

Pilot Grants Available in the Environmental Health Sciences

The National Institute of Environmental Health Sciences (NIEHS)-funded HERCULES Center (Emory Health and Exposome Research Center: Understanding Lifetime Exposures) has funds available for pilot project grants of *up to \$35,000*. A major focus of HERCULES is to advance the science of the exposome (an analysis of the complex exposures we face as humans that complements the human genome), but the HERCULES Pilot Project Program also accepts applications in the general area of Environmental Health Sciences that are in line with the mission of NIEHS.

These awards are open to all investigators at Emory and Georgia Tech who are eligible to serve as Principal Investigators on NIH grant applications (Instructor and above, tenure, research- or clinical-track). Grants must focus on the role of the environment in human disease, and may include basic, biomedical, translational, clinical, epidemiological, or behavioral projects, e.g. studies on specific environmental toxicants or gene-environment interactions. Projects with translational relevance (clinical or population-based); applications from early-career investigators; and collaborative and interdisciplinary projects are particularly encouraged.

Applications that are not relevant to the mission of the Center will be returned without review. Applications that propose to utilize one or more of the HERCULES Cores are especially encouraged and awardees will receive subsidized core services. Requests for equipment or for a portion of PI salary greater than 5% must be justified in the budget.

Application Guidelines:

- 4 page maximum length for science portion (11 point arial, 1-inch margins)
- NIH Biosketch and full NIH budget & justification on PHS 398 form (required by NIEHS)
- Due by Feb 1, 2014. Decisions made by March 15, 2014

Award Requirements:

- Applicant must hold a faculty position and be eligible to be a PI on an NIH R01 grant
- Awardees must agree to participate in HERCULES activities (Seminar, Data Club, Workshops) and provide a brief written report at the end of the funding period.
- Any resultant publications must cite funding from HERCULES (NIH grant 1 P30 ES019776) and copies of the publications should be provided to Dr. Morgan.
- For questions contact Dr. Morgan, Email: etmorga@emory.edu
- An electronic version (PDF) of the application should be submitted to: Kristine Dennis, Email: kkdenni@emory.edu



Core Services

EMORYHERCULES.COM

While the HERCULES cores are based upon specific NIH guidelines and are organized as two specific umbrella cores (Integrated Health Sciences Facility Core and the Systems Biology Core), the specific research activities are subdivided here based on potential user interest. The mission of the cores is to provide tools and research services to enable translation of basic environmental health research into clinical and population research.

High Resolution Metabolomics- Dean P. Jones, PhD dpjones@emory.edu

High resolution metabolomics can measure thousands of chemicals in biologic samples and provides an innovative capability that can be used for cell culture, animal models and human studies. This approach includes the measurement of a broad range of environmental contaminants as well chemicals introduced through our diet. The analysis requires a small volume of plasma (~50 microliters), but there are special sample preparation needs. Contact Dr. Jones for more information.

Targeted Exposure Analysis – Dana Boyd Barr, PhD dbbarr@emory.edu

Using a suite of analytical technologies (multiple types of mass spectrometers e.g. triple quadrupole mass spectrometers, time of flight mass spectrometers, ion trap mass spectrometers with different interfaces and ionization techniques e.g., high performance liquid chromatographs, gas chromatographs, electrospray ionization, chemical ionization, matrix-assisted laser desorption interfaces), this core can essentially measure any chemical in multiple biological matrices. Users should contact Dr. Barr with questions about the various assays available.

Clinical Research Services - Thomas R. Ziegler, MD tzieg01@emory.edu

This core is designed to provide services to promote translation of basic science concepts into practical clinical and population research designs that can significantly promote incorporation of environmental health sciences (i.e., exposome research) into clinical medicine and population-based health research. Dr. Ziegler can assist with the design and conduct of human studies.

Systems Biology- Eberhard Voit, PhD; Melissa Kemp, PhD eberhard.voit@bme.gatech.edu, melissa.kemp@bme.gatech.edu

The Systems Biology Core serves as a marketplace for matching data with analytical models. The core team collectively represents a solid body of strong expertise from mathematical modeling to systems biology and will work with investigators to develop the best approach for their particular needs. The Core will also host educational workshops on a variety of computational approaches.

Biostatistics and Bionformatics- Lance Waller, PhD; Tianwei Yu, PhD

lance.waller@emory.edu, tianwei.yu@emory.edu

Through their affiliation with the center, Hercules investigators receive discounted services through the Biostatistical Consulting Center at Emory.

http://www.sph.emory.edu/departments centers/bios/index.html