



Washington University is one of the premier research centers in the world, whose mission is to promote learning both in the classroom and in the research laboratory.

For More Information

Consult the GEMS website

www.biostat.wustl.edu/gems

or write to:

GEMS Program Administrator

Division of Biostatistics

Washington University

Box 8067

660 S. Euclid Ave.

St. Louis, MO. 63110, U.S.A.

Your Name

Institution

Street

City, State

ZIP Code

E-mail Address

Reason for interest (Please Check):

Prospective Student

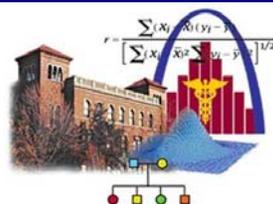
Interest in Hiring Graduates

Genetic Epidemiology *MS Degree & Certificate*



WUSM Division of Biostatistics

Division of Biostatistics



 Washington University in St. Louis
SCHOOL OF MEDICINE

Genetic Epidemiology

Washington University School of Medicine in St. Louis offers a “one year”, Summer to Summer, Masters Degree program covering genetic epidemiology, bioinformatics, biostatistics, and human genetics. Financial aid is available.

The “Genetic Epidemiology Master of Science” (GEMS) program provides exciting training opportunities in response to an increasing market demand for well-trained Genetic Epidemiologists. Graduates can expect to find gainful employment in either academic or industrial settings.

The **Computational Track** is a 14-month program (July 5-August 15 of the following year) offering training in genetic epidemiology and software for biology and/or mathematics/statistics majors, and preparation for employment in academia, industry or to prepare for further graduate studies.

The **Clinical Track** is a more flexible 12-month program (July 5-June 15 of the following year) for physician scientists and other clinical investigators, particularly for researchers in early career stages.

Core Curriculum includes:

- Genetic Epidemiology: Fundamentals, heritability, and segregation
- Linkage and Association: Gene Discovery and Localization for Complex Traits
- Bioinformatics: Gene Expression, Data Mining and Pattern Recognition
- Epidemiology, Clinical Trials, Study Design and Management

- Computational statistical genetics, including basics of Pharmacogenetics
- Grant Writing
- And a host of other courses including human genetics, statistics, probability, computational statistics, and independent research

Prospective students:

- Recent recipients of a bachelors degree in biology, mathematics, or related fields
- Individuals with terminal degrees (e.g. M.D. or Ph.D. in related disciplines) who would like to gain post-doctoral experience in genetic epidemiology

Faculty include world renowned Genetic Epidemiologists such as **D.C. Rao, Program Director**, who is one of the early pioneers of the field, is the founding editor of the journal Genetic Epidemiology, and an early president of the International Genetic Epidemiology Society.

Many “superstar” faculty at Washington University play key training roles, including: C. Charles Gu, Jingqin Luo, J. Philip Miller, Jay Piccirillo, Michael Province, John Rice, Treva Rice, Kenneth Schechtman., and Mario Schootman.

There are also internationally renowned and outstanding faculty leaders in related disciplines such as Ingrid Borecki and Aldi Kraja in Statistical Genomics; Gary Stormo in Computational Biology; James Cheverud and Alan Templeton in Population Genetics; Victor Davila-Roman, Brian Gage, and F. Sessions Cole in Clinical and Translational Research.

Washington University is one of the premier research centers in the world, whose mission is to promote learning both in the classroom and in the research laboratory.

The Division of Biostatistics has earned a national and international reputation as a research center of excellence. It plays leadership roles on several NIH-funded multicenter clinical investigations including family studies. The primary focus of these studies is on complex diseases such as hypertension and obesity.

The Department of Genetics is at the forefront of human genome research, developing new methods for physical and genetic mapping of the human genome and for identifying and isolating genes that cause inherited diseases or susceptibility to diseases.

The Department of Psychiatry has an excellent international reputation in the field of psychiatric genetics and genetic epidemiology. The faculty have played critical roles in demonstrating the importance of epidemiological studies in psychiatric research and the role of familial factors in psychiatric illnesses.

Certificate Program:

- Four GEMS summer courses are offered as part of a Certificate, July 5-end of August, and may be taken over 1 or 2 summer semesters. It is designed to serve research and medical employees, medical students and others who want to learn the fundamentals of genetic epidemiology.

Information on the program, course descriptions, and application procedures, is available on the GEMS website www.biostat.wustl.edu/gems

Contact Information: If you are interested in the program, please contact the GEMS Program Administrator at pa@wubios.wustl.edu

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