



## Program Information

### Application Deadline

:: January 15

### Department Contacts

:: Debashis Ghosh, PhD  
Chair, Biostatistics  
& Informatics

:: Sharon Lutz, PhD  
Concentration Director  
[sharon.lutz@ucdenver.edu](mailto:sharon.lutz@ucdenver.edu)

### Program Competencies

- :: Apply appropriate biostatistical methods to support research
- :: Test and interpret models for continuous, categorical, and time-to-event data
- :: Critically review and interpret basic statistical methods presented in public health research to identify strengths, weaknesses, and bias

## MPH | Applied Biostatistics

CU Anschutz Medical Campus | Aurora, CO

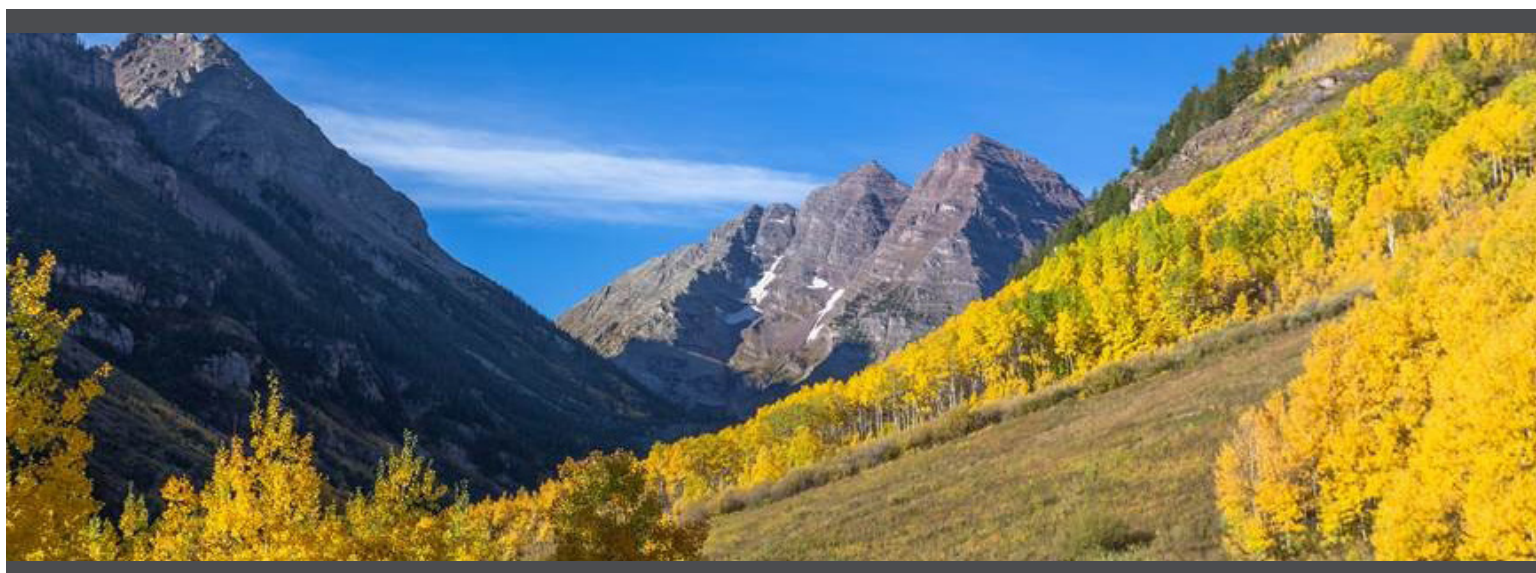
The field of biostatistics provides the essential analytical methods necessary for public health and medical research. Biostatisticians formulate scientific questions, plan and evaluate study designs, collect and interpret data, and report results for studies designed to improve health and reduce illness.

The Master of Public Health in Applied Biostatistics is designed for students who want a broad education in the field of public health, augmented with a specialization in biostatistics and informatics. In addition to taking coursework in multiple areas of public health, you'll learn about a variety of commonly used statistical methods and how they can be applied to the design, collection, management, analysis, interpretation and presentation of health-related data. Students with strong mathematics skills should consider the MS in Biostatistics.

Curriculum	Credits
MPH Core Courses	17
Concentration Courses	12
Electives	9
Practicum	2
Capstone	2
Total Program Credits	42

By pursuing your Master of Public Health in Applied Biostatistics, you will be prepared for career opportunities with the government, medical centers, pharmaceutical, biotech and health care service industries, and academia.

Visit the program website for a complete overview of admissions requirements, course offerings, and competencies: [publichealth.ucdenver.edu/biostatistics](http://publichealth.ucdenver.edu/biostatistics)



## Program Information

## MS | Biostatistics

CU Anschutz Medical Campus | Aurora, CO

### Application Deadline

:: February 1

### Department Contacts

:: Debashis Ghosh, PhD  
Chair, Biostatistics  
& Informatics

:: Gary Grunwald, PhD  
Co-Director  
[gary.grunwald@ucdenver.edu](mailto:gary.grunwald@ucdenver.edu)

:: Katerina Kechris, PhD  
Co-Director  
[katerina.kechris@ucdenver.edu](mailto:katerina.kechris@ucdenver.edu)

### Program Competencies

:: Work collaboratively in the development and design of research studies

:: Perform and report biostatistical modeling and analysis

:: Learn about new issues in the design, implementation, and analysis of research studies

The Master of Science in Biostatistics will prepare you to work collaboratively with investigators and biostatisticians, helping to design and analyze studies in areas such as immunology and infectious disease, cancer, heart disease and pulmonary research. The program also offers a specialty track in Statistical Genomics and Genetics. By pursuing the MS program, you will learn a wide variety of statistical methods as well as how, why and when these methods work.

The program targets students who have an interest in applying statistical methods to biological and health care environments and have strong skills, training, and interest in mathematics and computing. You will work closely with faculty to apply methods for longitudinal and correlated data, perform clinical trials and survival analyses, run diagnostic testing, utilize Bayesian estimation methods and assess sample size and power. Those who graduate with a Master of Science in Biostatistics can look forward to rewarding careers in academia, research, public health and private industry.

Curriculum	Credits
Biostatistics Courses	20
Public Health Courses	6
Electives	5
Thesis / Research Paper / Project	4
Total Program Credits	35

If you're interested in a less mathematical degree with broader exposure to public health, you should consider the MPH in Applied Biostatistics.

Visit the program website for a complete overview of admissions requirements, course offerings, and competencies: [publichealth.ucdenver.edu/biostatistics](http://publichealth.ucdenver.edu/biostatistics)





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[gary.grunwald@ucdenver.edu](mailto:gary.grunwald@ucdenver.edu)

:: Katerina Kechris, PhD  
Co-Director  
[katerina.kechris@ucdenver.edu](mailto:katerina.kechris@ucdenver.edu)

Program Competencies  
:: Work collaboratively in the  
development and design of  
research studies

:: Develop new statistical  
methods for design and  
analysis

:: Communicate and teach  
biostatistical concepts

## PHD | Biostatistics

### CU Anschutz Medical Campus | Aurora, CO

The PhD program in Biostatistics will prepare you for research and leadership positions in biostatistics. The program targets students with strong skills and training in mathematics, statistics and computing who are interested in applications in health care and biological settings. PhD biostatisticians typically function as independent investigators and researchers, or as key collaborators or co-investigators along with researchers in other areas, and take the lead in designing studies and analyses. Many continue to teach and carry out research developing new statistical methods. Areas of faculty research include: analysis of longitudinal data, clinical trials, statistical methods in genomics and genetics, causal modeling, treatment of missing data and imputation, and power and sample size analysis. For students with an MS in biostatistics or a related field, the program can be completed in 3 - 4 years, with much of years 1 and 2 devoted to coursework, and the later years devoted to research and your dissertation.

Curriculum	Credits
Required MS Biostatistics Courses	20
Elective MS Biostatistics Courses	5
Required Public Health Courses	6
Required PhD Biostatistics Courses	6
Elective PhD Biostatistics Courses	9
Elective Health Sciences Courses	3
Dissertation	30
Total Program Credits	79

Visit the program website for a complete overview of admissions requirements, course offerings, and competencies: [publichealth.ucdenver.edu/biostatistics](http://publichealth.ucdenver.edu/biostatistics)