

International Research Experience for Science Students (IRES)

Summer 2008

Deadline for Applicants: materials are due in 300 White Hall by 4 p.m., Friday, October 26, 2007

Program Description: International Research Experience for Science Students provides summer grants for students working in a science laboratory in another country. The goal is to give students a research experience similar to one that they could have on a US campus but in an international location. Students apply directly but should consult with their department and research mentor about their application. Applicants should meet the following criteria:

1. Students should have worked at least one semester and preferably a year in a research lab at Emory.
2. Student's research advisor should support the nomination.
3. Students should be in good academic standing and generally in their second or third year at Emory at the time of application.
4. The science department or the student's research advisor should recommend a faculty advisor in an international research lab with whom they are familiar and who will provide outstanding mentoring for the student. Alternatively, a student may identify three Howard Hughes Medical Institute with whom he or she would like to work. A list of those investigators and their research projects are at:
<http://www.hhmi.org/research/scholars/>
5. A faculty member (generally the student's lab supervisor), will direct a one-hour independent study project with the student should he or she be chosen, in cooperation with the Center for International Programs Abroad, the Center for Science Education and the SIRE office. The independent study project will prepare the student for their international lab experience. This will include reading articles about the work in the lab, sessions on living and working in that culture, safety issues (where applicable) and other preparatory work the faculty mentor believes is necessary to prepare the student for work in that particular lab.
6. Applications are due by October 26, 2007 to the SIRE office (300 White Hall). Applicants will be interviewed before selection is made.

Program Funding: IRES is funded by the SIRE undergraduate research program, Howard Hughes Medical Institute and the Center for International Programs abroad (CIPA). Dean Preetha Ram, Dean Joanne Brzinski, Dr. Pat Marsteller and Dr. Cathy Quinones jointly organize the program.

A similar program is available to participate in scientific research in Germany through the German Academic Exchange (DAAD). If you are interested in applying for the DAAD program, please fill out this application and indicate that your plan to apply. We will assist you with your application to DAAD and include you in the spring courses. You should not indicate a research mentor or the location of your research as those are determined by the DAAD at the end of the selection process.

SIRE Grants

STUDENT RESPONSIBILITIES:	Benefits of a IRES grant
<ul style="list-style-type: none"> • Enroll in a one-hour directed study during the spring semester before working abroad • Post an abstract of your research project on the SIRE web site no later than three weeks into the spring term • By the start of spring semester, provide a copy of your passport and any required visa application • Work under the direction of a host mentor at an international laboratory • Present your research or project on campus at an approved symposium, and/or at a national conference • Write a final report and summary of the project to post on the Emory College web site. 	<ul style="list-style-type: none"> • Provides financial support for research in an international lab with a good research mentor. This includes a summer stipend and travel/living expenses. Students with DAAD grants receive only a travel stipend from the SIRE program. • Assistance preparing for an international study experience that requires individual initiative and planning • Opportunities to present your work in campus or national forums provides a valuable credential and experience, and feedback from a broader audience for your work

About the Application process

1. **On-line form:** Students applying for support should complete the on-line information form:
http://www.surveymonkey.com/s.aspx?sm=kPzI6br72GYeHn5LYvNCnQ_3d_3d

Except where noted, information from this form will be provided to members of the selection committee for use in the selection process, and by the program office for use in administering the grant. That information includes the following:

Academic and Project information: You are asked to provide information about your academic program of study and your cumulative and major GPA. Please put as your first major the field most closely related to the work on your project. Indicate your Emory faculty mentor and the host mentor with whom you will be working.

Personal information: This information is voluntary and refusal to provide it will not subject you to any adverse treatment. This information will be kept confidential and will be used only in accordance with Title VI of the Civil Rights Act of 1964 and Title IX of the Education Amendment of 1972. Emory University's Office of the Registrar will require this information in order to process fellowship awards; our office uses this information to track program application trends. This information will not be provided to the selection committees.

Contact information: We contact you at the addresses provided. Early notification of your status is provided via email and to your local address. Your permanent address should be a place where you regularly receive official mail from the university, and where you can be contacted after spring semester. Indicate whether this is your parents' address, the address of a friend, or other permanent address. Please be sure that we have an Emory email address and a local phone number for you.

The following additional information should be turned in to 300 White Hall with the forms provided. At the top of each page, indicate your name and the grant semester (in this case, IRES, Summer 2008).

2. Project Proposal (max. 3 pages, single-spaced, 12 pt. font)

This proposal should be written by the student applicant NOT the faculty mentor. However, the faculty mentor should be consulted. Please be sure that the proposal is understandable to scientists who are not in your field of study. The committee includes faculty from all science departments and programs.

- What laboratory research have you performed at Emory? How long have you been involved in laboratory research and on what research questions have you worked? Have you developed specialized skills in particular laboratory techniques?
- In what international lab would you work? If you would like to work with a Howard Hughes Investigator, please identify three possible mentors. How does the work of this faculty mentor and the lab relate to the work that you have already done and the expertise you have developed at Emory? How does this placement relate to coursework you have completed or will complete before beginning work in this foreign lab?
- What preparation have you made to work in this particular place and cultural setting? Consider the following issues, among others:

Research experience:

How is the research in this lab similar to the research you have done at Emory? What additional preparation will you need to prepare for the work you will be doing in that lab?

Cultural experience:

*Describe and explain your prior cultural understanding, background, and experience with the culture or culture area where you hope to work. Include but do not limit yourself to description of relevant academic training.

*Are you aware of culturally sensitive topics in traveling and researching in this site? If so, please describe and explain how you would address these issues.

*What guide books, travel guides or other information you have you used to familiarize yourself with the country/area, and how have you used or will use these sources?

Language: If you are proposing to work in a country that is not primarily English-speaking, complete the attached language evaluation in addition to addressing the following in your proposal:

*Language logistics: If you are not completely fluent in the local language, how will you circumvent or otherwise deal with this fact? Do you know what language is used for everyday exchanges in the lab?

Personal challenges and security

*Do you have any personal characteristics – such as gender, national or ethnic identity, or otherwise– that will pose special challenges to your research given the cultural and social characteristics of your research location? How will you respond to these challenges?

*Are there any special challenges of safety or security that your research poses? How will you address these to reduce your risk to an acceptable level?

*Are there any customs, practices, or beliefs in your location of research that are especially sensitive or that will pose special challenges for you or for your research? How will you respond to and deal with these?

3. Letter of support from your faculty mentor

Your faculty mentor is the faculty member who is familiar with the work you have done thus far and who is willing to oversee your directed study to prepare for this placement. Please have your mentor include the attached form with his or her letter. This letter of support should discuss your academic background, your work ethic, and your overall potential as an independent researcher

and scholar. Your mentor is more likely to write a strong, supportive letter if he/she is familiar with your performance in the classroom or laboratory, work ethic, academic background, etc. He or she should also indicate who will be directing the spring independent study course.

4. International Forms

A. Previous International Experience

This information is required, and will help the committee assess your preparation to carry out research in a foreign setting.

B. Foreign Language Form

Summarize in writing your language courses and competence and give the form to a person able to evaluate your language skills. Details about the information you should provide is described on the form. Provide the evaluator with a copy of your proposal as well as he or she needs to assess whether your language abilities are sufficient for the project proposed.

International Research Experience for Science Students

Project Proposal Cover Sheet

Due: October 26, 2007, 300 White Hall by 4 pm

The project proposal should be as complete and detailed as possible, and should explain both why this experience will be of value to you and what you have to offer the lab in which you will be placed. In general, you should include the following elements (see the more detailed description in the application):

- Past research experience and relevant coursework
- International lab in which you plan to work, and the fit between that lab and your past experience
- Preparation to work in this particular cultural setting, including your language skills

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Student ID

Name: _____ Date: _____

Signature: _____

Title of Proposed Project: _____

Emory Faculty Mentor: _____ Emory Dept. of Mentor: _____

International Host Mentor: _____ Host Institution: _____

International Research Experience for Science Students

Faculty Letter of Support

By my signature, I forego access to letters written in support of my application for a SIRE Grant.

Student Name: _____ Signature: _____

To the faculty mentor:

The student indicated above is applying for a IRES Grant for an international research experience, and has specified you as his/her faculty mentor. Can you please provide a letter on departmental letterhead evaluating the proposed placement and the student applicant? In your letter of assessment, please discuss the applicant's laboratory skills and ability to fit into the lab in which he/she proposes to work, the appropriateness of this lab placement, and his/her maturity and preparation to work in a different cultural setting.

Emory faculty mentors agree to supervise the student in a one-hour directed study in spring semester (graded on an SU basis). During this directed study, the student will read articles produced in the host lab, work with CIPA on cultural preparation, and undertake other preparations for his/her summer research experience.

Please attach this form to your letter of support. If you have questions, contact Joanne Brzinski (poljb@emory.edu, 7-6160) **DUE: October 26, 2007, 300 White Hall.**

Recommender name: _____

Department or Program: _____

Title: _____

Signature: _____ Date: _____

Applications for international projects ONLY

International Research Experience for Science Students

Previous International Experience

Foreign languages previously studied or learned (if applicable);

Language Current Competence (Fluent / Advanced / Intermediate / Beginner)

Please ask a faculty member to fill out the attached Foreign Language Report for the language in which you will be conducting your research.

Previous experience abroad (Please list country, length of your stay, and in what capacity – studying, traveling, etc)

Applications for international projects ONLY

International Research Experience for Science Students

Foreign Language Report

Name of Applicant _____

For Research in _____

Language being evaluated _____

TO BE COMPLETED BY APPLICANT Note: Faxed or emailed reports will not be accepted.

1. Number of years language was studied in high school _____
 2. On a separate 8 ½ x 11 sheet list courses taken in college and graduate school in the required language and/or the literature in that language including those now in progress. Provide names of courses, brief descriptions where necessary, and grades. Do not list course catalog numbers. If grade is not available, leave the space blank.
 3. You should be able to follow university lectures in the foreign language, participate in seminar discussion, take notes, and understand written material in your field. Specifically, what are you doing now and what are you planning to do to bring your language facility to this point?
 4. List other languages which you know indicating proficiency in each and the number of years studied.
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TO BE COMPLETED BY A PROFESSIONAL LANGUAGE TEACHER (preferably by a college or university faculty member; however, if the language is an unusual one and a professional teacher of the language is not available within a reasonable distance, this may be completed by a native speaker).

1. Please comment on the applicant's present language ability in relation to the proposed project in each of the following categories:

ORAL COMPREHENSION

- None
- Limited to slow, uncomplicated sentences
- Understands simple conversation
- Understands conversation on simple academic topics
- Understands sophisticated discussion of academic topics

SPEAKING ABILITY

- None
- Can only frame structurally simple, short utterances
- Uses basic grammatical structure, speaking with limited vocabulary
- Uses structural patterns, but not with consistent accuracy. Adequate to handle conversational subjects
- Has control over structural patterns; can handle a range of conversational situations

READING ABILITY

- None
- Limited to simple vocabulary and sentence structure
- Understands conventional topics and non-technical subjects
- Understands materials whose content contains idioms and specialized terminology
- Understands sophisticated materials including field of proposed study literature

WRITING ABILITY

- None
- Writes simple sentences on conventional topics, with some errors in spelling and structure
- Writes on academic topics with few errors in structure and spelling
- Writes with idiomatic ease of expression and feeling for the style of the language

2. Please mark (x) the appropriate line to indicate your general opinion of this applicant's ability in the foreign language

- Will require considerable training before necessary competence can be attained
- Should be able to manage adequately after some additional formal language training
- Should be able to manage adequately after a short period of adjustment abroad
- Should have no difficulty

3. Is the applicant's present language competence adequate to carry out the proposed study?

Yes No

METHOD: Indicate briefly how the evaluation was determined

Evaluator's Name _____ Date _____

Signed _____

Position or Title _____

Address _____