

HEART GK-12 FELLOWSHIP
(Heartland Ecological/Environmental Academic Research Training)
Student Application Packet
2008-2009 Cohort

**Deadline: Review of Applications will begin Friday January 11, 2008
and continue until all fellowships have been awarded**

HEART GK12 Fellowship Program
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Program Description

The Heartland Ecological/Environmental Academic Research Training GK-12 (HEART GK12) program is a National Science Foundation funded fellowship targeting primarily underrepresented minorities in science. Our program has four goals: 1) use content knowledge and skills of fellows and faculty to increase scientific literacy among high school students; 2) improve teachers' science content and pedagogical knowledge; 3) provide experiences for teachers in conducting scientific and action research and; 4) enhance long-term partnerships between the university and local schools.

HEART GK-12 fellows and their faculty advisors will be partnered with area high school teachers and engage in a rich array of scientific experiences through exploration of the highly diverse ecological habitats at SIUC Touch of Nature Environmental Center (TONEC). In consultation with faculty the fellow-teacher teams will design an original research project, participate in workshops designed to familiarize them with science standards, and provide training in research-based pedagogy. Fellow-teacher teams will plan exercises, develop action plans, and design Action research that together integrate and refine inquiry-based teaching in the classroom.

Our program is designed to bridge the gap between the university and local schools by involving graduate students directly with the development of ecological and environmental science curricula as well as mentoring high school teachers in the scientific research process. Ultimately this program provides an opportunity for graduate students to impact the lives of high school teachers and students in southern Illinois and beyond.

Roles and Expectations of Fellows

Fellows will have a variety of roles in addition to their thesis/dissertation research, including that of role models to diverse student bodies at area high schools. They will bring to the classroom a wealth of science content and concepts, and science process skills. Fellows will be expected to provide leadership and guidance as learning team coaches to ensure the team remains on task and meets deadlines. Working in collaboration with teachers, fellows will align high school science curricula in ecology with the Illinois state standards and develop effective inquiry-based exercises and lesson plans. All fellows are required to attend the Summer Institute, whereby fellows will mentor teachers in the research environment and supervise the development and implementation of a research project. As an extension of this work fellows and teachers will provide professional workshops and develop Action research projects, fellows will be liaisons between the university and science coordinator for the school districts, and assist in introducing technology into the classrooms. All fellows will be required to participate in graduate seminars offered through the Center for Ecology and help organize a high school research symposium. Upon completion of their graduate program fellows will submit a copy of their thesis/dissertation to the HEART Program and acknowledge program support in presentations and publications.

Roles and Expectations of Participating Faculty

Participating university faculty members have several responsibilities to the fellowship program. Faculty members are expected to be members of the SIUC Center for Ecology and attend the Summer Institute with their fellow. For information on how to get involved with the SIUC Center for Ecology, please visit (<http://www.ecology.siu.edu/>). In addition, faculty members will serve as mentors to the fellow-teacher research teams and provide adequate guidance to ensure timely progress on their TONEC research projects. Lastly, as the fellows' faculty advisor, they will mentor the fellows on the importance of maintaining academic integrity and complete their thesis/dissertation research in a timely manner.

1a. Eligibility Requirements

IMPORTANT: To be considered for a HEART Fellowship you must be admitted to the SIUC Graduate School and accepted into a department and identified a faculty advisor willing to advise you for your thesis or dissertation research. If you have not yet done this, please visit the SIUC Center for Ecology website (<http://www.ecology.siu.edu/>) to identify a department and advisor.

Please answer the following by entering a **Y** for yes or an **N** for no.

_____ 1. Are you a U.S. citizen or lawful permanent resident of the United States? (If you answered **NO**, then you are not eligible to apply.)

_____ 2. Do you have at least a 3.0 cumulative grade point average? (If you answered **NO**, then you are not eligible to apply.)

_____ 3. Are entering a **new** Master's or PhD program of study at SIUC? (If you answered **NO**, then you are not eligible to apply.)

_____ 4. Have you identified a faculty advisor from a department involved with the SIUC Center for Ecology for your program of study? (If you answered **NO**, then see the above message.)

_____ 5. Have you applied to a department at SIUC?

1b. Commitment to the HEART GK-12 Fellowship Program

The SIUC HEART GK-12 Fellowship program seeks to identify outstanding and committed individuals dedicated to academic research and training. The program requires fellows to:

1. Perform a maximum of 15 hrs/week in HEART GK-12 activities
2. Maintain adequate progress in their degree program
3. Maintain a minimum GPA of 3.0
4. Participate in all required HEART GK-12 activities and events

I hereby agree to fulfill all of the requirements as stipulated by the HEART GK-12 Fellowship Program and do so with the integrity of an academic professional.

Print Name

Signature

Date

2. Personal Information *(Please type or print)*

Last Name

First Name

Middle Name

Date of Birth

Social Security Number

Current Mailing Address

Permanent Mailing Address

Home Phone :

Cell Phone:

E-mail Address:

Name and telephone of emergency contact:

Gender:

Female

Male

Citizenship:

U.S. Citizen

Permanent Resident

Ethnicity:

Black or African American

Hispanic or Latino(a)

Pacific Islander

Native American/ Alaskan Native

Caucasian

Asian

Do you have a disability?

No

Yes (Please Specify)

Do you speak any languages other than English?

No

Yes (Please list below)

How did you become aware of the SIUC Heartland GK-12 Fellowship Program? (Please check all that apply)

Letter

Email

Faculty Member

Academic Advisor

Flyer

Friend

Presentation

Other (specify)

HEART Fellow

3a. Educational Information

Major

Department

Minor or Dual Major

Degree Sought

Master's

Ph.D.

Cumulative GPA

GPA in Major

Intended department for your graduate school field of study:

Name of intended faculty advisor:

Please describe your particular research interests:

3b. Academic Record and Extracurricular Activities

Please *submit an official transcript from your current educational institution and all other colleges and universities you attended.*

List previous undergraduate and graduate research experiences you had in a university setting or elsewhere (include name of program, institution, year, faculty mentor): - *attach other pages as necessary*

List academic and extracurricular honors, awards, and scholarships that you have received:

List previous teaching experiences (include class, grade level, institution, year):

List membership or participation in academic/campus organizations and activities:

4. SIUC HEART GK-12 Fellowship Program Compliance and Release Form

This release form enables the HEART GK-12 Fellowship Program at Southern Illinois University Carbondale to secure copies of all academic records including transcripts, grade reports and other information pertaining to my possible participation in the HEART GK-12 Fellowship Program. This information will be shared with other university personnel in accordance with federal regulations and university policy.

I understand that a copy of my application will be kept on file at the HEART GK-12 Program office and that resulting information received from counselors, admission officers, instructors, etc. will be kept confidential in compliance with the Family Rights and Privacy Act.

If I receive a fellowship, I grant permission for the HEART GK-12 Program to use photographs or likenesses of myself in various publications. I am also **fully aware that the fellowship is for 2 years of support** and that I must seek other funding sources, if necessary, to complete my degree.

I hereby certify to the best of my knowledge that all information submitted is complete and accurate. I understand that failure to disclose information, or falsification of information, are grounds for denial of a fellowship from the HEART GK-12 Program, and if given a fellowship, grounds for immediate revocation of the fellowship.

Print Name

SS#

Signature

Date

5. Personal/Professional Statement (2-3 pages, single-spaced)

Type on a separate sheet of paper a statement describing: (1-2 pages)

1. **Your educational and career goals.**
2. The personal **attributes and professional skills** that will enable you to achieve your goals.
3. The **major challenges in increasing ecological and environmental science literacy** among teachers and students and how you would address them.
4. Your **contribution to increasing the overall diversity of educators** in the sciences.

Type on a separate sheet of paper a statement describing: (1 page)

1. Your **research experiences and interests. Include examples of questions/hypotheses in the discipline** you intend to conduct your research.

6. Statement of Teaching Philosophy

Please attach a one page statement on your personal teaching philosophy. In your statement reflect on the following questions:

1. What qualities characterize good teaching? How do these relate to student learning?
2. What constitutes science literacy?
3. Which aspects of science (knowledge, skills, dispositions) do students really need to know?

7. Letters of Recommendation

Three letters of recommendation are required; at least two of these letters should come from faculty members who are familiar with your academic performance, research experiences, and/or professional goals. Please include recommendation letters in sealed and signed envelopes in your completed application packet or have them sent directly to the HEART office. Once received these confidential references become the property of the SIUC HEART GK-12 Fellowship Program. **It is YOUR responsibility to ensure the HEART staff receives these letters by the application deadline.**

Provide the name, title and contact information for each reference who has agreed to write about your qualifications for this fellowship.

1. Name and Title

Institution and Address

Phone and Email

2. Name and Title

Institution and Address

Phone and Email

3. Name and Title

Institution and Address

Phone and Email

8. Curriculum Vita

Please attach a two-page curriculum vita

9. Criminal Background Check

The State of Illinois requires that all people entering the public school classroom have a comprehensive criminal background check. Please fill out the release form on the following page. Noncompliance with this requirement disqualifies you from being considered for a fellowship.

