

Biostatistics

MS MPH PhD

Why Biostatistics?

- Biostatistics is the application of statistics to a wide variety of fields in the biological sciences
- *Best Master's Degree for Jobs* (2016, Forbes)
- Opportunities for employment in academia, industry and government



Our Graduate Degree Programs

Master of Public Health (MPH)

A two-year degree that provides training in applied statistical methods and other core public health disciplines. It involves a practicum where students apply the skills they learn in the classroom to a real public health setting.

Recommended preparation: A first course in probability and statistics is desirable, and any applied statistics courses are also helpful.

Master of Science (MS)

Recommended for students interested in pursuing a PhD or a career in research, this two-year degree provides training in statistical theory and application. Students conduct a formal research thesis under the supervision of a faculty adviser.

Recommended preparation: In addition to the preparation recommended for the MPH, applicants should have strong undergraduate training in mathematics, including multivariate calculus and linear algebra.

Doctor of Philosophy (PhD)

The Graduate Interdisciplinary PhD in Biostatistics degree is a collaboration between the College of Public Health Division of Biostatistics and the Department of Statistics in the College of Arts and Sciences. It offers two specializations: Methodology, which requires advanced theoretical training in statistics; and Public Health, which requires additional courses in a health related field. Students in both programs complete a thesis addressing important methodological issues in biostatistics.

Recommended preparation: Same as the MS in biostatistics, with more weight given toward performance in undergraduate math courses.

Why Biostatistics at Ohio State?

- Ranked #11 *Best Graduate Public Health Programs* among public schools (2015, U.S. News & World Report)
- First accredited public health college in Ohio
- Part of the most comprehensive health sciences program in the nation
- Faculty recognized internationally for their research and teaching accomplishments
- Interdisciplinary PhD program which utilizes expertise from faculty in the Division of Biostatistics in the College of Public Health and the Department of Statistics in the College of Arts and Sciences
- Columbus is the largest and fastest-growing city in Ohio



Opportunities at Ohio State, and Beyond

As a graduate student in biostatistics, you will have the opportunity to collaborate with a wide variety of biomedical researchers.

Previous students have been involved in projects such as:

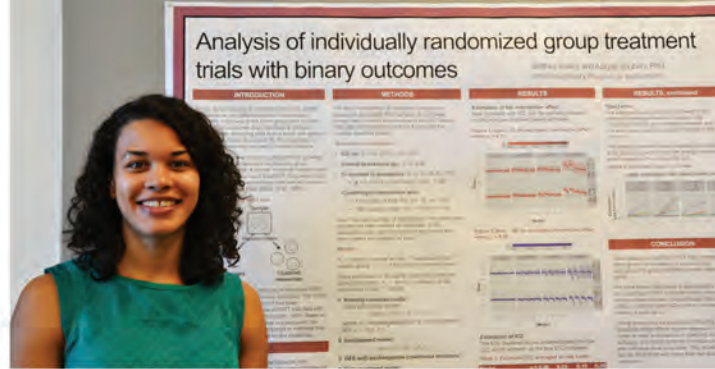
- Cervical cancer prevention
- Pharmacogenomics
- Smoking cessation and tobacco control
- Immunology

Employers of our master's degree graduates have included:

- Battelle Memorial Institute
- Eli Lilly
- Nationwide Children's Hospital
- Mayo Clinic
- Ohio State Center for Biostatistics
- Quintiles

Our PhD graduates have gone on to:

- Faculty positions (University of Arkansas for Medical Sciences, Texas Tech University, Ohio State)
- Private industry (AbbVie)
- Government agencies (U.S. Census Bureau, National Institutes of Health)



Firsthand Experience

Brittney Bailey, PhD candidate (pictured above)

There are many institutions that offer degrees in biostatistics, but the faculty in the Division of Biostatistics at Ohio State makes the program unique. They have created an environment where students feel supported and encouraged while they also push us toward becoming better independent researchers. Students feel comfortable approaching faculty for questions or advice, whether it's related to biostatistics or just about life in general. The faculty are excellent instructors, highly respected researchers and incredible mentors that lead by example and challenge us to be better biostatisticians.

Ann Nwosu, MS '17

Biostatistician I, Center for Injury Research and Prevention, Nationwide Children's Hospital

The MS-Biostatistics program gave me the ability to assess the appropriateness of new or existing statistical methods in an applied research setting. It emphasized applied and theoretical statistics from an approach that was both academic and collaborative. The strongest features of the program were the diversity of methods that we were exposed to and the expertise of the instructors. I always felt like I learned something new and potentially useful to my career.

Fangyuan Zhang, PhD '15

Assistant Professor, Department of Mathematics & Statistics, Texas Tech University

The rigorous training in statistics theory and exposure to real biology problems during my years in the biostatistics interdisciplinary program at Ohio State helped me understand newly developed biological technology faster, and perform better at developing or applying proper statistical methods to solve the statistical problems involved.



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