Faculty

Ranjan Deka, PhD (Director)
Environmental Health
Kim Dietrich, PhD (Deputy Dir.)
Director, Epidemiology and Biostatistics
Lawrence Dolan, MD (Assoc. Dir.)
Pediatrics

Environmental Health
Erin Haynes, DrPH
Shuk-mei Ho, PhD
Grace LeMasters, PhD
Mario Medvedovic, PhD
Daniel Nebert, MD
Susan Pinney, PhD
Tiina Reponen, PhD
Glenn Talaska, PhD

Pediatrics
David Bernstein, MD
Kim Cecil, PhD
Gurjit Khurana Hershey, MD, PhD
James Heubi, MD
Lisa Martin, PhD
Ardythe Morrow, PhD

Nutrition
Sarah Couch, PhD

Molecular Genetics
Iain Cartwright, PhD
Malak Kotb, PhD
Anil Menon, PhD
Richard Thompson, PhD

Dermatology
Zalfa Abdel-Malek, PhD

Pharmacology and Cell Biophysics
Scott Belcher, PhD

External Advisory Board
Stephen Daniels, MD, PhD (U. Colorado)
Janice Dorman, MS, PhD (U. Pittsburgh)
Ann Hernick, BSBA (Breast Cancer Alliance)

Programs

Eligibility

♦ Predoctoral students pursuing a PhD in epidemiology or biostatistics
♦ MD fellows accepted in the Master of Science or PhD program
♦ Postdoctoral students with a doctoral degree in such areas as epidemiology, public health, molecular biology/genetics or medicine
♦ U.S. citizenship or permanent residency is required.

Application

Applications should be sent to the Division of Epidemiology and Biostatistics. The application can be found at the following website:

http://eh.uc.edu/graduate/how_to_apply.asp

University of Cincinnati
College of Medicine

Molecular Epidemiology
Children’s Environmental Health Training Program

Fellowship Opportunity
Predoctoral
Postdoctoral
MD/MS Fellows
This program best meets the needs of students who desire an academic position. It will enhance their knowledge base and conceptual grasp of scientific inquiry in molecular epidemiology. Students subscribe to the goal of establishing independent research careers in academics and epidemiology, investigations of population and clinical based studies of pregnancy, newborns, children, adolescents, and early adulthood.

**Relevant Course Work includes:**
- Pediatric Environmental Health
- Genetics of Complex Disease
- Molecular Epidemiology
- Statistical Genetics
- Molecular Genetics

**Molecular Epidemiology in Children's Environmental Health Training Program (MECEH)**
http://www.eh.uc.edu/epitraining

**Vision for MECEH Fellows**

- Next Generation Biomedical Investigator
- MS, PhD Molecular/Clinical Researcher
- Integrated Cross-Training
- Environmental Health Science and Public Health Investigators
- Basic Science, Biostatistical/Informatics, Clinical & Epidemiological Mentors and Resources
- Biomedical Translational Researchers

**Goals of the Training Program**

Educate and train next generation scientists in molecular epidemiology to conduct inter-disciplinary research relevant to pediatric environmental health.

- Provide a strong background in basic epidemiological, molecular and quantitative principles and methods related to environmental exposures in complex childhood diseases
- Prepare students to address the needs of the NIH roadmap to develop “interdisciplinary research training” and “enhance clinical research training” initiatives
- Two new innovative directions:
  - Epigenetic epidemiology training research
  - Community-based participatory research

**Setting**

The MECEH program is housed in the Department of Environmental Health. Much of the didactic course work as well as laboratory experiences are available there as well as the CCHMC and College of Medicine.

**Teaching and Education**

This program best meets the needs of students who desire an academic position. It will enhance their knowledge base and conceptual grasp of scientific inquiry in molecular epidemiology. Students subscribe to the goal of establishing independent research careers in academics and epidemiology, investigations of population and clinical based studies of pregnancy, newborns, children, adolescents, and early adulthood.

**What is Molecular Epidemiology in Children’s Environmental Health?**

Pediatric diseases of enormous public health importance that involve environmental and genetic factors.

- Metabolic Disorders
- Cardiovascular Disorders
- Respiratory and Allergic Diseases
- Cancer
- Neurodevelopment Disorders
- Gastrointestinal Disorders

**About MECEH Training Program**

This training program is an interdepartmental and interdisciplinary program. Participating departments include: Environmental Health, Pediatrics, and Molecular Genetics.

**Honors and Accomplishments of Recent MECEH Fellows**

- 75 publications in peer reviewed journals
- Lennon Ono Grant for Peace—2010 (Kowalcyk)
- EPA Star Fellowship—2011 (Sebastian)
- F32 Award—2011 (Sisley)
- Travel Awards (Dorris, Karns)
- National & International Meetings (Alexander, Brandt, Dorris, Johansson, Karns, Mosley, Sebastian)

**Benefits and Resources for Fellows**

**Funding**

- Competitive stipend, tuition remission
- Meetings, conferences, partial lab expenses

**Mentors**

- Mentorship from experienced researchers, wet and dry lab rotations
- Interdisciplinary interactions
  - Mentors and other MECEH fellows
  - Assistance in grant writing and publications
  - Monthly journal club and seminars

**Resources**

- MECEH Office space, Computer facilities
- Access to focused research and support centers

**New Medical Sciences Building/Center for Academic and Research Excellence (MSB/CARE)**