Curriculum Vitae

Samrachana Adhikari, PhD

Contact Information
Office address: 180 Madison AvenueNew York, NY, USA Work phone: 646-501-3647
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Current Appointments and Leadership Positions

2018 - Present Assistant Professor (Tenure eligible), Division of Biostatistics
Affiliated faculty, Section for Global Health
Department of Population Health (DPH)
New York University School of Medicine (NYUSOM)

2019 - Present Visiting Faculty, NepAl Applied Mathematics and Informatics Institute for Research (NAAMII)
Kathmandu, Nepal

Education and Training

05/2011 Bachelor of Arts, Mathematics and Economics (Summa Cum Laude)
Mount Holyoke College (MHC), South Hadley, MA

05/2012 Master of Science, Statistics

08/2016 Doctor of Philosophy, Statistics
Carnegie Mellon University (CMU), Pittsburgh, PA

07/2018 Postdoctoral research fellow in Statistics, Mentor: Sharon-Lise Normand
Department of Healthcare Policy, Harvard Medical School, Boston, MA

Awards, Honors, and Memberships in Honorary Societies

2009 Paul F. Mcguire Bequest Fund (MHC)
– fellowship to accomplish an internship at MannDeshi Microfinance, India

2010 Research Experience for Undergraduate Fellowship
National Institute of Mathematical and Biomedical Sciences, University of Tennessee, Knoxville TN

2011 Summa cum laude in Statistics, Statistics Department Award, Phi Beta Kappa, MHC

2013 Data Science for Social Good Fellow, University of Chicago

2015 Mihaela Serban Memorial Travel Award, CMU

2016 AIS SIGHealth Best Paper Award

2019 AcademyHealth and the Robert Wood Johnson Foundation Paradigm Community
Selected to Participate in Revolutionizing the Health Services Research Paradigm: A Design Thinking-based Learning Community

2020 Johnson & Johnson Women in Stem (WiSTEM2D) Scholar in Math

Bibliography
Peer-reviewed Publications

1. S. Somanchi, **S. Adhikari**, A. Lin, E. Eneva, R. Ghani. "Early prediction of cardiac arrest (code blue) using electronic medical records". KDD '15 Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, 2119–2126. New York, NY, USA. 2015.
Winner of the AIS SIGHealth 2016 Best Paper Award Competition

2. **S. Adhikari** and B. Dabbs. "Social Network Analysis in R: A Software Review." Journal of Educational and Behavioral Statistics, 43(2), 225–253. 2018.

3. J. P. Spillane, M. Shirrell, and **S. Adhikari**. "Constructing "Experts" Among Peers: Educational Infrastructure, Test Data, and Teachers' Interactions About Teaching". Educational Evaluation and Policy Analysis, 40(4), 586–612. 2018.

4. **S. Adhikari**, J. T. Becker, B. W. Junker, F. Lecci, O. L. Lopez, and R. J. Tibshirani. "High-dimensional longitudinal classification with multinomial fused lasso". Statistics in Medicine. 2019.

5. M. Minen, **S. Adhikari**, E. Seng, T. Berk, S. Jinich, S. Powers, and R. Lipton. "Smartphone Based Migraine Behavioral Therapy: A Single Arm Study with Assessment of Mental Health Predictors". npj Digital Medicine. Jun 4;2(1):46. 2019.

6. **S. Adhikari**, S. Rose and S-L. T. Normand. "Non-parametric Bayesian instrumental variable method with heterogenous treatment effects". Journal of the American Statistical Association. 1-26. 2019.

7. T. Sweet and **S. Adhikari**. "A latent space model for network influence". Psychometrika. 1-24. 2020.

8. H. Reynolds, **S. Adhikari**, et al. "Renin–Angiotensin–Aldosterone System Inhibitors and Risk of Covid-1." New England Journal of Medicine. 2020 May 1.

9. R. Haberman, J. Axelrad, A. Chen, R. Castillo, D. Yan, P. Izmirly, A. Neimann, **S. Adhikari**, D. Hudesman, JU. Scher. Covid-19 in immune-mediated inflammatory diseases—case series from New York. New England Journal of Medicine. 2020 Apr 29.

10. B. Dabbs, **S. Adhikari** and T. M. Sweet. Conditionally independent dyads (CID) network models: A latent variable network approach. Accepted. Social Networks Journal.

Current Grant Activities

09/01/2019 - 08/31/2020, Center for the Study of Asian American Health (5U54MD000538-17, Trinh (PI)), Machine Learning to Inform Family- and Population-Centered Approach to Mental Health Programming: Reducing Mental Health Disparities in Asian American Children, **Role:** Pilot Project Principal Investigator

09/01/2016 - 08/31/2020, ParentCorps GOS (Laurie Brotman, PI), Overdeck Family Foundation, Research to Practice: Scaling, **Role:** Co-investigator

09/01/2017 - 08/30/2020, 5R21HL140474 (Rajesh Vedanthan, PI), SPatial Analysis of Cardiovascular Events (SPACE) in the Golestan Cohort Study, **Role:** Biostatistician

09/30/2017 - 09/29/2022, CDC U01DP006293 (Lorna Thorpe and Brian Elbel, PIs), Diabetes LEAD Network: Studying the Impact of Modifiable Community Factors on Geographic Disparities on Diabetes Nationwide, **Role:** Co-Investigator

04/09/2019 - 12/31/2023, NIH-NIMHHD 1R01MD013769-01 (Schoenthaler/ Ogedegbe, PIs), Bridging the evidence-to-practice gap: evaluating practice facilitation as a strategy to accelerate translation of a systems-level adherence intervention into safety net practices, **Role:** Co-Investigator

07/15/2019 - 04/30/2024, NIH-NIA 1R01AG062520-01 (Dodson, PI), Rehabilitation at home using mobile health in older adults after hospitalization for ischemic heart disease, **Role:** Co-Investigator

Invited Talks and Teaching of Peers

Internal Sponsored by NYU Langone Health

11/2017, Invited speaker, Division of Biostatistics, Non-parametric Bayesian Instrumental Variable Method with Heterogenous Treatment Effects, Department Seminar, DPH, NYUSOM

05/06/2019, Invited speaker, Prediction with Rare Outcome: A Cautionary Tale, Department Seminar, DPH, NYUSOM

04/06/2020, Invited speaker, Prediction with Rare Outcome: A Cautionary Tale, Translational Research in Progress Seminar, NYUSOM

Sponsored by all other NYU schools

03/25/2020, Invited speaker, Department of applied statistics, Non-parametric Bayesian Instrumental Variable Method with Heterogenous Treatment Effects, Department Seminar, NYU Steinhardt (Postponed)

04/02020, Invited speaker, Prediction with Rare Outcome: A Cautionary Tale, Perspectives in Public Health: Doctoral Colloquium, Department of Epidemiology, NYU School of Global Public Health

External to NYU Langone Health and all other NYU schools

10/2014, Invited speaker, Statistical Analysis of Real-World Network, Invited talk at the Math and Stat club, Department of Mathematics, Mount Holyoke College, South Hadley, MA

10/2015, Invited speaker, Longitudinal Latent Space Network Model with Application in Education, Invited talk at the MoRRE research group, Department of Educational Psychology Quantitative Methods Program, University of Texas, Austin, TX

08/2016, Invited speaker, Longitudinal Latent Space Network Model with VAR Evolution, Invited session in Social Science Section, Joint Statistical Meeting, 2016, Chicago, IL

10/2017, Invited speaker, Post PhD academic life, Invited talk at the Women in Statistics Group seminar series, Department of Statistics and Data Science, CMU, Pittsburgh, PA

11/2017, Invited speaker, Causal Inference in Observational Data with Unmeasured Confounding, Department Seminar, Department of Statistics and Actuarial Science, University of Waterloo, Canada

05/2019, Invited speaker, Prediction with Rare Outcome: A Cautionary Tale, Annual Thomas Ten Have Symposium on Statistics in Mental Health, New Haven, CT

11/2019, Invited speaker, Survival analysis with spatial risk-factors in R, Rladies NYC, New York, NY

Mentoring and Advising

01/2019 - 08/2019, Jaclyn Szymonifka, Biostatistics, Rotation Advisor

01/2019 - Present, Nicholas Pantaleo, Biostatistics, Rotation Advisor

09/2019 - Present, Tabitha F. Julien, Epidemiology, Dissertation Committee

09/2019 - Present, Melanie Baker, Epidemiology, Dissertation Committee

09/2019 - Present, Jinchun Zhang, Epidemiology, Dissertation Committee

Postdoctoral students supervised and/or mentored

09/2019 - Present, Angela Aifah, T-32 Post Doctoral Fellow, Department of Population Health, Biostatistics advisor on a diversity supplement grant application

Faculty mentored

02/2019 - Present, Alexander F. Glick, Assistant Professor, Department of Pediatrics, Advisor in biostatistics for K23-grant proposal

Teaching Activities

Course Director

Spring 2020, Advanced Regression Modeling, Graduate Level Course for PhD students in Epidemiology

Guest Lecturer

11/2016, **Guest co-lecturer**, Introduction to the Models, Clustering and Graphical Representations for Social Network Analysis: Social Networks Seminar/ CEP991B, Prof. Ken Frank, Graduate Students, Department of Counseling, Educational Psychology and Special Education, Michigan State University

12/2017, **Guest Lecturer**, Assessment Concepts and Methods In Psychiatric Epidemiology/ EPI219, Dr. Deborah Blacker, Graduate Students, Department of Epidemiology, Harvard T.H. Chan School of Public Health

12/2018, **Instructor**, Introduction to Machine Learning, Graduate Students, Nepal Winter School in Artificial Intelligence, Kathmandu, Nepal

02/2019, **Guest co-lecturer**, Introduction to the Models, Clustering and Graphical Representations for Social Network Analysis: Social Networks Seminar, Prof. Ken Frank, Graduate Students, Department of Counseling, Educational Psychology and Special Education, Michigan State University

Institutional, Local/National Service and Related Activity
Institutional Service

08/2018 - Present, Biostatistics Department Seminar, Organizer, Division of Biostatistics, DPH, NYUSOM

08/2018 - 11/2019, Biostatistics Journal Club, Organizer, Division of Biostatistics, DPH, NYSOM

08/2019 - Present, Causal Inference Working Group, Co-organizer, DPH, NYUSOM

09/2019 - Present, Machine Learning for Good Lab, Faculty member, NYU

Professional Service for Professional Organizations

08/2020, Biometric Society, Program chair, American Statistical Association

Organizing Roles in Scientific Meetings

12/2018, Organizing Committee, First Nepal Winter School in Artificial Intelligence, Nepal Applied Mathematical Institute for Research, Kathmandu, Nepal

12/209, Organizing Committee, Nepal Winter School in Artificial Intelligence, Nepal Applied Mathematical Institute for Research, Pokhara, Nepal

01/2020, Organizer and moderator, Invited Session on 'New Avenues for Network Analysis in Health Policy Research: Social networks in the context of selection, peer influence and mediation", International Conference on Health Policy and Statistics, San Diego, CA

Editorial and Journal Positions

2018, Adhoc reviewer, Journal of Behavioral Statistics

2019, Adhoc grant reviewer, National Science Foundation

2019, Proposal reviewer, AI for Social Good Workshop, ICML 2019 and ICRL 2019

2019, Adhoc reviewer, Statistics in Medicine

2019, Review panel, Ontario Research Fund: Advanced Health Technologies

2020, Adhoc reviewer, Clinical Journal of the American Society of Nephrology

2020, Adhoc reviewer, BJPsych Open

Software & code: R packages - publicly available at CRAN

Primary author and maintainer of "`HLSM`: Hierarchical Latent Space Network Model", $\approx$ 19000 downloads as of September 2019.

Co-author of "`CIDnetworks`", $\approx 19,000$ downloads as of September 2019.