

THE EARTH INSTITUTE COLUMBIA UNIVERSITY

ANNOUNCEMENT OF THE NSF GK-12 FELLOWSHIP PROGRAM SPECIFICS AND APPLICATION PROCESS

Learning through Ecology and Environmental Field Studies (LEEFS):

12-month Fellowship Program for Columbia University Graduate Students

Are you interested in helping to bring hands-on science to middle school and high school public school students in New York City? Would you like to hone your own communication skills to be more effective in reaching the non-science community? Would you be interested in helping to public school teachers' commitment to inquiry-based science education?

If so, please consider becoming an NSF GK-12 Fellow by applying for the *Columbia University's Learning through Ecology and Environmental Field Studies Fellowship* program (LEEFS).

Specifics of LEEFS Program:

1. LEEFS is a NSF-funded graduate fellowship offered by Columbia University Earth Institute and Arts and Sciences, and is one of over 100 "GK-12" programs nationwide. The fellowship provides \$40,500 in support (\$30,000 stipend and \$10,500 tuition relief) to graduate students in the program for a 12 month period.
2. LEEFS requires that you work weekly with a science teacher(s) in one of several partnering public schools. The program is designed for you to bring your research into the classroom. LEEFS has partnerships with both New York City public middle and high schools.
3. The schools have different student populations and are mostly comprised of students who are eligible for Title I funding (free or subsidized lunch). The schools also share a commitment to hands-on, student-centered learning and to team teaching.
4. As a Fellow, you can expect to make a difference in the lives of public school students and teachers.

Background on LEEFS:

LEEFS is a program of the Columbia Earth Institute and the Graduate School of Arts and Sciences.

The goal of the NSF in providing funding for the GK-12 LEEFS Program is for graduate students to use their experience and expertise to invigorate the science learning in middle and secondary school classrooms, while improving their own teaching and communications skills.

We provide a network of experienced teachers and training to support you in figuring out how to communicate what excites you about science to young people. We will pair you with an experienced teacher, or sometimes a small team of teachers, who will integrate you into their classrooms.

You will also get an introduction to science curriculum in the New York City middle and high schools as well as mentorship on how to develop classroom techniques that maximize student centered learning. You will have direct contact with young students, sometimes mentoring them one-on-one or helping them with group projects, and sometimes co-teaching or leading classes with your teaching mentor.

In today's world, scientific literacy is critical, both for access to the job market and for responsible citizenship. In your future career you will be called upon to contribute, through your teaching, writing and presentations, to the education of a wide range of audiences. We believe that a year spent helping to educate young students and their teachers will have lasting benefits for you as a communicator and teacher, as much as for the students and teachers with whom you will work.

Appointment: 1 July 2010 - 30 June, 2011

Since the Fellowship is 12 months long, you will be asked to begin your relationship with teachers and students in July 2010 through the end of June 2011. Your work will last the year of the fellowship.

Over the summer, if your own research has a local component (either field work in the New York area or lab work at Columbia) we may ask you to accept one of our teachers as a part-time research assistant.

If you are doing summer field work at a distance from New York City, we would ask that you meet with a teacher in June. We are also developing an educational collaboration between one of our middle schools and a school in the Dominican Republic. Please indicate on your application if you are interested in working on this international component.

At the end of the summer, before the start of school, all of us will gather for a day-long orientation and workshop. We will cover issues related to the NYC science scope and sequence, experiences teaching in the public school system, and the kind of activities or presentations that might effectively communicate your research to children and teenagers.

During the school year, you will spend on average one day a week at your schools working with your teachers. You will likely be matched one-to-one with a teacher; although at the middle school level, you may be matched with a team of two to three teachers. Additionally, time will be spent working out lesson plans, presentations, field trips, classroom labs, etc. under your teachers' supervision and with support from the LEEFS program.

Eligibility:

You must be a matriculated student in one of the GSAS or SEAS Departments in a Science, Technology, Engineering, or Math discipline (STEM).

You must be a United States citizen or a permanent resident of the United States (NSF funding requirement).

Students whose research is related to ecology, conservation biology, environment, earth science, geochemistry, sustainability, or the relationship between man and nature will receive priority.

LEEFs Fellowships are designed for one or two years of study.

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