



Career Development Core Request for nominations

NEXT GENERATION BIOMEDICAL INVESTIGATOR

The Center for Environmental Genetics (CEG) is an NIEHS-supported Center (see <http://eh.uc.edu/ceg/>) with the mission of promoting integrative research among basic and applied scientists, epidemiologists and clinicians to develop an understanding of the complex relationships between genetic predisposition factors and environmental exposures. Our goal is to improve human health through 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 biomedical, clinical, and environmental health researchers and promoting cross-training directed toward research related to environmental health sciences.

Resources and Benefits Available for the Next Generation Biomedical (NGB) Investigator:

Junior investigators frequently begin their careers with limited assistance and little understanding of what an academic career requires. The CEG-CDC will rectify this detrimental situation by providing strong mentorship and career-building measures as determined on an individual basis.

- **Travel Budget** for attendance at national meetings, summer internships at NIH (especially NIEHS), and/or other career development workshops and experiences such as those offered by The Jackson Laboratory, Cold Spring Harbor Laboratory, and Harvard School of Public Health.
- **Eligible** for a Pilot Program Project award from the CEG for up to \$30,000.
- **Mentorship** with preparation of grant proposals and admittance to the Design and Management course provided by Dr. LeMasters.
- **Funds** for laboratory and other research supplies.
- **Protected** time, if needed, will be awarded on a cost-share basis using a matching ratio with the home department. (This resource will be awarded sparingly in order to serve as many NGB investigators as possible.)
- **Certification** as an NIEHS-Center for Environmental Genetics-Next Generation Biomedical Investigator recipient.

Access and subsidies for CEG core services include:

Bioinformatics Core: NGB investigators 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: NGB investigators 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. This 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 biospecimen resources for research purposes.

Integrative Technologies Support Core: NGB investigators can receive assistance in experimental design using technologies that might be new to the environmental health scientist/clinical investigator and 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***

CEG-NGB Investigator Eligibility Requirements –

- A junior-level investigator defined as appointed to an entry-level full time academic position within the last 36 months
- The candidate must have an MD, PhD, or other equivalent degree.
- He/she has a peer-reviewed publication record
- Preference is given to U.S. citizens or those with a permanent residence visa.

Nomination Process

A. The nominee should submit a two page biographical sketch plus a three page maximum personal statement that includes:

1. A one page summary of his/her specific research interest,
2. The potential synergy of the research with the CEG,
3. Suitability for consideration as an NGB investigator and a career development plan.
4. Special interests and plans for cross-training in one or multiple basic, translational, or clinical environmental health areas.
5. Description of the benefits or resources that are being requested.

B. A letter from a senior faculty member/mentor. This letter should state why the nominee is an excellent candidate which summarizes the following:

1. Scientific merit of the candidate's ongoing and potential research and its alignment with the CEG's mission.
2. Career goals of the applicant.
3. Description of how participation with the CEG will contribute substantially to their scientific development.
4. Facilities and research opportunities available to the candidate in their home dept.
5. Description as to why the nominee is considered very promising.

C. A letter of recommendation from the division or department chair that addresses the above and outlines specific commitment to the candidate's career development that includes protected time and such resources as space, equipment and funding.

Selection Process: Selection will be made by a CEG committee co-chaired by the Core directors, Dr. Grace LeMasters and Dr. Daniel Woo. Appointment as an NGB investigator is for up to 2 years, assuming adequate progress the 1st year in the form of publications, acquisition of promising pilot data, and/or submission of a grant proposal either as PI or co-investigator.

Applications are due by August 30, 2009. Materials should be addressed to Drs. LeMasters & Woo, and submitted to the CEG at 112 Kettering Lab. For additional information, please contact or visit the CEG Coordinator, Elizabeth Koprass, at 558-3625 or Koprass@uc.edu. A decision will be made by October, 2009. If there are additional questions contact grace.lemasters@uc.edu or daniel.woo@uc.edu.