

FOOD SYSTEMS AND POVERTY REDUCTION

A CORNELL UNIVERSITY IGERT FOR PHD STUDENTS

Integrative Graduate Education and Research Traineeships (IGERTs) are National Science Foundation supported programs for graduate students. IGERTs provide doctoral students with the opportunity to work as members of interdisciplinary teams, learning the concepts, methods and vocabularies of other disciplines as they collaborate to solve some of the world's most complex problems.

Cornell's Food System and Poverty Reduction IGERT addresses the challenges faced by the 1.2 billion poorest people on the planet who live in rural areas in developing countries and depend on food systems for their livelihoods. Food systems are human managed systems that regulate the production, distribution and consumption of food. This necessarily involves multiple disciplines because food systems encompass many spatially and temporally distinct sub-systems, such as markets and other economic institutions, agroecosystems, socio-cultural belief systems, political bodies and other organizations concerned with policies.

The Food Systems and Poverty Reduction IGERT provides competitively selected PhD students with a two year interdisciplinary Traineeship that augments the students' core disciplinary training during the early years of their doctoral program.

Students are funded by the IGERT only for their two year Traineeship. Funding includes a \$30,000 stipend, fully paid fees and tuition, health insurance and \$10,000 in research funding to spend the final half year of IGERT at one of the program's research sites in East Africa (Ethiopia or Kenya). The Graduate Field that you enroll in will be responsible for putting together a package for at least an additional two years of financial support.

ELIGIBILITY

Funding is restricted to U.S. citizens and permanent residents who have been admitted into a doctoral program at Cornell.

PURPOSE OF THE PROGRAM

The purpose of the Food System and Poverty Reduction program is to provide a new generation of natural and social scientists with the conceptual and methodological tools necessary for understanding how sub-system interactions affect poverty and food system function. The program's integrative framework will also help students to understand how their disciplinary research fits into the larger context of food systems research.

WHY SPECIALLY-TRAINED SCIENTISTS ARE NEEDED

Food systems are characterized by complex webs of connections, dynamic linkages and feedback loops such that perturbations in one part of the system typically affect others. Yet, these are rarely accounted for in discipline-specific research designs, policy or institutional or technological interventions, which too often assume that variables other than those under direct consideration remain constant or change in a predictable, linear fashion.

A DISCIPLINARY-PLUS PROGRAM

The Food Systems and Poverty Reduction IGERT is a "disciplinary-plus" program. IGERT Trainees fulfill all of the Doctoral requirements in one of twenty-one associated Graduate Fields PLUS they complete supplementary academic and field training in Food Systems and Poverty Reduction. Students receive IGERT funding early in their doctoral programs, usually during their first 2 years. This liberates them from the usual 15-20 hours per week of (teaching or research) assistantship responsibilities and allows them to focus on the IGERT's supplementary training program.

ASSOCIATED GRADUATE FIELDS

IGERT Trainees fulfill the Doctoral requirements in one of the following Graduate Fields.

Animal Science; Anthropology; Applied Economics and Management; Atmospheric Sciences; Biological and Environmental Engineering; Civil and Environmental Engineering; Development Sociology; Ecology & Evolutionary Biology; Economics; Entomology; Environmental Toxicology; Food Science; Government; Molecular and Integrative Physiology; Natural Resources; Nutritional Sciences; Plant Breeding; Plant Pathology and Plant-Microbe Biology; Sociology; Soil and Crop Sciences; Zoology

IGERT-SPECIFIC TRAINING

The IGERT-specific training accounts for a total of 12 credit hours (4 credit hours per semester for 3 semesters), which qualifies Trainees for a minor in the Graduate Field of International Agriculture and Rural Development (IARD). It consists of:

- A three semester course sequence covering Dynamic Systems Modeling and Food System Concepts and Themes
- Research and Professional Skills Development Seminar
- Exploratory Field Research Experience

Please refer to our website (ciifad.cornell.edu/igert) for more detailed information about the individual training components.

Together, the three-semester course sequence, multi-year professional development and research seminar and exploratory field research experience ensures that all Trainees, regardless of their field of doctoral study (i) possess some common analytical tools, (ii) are familiar with a common set of issues, concepts, theories, vocabularies, measurement methods and literature revolving around food systems and poverty reduction, (iii) acquire a broad, deep set of professional skills and interdisciplinary group research experiences that are commonly omitted from formal curricula. The courses are team taught in modular fashion by scientists from across the social and natural sciences, and emphasize small group discussions, debates, case studies, and group assignments rather than lectures and individual exercises.

IGERT RESEARCH AREAS

The following are examples of potential research areas that students might focus on. Some of these examples are discussed further on our website (ciifad.cornell.edu/igert).

Water Shortages; Climate Variability; Soil and Land Degradation; Emerging Agricultural Pest and Disease Problems; Wildlife / Livestock / Human Conflicts; Evolving Agricultural Supply Chains; Rural Institutions and Political Economy; Human Nutrition, Food Safety and Health Linkages; Multi-Scalar Stability and Resilience

CONTACT INFORMATION

For more information please refer to our website (ciifad.cornell.edu/igert); email IGERT Associate Director, Dr. Beth A. Medvecky (food-systems@cornell.edu); contact Professor Chris Barrett, IGERT Director; or stop by the Cornell International Institute for Food, Agriculture, and Development (CIIFAD) office at 31 Warren Hall.

HOW TO APPLY

Students apply for our Traineeships through their associated Graduate Field rather than directly to our program office. They do this either as a Prospective Student (one who is applying for admission to a doctoral program in an affiliated field) or as a Continuing Cornell PhD Student (one who is in the first or second year of a Cornell PhD program in one of the affiliated fields).

Our affiliated Graduate Fields may nominate either category of student for the Traineeship and our program faculty makes the final selection from the pool of nominees put forward by the Graduate Fields. We let the Fields know who we have selected in time for them to include the fellowship offer in their admission offer to prospective students. Program faculty will select a cohort of 5-7 students each of the next four years (2010-2013).

APPLICATION DEADLINES FOR AFFILIATED GRADUATE FIELDS

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| December 1 | Ecology & Evolutionary Biology; Entomology; Molecular and Integrative Physiology; Zoology |
| December 15 | Government |
| January 1 | Anthropology; Environmental Toxicology; Food Science; Plant Pathology and Plant-Microbe Biology |
| January 5 | Plant Breeding; Soil and Crop Sciences |
| January 10 | Nutritional Sciences |
| January 15 | Animal Science; Applied Economics and Management; Biological and Environmental Engineering; Civil and Environmental Engineering; Development Sociology; Economics; Sociology |
| February 1 | Atmospheric Sciences; Natural Resources |

PROSPECTIVE STUDENT APPLICATION PROCEDURES

A. Contact at least one IGERT faculty member from a participating Field to discuss your interest in the program. A faculty listing is available at <http://ciifad.cornell.edu/igert/>.

B. Submit the Graduate School's online application and all supporting materials required by the Graduate School and the Field to which you are applying. In the appropriate Financial Application Section of the Graduate School application, indicate that you are applying for the Food Systems and Poverty Reduction IGERT Traineeship.

C. Submit an IGERT Application Notification Form (available on our website) to the IGERT office, indicating that you have completed and submitted a Graduate School application and are applying for a Food System and Poverty Reduction IGERT Traineeship. Indicate the specific PhD field to which you applied and include a 1 or 2 page statement of interest explaining how the Food Systems and Poverty Reduction IGERT would contribute to your career aspirations.

Application deadlines vary by Field (see above), as may the particular materials required for submission. You have to be accepted into a PhD Field at Cornell to be eligible for IGERT funding.

CONTINUING CORNELL STUDENTS

Continuing PhD students must submit a Continuing Student Application form (available on our website) directly to the Director of Graduate Studies of their Graduate Field by the Prospective Student's deadline for the Field. Please also submit Submit an IGERT Application Notification Form (available on our website) to the IGERT office, indicating that you are applying for a Food System and Poverty Reduction IGERT Traineeship through your Graduate Field. Indicate the specific PhD field to which you belong and include a 1 or 2 page statement of interest explaining how the Food Systems and Poverty Reduction IGERT would contribute to your career aspirations.



IGERT



Cornell University



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Food, Agriculture and Development
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PHD TRAINEESHIP PROGRAM AT CORNELL

