



LOVE DATA? PUT IT TO WORK IN HEALTH.

EXPLORE A CAREER IN BIOSTATISTICS





UNIVERSITY OF SOUTH CAROLINA

Built for health impact from the start.

A degree in biostatistics prepares you to use data to improve health, strengthen research and support decisions that affect real people and communities.

You'll learn how to identify risks, evaluate what works, improve care and protect patients by translating evidence into insights that guide programs, policies and practice.



The math of medicine

Biostatistics is the math of medicine. With a background in biostatistics, you can help make evidence more trustworthy, treatments safer and medicine more effective. You'll know how to analyze trends, detect patterns before they become emergencies and understand what works, for whom and under what conditions.



Improve reliability.

Biostatistics is a big part of what makes AI actually work in medicine and public health. It helps us know whether results are reliable, meaningful and trustworthy.

In our biostatistics program, you'll build more than technical skills and will learn how to think through complex problems, ask better questions and bring creativity to the work. As AI grows across healthcare and public health, our program prepares students to step into that space with confidence.



ALEXANDER MCLAIN

ASSOCIATE PROFESSOR OF BIOSTATISTICS

Make modern medicine work.

Biostatistics sits at the heart of modern medicine - from designing clinical trials, to discovering drug targets, to modeling disease outbreaks. The degree equips students with the analytical tools and real-world experience to tackle today's most pressing health challenges.

You'll take rigorous coursework and collaborate with faculty in statistics, machine learning, and AI, and be ready to lead in academia and industry. **If you are ready to turn data into discovery, come to our program!**



ENAKSHI SAHA, PHD

ASSISTANT PROFESSOR OF BIOSTATISTICS



Answer modern questions.

Biostatistics is for those who want to do more than analyze numbers.



STELLA SELF

ASSOCIATE PROFESSOR OF BIOSTATISTICS

It's for students who want to use data to answer important questions in medicine and public health, from improving treatments to understanding cancer outcomes. Students build strong statistical skills, work closely with faculty and complete a thesis that can lead to a publication, conference presentation or the next step toward a Ph.D. or career in health research.



Biostatistics is where data meets purpose.

As a biostatistician, you can:

TRACK DISEASE AND HEALTH TRENDS

Analyze patterns in cancer, chronic disease, infectious disease, maternal health, aging, environmental exposure and other population-level health issues.

IDENTIFY RISK FACTORS

Use data to understand who is more likely to experience certain health outcomes and why.

EVALUATE HEALTH PROGRAMS AND POLICIES

Determine whether a public health program, screening effort, prevention campaign or health policy is actually working.

SUPPORT HEALTH EQUITY RESEARCH

Analyze differences in outcomes across communities and help identify where systems are failing certain populations.

STRENGTHEN PUBLIC HEALTH RESPONSE

Detect emerging risks, monitor outbreaks, evaluate interventions and help agencies respond faster.

WORK WITH BIG HEALTH DATASETS

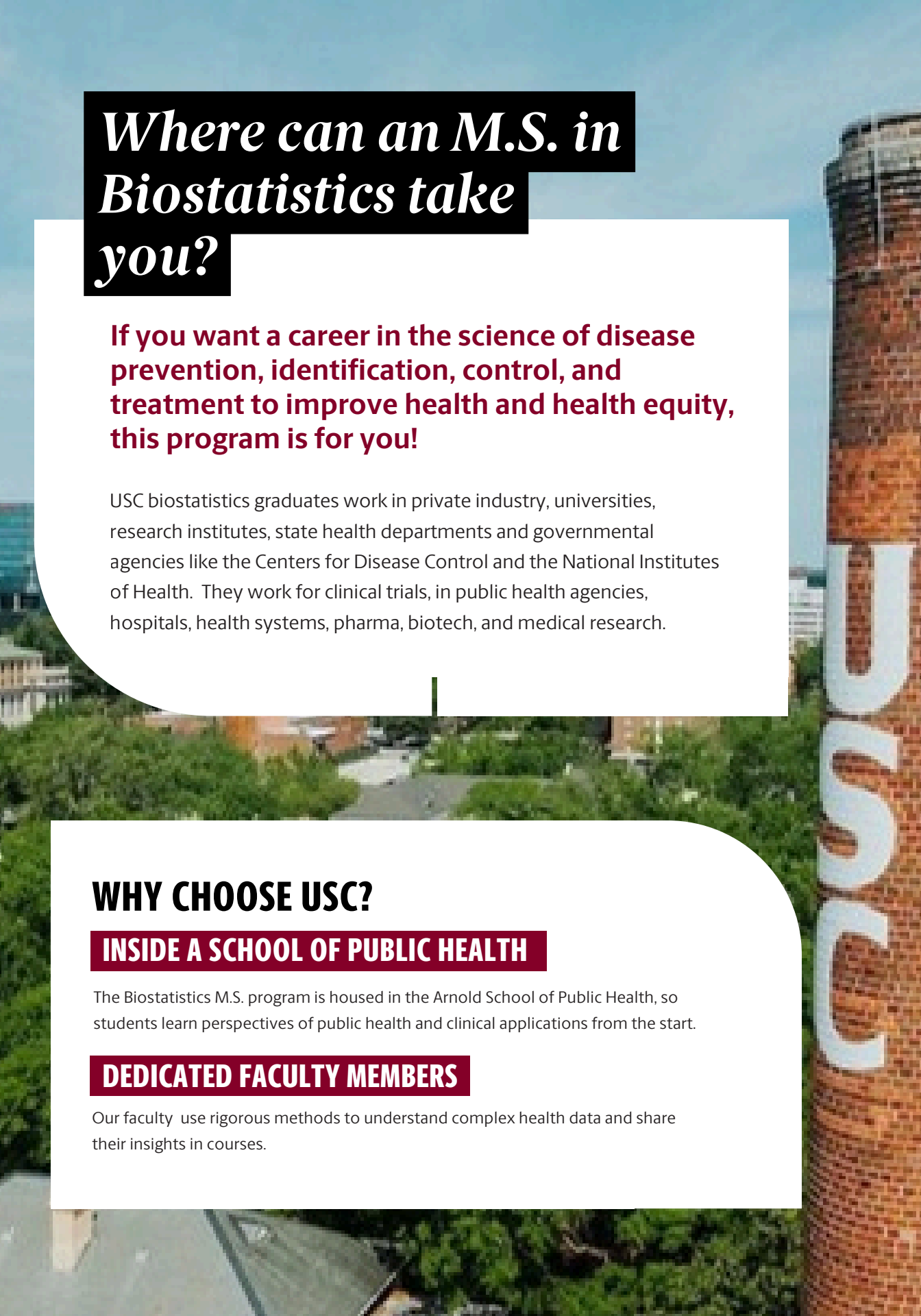
Use electronic health records, insurance claims, surveys, registries and public health surveillance data to answer real-world health questions.



Where can an M.S. in Biostatistics take you?

If you want a career in the science of disease prevention, identification, control, and treatment to improve health and health equity, this program is for you!

USC biostatistics graduates work in private industry, universities, research institutes, state health departments and governmental agencies like the Centers for Disease Control and the National Institutes of Health. They work for clinical trials, in public health agencies, hospitals, health systems, pharma, biotech, and medical research.



WHY CHOOSE USC?

INSIDE A SCHOOL OF PUBLIC HEALTH

The Biostatistics M.S. program is housed in the Arnold School of Public Health, so students learn perspectives of public health and clinical applications from the start.

DEDICATED FACULTY MEMBERS

Our faculty use rigorous methods to understand complex health data and share their insights in courses.

What students are saying



USC has been a place where I've been able to grow academically while also building meaningful friendships and experiences outside the classroom. What really drew me to USC, though, was the sense of community in the department. I remember reading posts on student forums from current and former students describing how the program is relatively small, which allows students and faculty to interact closely,

LEILA MENG



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The program's focus on hands-on projects and real-world applications was highly appealing, and its reputation and the strong network of alumni also played a crucial role in my decision. I knew that USC's biostatistics program would provide me with the skills, knowledge and connections necessary to advance my career in clinical research and public health."





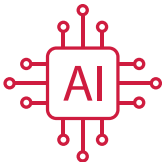
Employment Outlook

Biostatisticians are in demand because healthcare, public health, pharmaceutical, government and research organizations are relying heavily on data to improve care, evaluate treatments and make evidence-based decisions.

The Bureau of Labor Statistics reports that statisticians typically need at least a master's degree and projects employment for mathematicians and statisticians **to grow 8 percent from 2024 to 2034, faster than the average for all occupations.**

BLS also reports that statisticians earned a median annual wage of **$103,300** in May 2024, with the lowest 10 percent earning less than $60,390 and the highest 10 percent earning more than $170,700.

For students with an M.S. in Biostatistics, this outlook reflects growing opportunities to analyze health trends, strengthen research, support clinical trials, improve patient safety and help organizations make better decisions from reliable evidence.



HEALTH DATA & ARTIFICIAL INTELLIGENCE

As **artificial intelligence** becomes more common in health care, biostatisticians play a critical role in making sure these tools are accurate, fair and useful. Biostatisticians help **make AI more accurate, ethical and trustworthy** by designing strong studies, evaluating algorithms, checking for bias and making sure results are based on reliable evidence.

8%
GROWTH IN NEXT 8 YEARS

$103K
MEDIAN ANNUAL WAGE

$170K
TOP EARNERS

Program Structure

2 YEARS. 44 CREDITS.

YEAR 1

FALL 1 — 12 CREDITS

EPID 701: Concepts and Methods of Epidemiology
BIOS 701: Concepts and Methods of Biostatistics
PUBH 700: Perspectives in Public Health
BIOS 709: Basic Software for Public Health
BIOS 711: Introduction to R Programming
BIOS 745: Seminar in Biostatistics

SPRING 1— 10 CREDITS

BIOS 757: Intermediate Biostatistics
BIOS 758: Advanced Linear Models in Biostatistics
STAT 512: Mathematical Statistics
BIOS 712: Introduction to Stata Software

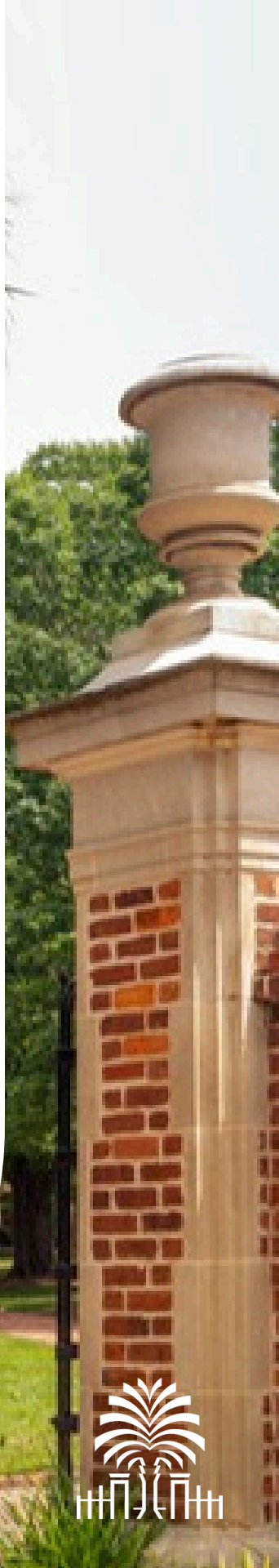
YEAR 2

FALL 2 — 13 CREDITS

BIOS 759: Theory and Methods of Discrete Data Analysis
BIOS 761: Survival Analysis
STAT 513: Theory of Statistical Inference
BIOS 799: Thesis Preparation
Elective: Select one approved elective

SPRING 2 — 9 CREDITS

BIOS 770: Applied Longitudinal Data Analysis
BIOS 746: Introduction to Complex Survey Data Analysis
BIOS 799: Thesis Preparation



EXCLUSIVE ACCESS TO THE

BIG DATA HEALTH SCIENCE CENTER

As a student at the Arnold School of Public Health, you'll learn in a collaborative environment where public health, data science and health research come together. We are home to the Big Data Health Science Center, a campus-wide initiative with more than 50 affiliated faculty and staff across nine schools and units, including the Arnold School. You'll be part of a community **focused on using electronic health records, genomic data and other large health datasets** to improve health care quality, population health and personalized medicine. Each year, the BDHSC hosts a national conference about big data in health, inviting scholars, students and community members to share and collaborate in discovery.









ASK A BIOSTATISTICIAN

UPCOMING CAREER AND GRADUATE SCHOOL CHATS

October 6, 2026

9:00 a.m.
Virtual session
Register online

sc.edu/publichealth

November 3, 2026

9:00 a.m.
Virtual session
Register online

sc.edu/publichealth



M.S. APPLICATION DEADLINE
February 1

ADMISSION REQUIREMENTS

Undergraduate Degree
arts, sciences or medicine
You don't have to major in statistics!

Resume and Statement of Purpose or Objectives

Official transcripts

Three letters of recommendation

Online application through SOPHAS

English language proficiency test scores for international applicants

NEXT STEPS

Explore the M.S. program and apply online