Memorial Conference, University of California at Davis, April 2023.

Invited Talk and Panel, Annual meeting of IBS EMR, Turkey (Virtual), May 2023.

Invited Talk, Ashoka University, India, June 2023.

Invited Talk, NIHR Statistics Conference, Sheffield, UK, June 2023.

Dean's Invited Lecture, Brown University, RI, July 2023.

Invited Session, Annual Joint Statistical Meeting, Toronto, Canada, August 2023.

Dean's Invited Lecture, Yale University, CT, August, 2023.

Invited Talk, Women in Statistics and Data Science Conference, Bellevue, WA, October 2023.

Invited Talk, KolGO Trg\_2023 Statistical Workshop, Kolkata, India, December 2023.

Invited Talk, Koita Centre for Digital Health at Ashoka University, Sonipat, India, January 2024.

Invited Talk, Duke-NUS Statistical Methods Talk, Singapore, March 2024.

Invited Talk, Harvard Radcliffe Institute Seminar - Clinical Data Science in the Era of Generative AI, October, 2024.

Invited Talk, BIRS Responsible AI with EHRs Workshop, Alberta, Canada, October, 2024.

Invited Talk, Center for Research on Computation and Society, Harvard University, March, 2025.

Distinguished Speaker Series in Data Science, Boston University School of Public Health, March, 2025.

Invited Talk, University of Wisconsin Madison Statistics Seminar, Madison, Wisconsin, April 2024.

Invited Talks (General Public and Technical Lectures), Vassar College, Poughkeepsie, New York, April 2024.

Invited Talk and Panel Discussion, WNAR, Fort Collins, Colorado, June 2024.

Invited Talk and Panel Discussion, JSM, August, 2024.

Harvard Radcliffe Institute Seminar – Clinical Data Science in the Era of Generative AI, October, 2024.

Invited Talk, BIRS Responsible AI with EHRs Workshop, Alberta, Canada, October, 2024

Invited Seminar, Karolinska Institutet, Stockholm, Sweden, December, 2024.

Invited Talk, ENAR Spring Meetings, New Orleans, March, 2025.

World Health Summit Regional Meeting, Bharat Mandapam, New Delhi, India, April, 2025.

#### LECTURES AT YALE UNIVERSITY

Invited Talk, Health Equity Summit: Advancing Health Equity, Lessons from the Covid-19 Pandemic and Beyond, September, 2024.

Invited Talk, Yale Institute for Foundations of Data Science, October 2024.

#### **GUEST LECTURES AT THE UNIVERSITY OF MICHIGAN**

Epidemiology 818: Methodologic Issues in Cancer Epidemiology, Spring, 2007;

Epidemiology 631: Cancer Prevention Seminar Series, Spring, 2008;

Biostatistics Graduate Spring Open House: Winter, 2008, 2009, 2011; Fall 2013, 2014;

Two-part lecture series on Biostatistics: CTSA Health Services Professional Training Program, University of Michigan, 2008, 2009;

HMP 200: Introduction to Public Health, 2009, 2011, 2012, 2013, 2014; Biostatistics Students' Brown Bag Seminar, 2010;

Faculty Research Luncheon, School of Public Health, 2010;

Epidemiology 813: Statistical Analysis of Longitudinal Data, 2010;

Genome Sciences Training Program Retreat, 2008, 2011;

Biostat 803: Cancer Seminar, Fall, 2013; Fall, 2015; Fall 2017, Fall 2020.

Epid 698/Biostat 815: Fall 2016, Fall 2021.

Michigan Center on Lifestage Environmental Exposures and Disease (M-LEED), Environmental Research Seminar, Winter 2019.

PH 383 (Undergraduate offering on Data Driven Solutions to Public Health): Winter 2018 Environmental Statistics Discussion Series, Winter 2018, Winter 2019.

Medical Scientist Training Program, Fall, 2019.

Summer Omics Learning Seminar Series, "The Michigan Genomics Initiative: An Integrated Data Frame to Enable Precision Health Queries", Summer, 2019

Users' workshop for the Michigan Genomics Initiative (MGI), December, 2019.

Cancer Quantitative Data Sciences Fall Webinar Series, August, 2021.

Provost's Campus Leadership Program, Leadership Panel "What I Wish I had Known", September 2023.

#### **SHORT COURSES**

<u>Bayesian Analysis of Case-Control Data</u>, ASA Continuing Education Short Course offered in JSM, 2006, Seattle. (Joint with Malay Ghosh and Samiran Sinha).

<u>Analysis of Ordinal Categorical Data</u>, ASA Continuing Education Short Course offered in ISM, 2010, Vancouver. (Joint with Alan Agresti).

Quantitative Methods in Genetic Epidemiology (Epid 719), University of Michigan graduate summer session in epidemiology, 2011, 2012. (Joint with Sebastian Zoellner), this is a five-day course with 20 hours of lecture and class work).

<u>A Tutorial on Computational Statistics and Survival Analysis</u>: A two-day short course at the Center for Cancer Epidemiology, Tata Memorial Hospital, Mumbai, 2019.

### SERVICE AND COMMITTEE WORK FOR THE PROFESSION

President-Elect, ENAR, 2025.

Planning Committee, Responsible AI with EHRs Program, Banff International Research Symposium, 2023-2024.

Chair, Committee of Presidents of Statistical Societies (COPSS), 2019-2021.

Board of Trustees, National Institute of Statistical Sciences (NISS), 2018-2020.

Member, Scientific Program Committee, Harvard University School of Public Health Program in Quantitative Genetics, Biobanks: Study Design and Data Analysis, 2018.

Member, Scientific Program Committee, IISA, 2017, Hyderabad, India.

Secretary, ENAR, 2017-2018.

Member, COPSS Presidents' Award Committee, ENAR Representative, 2014-2017.

Member, Scientific Program Committee, annual conference of RBRAS (the Brazilian section of the IBS), 2016.

Member, Scientific Committee, ISBA, Sardinia, Italy, 2016.

Member, Educational Advisory Committee, ENAR Spring Meetings, 2015.

Poster judge, Conference on Women in Statistics and Data Science, 2014.

Member, Scientific Program Committee, Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data: A Conference Honoring Professor Malay Ghosh, 2013-2014.

Elected Member, ENAR Regional Committee (RECOM), 2012-2014.

Overall Program Chair, ASA, Joint Statistical Meetings, Montreal, 2013.

Member, ASA Committee on Meetings, 2012-2014.

Member, ENAR Distinguished Student Paper Award Committee, 2011-13.

Member, Organizing Committee, Midwest Statistics Research Conference, April, 2011.

Member, Scientific Program Committee, International Conference on Probability, Statistics and Data Analysis, IISA, 2011.

Chair, Poster Award Committee, IISA, 2011.

Appointed Member, Regional Advisory Board (RAB) of ENAR, 2010-12.

Secretary/Treasurer, The Committee of Presidents of Statistical Societies (COPSS), 2010-12.

Member, JSM Program Committee, ENAR Representative, 2011.

Member, SBSS Student Paper Award Committee, 2010.

Member, ENAR junior researchers' workshop planning committee, 2009-2012.

Member, ASA Section on Statistics in Epidemiology, Young Investigator and Graduate Student Travel Awards Committee, 2009.

Appointed Member, American Statistical Association Committee on Membership Retention and Recruitment, 2010-2012.

Treasurer/Secretary elect, ASA Section on nonparametric statistics, 2008-2010.

Member, JSM Program Committee, as Program Chair of International Indian Statistical Association, 2009.

Executive Board Member and Program Chair, International Indian Statistical Association, 2007-2009.

Member, Student Paper Award Committee, IISA conference, University of Connecticut, 2008.

Member, David P. Byar award committee, ASA, Biometrics section, 2007.

Appointed Member, American Statistical Association Committee on Minorities in Statistics, 2004-2006.

Executive Board Member and Director of Young Professional Statisticians in International Indian Statistical Association, 2003-2004.

#### SESSIONS ORGANIZED AT PROFESSIONAL MEETINGS

Organizer, Invited session on "Recent Statistical Advances in Cancer Research", JSM 2004.

Organizer and Chair, Session on "Survival Skills for Young Researchers", IISA conference on Probability and Statistics, University of Georgia, 2004.

Organizer, Student Paper Competition (Theory and Methods category), IISA conference, University of Georgia, 2004.

Organizer and Chair, Invited Session on "Recent Advances in Statistical Methods for Genetic Epidemiology", ENAR 2006.

Organizer, Invited Session on "Complex Sampling Designs and Related Inference Issues in Epidemiological Studies", JSM 2006.

Organizer and Chair, Invited Session on "Statistical Challenges in Analyzing Highly Stratified Data", JSM 2006.

Organizer and Chair, Invited Session on "Bayesian Methods in Epidemiology", ENAR 2008

Organizer and Chair, Invited Session on "Statistical challenges in large-scale genetic and genomic studies", JSM, 2008

Organizer, Invited Session on "Bayesian Nonparametrics: New Directions and Novel Applications" IISA, 2008.

Organizer, Invited Session on "Bayesian Nonparametrics", IMS-Asian Pacific Rim Meeting, Seoul, 2009.

Organizer and Chair, Invited Session on "Emerging Statistical Challenges in Cancer Research", JSM, 2009.

Organizer and Chair, Invited Session on "New frontiers of statistical genetics: Fresh perspectives", IISA conference on probability and statistics, Vizag, 2010.

Organizer and Chair, Invited Session on "Analysis of high-dimensional data in genomic/epidemiologic studies." IISA conference on probability and statistics, North Carolina State University, 2011.

Organizer, Invited session on "Shrinkage and Empirical Bayes", JSM 2012.

Organizer, Invited panel on "Career after graduation with a degree in statistics", JSM 2012.

Organizer, Invited session on Bayesian Methods for Biomedical Research, ISBA conference, Banaras Hindu University, 2013.

Organizer, Invited session on Statistical Methods for Cancer Research, IISA conference on probability and statistics, Chennai, 2013.

Organizer, Introductory Overview Lecture on Next Generation Bioinformatics and Beyond: JSM 2013.

Organizer, Invited session on "Statistical Methods for High Dimensional Data: Presentation by Junior Researchers", JSM, 2013.

Organizer, Invited session on "Inside the biostatistical collaborative process", ENAR, 2014.

Organizer, Invited session on "Meta-analysis of gene-environment interactions", ENAR, 2014.

Organizer, Invited session on "The Role of Big Data in Environmental and Spatial Statistics", JSM, 2014.

Organizer, Invited session on "Showcasing work by young researchers in high-dimensional statistics", IASSL, Sri Lanka, 2014.

Organizer, Invited session on "Statistical methods in modern epidemiology", IASSL, Sri Lanka, 2014.

Organizer, Invited session on "Doing Data Science: Straight talk from the front line", ENAR, 2015.

Organizer, Invited session on "Statistical Methods for Next Generation Sequencing Studies", IISA, 2016.

Organizer, Special Invited Presentation, Committee of Presidents of Statistical Societies: Eugenics and Its Intersection with Statistics and Society Over Time: A Conversation, JSM 2020.

## SERVICE AND COMMITTEE WORK AT HOME INSTITUTION

## *University of Florida: 2002-2006*

Member, Organizing Committee, Sixth annual winter workshop, 2004.

Member, Organizing Committee, Fifth annual winter workshop, 2003.

Member, CLAS New Faculty Search Committee, 2003.

Member, IFAS New Faculty Search Committee, 2004.

Member, Graduate Admissions Committee, 2003-06.

Colloquium Coordinator, 2003-2004.

Organizer, Challis Lectureship Award, 2005.

# *University of Michigan: 2006-2024.*

## **DEPARTMENT LEVEL:**

Member, Student Affairs/Alumni Relations Committee, 2006.

Member, Biostatistics New Faculty Search Committee, 2006-10.

Member, Biostatistics Candidacy Examination Committee, 2008.

Member, Biostatistics Curriculum Committee, 2008-10, 2013-2014, 2017-2018.

Chair, Biostatistics Curriculum Committee, 2010-11, 2014-2015.

Member, Biostatistics chair search committee, 2010.

Member, 50/60 Conference Organizing Committee, Biostatistics, 2009.

Member, New Faculty Search Committee, Epidemiology, 2010.

Member, Graduate Student Admissions Committee, Biostatistics, 2011-12.

Member, Organizing committee, A symposium in honor of Professor Jack Kalbfleisch, 2012.

Member, Committee on Endowment, Biostatistics, 2012-2013.

Member, Cancer Epidemiology Faculty Search Committee, Epidemiology, 2013.

Member, Genomics Faculty Search Committee, Biostatistics, 2014.

Member, Ad Hoc Chair Search Committee, Biostatistics, 2014.

Member, Kidney Epidemiology and Cost Center (KECC) Faculty Search Committee, Biostatistics, 2015.

Chair, Junior Faculty Search Committee, Biostatistics, 2016.

Member, Junior Faculty Search Committee, Epidemiology, 2016.

Member, Open Rank Faculty Search Committee, Biostatistics, 2017.

Member, Kidney Epidemiology and Cost Center (KECC) Research Faculty Search Committee, Biostatistics, 2017.

Member and Co-Chair, Organizing Committee, Biomedical Statistical Modeling: A conference in honor of Jeremy MG Taylor, 2016-2017.

Member, Biostatistics faculty search committee, 2018.

Member, Biostatistics Award and Nomination Committee, 2018-2020.

Member, Biostatistics Curriculum Committee, 2018.

Co-Chair, Committee on developing a MS track in Health and Data Science, 2018-2019.

#### **SCHOOL LEVEL:**

Member, Diversity Committee, School of Public Health, 2009-11.

Co-Chair, Diversity Committee, School of Public Health, 2011-12.

Member, Celebration Committee for Ken Warner's Term as a Dean, 2010.

Member, School Committee on Global Public Health, 2011-12.

Service on academic misconduct review panel, Office of academic affairs, School of Public Health, 2012.

Member, Advisory Committee on Academic Programs (ACAP), 2013-2015.

Member, Retained organization working group, 2013-2014.

Member, Global Public Health Faculty Advisory Committee, 2014-2016.

Co-Chair, SPH India Interest Group, 2014-2015.

Member, Global Public Health Professorship Advisory Committee, 2014-2015.

Member, SPH 75th Anniversary Celebration Committee, 2016.

Member, SPH Dean Search Advisory Committee, 2017.

Biostatistics representative to Deans and Chairs committee, 2018-2024.

#### INSTITUTIONAL LEVEL:

Member, Center for Statistical Consulting and Research (CSCAR) Executive Committee, 2016-2018.

Member, School of Nursing Oncology Senior Faculty Search Committee, 2016-2017.

Member, Quantitative Methods in Social Sciences Curriculum Revision Committee, 2016-2017.

Member, Rackham Faculty Recognition Award Committee, 2017-2019.

Member, Global Health Equity Initiative (M-Globe) Visioning Committee, 2019-2020.

Member, Institute of Social Research, Director Search Advisory Committee, 2020.

Member, Information Technology Council Faculty Representative, 2019-2020

Member, Thomas Francis Jr. Medal Selection Committee, 2022-2023.

Vice Chair, AI Resources/Key Investments Committee, OVPR, 2023-2024.

Member, High Performance Computing Committee (HPCC), OVPR, 2023-2024.

Member, Rackham Distinguished University Professor Selection Committee, 2023-2024.

### MICHIGAN INSTITUTE OF DATA SCIENCE:

Chair, Faculty Engagement and Recruitment Committee, 2017-2018.

#### UNIVERSITY OF MICHIGAN ROGEL CANCER CENTER:

Member, Search committee for a senior faculty in Cancer Epidemiology and for Associate Director of Cancer Prevention and Control at the University of Michigan Rogel Cancer Center, 2012.

Member, Senior Leaders Committee, Executive Leaders Committee, Internal Advisory Committee, Committee on Space Allocation, Committee on Shared Resource Services, Committee on Education and Training, Committee on Cancer Informatics. 2016-

# Yale University: 2024-

Yale School of Public Health, Senior Leadership Team, 2024-

Discovery Planning Group, YSPH Representative, Campus Planning Initiative, 2024

Steering Committee Member, Yale Center for Research Computing, 2024-

Computation and Data Services Advisory Committee, 2024-

Member, Yale Cancer Center Executive Committee and Director's Cabinet, 2024-2025.

AI Faculty Task Force, 2024-

Steering Committee, Women Faculty Forum (WFF), Yale University, 2025-

Co-chair: Data Science Fellowship Committee, Graduate School of Arts and Sciences, 2025-

#### **DISSERTATON COMMITTEES**

# University of Florida: 2002-2006

Tyson G. Brown Department of Sociology, Member, Master's thesis committee, (2003).

Zhaojie Wang Department of Statistics Member, Master's thesis committee, (2003).

Lynette Bardolf Department of Audiology, Member, Doctoral committee (2004-06).

Jangyul Kim Department of Journalism and Mass Communications, Doctoral committee

(2005-06)

# University of Michigan: 2006-

Kristin Meyers Epidemiology, Member, Ph.D. Dissertation committee, (2007-2009).

Ali Kamal Environmental Health Sciences (EHS), Member, Ph.D. Dissertation committee,

(2007-2009).

David Cantonwine EHS, Member, Ph.D. Dissertation committee, (2007-2009).

Laila Poisson Biostatistics, Member, Ph.D. Dissertation committee, (2008-2009).

Ying Guo Biostatistics, Member, Ph.D. Dissertation committee, (2009-2010).

Huang-Tz Ou Pharmacy, Member, Ph.D. Dissertation committee, (2009-2010).

Yoon-Hyeong Choi EHS, Member, Ph.D. Dissertation committee, (2008-2011).

Paula Johnson EHS, Member, Ph.D. Dissertation committee, (2009-2012).

Kathleen Bush EHS, Member, Ph.D. Dissertation committee, (2009-2011).

Jian Kang Biostatistics, Member, Ph.D. Dissertation committee, (2009-2011).

Kelly M. Bakluski EHS, Member, Ph.D. Dissertation committee, (2009-2012).

Feng-Ciao Su EHS, Member, Ph.D. Dissertation committee, (2009-2013).

Darlene Bhavnani Epidemiology, Member, Ph.D. Dissertation committee, (2010-2012).

Erin Bakshis Epidemiology, Member, Ph.D. Dissertation committee, (2010-2013).

Robert William EHS, Member, Ph.D. Dissertation committee, (2011-2012).

Kononowech

Kari Sant EHS, Member, Ph.D. Dissertation committee, (2011-2012).

Kelly Ferguson EHS, Member, Ph.D. Dissertation committee, (2011-2014).

Chun-Yi Wu Epidemiology, Member, Ph.D. Dissertation committee, (2011-2012).

Stephanie Stenzel Epidemiology, Member, Ph.D. Dissertation committee, (2012-2013).

Erin Payne Epidemiology, Member, Ph.D. Dissertation committee, (2012-2013).

Juan Shen Statistics, Member, Ph.D. Dissertation committee, (2012-2014).

James Couch EHS, Member, Ph.D. Dissertation committee, (2013-2015).

Zhuqing Liu Biostatistics, Member, Ph.D. Dissertation committee, (2013-2014).

Krystin Karlson EHS, Member, Ph.D. Dissertation committee, (2013-2014).

Mark Reppell Biostatistics, Member, Ph.D. Dissertation committee, (2013-2014).

Abram Wagner Epidemiology, Member, Ph.D. Dissertation committee, (2013-2015).

Andre Oliviera

Markon

Epidemiology, Member, Ph.D. Dissertation committee, (2014).

Nhat Ho Statistics, Member, Ph.D. Dissertation committee, (2014-2017).

Ritabrata Das Biostatistics, Member, Ph.D. Dissertation committee, (2014-2015).

Lauren Johns EHS, Member, Ph.D. Dissertation committee, (2015-2017).

Ben Roberts EHS, Member, Ph.D. Dissertation committee, (2015-2017).

Paola Filigrana Villegas	Epidemiology, Member, Ph.D. Dissertation committee, (2015-2018).
Sayantan Das	Biostatistics, Member, Ph.D. Dissertation committee, (2015-2017).
Kristen Brown	Epidemiology, Member, Ph.D. Dissertation committee, (2014-2017).
Sonia Hegde	Epidemiology, Member, Ph.D. Dissertation committee, (2016-2018).
Amira Akeer	EHS, Member, Ph.D. Dissertation committee, (2016-2019).
Naveen N Narisetty	Statistics, Member, Ph.D. Dissertation committee, (2015-2016).
Vivienne Hazzard	Nutritional Sciences, Member, PhD Dissertation committee (2016-2019).
Max Aung	EHS, Member, PhD Dissertation committee (2016-2019).
Thomas Gonzalez	EHS, Member, PhD Dissertation committee (2016-2018).
Weiye Wang	Epidemiology, Member, PhD Dissertation committee (2016-2018).
Marco Benedetti	Biostatistics, Member, PhD Dissertation committee (2016-2018).
Xin Wang	EHS, Member, PhD Dissertation committee (2017-2020).
Ning Ding	EHS, Member, PhD Dissertation committee (2017-2020).
Zoey Laskaris	Epidemiology, Member, PhD Dissertation committee (2017-2020)
Pahriya Ashrap	EHS, Member, PhD Dissertation committee (2018-2020).
Amber Cathey	EHS, Member, PhD Dissertation committee (2018-2020).
Lan Luo	Biostatistics, Member, PhD Dissertation committee (2018-2020).
Katharine Brieger	Epidemiology, Member, PhD Dissertation committee (2019-2020)
Lu Xia	Biostatistics, Member, PhD Dissertation committee (2018-2020).
Wei Hao	Biostatistics, Member, PhD Dissertation committee (2019-2021).
Abhay Hukku	Biostatistics, Member, PhD Dissertation committee (2020-2021)
Tung Phung	Epidemiology, Member, PhD Dissertation committee (2019-2022)
Aleda Leis	Epidemiology, Member, PhD Dissertation committee (2019-2022)
Viktoryia Kalesnikava	Epidemiology, Member, PhD Dissertation committee (2019-2022)
Mia Peng	Epidemiology, Member, PhD Dissertation committee (2019-2022)
Aliya Alimujiang	Epidemiology, Member, PhD Dissertation committee (2019-2022)
Cesar Higgins Tejera	Epidemiology, Member, PhD Dissertation committee (2020-2022)
Guangyu Yang	Biostatistics, Member, PhD Dissertation committee (2020-2022)
Yuqi Zhai	Biostatistics, Member, PhD Dissertation committee (2021-2022)

Boya Zhang Epidemiology, Member, PhD Dissertation committee (2021-2022)

Mengbing Li. Biostatistics, Member, PhD Dissertation committee (2022-2025)

Soumik

Purakayastha Biostatistics, Member, PhD Dissertation committee (2023-2024)

Yichen Si Biostatistics, Member, PhD Dissertation committee (2022-2023)

Ram Siwakoti Environmental Health Sciences, Member, PhD Dissertation committee (2022-2025)

Shannon Park Environmental Health Sciences, Member, PhD Dissertation committee (2023-2025)

Harry Momo Epidemiology, Member, PhD Dissertation committee (2023-2024)

Savannah Sturla Environmental Health Sciences, Member, PhD Dissertation committee (2023-2025)

Haley Jenkins Environmental Health Sciences, Member, PhD Dissertation committee (2023-2024)

## <u>Invited External Member of a Dissertation Committee</u>

Yanyan Zhu Department of Biostatistics, Boston University, Member, Ph.D.

Dissertation committee, (2009-2011)

#### **DOCTORAL STUDENTS**

## *University of Florida*: 2002-2006

- 1. Samiran Sinha, (Ph.D. 2004; Co-chair with Malay Ghosh) Professor, Department of Statistics, Texas A & M University.
- 2. Li Zhang, (Ph.D. 2006; Co-chair with Malay Ghosh) Professor, Division of Hematology and Medical Oncology Department of Medicine UCSF Helen Diller Family Comprehensive Cancer Center and Department of Epidemiology and Biostatistics University of California, San Francisco.
- 3. Upasana Santra, (Ph.D. 2007; Co-chair with Malay Ghosh), Lecturer, Valencia Community College, Florida.

# University of Michigan: 2006-2024

- 4. Jaeil Ahn, (Ph.D. 2011; Co-chair with Timothy Johnson), Associate Professor, Georgetown University, Division of Biostatistics and Bioinformatics.
- 5. Philip Simon Boonstra, (Ph.D. 2012; (Co-chair with Jeremy MG Taylor). Associate Professor, Department of Biostatistics, University of Michigan.
- 6. Shi Li, (Ph.D. 2013) Statistician at Genentech, California.
- 7. Yi-An Ko, (Ph.D. 2014), Research Associate Professor, Department of Biostatistics, Emory University.
- 8. Zhichao Sun, (Ph.D. 2016; Co-chair with Thomas Braun). Senior Biostatistician at Boehringer Ingelheim Pharmaceuticals, Connecticut.
- 9. Zihuai He, (Ph.D. 2016; Co-chair with Min Zhang), Research Assistant Professor, Neurology & Neurological Sciences, Research Assistant Professor, Medicine Biomedical Informatics Research, Stanford University.

- 10. Yin-Hsiu Chen, (Ph.D, 2017) Quantitative/Data Analyst, Google Inc, California.
- 11. Wenting Cheng, (Ph.D, 2017; Co-chair with Jeremy MG Taylor). Statistician, Biogen Inc, Boston, Massachusetts.
- 12. Yanyi Song, (Ph.D, 2020; Co-chair with Xiang Zhou). Data Scientist at Facebook/Meta.
- 13. Zhongsheng Chen, (Ph.D 2020; Co-chair with Michael L Boehnke). Senior Biostatistician II, Vertex, Boston Massachusetts.
- 14. Zhangchen Zhao, (Ph.D, 2021; Co-chair with Shawn Lee). Statistician, Eli Lilly & Co.
- 15. Tian Gu, (Ph.D., 2021) Co-chair with Jeremy MG Taylor). Assistant Professor in Biostatistics, Columbia University, Mailman School of Public Health.
- 16. Youfei Yu, (Ph.D., 2021; Co-chair with Min Zhang). Biostatistics Manager, Amgen Inc.
- 17. Yongwen Zhuang, (Ph.D, 2022, Co-chair with Shawn Lee). Biostatistician, Illumina Inc.
- 18. Jonathan Boss, (Ph.D, 2023, Co-chair with Jian Kang). Biostatistician, Eli Lilly & Co.
- 19. Maxwell Salvatore, (Ph.D, 2024, Co-chair with Leigh Pearce), Post-doctoral fellow, Division of Biostatistics, Epidemiology and Informatics, University of Pennsylvania School of Medicine.
- 20. Jiacong Du, (Co-chair with Xu Shi).
- 21. Ritoban Kundu, (Co-chair with Peter Song)
- 22. Youqi Yang (Co-chair with Walter Dempsey)

#### UNDERGRADUATE STUDENT SUPERVISED

Yale University: 2024-

Timothy Ward (2024-2025), Winner of Statistics and Data Science Outstanding Thesis Award.

### GRADUATE STUDENT RESEARCH ASSISTANTS SUPERVISED

Yale University: 2024-

Yi Ren (2024-2025).

*University of Michigan: 2006-2024* 

Jaeil Ahn (2007-2008), Xi Xia (2007-2008), Nabihah Tayob (2008-2009); Fei Wang (2008-2011); Shi Li (2008-2009); Ye Yang (2010-2011); Zhichao Sun (2011-2013); Jie Zhou (2011); Hui-yu Yang (2012); Matthew O'Connor (2012); Yebin Tao (2012-2014); Zihuai He (2013-2016); Zhichao Sun (2011-2016); Yin-Hsiu Chen (2013-2017); Sarah Scarlett (2013-2014); Greyson Liu (2015-2016); Miao Wang (2016-2017); Zhangchen Zhao (2016); Jingyi Zhai (2016); Lu Xia (2016); Jonathan Boss (2016-); Youfei Yu (2016-); Vivian Xia (2018); Ryan Ross (2018); Robert Peng (2018); Jiacong Du (2019-2020); Chen Chen (2021-2022); Spencer Haupert (2021-)2022; Ritoban Kundu (2021-); Lauren Zimmermann (2021-2022) Youqi Yang (2021-); Sabir Meah (2021-2023); Weijia Jin (2021-2023), Lillian Rountree (2023-2024), Yi-Ting Lin (2023-2024) Kalpana Das (2024), Yiren Hou (2024), Xingran Chen (2024).

#### POST DOCTORAL FELLOWS

*University of Michigan: 2006-2024* 

Jason P Estes (PhD in Biostatistics, UCLA), 2016-2017. Statistician at Google Inc.

Lauren Beesley (PhD in Biostatistics, University of Michigan), 2018-2021. Feynman Distinguished Postdoctoral Fellow (2021-2023); Staff Scientist/Statistician (2023-) Analytics, Intelligence and Technology Division: Information Systems and Modeling, Los Alamos National Laboratory.

Max Aung (PhD in Environmental Health Sciences, University of Michigan), 2019-2020. Assistant Professor, University of Southern California, KECC School of Medicine.

# *Yale University: 2024-*

Yiran Wang (PhD in Statistics, University of Waterloo), 2024-. Sean McGrath (PhD in Biostatistics, Harvard University), 2025-

#### **TEACHING EXPERIENCE**

1996	Course: Algebra and Trigonometry for freshmen. Purdue University, Dept. of Mathematics
1997, 1998, 2001	Course: Probability for management students. Purdue University, Dept. of Statistics
1997	Course: Probability and Basic Statistics for math education majors. Purdue University, Dept. of Statistics
1999, 2001	Course: Regression Analysis and other Multivariate Methods for graduate students in other disciplines. Purdue University, Dept. of Statistics
2001	Course I: Introduction to Experimental Statistics (I) for graduate students in other disciplines.  Course II: A Data-oriented Introduction to Basic Statistics for undergradual mathematics and actuarial Sciences majors.  Purdue University, Dept. of Statistics
2002, 2004	Course: Statistical Methods for Social Sciences II. University of Florida, Dept. of Statistics
2002, 2003, 2005	Course: Statistical Methods for Social Sciences I University of Florida, Dept. of Statistics
2004	Introduction to Experimental Statistics (I) for graduate students in other discipline (Distance learning course, lectures broadcast via television network). Purdue University, Dept. of Statistics
2005	Introduction to Experimental Statistics (II) for graduate students in other discipline (Distance learning course, lectures broadcast via television network). Purdue University, Dept. of Statistics
2006, 2007	Introduction to Biostatistics and Applied Biostatistics for graduate students in the school of public health
2008, 2011	(large service course for Master's level students in public health). University of Michigan, Dept. of Biostatistics

2009	Categorical Data Analysis. (For MS and PhD in Biostatistics) University of Michigan, Dept. of Biostatistics
2014	Genetic associations and interactions (Special topics Ph.D. level course for doctoral students in Biostatistics, Statistics and Bioinformatics). University of Michigan, Dept. of Biostatistics
2017, 2019.	Modern Statistical Methods for Epidemiological Studies (An advanced methods course for doctoral students in Epidemiology and MS students in Biostatistics.)
2021	University of Michigan, Dept. of Biostatistics and Epidemiology
2010,2011 2016,2018. 2022, 2023	Biostatistical Investigations, Project based capstone course for MS Biostatistics. University of Michigan, Dept. of Biostatistics
2023	Seminal controversies in Statistics, PhD Elective, University of Michigan, Dept. of Biostatistics

#### SPECIAL EDUCATIONAL INITIATIVE AND OUTREACH

**Founding Director**, 2015-2024: Undergraduate Summer Institute in Biostatistics: Transforming Analytical Learning in the Era of Big Data (BDSI), a summer institute designed to train undergraduate students interested in data science. <a href="http://bigdatasummerinstitute.com">http://bigdatasummerinstitute.com</a>, A SIBS program since 2019. During the ten years of my leadership of this program, this summer institute trained 357 students with 185 female trainees (51%) and 60 underrepresented minority students (17%), recruited internationally. More than 60% of the past trainees have pursued graduate school in quantitative disciplines.

**Founding Director**, 2025-Present: Undergraduate Summer Immersion in Biostatistics at Yale (BDSY): Transforming Analytical Learning in the Era of Big Data, A summer institute designed to train undergraduate students interested in data science. <a href="http://sph.yale.edu/bdsy">http://sph.yale.edu/bdsy</a>.

**Founding Advisor**, 2025-Present: Summer Program in Biomedical Data Sciences at Ashoka University (BDSA): A summer institute designed to train undergraduate students and early career researchers interested in data science. <a href="https://www.ashoka.edu.in/bdsa2025/">https://www.ashoka.edu.in/bdsa2025/</a>

Online Nature Masterclasses Courses: Data Analysis: Planning and Preparing and Data Analysis: Conducting and Troubleshooting.

Massive Open Online Courses (MOOC): *Linear Regression Modeling for Health Data* and *Logistic Regression and Prediction for Health Data*. With Phil Boonstra, in Coursera.

#### MEDIA MENTIONS SUMMARY

Dr. Mukherjee's COVID-19 research on India received numerous mentions in respected media outlets including but not limited to the BBC News, NPR, Reuters, the New York Times, The Hindu, The Times of India, The Wire, The Quint, Bloomberg News, The New Yorker, The Australian Broadcasting Company, Der Spiegel, The Wall Street Journal, and the Washington Post. She has appeared in more than 100 television shows including CNN, BBC World, India Today, NDTV, National Television of Singapore and the AM show in New Zealand. A more comprehensive list can be found on the media page of the Center for Precision Health Data Science Website. <a href="https://sph.umich.edu/precision-health-data-science/news/media.html">https://sph.umich.edu/precision-health-data-science/news/media.html</a>. Following summary reflects the volume of media mentions.

Total Coverage: 1,043 2020 Total Reach: 5.8 Billion

Average Reach per Media Clip: 5.56 Million

2021 Total Coverage: 5,881

Total Reach: 18 Billion

Average Reach per Media Clip: 3 Million

2022

Total Coverage: 430 Total Reach: 2.5 Billion

Average Reach per Media Clip: 6.2 Million

(As of 5/2/2022)