

## Career Development Core Request for Applications:

### **New Investigator Scholar (NIS) awards *for students, postdoctoral fellows and recent graduates***

The Center for Environmental Genetics (CEG), housed in the Department of Environmental Health in the UC College of Medicine, is an NIEHS-supported Center with the mission of promoting integrative research between clinicians or epidemiologists and basic or applied scientists, to develop an understanding of the complex relationships between genetic factors or biomarkers and environmental exposures related to adverse health outcomes. Our goal is to improve human health through research, clinical practice and public health initiatives that prevent illness and decrease mortality from diseases associated with environmental exposures. The **CEG Career Development Core (CDC)** will accomplish this goal by supporting promising junior level clinical, biomedical, and environmental health beginning researchers and promoting cross-training directed toward research related to environmental health sciences. This Clinical Research Award serves as an initiation step for clinicians-scientists to become collaborative environmental health sciences investigators. The environment is broadly defined and includes nutrition, infectious agents, xenobiotics and psycho-social issues.

#### **CEG-NIS Investigator Eligibility Requirements:**

- Clinicians (MD, DO, DDS) accepted into a Master of Science or Doctoral degree program in molecular epidemiology, clinical research, clinical epidemiology, clinical effectiveness, clinical trials, occupational medicine, or translational biomedical research.
- Clinicians who have completed a MS degree in the last three years.
- Clinicians who are actively engaged in a postdoctoral program.
- Preference is given to U.S. citizens or those with a permanent residence visa.
- Applicants must demonstrate an interest in molecular biomarkers or gene-environment interactions.
- Previous CEG NIS awardees are eligible to apply for an additional funding cycle.

#### **Application Process: The Nominee submits the following:**

- Type of support requested (for example: research supplies, CEG core use, name of meeting, workshop, or career development activity).
- A detailed budget (support of up to \$5,000).
- A brief (two page) description of the research project, including the environmental health sciences aspects and how the requested support will assist in your research and professional development.
- Two page biographical sketch.

**Available Resources:** CEG will provide funds to conduct unfunded thesis, pilot or preliminary research. This award may be used for such items as subsidies to use CEG core services, database searches, statistical analyses, laboratory supplies, travel funds or other professional development activities related to research.

### **Access and subsidies for CEG core services include:**

**Bioinformatics Core:** Investigators will have priority use of this core, which assists investigators in converting the genomic and protein data into meaningful information through the use of appropriate statistical methods and computational tools.

**Integrative Health Sciences Core:** Investigators will receive assistance to develop expertise in the use of exposure biomarkers in human studies, including selection of biomarkers, collection, processing and storage, data interpretation, and communication of results. The IHS Core provides a panel of expert consultants as a resource to address design and methodological questions in studies of gene-environment interactions. The Core is in the process of developing informatics and bio-specimen resources for research purposes.

**Integrative Technologies Support Core:** Investigators can meet with ITS leaders to assist in experimental design using technologies that might be new to the environmental health sciences investigator.

**The Integrative Technologies Support Core includes the following facilities:**

- **Genomic and Microarray Laboratory**
- **Transgenic and Knockout Mice**
- **Microscopy**
- **Genotyping Facility**
- **Proteomics and Metabolomics Analyses**
- **High-Field Magnetic Resonance Imaging and Spectroscopy**
- **Flow Cytometry Facility**
- **Analytical Services and Mass Spectrometry of Large and Small Molecules as well as Heavy Metals**

**Administrative Core:** NIS awardees will have access to the CEG Administrative Core support services, which includes searching for funding opportunities, networking assistance, and grantsmanship.

- **Support** to present research at national meetings, summer internships at NIH (especially NIEHS), career development activities at other NIEHS-Centers, and/or other career development workshops and experiences such as those offered by Jackson Laboratories, Cold Spring Harbor Laboratories, etc. No overhead, F&A or salary support will be provided.
- **Assistance** with preparation of grant proposals.
- **Funds** for laboratory and other research supplies.
- **Identification** as an NIEHS-CEG NIS awardee.

### **Selection Process:**

Selection will be made by a CEG-CDC Committee co-chaired by the CDC directors, Dr. Grace LeMasters and Dr. Daniel Woo. Anticipated start date is December 1, 2009.

Materials should be submitted by **November 10, 2009**, addressed to Drs. LeMasters and Woo, and submitted to the CEG at [koprasej@uc.edu](mailto:koprasej@uc.edu), or hand-delivered to 112 Kettering Lab. For additional information, please contact the CEG Program Coordinator, Elizabeth Koprass, at 558-3625 or [Koprasej@uc.edu](mailto:Koprasej@uc.edu). More information on the Center for Environmental Genetics can be found at <http://www.eh.uc.edu/ceg/>

**All CEG-NIS awardees agree to**

- **acknowledge the Center for Environmental Genetics support (NIEHS P30-ES006096) on publications or other products resulting from these funds**
- **present research progress at the conclusion of funding by a seminar presentation**
- **prepare a one page report on how CEG support was used to meet the goals of the program**