

Application requirements:

- bachelor's degree from accredited college or university
- online application form
- non-refundable application fee
- official transcripts from all postsecondary education institutions
- three letters of recommendation (submitted online)
- statement of purpose
- Graduate Record Examination (GRE) scores
- TOEFL scores (if English is not native language)

Competitive applicant profile:

- GPA of 3.0 on a 4.0 scale in all postsecondary coursework
- combined GRE score of 1100 on verbal and quantitative sections and 3.5 on analytic section
- TOEFL score of 250 (600 on the old scale)

Please visit our Web site at www.soph.uab.edu/bst for additional details on the application process and funding opportunities.

Contact Information

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Graduate Program Coordinator

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Department Location:

University of Alabama at Birmingham • School of Public Health •
Department of Biostatistics • 1665 University Boulevard • Ryals
Public Health Building • Room 327 • Birmingham, AL • 35294-0022

Curriculum

The Ph.D. and M.S. programs require completion of a set of core courses and elective courses. The elective courses will be a combination of courses offered by the Department of Biostatistics and outside elective courses from a non-quantitative field approved by the department. Both degree programs require successful completion of the standard departmental exam. Ph.D. students must also successfully present their dissertation proposal.

Biostatistics Core for Master's Degree:

Statistical Methods I	Statistical Theory I
Statistical Methods II	Statistical Theory II
General Linear Models	Categorical Data Analysis
Data Management/SAS	Biostatistical Consulting

Additional Core for Ph.D.:

Theory of Linear Models
Advanced Computational Methods
Advanced Inference
Generalized Linear and Mixed Models

Biostatistics Courses Required for Certificate in Statistical Genetics:

Introduction to Statistical Genetics
Introduction to Human Population Genetics Theory
Statistical Bioinformatics
Statistical Methods for Genetic Analysis I
Statistical Methods for Genetic Analysis II

Additional Biostatistics Elective Courses:

Nonparametric Methods	Bayesian Analysis
Applied Multivariate Analysis	Stochastic Modeling
Structural Equation Modeling	Applied Longitudinal Modeling
Survival Analysis	Advanced Clinical Trials I
Sampling Methods	Advanced Clinical Trials II
Meta Analysis	

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UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM



UAB DEPARTMENT OF
BIOSTATISTICS

UAB THE UNIVERSITY OF
ALABAMA AT BIRMINGHAM

We invite you to join the growing field of **biostatistics**

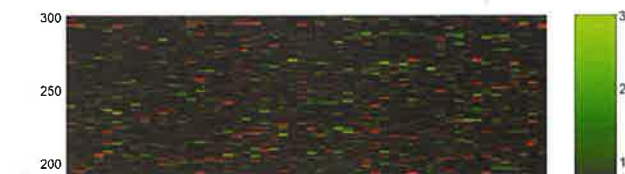
Biostatistics is the field of statistical methods related to biological research in areas such as public health, medicine, dentistry, and nursing. Biostatisticians are in high demand, and recent graduates are met with abundant employment opportunities in academia, business, industry, and government.

Department Description

The department has more than 25 faculty members and 65 staff with a wide variety of research interests. Research directed by department faculty is supported in excess of \$30 million annually and includes investigations in such diverse areas as understanding the causes of excess stroke mortality in the southeastern United States, advancing techniques to determine the number of patients needed in randomized clinical trials using data from nested pilot studies, genetic admixture mapping, microarray data analysis, multiple imputation method, haplotype mapping, and QTL analysis in experimental crosses.

Graduate Program Objectives

At UAB, the Department of Biostatistics focuses on the application of existing statistical techniques to studies in these health-related fields and the development of new statistical techniques.



Our goals are to:

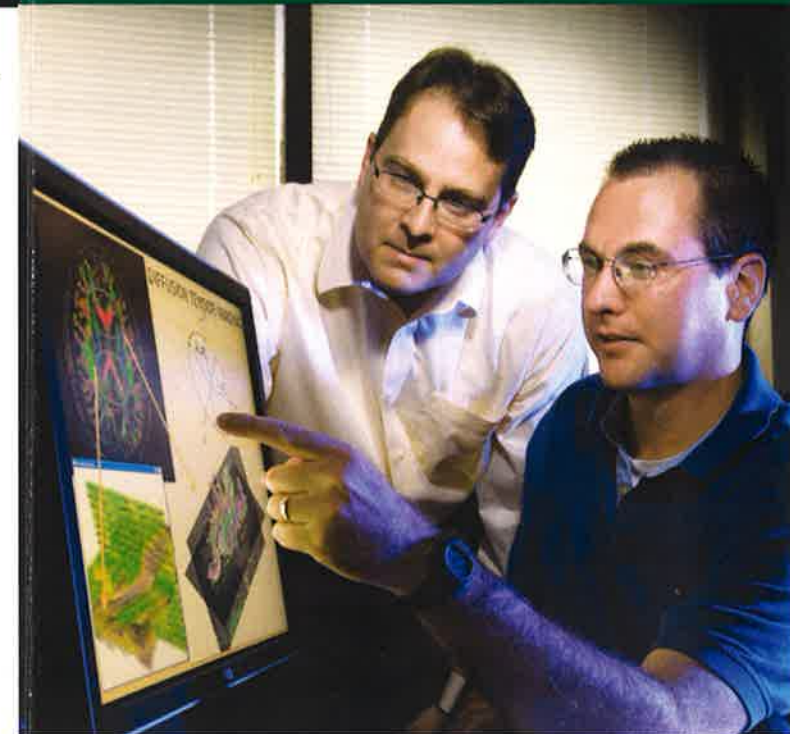
- produce research-oriented statistic scientists
- contribute to the development and evaluation of statistical methods
- work effectively in interdisciplinary teams to advance knowledge in the biological, biomedical, and behavioral sciences through applications of statistical methodology

We focus research and teaching into two specific areas:

- Section on Statistical Genetics (SSG)
 - *One of the largest in the nation*
 - *Undertakes both methodological and collaborative research involving a wide array of biological problems*
 - *Offers a formal certificate in statistical genetics*
- Section on Research Methods and Clinical Trials (RMCT)
 - *Focus on design, management, and analysis of large clinical trials and epidemiological studies*
 - *Development of new methods for application in clinical trials and longitudinal observational studies*

Program Descriptions

The Department of Biostatistics at UAB offers programs leading to both Ph.D. and M.S. degrees and a Certificate in Statistical Genetics (CSG). The graduate program in biostatistics was created to be a balanced program covering both theoretical and applied aspects of biostatistics. As such, the main objectives of the programs are to provide students with an in-depth understanding of statistical



theory and methodology, to train them to become effective statistical consultants and collaborators in scientific research, and to train them to do teaching and independent statistical research.

Admissions

The admissions process begins in February (application deadline April 1) and students are admitted in the fall semester of each academic year. Early application is recommended to be considered for financial support. Applicants for the Ph.D./M.S. programs are expected to have a strong foundation in mathematics. At the very minimum, they should have had a semester of advanced calculus, a semester of advanced matrix algebra, and proficiency in computer programming. With few exceptions, applicants to the Ph.D. program must have a relevant master's degree.