

# BIOSTATISTICS DEPARTMENT

*Chair:* P. Qiu

*Associate Chair for Education:* B. Brumback

*Graduate Coordinator:* K. Cason

The Department of Biostatistics offers the Doctor of Philosophy degree in biostatistics (p. 1), the Master of Science degree in biostatistics (<http://biostat.ufl.edu/education/ms-in-biostatistics/>), and the Master of Public Health degree with concentration biostatistics, which is described in detail in the Public Health section of the catalog. These programs in the Department are designed to prepare students for research and faculty positions; careers in health agencies and health-related institutions; and for consultation, especially in the biomedical fields. Although each graduate program has a set of required courses, there is ample flexibility in the programs to allow each student to develop strengths and interests through elective courses, seminars, and tutorials.

## Doctor of Philosophy

The biostatistics doctoral program requires a minimum of 90 semester credits beyond the bachelor's degree. All students must complete a minimum of 54 credits of biostatistics/statistics course work (30 credits can be transferred from a previously earned Master of Science program if applicable), 6 credits of public health course work, 3 credits of a consulting requirement, 6 credits of the cognate requirement, and 21 credits of dissertation work.

All graduates of the program are expected to be able to

- Conduct independent research in the development of new biostatistical methodology
- Engage in successful collaborations with investigators in new quantitative fields
- Write statistical methodology papers for peer-reviewed statistical and biostatistical journals
- Write collaborative papers for peer-reviewed subject matter journals
- Compete successfully for research and teaching positions in academic institutions, federal and state agencies, or private institutions

Specific course requirements are described at the program website <http://biostat.ufl.edu/education/phd-in-biostatistics/curriculum-overview/>.

## Master of Science

The Master of Science in Biostatistics Program in the Department of Biostatistics requires a minimum of 36 post-baccalaureate credit hours. The program is designed to facilitate students' development of a strong theoretical foundation in biostatistics, broad-based understanding of biostatistical methods, and expertise in a cognate field. A typical student will be enrolled full-time for two years. Upon successful completion of the program, graduates will be awarded an M.S. degree in biostatistics. We currently offer the Master of Science program in both traditional (campus) and online learning delivery methods.

The principal goal of the M.S. program is to prepare highly qualified individuals for future Ph.D. training and for careers in biostatistics practice. This training is conducted in the innovative and interdisciplinary public health culture of the college of public health and health professions and the college of medicine and will produce graduates who will help address the shortage of biostatisticians. We expect our

graduates to be highly competitive in three primary settings: academic university-based settings, industry, and federal agencies that involve research and/or public health practice.

Specific course requirements are described at the program website <http://biostat.ufl.edu/education/ms-in-biostatistics/> (Campus) and <http://biostat.ufl.edu/education/msonline/> (Online).

## Majors

- Biostatistics (PHHP) (<http://gradcatalog.ufl.edu/graduate/colleges-departments/public-health-professions/biostatistics/biostatistics/>)

## Faculty

### Professor

- Datta, Somnath
- Datta, Susmita
- Lee, Ji-Hyun
- Longini, Ira M.
- Lu, Qing Terry
- Qiu, Peihua
- Shan, Guogen
- Wu, Samuel Shangwu

### Associate Professor

- Chen, Li
- Guha, Subharup
- Li, Zhigang
- Xiao, Feifei

### Assistant Professor

- Berube, Sophie Christine
- Hitchings, Matthew David Thomas
- Liang, Muxuan
- Roy, Arkaprava

### Research Associate Professor

- Kairalla, John Andrew
- Naranjo, Arlene H.

### Clinical Assistant Professor

- Fischer, Jonathan R.
- Foti, Steven J.
- Parker, Robert L.
- Wang, Lixia

### Research Professor

- Lou, XiangYang

### Research Assistant Professor

- Brant, Jason Orr
- Lin, Tuo
- Xue, Wei

## Courtesy Professor

- Yang, Yang

## Affiliated Faculty

- Bacher, Rhonda Leigh  
Associate Professor
- Cai, Guoshuai  
Assistant Professor
- Doss, John  
Professor
- Ghosh, Malay  
Distinguished Professor
- Pei, Qinglin  
Associate Professor

### Courses

## BIOSTATISTICS

Code	Title	Credits
GMS 6827	Advanced Clinical Trial Methods	3
PHC 6020	Clinical Trial Methods	3
PHC 6022	Design and Conduct of Clinical Trials	3
PHC 6050C	Biostatistical Methods I	3
PHC 6051	Biostatistical Methods II	3
PHC 6059	Introduction to Applied Survival Analysis	3
PHC 6063	Biostatistical Consulting	3
PHC 6064	Survey of Advanced Biostatistical Methods for the Health Sciences	3
PHC 6075	Biostatistical Literacy	3
PHC 6084	Bayesian Biostatistical Methods	3
PHC 6088	Statistical Analysis of Genetic Data	3
PHC 6089	Public Health Computing	3
PHC 6092	Introduction to Biostatistical Theory	3
PHC 6097	Statistical Learning with Applications in Health Sciences	3
PHC 6099	Programing Basics for Biostatistics	3
PHC 6790	Biostatistical Methods Using SAS	3
PHC 6791	Data Visualization in the Health Sciences	3
PHC 6905	Independent Study	1-6
PHC 6937	Special Topics in Public Health	1-6
PHC 7056	Analysis of Longitudinal Data	3
PHC 7066	Large Sample Theory	3
PHC 7068	Biostatistical Computing	3
PHC 7090	Advanced Biostatistical Methods I	3
PHC 7091	Advanced Biostatistical Methods II	3
PHC 7095	Advanced Statistical Learning for Biostatistics	3
PHC 7925	Biostatistics Journal Club	1-3
PHC 7979	Advanced Research	1-12
PHC 7980	Research for Doctoral Dissertation	1-15
STA 6177	Applied Survival Analysis	3
STA 6707	Analysis of Multivariate Data	3
STA 7179	Survival Analysis	3

## College of Public Health and Health Professions Courses

Code	Title	Credits
GEY 5935	Topics in Gerontology	3
GEY 6220	Overview of Geriatric Care Management	3

GEY 6306	Interpersonal Communication Within the Aging Network	3
GEY 6646	Issues and Concepts in Gerontology	3
GEY 6936	Professional Development in Gerontology/ Geriatrics	1-2
HSC 6905	Independent Study	1-3
HSC 6910	Supervised Research	1-5
HSC 6940	Supervised Teaching	1-5
PHC 6053	Regression Methods for the Health and Life Sciences	3
PHC 6193	Qualitative Data Analysis	3
PHC 6195	Health information for Diverse Populations: Theory & Methods	3
PHC 6447	Ecology of HIV/Aids in the Rural South	3
PHC 6917	Supervised Research Project	1-6
PHC 6945	Public Health Practicum	1-6
PHC 6946	Public Health Internship	1-9
PHC 7587	Theory Development and Testing in Behavioral & Community Public Health	2
PHC 7907	Social and Behavioral Science Journal Club	1
RCS 6036	Or to Forensic Vt P	3
RCS 6601	Forensic Rehabilitation Consultation I	3
RSD 6110	Rehabilitation Science Theory and Application I	3
RSD 6905	Individual Work	1-4
RSD 6910	Supervised Research	1-5
RSD 6930	Special Topics in Rehabilitation Science	1-4
RSD 6940	Supervised Teaching	1-3
RSD 7979	Advanced Research	1-12
RSD 7980	Research for Doctoral Dissertation	1-15