The Big Data Summer Institute in Biostatistics (BDSI) is a six-week interdisciplinary training and research program at the University of Michigan School of Public Health. BDSI introduces undergraduate students to the intersection of big data and human health.

Big data for human health and health care is a rapidly growing field that uses quantitative analysis to help solve scientific problems and improve people's lives. Students are introduced to big data, biostatistics, and machine learning through a combination of expert lectures, faculty-mentored research projects, and peer teamwork.

BDSI participants gain the technical computing and problem solving skills needed to work on cutting-edge research at the interface of statistics, computing, and health sciences. Whatever your plans beyond your undergraduate study, BDSI will help you become a highly competitive candidate for desirable positions in graduate school and in industry. The program provides plenty of opportunities to expand your professional and social network.

BDSI is a Summer Institute in Biostatistics (SIBS) program and is sponsored by the National Heart, Lung, and Blood Institute (NHLBI), grant R25HL147207.

In this rigorous summer program, we inspire and encourage students to think beyond textbook boundaries. Students collaborate in small teams on a complex problem involving health big data and create new knowledge.

—Bhramar Mukherjee, Program Director
Chair of Biostatistics, John D. Kalbfleisch
Collegiate Professor of Biostatistics

APPLICATION INFORMATION
• Application opens December 1, 2019
• Applications are reviewed on a rolling basis
• Decisions will be made by March 9, 2020

publichealth.umich.edu/bdsi
Beyond the technical training, the Big Data Summer Institute provides numerous professional development activities including scientific writing, communication, and tips on writing resumes and personal statements. Students also have opportunities to form community with peers from across the country, building a professional network while still in school. Participants get to know the University of Michigan and Ann Arbor area through outings to places like the Huron River, the University of Michigan Museum of Natural History, historic Michigan Stadium, and numerous social outings.

Pursue Your Passion

The Big Data Summer Institute was the single most informative experience of my life in terms of figuring out what I want to do after I graduate. Collaborating with like-minded students to perform research in machine learning with medical data was an invaluable experience for me. Nothing compares to doing exciting work with smart, hardworking peers in a supportive environment.

—Samuel Hawke, BDSI 2019

This program helped me see a bigger world, and I interacted with people who have the same passion about machine learning applications in public health. I was able to work with datasets more complicated than I had imagined. Working with professors and peers definitely made me more productive and organized and helped me develop leadership skills.

—Lucy Shen, BDSI 2018