The World of Mathematics and Statistics MATH/STAT COLLOQUIUM

SWARTHMORE COLLEGE • DEPARTMENT OF MATHEMATICS AND STATISTICS • COLLOQUIUM SERIES 2021-2022



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Statistical Methods to Support Scientific Evidence in Collaborative Medical Research

Bio: Samrachana Adhikari, PhD is an assistant professor of biostatistics in the department of population health at New York University Grossman School of Medicine. At NYU she conducts research, mentors graduate students, and collaborates with clinical and population-health researchers. Her research lies in the intersection of statistics, data science and medicine. She is interested in developing and implementing statistical and machine learning tools to solve problems motivated by real-world applications in medicine, global health and education.

In this talk, she will discuss the role of statistics and data science in supporting evidencebased decision making in medicine. By using her current collaborative applied research as motivation, she will briefly introduce her methodological work focusing on social network analysis, causal inference with observational data, and prediction modeling. She will thus demonstrate the important roles statisticians and data scientists play in moving the scientific field forward, improving decision making, and minimizing error and biases.

Tuesday, March 29 – SC 199 4:15pm Refreshments, 4:30pm Lecture