



EPA Fellowship Programs: Bolstering the Next Environmental Generation



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Office of Research and Development
National Center for Environmental Research, Health Research and Fellowships Division (HRFD)

June 21, 2011

EPA's
National Center for Environmental Research
supports STEM Education

Undergraduate

Greater Research
Opportunities
(GRO)
Fellowship

Graduate

Science to Achieve
Results (STAR)
Fellowship

Marshall Scholarship
(UK)

Post-Graduate

Association of Schools
of Public Health
(ASPH) Fellowships

Presidential Management
Fellows (PMF)

EPA Post-doc Program

National Network for Environmental
Management Studies (NNEMS)



Program Goals & Highlights

STAR Graduate Fellowship Program

- ✓ Encourage promising students to obtain advanced degrees and pursue careers in environmentally related fields
- ✓ Support basic and applied research in environmentally-related research areas conducted by the nations' best and brightest students



GRO Undergraduate Fellowship Program

- ✓ Encourage promising students to pursue careers in environmentally related fields and to continue their education beyond the baccalaureate level
- ✓ Stimulate and support interest in environmentally related research and development at institutions of higher education that receive limited federal funding, including in particular institutions with substantial minority enrollment



~1600 STAR/GRO Fellowships since 1995

~\$110M have supported fellows since 1995

Program Details - STAR

**2-yr financial support for
students for Master's students**

**3-yr financial support for Doctoral
students**

Provides up to \$42,000 each yr

**Up to \$12,000 for tuition
and fees**

\$25,000/yr = stipend

\$5,000 = expense

allowance

➤ **Up to 105 awards expected for
Fall 2011**

➤ **Topic Areas**

Emerging Environmental Approaches & Challenges:

Innovative Investigations for Oil Spill Impacts

Social Sciences

Information Science

**Tribes and American Indian/Alaska Native/Pacific Islander
Communities**

Nanotechnology

Science & Technology for Sustainability:

Environmental Entrepreneurship

**Green Engineering/Building/Chemical Products &
Processes/Materials Development**

Green Energy/Natural Resources Production & Use

Global Change

Clean Air

Drinking Water

Water Quality:

Hydrogeology and Surface Water

Coastal and Estuarine Processes

Human Health:

Public Health

Risk Assessment and Risk Management

Ecosystem Services

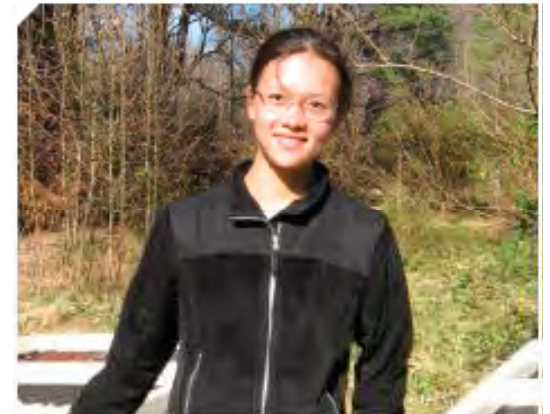
Aquatic Systems Ecology

Terrestrial Systems Soil and Plant Ecology

Terrestrial Systems Animal Ecology

Pesticides and Toxic Substances

Land Protection



Program Details - GRO

- **Financial support for students in their last two years of undergraduate study (current sophomores apply)**
- **Students must attend a GRO eligible institution (<\$35M in R&D)**
- **Provides up to \$48,900 over 2 yrs**
 - Up to \$10,000 for tuition and fees**
 - \$7,200/yr = stipend**
 - \$2,500 = expense allowance**
 - \$9,500 = 12 wk summer internship**
- **Up to 40 awards expected for Fall 2011**
- **Topic Areas**
 - Natural and Life Sciences**
 - Environmental Sciences and Interdisciplinary Programs**
 - Engineering**
 - Social Sciences**
 - Physical Sciences**
 - Mathematics and Computer Science**



Using Holistic Review Criteria

- **Criteria I. Comment on the Scientific Merit of the Applicant's Proposed Area of Inquiry.** To evaluate the scientific merit of the applicant's proposed area of inquiry, reviewers will consider the following elements, to be weighted equally:
 - The candidate's organizational, analytical, and written skills;
 - The candidate's demonstrated potential for success in working as a member of a team and individually;
 - The candidate's potential for scientific curiosity, creativity, acumen, and success in research appropriate to his/her educational level as indicated in their planned course of study (which may include a thesis project/dissertation topic description and listing relevant research literature based on educational level); and,
 - The proposal, as appropriate to the candidate's educational level, for its technical merit, social application, potential for success, and expected environmental benefits.



Using Holistic Review Criteria

- **Criteria II: Comment on the Applicant's Demonstrated Commitment to an Environmental Career.** To evaluate the applicant's demonstrated commitment to an environmental career, reviewers will consider the following elements, to be weighted equally:
 - The degree to which the candidate possesses a strong potential for pursuing an environmental career;
 - The candidate's demonstrated commitment to the environment and/or potential for leadership in the environmental arena;
 - The candidate's demonstrated potential for success in attaining an advanced degree in an environmentally-related field; and,
 - The candidate's demonstrated potential for maturity, responsibility, and integrity.

Using Holistic Review Criteria

- **Criteria III. Comment on the Potential for Broader Societal Impacts.** To evaluate the potential for broader societal impacts, reviewers will consider the following, which are weighted equally:
- Evaluating how the applicant, by virtue of his/her environmental interests, may encourage diversity, broaden opportunities, and enable the participation of all citizens—women and men, underrepresented minorities, and persons with disabilities—in the protection of human health and the environment;
- Evaluating how the applicant addresses possibilities for disseminating environmental research results and information; and,
- Evaluating how the applicant proposes to collaborate with other [non-federal] sectors and users to advance environmental decision-making.



Using Holistic Review Criteria

- **Criteria for Internal Programmatic Review:**
- **Comment on the Relevance to EPA's Mission of Protecting Human Health and the Environment.** To evaluate the merit of the proposed area of inquiry in the internal programmatic review, reviewers will consider the following elements, which are weighted equally:
 - The strength and degree to which the proposed area of inquiry relates to protection of human health and the environment in light of EPA's authorizing statutes while not being duplicative of a government effort [e.g. supported by EPA or some other source];
 - The strength and degree to which the proposed area of inquiry has the potential to improve environmental management decisions and practices and/or improve the managing of complex environmental problems; and,
 - The strength and degree to which the proposed area of inquiry provides a focus for future approaches towards assessing and managing environmental risks.



Using Holistic Review Criteria

- **Criteria for Internal Programmatic Review:**
- **Comment on the Potential for Broader Environmental Application.** To evaluate the potential for broader environmental application in the internal programmatic review, reviewers will consider the following elements, which are weighted equally:
 - The strength and degree to which the application proposes consideration, where appropriate, of persons and groups affected by disproportionate environmental impacts and/or unequal distribution of environmental protection; and,
 - The strength and degree to which the applicant proposes to carry out activities in a sustainable fashion [e.g. conserving water and energy, minimizing waste and toxics] appropriate to his/her environmental interests.



Program Contacts

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WEBSITE & LINKS to RFAs:

<http://www.epa.gov/ncer/fellow/>

*Supporting the Next Generation of
Scientists and Engineers!*

