Expo for Students in Agriculture

International Opportunities

Web: ip.cals.cornell.edu
Email: ip-cals@cornell.edu
Office: Mann Library B-75
International Programs

November 2: Come to the International Opportunities for Students Expo! Learn about internship opportunities and the many international projects and programs in CALS. This information session, for all students and visiting fellows, is an opportunity to learn about the many and varied international activities in the college, international professors, and other program leaders will talk.
Student Multidisciplinary Applied Research Teams (SMART) Program

2015 - 2016
What is SMART?

- Work with private companies, public sector entities, and NGOs in developing countries
- January: Teams of 3-5 students plus a faculty leader travel to client location
- Spring 2016: Enroll in AEM 4421: Research and Strategy in Emerging Markets (3 credits)
- Practical “service” product + high-quality research output
- Present posters at the CIIFAD Annual Symposium on International Development on April 13th, 2016
- www.smart.ciifad.cornell.edu
SMART Program Objectives

- Participate in multidisciplinary teams to meet complex challenges of emerging economies
- Gain practical, firsthand experience in economic development
- Increase understanding of development challenges and opportunities in emerging markets
- Contribute to the development of case studies for classroom instruction
2016 SMART projects

SOUTH AMERICA: Colombia

AFRICA: Kenya (2), Rwanda, South Africa

ASIA: Cambodia, China, Taiwan, Thailand

www.smart.ciifad.cornell.edu/projects/2016
Thank you!
Questions?
https://smart.ciifad.cornell.edu/

Questions about projects:
Margaret Lynch
mkl74@cornell.edu

Phone: (607) 255 0831
NTRES 4940: Worldly Explorations
Spring 2016
1-credit, S/U only
Open to Freshmen & Sophomores in AGSCI, ESS, & IARD
(others by permission)
Wednesdays at 8:40 – 9:55 am

Jim Lassoie & Ruth Sherman
Worldly Explorations

Introduces the Range of International Engaged Learning Opportunities Available to Juniors & Seniors

1 or 2 years to Prepare

AGSCI Majors
AGSCI/CSS 1125

ESS Majors
NTRES/SNES 1101

IARD Majors
PLSCS 1900

Others
Student to Student Discussions

- Courses Offering Off-Campus Field Experiences
- Semester-Long Study Abroad
- Summer Research & Internship Opportunities
Building Student-Community Partnerships in Ecuador I & II

IARD/LATA/NTRES 4011 & 6011
James Lassoie & Stephen Morreale
Course Overview

Fall: IARD/LATA/NTRES 4011
- 3 Credits; letter grade only; Jr./Sr.
- Project-based Teamwork
- Readings & Blogs
- Lecture/Discussions & Project Labs
- Preparation for Fieldtrip

Spring: IARD/LATA/NTRES 6011
- 3 Credits; letter grade only; 4011 required
- 3-week Fieldtrip to Ecuador in January
- Reflection & Synthesis Discussions During the Semester
Course Overview

Highlights:
- Hands on meaningful work
- Direct relationship with community organizations
- Insight into complex environmental and social issues
- Exposure to community organizing around sustainable development and conservation
Interested?

Application Process in March/April for 2016-17

Improving Your Application:
1. Coursework and interests in Latin America
2. Be a junior or senior
3. Have some international experience
4. Have some Spanish
5. Take ALS/ILRIC 3200: Leadership & Global Learning this spring semester (2016)
IARD 4020 (fall) and 6020 (winter session and spring)

Agriculture in Developing Nations I and II
This interdisciplinary course examines many dimensions of agricultural and rural development including agricultural productivity and technology, rural labor and livelihood issues, poverty and food security…….
Changes in markets that accompany a growing middle class....

Export crops and their value chains.....
Part of the January field trip is organized around in-depth theme group activities.

- agricultural production
- food science and value addition
- the social and institutional infrastructure for rural development
Be inspired by Indian women’s self-help
group “movement”……..

……. and by a diverse set of rural entrepreneur and development practitioners
Visit the field research stations of Indian universities as well as International Agricultural Research Centers.
Similar course sequence focused on Chiapas, Mexico

*IARD 4010 (spring)* and 6010 (2 weeks in June, plus fall semester)

• Summer internships with Chiapas-based development organizations are available to students who register for both IARD 4010 and 6010.

• Contact Prof. Hobbs for additional information (*ph14@cornell.edu*)

• Some financial support is typically available for both the India and Mexico IARD courses.
Internships and Cross-Cutting Opportunities

International Programs Communications
Advancing Women in Agricultural Research and Education
Summer and Semester Internships
CALS Exchange
IP-CALS EXPO
Communications Opportunities
Nov. 2, 2015
Linda McCandless
LLM3@cornell.edu
A W A R E
Advancing Women in Agriculture through Research and Education
ip.cals.cornell.edu/AWARE
daniel.torrington@cornell.edu
About AWARE

AWARE is an initiative by IP-CALS to engage a community focused on empowering women in agriculture.

AWARE believes that empowering women as an underserved group holds the greatest potential to make significant impacts in agricultural development.

A woman makes garri (cassava flour) while her child sleeps on her back.
AWARE activities include

- **Supporting graduate student research** in agriculture with a gender focus
- **Featuring biweekly seminars** by international gender experts, students, and staff to raise cross-campus awareness of gender issues in agriculture
- **Awarding AWARE visiting fellowships** to international gender experts to engage with students and faculty and guide changes in CALS teaching and research
- **Examining and recommending gender-sensitive improvements** to CALS policies for faculty and staff

Syrian scientist and Women in Triticum (WIT) award winner Esraa Alwan assesses her wheat plants.
AWARE Fall 2015 Seminar Series

Seminars are on Fridays at 12:20 PM in Mann 102, unless otherwise noted. Refreshments provided.

**September 11 - Xin Gao**
2015 AWARE travel grant award winner
Prudence and Gender in Rural Finance: Evidence from China

**October 7 - Jennifer Thomson**
Chair, Organization for Women in Science for the Developing Word (OWSD), South Africa Chapter Activities in the South African National Chapter of the Organization of Women in Science in the Developing World

**October 23 - Zillah Eisenstein**
Professor of Politics, Ithaca College
Thinking about Hetero-Racist Misogyny in “Agriculture”

**November 6 - Amit Anshumali**
2014 AWARE travel grant award winner
Class, Caste & Patriarchy: Emerging Contradictions from Off-Farm Employment in India

**November 20 - Lori Leonard**
Assoc Prof of Development Sociology, Cornell
Corporate Detachment, “Gender-Neutral” Policy, and Women’s Access to Land in the Oilfields of Chad
Join the AWARE community:

• Receive AWARE news and opportunities:
  • Send a blank email to IPGENDER-L-REQUEST@cornell.edu with the word “join” in the subject line.

• Join us for an AWARE seminar this Friday, Nov. 6 at 12:20PM in Mann 102 (refreshments provided):
  • Class, Caste, and Patriarchy: Emerging Contradictions from Off-Farm Employment in India, by Amit Anshumali

• Apply to the AWARE travel grant for graduate student research in topics in gender in agriculture:
  • Late 2015/early 2016: details at ip.cals.cornell.edu/AWARE

• For more information, speak with Dan Torrington (daniel.torrington@cornell.edu).
Summer and Semester Internships

ip.cals.cornell.edu/undergrad/student-experiences
CALS International Exchange Program

https://confluence.cornell.edu/display/CALSIEP/CALS +International+Exchange+Program
International Research Projects

SRI-Rice
Tata-Cornell Agriculture and Nutrition Initiative
Cornell Alliance for Science
Next Generation Cassava Breeding
Delivering Genetic Gain in Wheat
The System of Rice Intensification (SRI) is a climate-smart, agroecological methodology to increase the productivity of irrigated rice (and, more recently, other crops) by changing the management of plants, soil, water and nutrients.
Global Spread of SRI

SRI is currently practiced by 10+ millions farmers in 57 countries
The Tata-Cornell Agriculture and Nutrition Initiative (TCi) is a long-term research initiative focusing on the design and evaluation of innovative interventions linking agriculture, food systems, human nutrition, and poverty in India.
Why India?

- Economically emerging, developmentally lagging
  - Asian Enigma

- Greatest number of stunted children in the world

- Severe micronutrient malnutrition
  - 48% women of reproductive age with anemia
  - 62% preschoolers with Vitamin A deficiency

- Evolving food system

Persistently High Poverty Levels
TCi Summer Internship Program

- 6-8 week research internship in India.

- Interns work to propel TCi research in any of our main research areas:
  - Metrics on Ag-Nutrition
  - Nutrition Behavior Change
  - Food and Micronutrient Programs
  - Agriculture-led Growth Strategies
  - Water, Sanitation and Nutrition

- Opportunities vary by year, depending on what projects are in need of support.

- Preference to first-year Masters/professional students & Juniors

http://tci.cals.cornell.edu/projects/tci-summer-internship
Why TC i?

**What you get:**
- Take research from start to finish
- Substantive work with real outputs
- 4 credit course
- Exposure – to fieldwork, partner organizations, international development & research
- Cross-cultural experience
- Funding & logistical support

**What we expect:**
- Substantive work with real outputs
- Carry on the research beyond the summer

**What we look for in candidates:**
- Accountability & Initiative
- Demonstrated interest in: ag, rural development, nutrition
- Skills: data analysis, socio-cultural, media/communications, relevant language

http://tc.i.cals.cornell.edu/projects/tci-summer-internship
Contact Me: Jessica Ames
TCi Program Manager | ja524@cornell.edu

Website: tci.cals.cornell.edu
Blog: tatacornell.tumblr.com
Twitter: @TataCornell

PeriodiCALS: http://summer2015.periodicals.cals.cornell.edu/adventures-abroad/team-interns-tackles-nutrition
The Alliance for Science Mission

The Alliance for Science seeks to promote access to scientific innovation as a means of enhancing food security, improving environmental sustainability and raising the quality of life globally.
Alliance for Science Global Leadership Fellows Program

2015 Fellows
Philippines (5)
Uganda (5)
Kenya (3)
Nigeria (3)
USA (3)
India (2)
Bangladesh (1)
Ghana (1)
Indonesia (1)
Tanzania (1)
Knowledge with a Public Purpose
As part of the Alliance for Science you will:

• Bring forward muted voices
• Promote access
• Expand choices
• Encourage nuanced views of biotechnology
• Promote evidence-based decision making
• Form alliances
Join the alliance!

Cornell Alliance for Science
a global initiative for science-based communications

joinallianceforscience.org

/ScienceAlly /scienceally /user/scienceally allianceforsci@cornell.edu
Application of sequencing to cassava improvement

Flowering physiology to ease crossing

Collaboration with many international partners

Gender-responsive breeding goals

Better breeding data management

More diverse African cassava
It just might be working!!!
Demand for wheat in the developing world is projected to increase 60% by 2050.

(Source: CGIAR WHEAT CRP)

#WheatMatters
Faster Gains in Crop Production are Needed to Meet Future Demands

Adapted from Tester and Langridge *Science* 2010
Increased rate of genetic gain for all key traits, in spite of climate change

Improved agronomic management

Improved chemical and biotech solutions

Increased Production area

Sufficient crop production
What will be required meet the challenge?

Resilience across stressful environments

Resistance to multiple, rapidly evolving diseases
How do we meet the challenge?

Disease tracking

Large scale breeding effort

Modern tools for accelerating breeding

Data management
Delivering Genetic Gain in Wheat

Overall objective: more rapidly develop and deliver improved wheat genetics for small-holder wheat farmers

Involves
• Conventional breeding
• Big data -drones & sequencing
• Harnessing data & information
• Tracking damaging diseases
International Team

Wheat breeding and research hub in Mexico
Field sites and collaborators in Kenya, and Ethiopia
Expo for Students in Agriculture

International Opportunities

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