BIOSTATISTICS (BIOS)

Graduate Degree Program
College: Public Health

Abstract

Biostatistics is a science that addresses theory and techniques for describing, analyzing, and interpreting health data. The discipline is primarily focused on applications to problems in the health, medical, and biological sciences. The MPH with a concentration in biostatistics is a 43 credit professional degree that prepares graduates to work in public health services as practitioners, researchers, administrators, and consultants. A full-time student may complete our program in 2 years. Part-time students may take up to 4 years. The majority of courses are offered in the evenings. In addition to coursework, all biostatistics masters’ students are required to complete a capstone experience that occurs after all courses are completed and includes:

1. a data analysis project and
2. an internship of at least 240 hours.

Our proximity to the nation's capital offers students unparalleled opportunities for research experiences in public health, including placements at the National Institutes of Health, National Center for Health Statistics, Centers for Disease Control, Food and Drug Administration, the Maryland Department of Health and Mental Hygiene, and many other national, state, and local health agencies.

CONTACT

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Website: http://sph.umd.edu/department/epib

Courses: EPID


Admissions

Applications for the MPH program with concentration in Biostatistics are reviewed with consideration to the following criteria:

1. Minimum 3.0 undergraduate GPA; outstanding performance in quantitative-oriented courses
2. Official GRE scores taken within the past 5 years (GRE scores are required and should be requested directly from ETS for electronic transmission to SOPHAS. Use the SPH code 0485 and the Graduate School Code 5814). Scores should be at least in the 50th percentile for all sections.
3. 3 letters of recommendation that address your academic capabilities.
4. Statement of Purpose: Your statement of purpose should address each of the following questions:
   a. describe your specific interest in biostatistics;
   b. what previous experiences have influenced your decision to pursue a degree in biostatistics; and
   c. how do you believe UMD’s program will help you reach your career goals.
5. Relevant academic/work experience, including previous coursework in mathematics, statistical methods, and/or statistical software packages.

The University of Maryland requires a Supplemental Application and a Supplemental Application Fee of $75 for each program. Applicants will receive e-mail instructions for how to complete the Supplemental Application once your SOPHAS application is complete. Applicants to the MPH program with concentration in Biostatistics should be sure to use the major code BIOS when selecting the program on the Supplemental Application.

How to Apply: Applications should be submitted through the Schools of Public Health Application Service (SOPHAS) at www.SOPHAS.org (https://sophas.org). Remember to designate the University of Maryland School of Public Health, College Park, as one of your school choices along with your desired program. The University of Maryland School of Public Health GRE Code in SOPHAS is 0485 (the GRE is required in all applications).

For information please see http://sph.umd.edu/content/graduate-admissions.

Application Deadlines

<table>
<thead>
<tr>
<th>Type of Applicant</th>
<th>Fall Deadline</th>
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<tr>
<td>Domestic Applicants</td>
<td>Priority Consideration: 14 Dec / Final: 12 April</td>
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<tr>
<td>International Applicants</td>
<td>Priority Consideration: 14 Dec / Final: 15 Feb</td>
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Other Deadlines: Please visit the program website at http://sph.umd.edu/department/epib
Requirements

- Biostatistics, Master of Public Health (M.P.H.) (https://academiccatalog.umd.edu/graduate/programs/biostatistics-bios/biostatistics-mph)

Facilities and Special Resources

Our faculty in the Department of Epidemiology and Biostatistics includes individuals with multi-faceted interests in biostatistics, epidemiology, and bioinformatics. Biostatistics faculty apply statistical techniques including survival and longitudinal analysis, computational statistics, statistical analysis of genomic and proteomic data, machine learning, neuroimaging statistics, (network) meta-analysis, missing data analysis, Bayesian hierarchical methods, and bioinformatics to analyze and interpret health data. Epidemiology faculty have research interests and expertise in the epidemiology of infectious disease and chronic disease with particular focus in the areas of HIV/STIs, cancer, health disparities, cardiovascular disease, obesity/physical activity, and sexual and reproductive health. Additional areas of specialization include social and behavioral determinants of health, aging, cultural competency, and community-based interventions.

Faculty

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First/Middle Name</th>
<th>Graduate Faculty Status</th>
<th>Academic Credentials</th>
<th>Positions</th>
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</thead>
<tbody>
<tr>
<td>Carter-Pokras</td>
<td>Olivia</td>
<td>Full Member</td>
<td>M.H.S., Johns Hopkins University, Ph.D., Johns Hopkins University of Public Health; Bloomberg School of Public Health;</td>
<td>Professor, Epidemiology Professor, Epidemiology Professor, Biostatistics</td>
</tr>
<tr>
<td>Cruz-Cano</td>
<td>Raul</td>
<td>Adjunct Member</td>
<td>B.S., Autonomous University of Chihuahua 1999, M.S. University of Texas at El Paso 2002, Ph.D. University of Texas at El Paso 2005</td>
<td>Research Assistant Professor, Epidemiology Research Assistant Professor, Biostatistics</td>
</tr>
<tr>
<td>Dallal</td>
<td>Cher</td>
<td>Full Member</td>
<td>B.A. University of California at Berkeley 1998; M.P.H. Yale University School of Public Health 2002; M.S. University of Southern California 2005; Ph.D. University of Pittsburgh Graduate School of Public Health 2009</td>
<td>Assistant Professor, Epidemiology Assistant Professor, Epidemiology Associate Professor, Biostatistics</td>
</tr>
<tr>
<td>He</td>
<td>Xin</td>
<td>Full Member</td>
<td>B.S., Peking University, 2003 B.A., Peking University, 2003 Ph.D., University of Missouri, 2007</td>
<td>Associate Professor, Epidemiology Associate Professor, Epidemiology Associate Professor, Biostatistics</td>
</tr>
<tr>
<td>Lee</td>
<td>Mei-Ling</td>
<td>Full Member</td>
<td>B.S., National Taiwan University, 1975; M.S., National Tsing Hua University, 1977; M.A., University of Pittsburgh, 1978; Ph.D., University of Pittsburgh, 1980</td>
<td>Professor, Epidemiology Professor, Applied Mathematics &amp; Statistics, and Scientific Computation Associate Professor, Biostatistics</td>
</tr>
<tr>
<td>Lee</td>
<td>Sunmin</td>
<td>Full Member</td>
<td>M.P.H., Seoul National University, Sc.D., Harvard University School of Public Health.</td>
<td>Associate Professor, Epidemiology Associate Professor, Epidemiology Associate Professor, Biostatistics</td>
</tr>
<tr>
<td>Liu Hongjie</td>
<td>Full Member</td>
<td>B.M., Shanghai Medical University, 1993 M.S., UCLA School of Public Health, 1998 Ph.D., UCLA School of Public Health, 2002</td>
<td>Chair, Epidemiology Chair, Biostatistics</td>
<td>Chair, Epidemiology Chair, Biostatistics</td>
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<tr>
<td>Nguyen Quynh</td>
<td>Full Member</td>
<td>B.A. in Human Biology, Stanford University, 2005 M.S.P.H. in Epidemiology, UNC Gillings School of Global Public Health, 2009 Ph.D. in Epidemiology, UNC Gillings School of Global Public Health, 2011</td>
<td>Assistant Professor, Epidemiology Assistant Professor, Biostatistics</td>
<td>Assistant Professor, Epidemiology Assistant Professor, Biostatistics</td>
</tr>
<tr>
<td>Saksvig Brit</td>
<td>Adjunct Member</td>
<td>B.A. St. Olaf College, 1989 M.H.S., Johns Hopkins University Bloomberg School of Public Health, 1996 Ph.D., Johns Hopkins University Bloomberg School of Public Health, 2002</td>
<td>Associate Research Professor, Epidemiology Graduate Director, Epidemiology Graduate Director, Biostatistics</td>
<td>Associate Research Professor, Epidemiology Graduate Director, Epidemiology Graduate Director, Biostatistics</td>
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<tr>
<td>Slopen Natalie</td>
<td>Full Member</td>
<td>B.S., University of Toronto 2002; M.A., University of Chicago, 2003; Sc.D., Harvard University School of Public Health, 2010</td>
<td>Assistant Professor, Epidemiology Assistant Professor, Biostatistics</td>
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Assistant Professor, Epidemiology Assistant Professor, Biostatistics