Predoctoral Fellowships in Environmental Health Sciences
Funded by NIEHS grant T32-ES11564

Faculty mentors participating in our NIEHS T32-ES11564 environmental health sciences training grant are invited to submit nominations for a pre-doctoral fellowship. Nominees who have completed an approved dissertation proposal with a defined focus in environmental health sciences research (as defined below) will be a priority. Teams of mentors (basic and clinical scientists or basic and population-based scientists) that emphasize the importance of multidisciplinary training and translation of basic science findings to the patient and/or community are encouraged.

The NIH training grant program stipulates that trainees must be a citizen or noncitizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment. A noncitizen national is a person who, although not a citizen of the United States, owes permanent allegiance to the United States. They are generally persons born in lands which are not States, but which are under U.S. sovereignty, jurisdiction, or administration (e.g., American Samoa). Individuals on temporary or student visas are not eligible.

These fellowship appointments are made for one year with reappointment for a second year based on satisfactory progress. The fellowships provide:

1) Annual stipend of $24,000 ($23,500 if not yet a PhD candidate)
2) Payment of student tuition and fees
3) Annual research-related travel up to $300

Letters of nomination should include:

1) Student academic record including past degrees and UofL graduate student record
2) A description of the student research or dissertation project and an outline of how the research is broadly related to environmental health sciences
3) A description of how the student’s dissertation research is funded
4) Description of the mentor’s graduate student training record
5) Projected dissertation completion date
6) A description of the student’s career goals

**Required courses for environmental health sciences training program**

- Responsible Conduct of Research: Survival Skills and Research Ethics
- Biochemistry I
- Cell Biology
- Scientific Writing
- Molecular Toxicology (course title may be modified in the future)
- Seminar
**NIEHS definition of environmental health sciences focus**

All trainee research projects supported by the training grants should have a defined focus in the environmental health sciences, and be responsive to the mission of the NIEHS, which is distinguished from that of other Institutes by its support of research programs seeking to understand how environmental exposures alter biologic processes and affect the risk of either disease development or the distribution of disease in populations. Examples of environmental exposures relevant to the mission of the NIEHS include industrial chemicals or manufacturing by-products, metals, pesticides, herbicides, air pollutants and other inhaled toxicants, particulates or fibers, fungal or bacterially derived toxins due to ambient exposures. Agents considered to belong to the mission area of other NIH Institutes include: alcohol, chemotherapeutic agents, ionizing radiation, drugs of abuse, pharmaceuticals, smoking (except second-hand smoke), and infectious or parasitic agents, except when these are disease co-factors with an environmental toxicant exposure to produce the biological effect. Training in ecology, ecologic or microbial biotransformation, ecologic biodegradation and remediation, ecological monitoring, wildlife and fisheries biology or studies of sentinel species, geochemistry and other ecologically based environmental studies is supported by the training component of the Superfund Basic Research Program, and will no longer be supported by the NIEHS National Research Service Awards (T32) Program. Training in veterinary medicine where the endpoint is animal health or in food science is also not responsive to the NIEHS NRSA Program. Training in exposure assessment should concentrate on exposure biology, which is at the interface of exposures and human health, and research centered on biomarkers as indicators of body burden, pathophysiological changes, or inception/progression of disease, rather than environmental measurement of ambient contact or point of exposure.