

Pilot Project Program of Duke's Center for Comparative Biology of Vulnerable Populations Summer 2008

1 Purpose of the Pilot Project Program

Duke's Center for Comparative Biology of Vulnerable Populations (CCBVP) was funded in May 2004 by the National Institute of Environmental Health Sciences to support research aimed at understanding *how biological, physiological, and social aspects of vulnerability alter the effect of the environment on human health*. The theme of the Center is broadly-based and interdisciplinary by design, and addresses the complex etiology and pathogenesis of diseases caused by environmental factors. For more information, please see the CCBVP website: www.nicholas.duke.edu/ccbvp.

The CCBVP invites a sixth round of pilot project applications to support research on human health and vulnerability to environmental influences in either the \$5,000-15,000 range or the \$15,000-35,000 range. We are especially interested in the effect of various aspects of vulnerability (age, geographic factors, co-morbid diseases, nutritional status, race, economic status, or genetics) on the relationship between environmental factors and health. Collaborative and interdisciplinary proposals are especially encouraged. New investigators in environmental health research are encouraged to apply and will be given special consideration. In the last solicitation, we funded about one-third of the applications submitted. This round, we plan to fund 4-8 proposals.

2 Eligible Applicants

All Duke University faculty, with the exception of members of the CCBVP's Internal Advisory Committee, are eligible to apply for funding

3 Additional Resources

In addition to the funds provided by the Pilot Project Program, the CCBVP resources available to support new projects include: consultation, access to equipment, and discounted services from the four facility cores. Services from the four facility cores are discounted for Pilot Project Program awardees:

- **DNA Microarray Facility Core.** Primary contact: Joseph Nevins, 684-2746, j.nevins@duke.edu; or Holly Dressman, 668-1583, dress002@mc.duke.edu
 - Consultation on design of microarray experiments
 - Provision of DNA microarrays that are enhanced for EHSRC projects by adding to the standard collection of sequences based on identification of genes important for environmental studies
 - Microarrays that will allow various cross-species comparisons (human vs. mouse vs. zebrafish vs. *C. elegans*)
- **Proteomics Facility Core.** Primary contact: Robert Roubey, 966-0578, robert.roubey@med.unc.edu
 - Cellular protein profiling (flow cytometry)
 - Soluble protein profiling (protein arrays: bead-based arrays for cytokine profiling, custom and prefabricated)
 - Discovery proteomics (protein-protein interactions, surface plasmon resonance)
- **Inhalational Toxicology Facility Core.** Primary contact: Michael Foster, 668-0382, foste028@mc.duke.edu
 - Pulmonary function assessment
 - Airway bronchoprovocation
 - Human/mouse exposure

- Human Bronchoscopy with bronchoalveolar lavage
- **Advanced Computational Technologies Facility Core.** Primary contact: Alan Gelfand, 668-5229, alan@stat.duke.edu
 - Consulting, advice, guidance and in some cases analysis for research projects
 - Consulting, advice, guidance and in some cases analysis for DNA microarray and proteomic studies
 - Bioinformatics support for genetic studies

The budget for a pilot project may include: supplies; salary support for technicians, research assistants, and graduate students; research related travel (but not travel to scientific meetings); and other justifiable research expenses. Investigators should contact facility cores for information on costs of facility core services for specific research projects. Faculty salary and indirect cost are not allowable expenses. Subcontracts cannot be issued to institutions outside Duke.

4 Email of Intent

Prospective applicants must submit an email of intent that includes the following information:

- Descriptive title of the proposed research
- Name, title, departmental affiliation, address, email address, and telephone number of the proposed Principal Investigator
- Name, title, and departmental affiliation of collaborating investigators

The email of intent is designed to facilitate a rapid review process and must be received by 15 June 2008. Please send your email of intent to mmiranda@duke.edu with a subject line of “CCBVP Pilot Project Program Email of Intent”.

5 Application Requirements

5.1 Small Grants – \$5,000-15,000

Abstract (250 words maximum)

Research plan (3 page maximum – single spaced, 12 point font, 1” margins all the way around) including responses to the following four questions:

- What hypothesis do you intend to test?
- Why is the work important?
- What have you already done related to the proposed work?
- What research methods will you use to undertake the work?

Appendix materials (1 page maximum – single spaced, 12 point font, 1” margins all the way around) including:

- Research schedule and milestones
- Collaborative nature of the project
- Relevance to mission of the CCBVP
- Planned utilization of Facility Core services
- Potential for future grant support

Budget and justification (1 page maximum)

Curriculum vitae **OR** *NIH biosketch* for each investigator including current grant support and limited to four pages for each investigator

5.2 Larger Grants – \$15,000-35,000

Abstract (250 words maximum)

Research plan (5 page maximum – single spaced, 12 point font, 1” margins all the way around) including responses to the following four questions:

- What hypothesis do you intend to test?
- Why is the work important?
- What have you already done related to the proposed work?
- What research methods will you use to undertake the work?

Appendix materials (1 page maximum – single spaced, 12 point font, 1” margins all the way around) including:

- Research schedule and milestones
- Collaborative nature of the project
- Relevance to mission of the EHSRC
- Planned utilization of Facility Core services
- Potential for future grant support

Budget and justification (1 page maximum)

Curriculum vitae **OR** *NIH biosketch* for each investigator including current grant support and limited to four pages for each investigator

5.3 Submission Format

Please compend all required elements into a single pdf document and submit via email to mmiranda@duke.edu with the subject line of “CCBVP Pilot Project Program Submission”.

6 Schedule

Email of intent receipt date: 15 June 2008

Application receipt date: 1 July 2008

Grant review: July 2008

Project start date: 1 August 2008

Project completion date: 31 March 2009 – please note that all funds must be expended by 3/31/2009 due to parent grant award constraints.

7 Inquiries

We welcome the opportunity to answer questions from potential applicants. Please feel free to direct inquiries related to this funding announcement to:

Marie Lynn Miranda, PhD
Deputy Director, Duke CCBVP
Director, Duke CCBVP Pilot Project Program
Nicholas School of the Environment and Earth Sciences
Telephone: 613-8023
Email: mmiranda@duke.edu

Richard Di Giulio, PhD
Director, Duke CCBVP
Nicholas School of the Environment and Earth Sciences
Telephone: 613-8024
Email: richd@duke.edu