





## ***Molecular Epidemiology***

The Molecular Epidemiology Track is designed for students who wish to undertake research that combines molecular, genetic, and epidemiologic techniques and apply them to the understanding of human health and disease. Recent advances in genomics have added a new dimension to the understanding of risk factors for disease transmission and acquisition. Students in this track develop a solid knowledge base in epidemiology and biostatistics, while gaining the laboratory and informatics skills needed to incorporate

## **Where do our graduates go?**

- Academia (research and teaching)
- CDC (including as Epidemic Intelligence Service officers)
- NIH (postdoctoral fellows or researchers)
- Other federal agencies (FDA, CMS, NCHS)
- State health departments
- Non-governmental organizations, domestic and international
- Industry, including pharmaceutical companies
- Employment as public health geneticists
- Employment as clinical laboratory geneticists
- Forensics

genomic or other molecular data into their research. Some recent dissertation topics of students in this track include: the effect of lubricant use on the vaginal microbiota and vaginitis, the role of rare genetic variants in the development of bipolar disorder, identification of parasite erythrocyte membrane antigens specific to cerebral malaria, and the effects of mindfulness based stress reduction on brain gray matter volume and psychosocial co-morbidities in episodic migraine patients



## ***Human Genetics and Genomic Medicine***

The Human Genetics and Genomic Medicine Track offers training for students who want to understand human genetic variation and its relation to health and disease. Students first receive a broad overview of human genetics (molecular, biochemical, and clinical), cytogenetics, and genetic epidemiology/genomics, and then specialize in their particular areas of interest. The track utilizes a multidisciplinary team approach to research training involving faculty from across the campus. Recent students have carried out research in a range of areas, including mechanisms of DNA repair, clinical genetics and screening, gene mapping in simple and complex diseases, gene discovery and function, recombination and mutation in bacteria that cause human disease, and characterization of chromosomal diversity in the Amish population.

Visit our website:

<http://lifesciences.umaryland.edu/epidemiology/>

### **Program Director**

Ann L. Gruber-Baldini, Ph.D.  
University of Maryland School of Medicine  
660 West Redwood Street  
Howard Hall, Room 213  
Baltimore, MD 21201  
Phone: 410-706-2444  
abaladin@som.umaryland.edu

### **Academic Services Specialist**

Jonathan Shinnick  
University of Maryland School of Medicine  
655 W. Baltimore Street  
Bressler Research Building, Room 1-005  
Baltimore, MD 21201  
Phone: 410-706-8492  
jshinnick@som.umaryland.edu