
Course and Employment Opportunities

Course

Genetic Analysis of Complex Human Diseases

This is a comprehensive, four-day course directed toward physician-scientists and other medical researchers, offered at the Sonesta Hotel and Suites, May 5–8, 2008, at Coconut Grove, FL. The course will introduce state-of-the-art approaches for the mapping and characterization of human inherited disorders with an emphasis on the mapping of genes involved in common and genetically complex disease phenotypes. Course goals are as follows: (1) To instruct participants about the necessary steps and procedures used in ascertaining, collecting, and databasing pedigree, demographic, family history, environmental risk factor, and clinical information for genetic disease mapping studies. The impact of genetic research on patients and their families will also be discussed. (2) To provide background information in the basic techniques of linkage analysis. The discussion will include problems and confounding issues that commonly arise. (3) To provide an introduction to the various strategies, designs, and methods of analysis needed to dissect the genetic basis of common and genetically complex (e.g., multifactorial or polygenic) traits. Examples are drawn from successful applications in human genetic disease. Discussions will include current approaches to both qualitative- and quantitative-trait phenotype assignment, methods of analysis, interpretation, follow-up, and refinement of the preliminary linkage and/or association data, investigation of power, examination of heterogeneity, and gene/gene and gene/environment interactions. This course will not include any bench or “wet” laboratory experience. It is designed to introduce newly evolving “genome-wide” study methodologies from the laboratory and statistical analysis perspectives including SNP-based (single-nucleotide polymorphism) genome-wide association mapping and “genomic convergence” (integration of linkage, association, expression, and gene function data). More details are available at <http://www.mihg.org/education.php> or by contacting Dori McLean, Course Administrative Co-Coordinator or Nora Matelis, Administrative Manager, Miami Institute for Human Genomics, University of Miami Miller School of Medicine, P.O. Box 019132 (M-860), Miami, FL 33101, USA; telephone: (877) 686-6444 or (305) 243-8779; fax: (305) 243-2396; e-mail: dmclean@med.miami.edu. Application deadline: March 1, 2008.

Employment Opportunities

Postdoctoral Fellow

A postdoctoral fellow position is available in the lab of Lang Li, Associate Professor in the Division of Biostatistics/Clinical-Pharmacology. Lang Li is also a full member in the Center of Computational Biology and Bioinformatics. The project will focus on functional and genetic variation annotation development for metabolic enzymes, transports, and receptors, pathway-based gene/gene and gene/environment interactions with functional genetic polymorphisms, and pharmacogenetics in breast cancer studies. Population genetics background is required. A strong statistical genetics background is preferred. On-site training in pharmacology and bioinformatics will be provided. Interested persons should send cover letter, curriculum vitae, and the names of three references to Division of Biostatistics, Department of Medicine, Indiana University School of Medicine, 410 W. 10th Street, Suite 3000, Indianapolis, IN 46202, USA; or email: lali@iupui.edu.

Chair of the Department of Pathology and Pathologist-in-Chief

Children's Hospital Boston and Harvard Medical School seek an academic leader to serve as Chair of the Department of Pathology and Pathologist-in-Chief at Children's Hospital Boston. Candidates should have a strong record of accomplishment in basic or clinical research; superior clinical credentials; a major commitment to medical students, residents, and fellows; experience in administration of an academic program; and the ability to provide leadership for all of the clinical, educational, and scientific activities of the Department. Academic credentials should be of sufficient strength to warrant an appointment as Associate Professor or Professor at Harvard Medical School. Interested candidates should forward a letter of application and their curriculum vitae to Scott L. Pomeroy, M.D., Ph.D., Neurologist-in-Chief, Bronson Crothers Professor of Neurology Chairperson, Search Committee, Children's Hospital Boston, 300 Longwood Avenue, Fegan 1103, Boston, MA 02115, USA. scott.pomeroy@childrens.harvard.edu. *Children's Hospital and Harvard Medical School are Affirmative Action/Equal Opportunity Employers. We strongly encourage applications from women and minorities.*

Statistical Data Analyst, UCSF

The UCSF Asthma Genetics Laboratory (AGL) has an excellent opportunity for a statistical data analyst to participate in projects aimed at understanding the genetic basis of complex diseases in racially admixed populations. The AGL is a member of UCSF's Institute for Human Genetics. It has a highly interactive and multidisciplinary team of investigators that includes physician-scientists, genetic epidemiologists, statisticians, geneticists, and molecular biologists. The research environment is enhanced by large family-based and population-based sample sets of well-phenotyped racially diverse individuals and strong national and international collaborative ties.

Job Responsibilities:

- Under the direction of senior investigators conduct statistical analyses on large genetic data for the candidate gene and genome-wide association studies, and investigations of admixture mapping. Develop analytic data files, programming, graphical presentation of results, and reporting of results with interpretations and explanations of statistical techniques used and valid inferences. Perform statistical analyses to support publications and presentations.
- Monitors quality of clinical data entry and management of clinical databases for ongoing recruitments. Using a standardized protocol, produces reports using statistical software packages to ensure good data collection.
- Additional duties include training and assisting students, post-docs, and research affiliates in the use of the analysis system and large, complex database, and also as a program reviewer and quality-control checkpoint person for analyses others have conducted.

Required Qualifications:

- Master's degree in biostatistics or genetic epidemiology, or a Master's degree in statistics/mathematics with an emphasis in applied statistics
- 0–3 years of collaborative statistical experience in a medical/research environment
- Proven record of accuracy and attention to detail

- Expertise in Access; Excel; and SPSS, SAS, STATA, or equivalent
- Strong communication skills
- Experience in programming languages such as C/C++ and Perl are highly desirable

To apply, please send your resume/CV to Dr. Esteban Gonzalez Burchard, M.D., M.P.H., Director, Asthma Genetics Laboratory and UCSF DNA Bank, esteban@sfg.ucsf.edu. *UCSF is an affirmative action/equal opportunity employer.*

Postdoctoral Fellowship in Statistical Genetics, UCSF

The UCSF Asthma Genetics Laboratory (AGL) is inviting applications for postdoctoral fellows to participate in projects aimed at understanding the genetic basis of complex diseases in racially admixed populations. The AGL is a member of UCSF's Institute for Human Genetics and has a highly interactive and multidisciplinary team of physician-scientists, genetic epidemiologists, statisticians, geneticists, and molecular biologists. The research environment is enhanced by large family-based and population-based sample sets of well-phenotyped racially diverse individuals and strong national and international collaborative ties. The successful candidate will participate in development of statistical methods, study design, and data analysis for genome-wide association studies, studies of population stratification, and investigations of admixture mapping for complex diseases.

A suitable candidate will hold a PhD in a quantitative science (statistics, biostatistics, computer science, or mathematics) or epidemiology and should have strong theoretical, analytical, and computational skills. Background in genetic epidemiology and statistical genetics would be beneficial. An ability to work collaboratively and good communication skills are required.

Applicants should email a CV and letter of application and arrange for three or more letters of reference to be sent to Dr. Esteban Gonzalez Burchard, M.D., M.P.H., Director, Asthma Genetics Laboratory and UCSF DNA Bank, esteban@sfg.ucsf.edu. *UCSF is an affirmative action/equal opportunity employer.*

Announcements from the past three months are available at <http://www.ajhg.org>.