

BIOS

BIostatistics and Bioinformatics [BIOS]

**GREAT OPPORTUNITY
LIES WITHIN THE DATA**
sph.emory.edu/bios



EMORY

ROLLINS
SCHOOL OF
PUBLIC
HEALTH

INFORM DECISIONS, IMPACT RESEARCH, IMPROVE PUBLIC HEALTH

The mission of Rollins' BIOS department is to improve public health by developing and applying analytic methods that are motivated by pressing biomedical problems; emerging big and complex datasets; and theories of mathematics, statistics, and computer science.

We advance the science and practice of biostatistics through research, teaching, and collaboration.

BIOS is more than an academic department - it's a family. Our faculty and staff forge relationships with students from day one and build relationships that last beyond graduation. Through small core classes,

expansive electives, and departmental activities, we're able to offer our students individualized attention and opportunities to hone their interests and to develop skills through work and research experiences.

At its core, statistics is a collaborative field that reaches across multiple disciplines. Statisticians don't just analyze data, they help acquire, interpret, and express it in a language the general public can understand. Rollins students learn from and partner with faculty across Emory University and often collaborate with public health agencies, health departments, and nonprofits.



There is a certain magic when statistical methods transform technical data into meaningful solutions for human health. Biostatistics and bioinformatics provide a wonderful way to use quantitative skills to directly impact public health and the well-being of society. Our field is intellectually intriguing and has become critical for addressing modern scientific barriers by offering innovative design and analysis strategies for complex studies."

John Hanfelt, PhD

Biostatistics Professor and Interim Chair

A photograph of a computer lab with several students working at their desks. In the foreground, a young man with dark hair, wearing a red and white checkered shirt, is looking at a laptop. Behind him, a young woman with long braids is working on a computer. To the right, another young woman is looking at a monitor. The room is brightly lit, and the desks are equipped with multiple monitors and laptops.

WHY STUDY BIOSTATISTICS AT ROLLINS?

- » Build relationships and a professional network.
- » Work directly with renowned scholars in statistical methodology and application.
- » Analyze large-scale epidemiologic studies, next-generation sequencing, and biomedical imaging data.
- » Design and analyze clinical trials.
- » Collaborate with faculty and leaders in the field.
- » Conduct research and gain real-world experience alongside researchers at major national and international institutions and organizations.

The BIOS department seeks students with strong quantitative and communication skills who are interested in the biomedical or health sciences. Admissions requirements for biostatistics degrees include:

- » Multivariate Calculus Linear Algebra (MSPH degrees only)
- » 50th percentile for GRE scores

WE PREPARE FUTURE QUANTITATIVE LEADERS for a wide array of career opportunities available in this fast-moving field. All students gain hands on experience through community engagement programs such as; Applied Practice Experience, Global Field Experience or Rollins Earn and Learn programs putting public health to practice.

DEGREES

BA or BS/MSPH in Biostatistics

MSPH in Biostatistics

MPH in Biostatistics

PhD in Biostatistics

INNOVATION + COLLABORATION

Scientific collaboration is a crucial element to public health and a driving principle for BIOS. Our department is home to various research cores and groups offering comprehensive statistical services to faculty, staff, and students across Emory University. BIOS faculty, students, and staff work in such diverse areas as genomics, epigenetics, microbiome and metabolomics, statistical computing and machine learning, spatial statistics and infectious disease modeling, Bayesian methods, clinical trials, causal inference, survival and event history analysis, latent variable methods, and methods for missing or mismeasured data.

RESEARCH OPPORTUNITIES

BIOS students gain real-world experience and often complete their thesis and dissertation research through partnerships with various research cores and centers including:

- » Biostatistics Collaboration Core in BIOS
- » Georgia Clinical and Translational Science Alliance
- » Center for Biomedical Imaging Statistics
- » World Health Organization
- » Emory University's Center for AIDS Research
- » Winship Cancer Institute
- » The Carter Center



FIND WORK THAT MATTERS

Statisticians are consistently ranked among the top 10 fastest-growing professions in the country. When students earn their graduate degree from Rollins, they enter the workforce prepared—and often, with a great deal of experience under their belts—for vital and fulfilling careers. In addition to their continuing education in doctoral programs, our graduates find employment at such sites as:

- » St. Jude Children's Research Hospital
- » Centers for Disease Control and Prevention (CDC)
- » American Cancer Society
- » Eli Lilly and Company
- » Booz Allen Hamilton, Inc.
- » Memorial Sloan Kettering Cancer Center



From my first day of orientation at Rollins, I felt very comfortable and welcomed by the faculty and staff in the Department of Biostatistics. During my first year, I began working part time as a statistician at the CDC. I continued my job there throughout my time at Rollins and began working full time after graduation. In addition to performing statistical analyses for many studies at CDC, I have had the unique opportunity to be an integral contributor to studies published in peer-reviewed medical journals. I believe I made the right choice for myself and my career by choosing to study biostatistics at Rollins."

Jason Mehal
MPH 2011

APPLY

sph.emory.edu/apply

FUNDING

Rollins offers scholarships, financial aid awards, global field experience awards, and work-study opportunities that allow graduate students to support their academic interests while gaining on-the-job experience. More than half of our students take advantage of paid work opportunities in the field through our groundbreaking Rollins Earn and Learn Program. Students in the PhD program are fully funded by Laney Graduate School with a tuition scholarship and a generous stipend for up to five years of graduate work.

sph.emory.edu/tuition

CONTACT US

Melissa Sherrer, MEd

Associate Director of Academic Programs

msherre@emory.edu

Angela Guinyard

Assistant Director of Academic Programs

angela.guinyard@emory.edu



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