

National Institute of Environmental Health Sciences  
Division of Extramural Research and Training  
Cellular, Organ, and Systems Pathobiology Branch

**NATIONAL ADVISORY ENVIRONMENTAL HEALTH SCIENCES COUNCIL**

May 14-15, 2013

Concept Clearance

Outstanding New Environmental Health Scientist Award

**Introduction**

An essential element of the mission of the National Institute of Environmental Health Sciences is the support and career promotion of the future generation of new scientists who will further the understanding of the impact of environmental exposures on human health. The NIEHS has long supported a number of training and fellowship programs for pre and postdoctoral training, and mentored career development awards for junior faculty development. However, even with these career development mechanisms in place, NIH data showed that the age at which junior faculty members were able to obtain their first independent R01 research funding was steadily increasing. At its NAEHS Council Meeting in May, 2005, NIEHS presented a concept for a new program, the Outstanding New Environmental Health Sciences (ONES) Award, an imaginative program to identify the best new biomedical investigators and facilitate their establishing vibrant, independent research programs in the environmental health sciences. The ONES program was announced yearly for six years by a special Funding Opportunity Announcement and between 2006-2012 forty-two awards were made representing the spectrum of research areas supported by the NIEHS. During this time, NIH adopted the designation of Early Stage Investigator and developed procedures for highlighting this group of investigators in the initial review process, and there was a hiatus in the NIEHS FOA announcement of the ONES program. The NIEHS is now seeking NAEHS Council approval to reinstitute the dedicated ONES program.

**Research Goals and Scope**

In order to identify outstanding junior scientists at the formative stages of their career and assist them in launching an innovative research program with a defined impact in the environmental health sciences, the NIEHS is proposing to reinstitute a program of R01 research grants intended for the Early Stage Investigator R01 applicant. It will be designed to be highly competitive and only a limited number will be awarded per year.

The goal of this program is to provide funding opportunities that will be attractive to promising Early Stage Investigators, because it will be targeted to them and because the applications will be reviewed in a special emphasis panel. This will allow NIEHS to identify the top echelon of new biomedical investigators, and provide them additional start-up funds to facilitate their future success. The requirement for an environmental health focus will give NIEHS a competitive edge in the search for talented researchers.

Thus, research programs supported by this announcement seek to promote career advancement of the best, highly creative and promising junior scientists who intend to make a long-term career commitment to research in the environmental health sciences, and bring innovative, ground-breaking research initiatives and thinking to bear on the problems of environmental exposures and human biology, human pathophysiology and human health

### **Mechanism and Justification**

Applicants to the FOAs will be expected to demonstrate how the proposed research will have a defined impact on the environmental health sciences and be responsive to the mission of the NIEHS, which is distinguished from that of other Institutes by its focus on research programs seeking to discover how the environment affects people in order to promote healthier lives. Through the research supported by this FOA, we propose to create a foundation of scientists who will better explain the link between the effects of environmental exposures and the cause, moderation, or prevention of a human disease or disorder.

Applications submitted in response to FOA's resulting from this this concept will be required to include all the elements of research grant applications appropriate for the mechanism to be used. However, the research grant applications in this concept are distinguished from other research grant applications in four other respects. First, additional emphasis will be given on the applicants' previous research experience and achievements, their future career goals and objectives, and their plans for enhancing their careers.

Second, applicants will be required to describe the active participation of an advisory committee composed of senior internal and external scientists to provide mentorship and scientific feedback on the research, and the demonstrated commitment by the institution to the participation of the advisory committee and the continued faculty development of the Principal Investigator.

Third, because active support from a new investigator's department is crucial to their career development, applicants will be required to demonstrate this support in the form of dedicated space, institutional resources, and letters of support from their Institution.

Fourth, since NIEHS is proposing to make a substantial commitment to the research career of the principal investigator, it is proposed that budgets submitted in response to this program will include a separate budget specifically devoted to resource development and career enhancement activities. The budget will also include an enhanced travel budget.

Further, the program is designed to build a long term association between the ONES awardees and the NIEHS. This is accomplished by yearly grantee meetings at the NIEHS campus which are open to all NIEHS scientific investigators, and which also include informal sessions with the NIEHS Grants Administrators. Also, the NIEHS staff will work closely with the ONES grantees to facilitate their inclusion in sessions and panels at national meetings focused on environmental health to provide other opportunities to promote interactions among the ONES grantees and to highlight their research.

Because of the special competitive nature of this program, institutional balance will be considered in the selection of the junior faculty to whom awards are made.