

University of Connecticut
Integrated Pest Management Program
Undergraduate IPM Training Fellowship

The UConn Integrated Pest Management (IPM) Program is soliciting applications for its Undergraduate IPM Training Fellowship opportunity. The fellowship will provide students with hands-on experience in IPM research and extension outreach to producers and the public. The IPM Fellowship Program is a multi-state collaboration funded through the USDA NIFA Agriculture and Food Research Initiative (AFRI), Educational Literacy Initiative (ELI) Research and Extension Experiences for Undergraduates. Fellows will join a group of selected students from around the nation who are interested in agricultural sustainability and will receive training in IPM, communication, research and extension work. Student fellows will have the opportunity to develop a research project under the guidance of an IPM Program faculty mentor. The program is designed so that students will conduct research on a horticultural pest issue and will then share their results with stakeholders through extension outreach. This opportunity will allow students to interact with faculty, graduate students, and postdocs in their host lab. Fellows will attend professional meetings, share experiences with each other and network with IPM professionals.

In addition to mentoring and networking opportunities, IPM Undergraduate Fellows will receive:

- A summer fellowship stipend to work on their project
- Funding for project materials and in-state travel
- Travel allowance to attend a conference
- Internship and independent study credits
- A certificate of Fellowship Completion and an "IPM Care Package"

EDUCATIONAL OBJECTIVES & ACTIVITIES:

The program's objectives are to provide students with a strong foundation in IPM and ecological pest management theory and practice, to enhance students' research skills through hands-on experiences, and to develop their ability to effectively communicate science.

Student activities have been selected to meet the educational objectives listed above. As an IPM Fellow, students will be required to complete the following:

a. Coursework. The coursework will consist of college-level courses covering IPM, pest identification, and biology. Fellows will be advised to take the following courses:

- SPSS 3810 Fundamentals of Plant Pathology
- SPSS 3820 Ecology and Control of Weeds
- SPSS 3830 Horticultural Entomology
- SPSS 3840 Integrated Pest Management

Mentors will help fellows identify additional courses that are suitable and align with their interests.

b. Responsible Conduct of Research Training. Prior to initiating a research project, fellows will be required to complete an online training course on Responsible Conduct of Research (RCR), which is administered through the Collaborative Institution Training Initiative. This course provides an in-depth review of core RCR topics including authorship, collaborative research, conflicts of interest, human subjects, and research misconduct. Additionally, this RCR course will provide fellows useful training in ethics and professionalism. In this training, case studies and video examples are used to supplement key concepts related to research ethics and other RCR topics.

c. Research Project. Faculty mentors will help fellows identify a study focused on IPM topics in food, agriculture, natural resources, and human sciences (FANH). Fellows will work on experimental designs and layouts, treatment allocation, data collection, analysis, and summarization of results. The length of time fellows spend on a research project will be dependent on the project but all fellows will work full time during summer months and part time during the spring and fall semesters for academic credit. Research opportunities include working on vegetable, fruit, and green industry pest issues.

d. Extension Experience. Fellows will work with their mentors to design and execute an extension/teaching program. Fellows will work closely with other lab and staff members (e.g., technicians, postdocs, graduate students, interns) and be involved in preparing, executing, and measuring impacts of extension tasks. Outreach activities may include field days, twilight tour events at research and education centers or private farms, workshops and stakeholder meetings, and development of demonstration plots in farmer participants' fields. Fellows will have opportunities to speak with stakeholders at these events and receive hands-on training in disseminating information to end-users. Fellows will attend commodity meetings with mentors and/or lab members to hear them speak to growers and other stakeholders about pest issues. Through an engaging and interactive relationship, fellows will gain practical experience in providing stakeholders with the knowledge they need to solve real life problems that impact food and non-food crop production.

e. Communication Workshop. Fellows will partake in an online workshop where they will learn how to effectively communicate science through various media. The Northeastern IPM Center (NEIPMC) Communication Specialist will conduct the workshop. The NEIPMC effectively communicates research and extension results from state IPM and other programs. Their website (NortheastIPM.org) links to more than 250 IPM-related organizations.

f. Student Videos. Fellows will produce at least one 4 to 5-minute extension video on a common pest issue of stakeholders' importance. These short engaging videos will be developed for online viewing and/or presentations at workshops. Videos may focus on a pest problem or document a farmer's perspective on IPM and their pest management needs.

g. Conference Presentation. Mentors will help fellows compose an abstract and slide presentation for a scientific conference. Each fellow will attend a scientific conference during year two and give a presentation on their research project. The mentor and fellow will decide jointly the most appropriate venue. These conferences will provide fellows an opportunity to network with other IPM specialists and related professionals and will serve as a forum for

exchange of views on IPM and possible future innovations. It is anticipated that this will be an opportunity for fellows interested in graduate school to meet potential post-baccalaureate mentors.

h. Online Fellows Conference. The NEIPMC will host a video conference where fellows will provide a 10-minute presentation of their project to other fellows. This conference will allow fellows at each institution to further interact and become aware of research/extension activities at other institutions.

APPLICATION:

Students interested in applying need to submit the following by December 14, 2018:

- Cover letter explaining interest in IPM research and extension
- Contact information for 2 references
- Up to date course transcript

This program is open to students with a major and career interest that closely aligns with IPM. Fellow selection will be based on academic standing, commitment to a 2-year training program, and an interview with faculty mentors. For more information and to submit an application, contact Ana Legrand (ana.legrand@uconn.edu) or Donna Ellis (donna.ellis@uconn.edu).

