

# DEPARTMENT OF BIOINFORMATICS & BIOSTATISTICS

*Offering graduate degrees in Bioinformatics and Biostatistics*

The University of Louisville is a state-supported research university located in Louisville, Kentucky. Louisville provides a small town feel with a big city appeal, providing a wide assortment of restaurants, music, art, theater, and sports. Louisville is one of the most culturally unique and economically thriving cities in the state of Kentucky. It is also centrally located to the region's largest cities, such as Cincinnati, Chicago, and Nashville.



## Who We Are

The Department of Bioinformatics and Biostatistics is on the cutting edge of research in health sciences. We are committed to preparing graduate students to meet the demand for well-trained biostatisticians, statistical bioinformaticists, and quantitative analysts/scientists. Our graduates have obtained well-paid positions in the pharmaceutical industry, academia, health sciences, government, and the private sector. Students enjoy classes with a low student-faculty ratio, where they receive training and education from distinguished faculty. Students also have the opportunity to participate in quantitative research in public health, medicine, dentistry, and nursing.

## Biostatistics

Biostatistics is an exciting and challenging discipline in which statistical theory and methods are applied to problems in biology, medicine, and health sciences. Students in biostatistics study advanced statistical techniques and methodology, survival analysis, data analysis, clinical trials, and many other areas of statistics within the health sciences. Students also use the most up-to-date software programs in biostatistics, such as SAS and R. Interested students should have strong quantitative skills and a strong interest in science.

## Bioinformatics

The department offers a bioinformatics emphasis as part of the MS and PhD degrees. It includes teaching and development of biostatistical methods for bioinformatics problems, and collaboration with applied research groups that utilize bioinformatics methods.

## Degrees & Certificate

- **Master of Science (MS) in Biostatistics** is a 30 credit hours program that can be completed in 3 semesters. A fully online version will be available in Fall 2018. The program focuses on industrial placement after graduation. Students also have the option of completing a thesis in a 4th semester, an option typically selected by students interested in pursuing a doctoral degree.

**MS Bioinformatics Track** - Students will be exposed to latest bioinformatics methods that are useful for many health sciences arenas.

- **PhD in Biostatistics** gives students a rigorous introduction to biostatistical research methods while offering flexibility in research specialization. After two years of coursework, students will work closely with a faculty advisor on a research project leading to a doctoral dissertation. There is also an optional bioinformatics emphasis in the PhD.
- **Master of Public Health (MPH)** with a concentration in Biostatistics provides students with a mix of quantitative skills as well as wide exposure to the field of public health. The MPH consists of 44 credit hours of coursework.
- **Certificate in Biostatistics** consists of 15 credit hours, and all coursework is transferrable to the MS in Biostatistics.

## Accreditation

The University of Louisville School of Public Health and Information Sciences is accredited by the Council on Education for Public Health.

UNIVERSITY OF  
**LOUISVILLE**<sup>®</sup>

SCHOOL OF PUBLIC HEALTH  
& INFORMATION SCIENCES