Career Development Program – Request for Applications

New Investigator Scholar (NIS) awards

For Pre-doctoral students, Physician MS or PhD students, or other Postdoctoral fellows

The Center for Environmental Genetics (CEG) is an NIH/NIEHS-funded center dedicated to promoting integrative research among basic and applied scientists, epidemiologists, and clinicians, in order to obtain better understanding of gene-environment interactions. We seek to improve human health through clinical practice and public health initiatives that prevent illness and decrease mortality from diseases associated with adverse environmental exposures. The CEG Career Development Program (CDP) serves this goal by supporting promising junior-level clinical, biomedical, and environmental health investigators and promoting cross-training in environmental health sciences research. The CDP New Investigator Scholar (NIS) Award serves as an initiation step for graduate students and postdoctoral fellows to embark on productive team science in environmental health. The ‘environment’ is broadly defined and includes nutrition, infectious agents, xenobiotics, and psycho-social issues.

NIS Eligibility Requirements

- Clinicians (MD, DO, DDS, MSN) accepted into a MS or Doctoral degree program in molecular epidemiology, clinical research, epidemiology, clinical effectiveness, nursing, pharmacology, clinical trials, occupational medicine, or translational biomedical research, or have completed an MD/PhD within the last three years, OR
- Researchers (MD/PhD) who are actively engaged in a mentored, postdoctoral research program, OR
- PhD graduate students or postdoctoral fellows pursuing translational research in gene-environment interaction

Applicants should demonstrate an interest in molecular biomarkers, epigenetics or gene-environment interactions or define how this award will lead to research in this area. CEG NIS awardees are eligible to apply for 1 additional year (total of 2 years) and awardees are eligible to apply for the CEG Pilot Projects Program under the Mentor-Mentee award category.

All CEG-NIS awardees are encouraged to articulate the importance of their research proposal and its potential impact on environmental health science and human health. At least 2 NIS awards will be made to projects demonstrating strong potential for translation/community impact (partial/additional funding via the CEG Community Outreach and Engagement Core/COEC).

How to Apply

Applications due by 5 PM Friday January 29, 2016

- Submit a brief (2 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.
- 2 page NIH biographical sketch including personal statement.
- A detailed budget (support up to $5,000) via PHS 398 Form Page 4 and budget justification. The budget must include the type of support requested: e.g., research supplies, CEG core use, name of meeting, workshop, or career development activity.
While institutional review may be pending or in process at time of application for proposals involving animal or human studies, the following IACUC or IRB information must be provided prior to release of award funds:

1) Name of PI holding the IACUC or IRB protocol
2) IRB or IACUC Protocol #
3) Last Approval Date
4) Expiration date

Delays in IRB and/or IACUC documentation will lead to delays in processing of award.

A letter of recommendation from a current faculty mentor or advisor describing the candidate's qualifications, a brief mentoring plan, and the likelihood that this individual is likely to be successful in a research career.

Available Resources: CEG will provide funds to conduct unfunded thesis, pilot or preliminary research, or support career development. This award may be used for such items as subsidies to use CEG core services, database searchers, 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 Facility 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 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, and Heavy Metals

Administrative Core: Administrative Core support includes searching for funding opportunities, networking assistance, and providing workshop/seminar opportunities.

- 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 will be made by a committee co-chaired by the CDP directors, Dr. Grace LeMasters and Dr. Daniel Woo. Materials should be submitted by 5:00 PM Friday January 29, 2016, addressed to Drs. LeMasters and Woo and submitted in c/o Teresa Donovan at donovata@ucmail.uc.edu

All CEG-NIS awardees agree to

- Acknowledge Center for Environmental Genetics support (NIEHS award P30 ES006096) on publications or other products resulting from these funds;
- Comply with NIH Public Access Policy: http://publicaccess.nih.gov/ NIH public access policy requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to PubMed Central immediately upon acceptance for publication. Published works also must acknowledge the CEG’s NIEHS award P30 ES006096. Additional instructions at http://www.ncbi.nlm.nih.gov/books/NBK53595/
- present research progress at the conclusion of funding by a seminar presentation
- prepare a 1-page report and evaluation of how CEG support was used to meet the goals of the program.
- meet with the Core directors Dr. LeMasters and Dr. Woo as requested.
- attend 2 – 3 career development workshops provided by the CDP.