



# Office of International Programs *Monthly Newsletter*

April 2012

## ACES hosts USAID administrators for workshop and Distinguished International Lecture



**Dr. Bertram speaks at Distinguished International Lecture**

Two high-level administrators from the United States Agency for International Development (USAID) were invited to the Urbana-Champaign campus on Wednesday, April 18, 2012, to speak about the U.S. government's Feed the Future initiative. Dr. J. Vern Long was the keynote speaker for the day-long workshop for ACES faculty and staff, and Dr. Robert Bertram spoke to a campus-wide audience as part of the ACES International Lecture Series. The events were co-sponsored by the ACES Office of International Programs, the International Programs Policy Committee, the ACES Office of Research, and the ADM Institute for the Prevention of Postharvest Loss.

The day-long workshop, "Engagement with the Feed the Future Initiative," offered 30 members of ACES faculty and staff an opportunity to interact with Drs. Long and Bertram and to learn more about the Feed the Future (FTF) initiative and on how their current activities may fit into the initiative. The FTF initiative is a presidential initiative announced in 2009 at the G-8 Summit in L'Aquila, Italy, with a \$3.5 billion investment. Dr. Long emphasized, "A hallmark in Feed the Future is that we want to use bi-lateral resources and link to in-country programs." Following Dr. Long's presentation, ACES faculty members presented selected examples of current and potential international food security projects. Dr. Bertram responded to the presentations positively, saying "Every one of these projects is right up our alley and the way we are thinking which shows how the University of Illinois is aligned with the FTF goals."

At 1 p.m., over 100 attendees gathered to hear Dr. Bertram speak on "Science and Policy for Food Security: USAID's Feed the Future Research Programs and Partnerships." Bertram explained the three research themes of FTF: a) advance productivity; b) transform key production systems; and c) improve nutrition and food safety. These themes are anchored in the key geographies of: South Asia; West, East, and Southern Africa; and the Ethiopian highlands. In closing, Dr. Bertram raised questions of rethinking soy research to include the areas of pest/disease resistance and abiotic stress, and also on how we can further link agriculture and nutrition. He emphasized that supporting agriculture is key to the world's prosperity and that the good news is that governments are evidently beginning to understand this. He specifically noted that USAID is starting to take advantage of land-grant universities again and that the MEAS project is a great example of this. Following Dr. Bertram's lecture, the workshop participants reconvened for break-out sessions in specific topic areas, after which the whole workshop group reconvened for further discussion with Drs. Long and Bertram.

Dr. Korban said, "The day-long FTF Workshop event and the ACES Distinguished International Lecture were highly successful as it allowed us to engage with top administrators at USAID and pursue some brainstorming activities that will allow us to capitalize on our strengths and how we can align our programs with FTF strategy." He added, "We have great strengths here in research, education, and outreach in ACES and on this campus, and we should be among the leading U.S. Institutions of Higher Education that play major roles in global development activities."

## ABE delegation travels to India to accept posthumous award for Professor Hay and represent the ADM Institute for the Prevention of Postharvest Loss



Six members of the ACES Department of Agricultural and Biological Engineering (ABE), led by Department Head K.C. Ting, visited India in late February to

accept a prestigious posthumous award for Professor Ralph C. Hay and to represent the ADM Institute for the Prevention of Postharvest Loss at the 46<sup>th</sup> Annual Convention of Indian Society of Agricultural Engineers (ISAE) and International Symposium on Grain Storage.

The additional members of the ABE delegation included Prasanta Kalita, Marvin Paulsen, Kent Rausch, Vijay Singh, and Steve Zahos. The ABE delegation also had the pleasure of traveling with the President of the American Society of Agricultural and Biological Engineers, Sonia Jacobsen. The convention and symposium were held at G.B. Pant University of Agriculture and Technology in Pantnagar, Uttarakhand on February 27-28, 2012. The University of Illinois was instrumental in helping establish this university during the period of 1959 –1972. Currently, the College of ACES has a Memorandum of Agreement with G.B. Pant University and is pursuing collaborative work. For the ABE delegation, a highlight of the event was the great honor of accepting the inaugural and highly prestigious ISAE Mason Vaugh Agricultural Engineering Pioneer Award posthumously for Professor Hay, an ABE faculty member from 1932-1972 who pioneered agricultural engineering work in India.

Following the events in Pantnagar, the ABE delegation traveled within India to further represent the ADM Institute for the Prevention of Postharvest Loss. Dr. Ting recounts, "It was a very productive trip. Besides having the pleasure of honoring Professor Hay, we were able to continue his legacy by pursuing further steps to establish collaborations to control post-harvest losses in India."

## Chapman-Novakofski using CONACYT grants to study relationship between diabetes complications and dietary advanced glycation end products in Hispanic and non-Hispanic populations

To better understand the role that genetics and/or Mexican foods play in diabetes development, Dr. Karen Chapman-Novakofski and her Mexican colleague Dr. Ma. Eugenia Garay-Sevilla, from the University of Guanajuato, are studying the relationship between the accumulation of a group of compounds called advanced glycation end products (AGEs) and indicators of diabetes severity in Hispanics and white non-Hispanics.

Dr. Chapman-Novakofski explains, "Although AGEs can be formed in the body as a result of metabolism, they are also found in foods rich in protein and fat and are increased by using high cooking temperatures and cooking methods that result in a chemical reaction, for example, the crispy edges of a grilled steak. We suspect that AGEs, when added to a diet in significant quantities, may contribute to the severity of diabetes for some people."

The implications of the study could be huge. Chapman-Novakofski notes, "We've always told people with diabetes to grill and broil their food, but these processes could actually be contributing to their health issues. It may be an important factor in both populations, or maybe more for one group over the other, but this is what we need to find out with more accurate surveying techniques."

As a member of the ACES Academy for Global Engagement traveling to Mexico in 2006, Dr. Karen Chapman-Novakofski met Dr. Garay-Sevilla. The women quickly realized they had common research interests, and their initial meeting has developed into a longstanding collaboration as well as a strong friendship. Beginning in 2008, Chapman-Novakofski has applied for and received a series of grants from the CONACYT-University of Illinois Small Research Grants Program competition, which is administered by the ACES Office of International Programs. Each project requires one principal investigator (PI) from Illinois and one PI from Mexico, so the program was a logical way to build a formal collaboration with Dr. Garay-Sevilla. The two have also received funding from the UI's Family Resiliency Center. For more detailed information on this study, visit the OIP website.

## OIP Announcements

### Mentors Needed for Summer Program with Zhejiang

**University:** The 2012 class's program will run from June 25 through August 3. Faculty interested in mentoring one or more of these should contact Mr. Tengjiao Chen in OIP (tchen41@illinois.edu). A \$500 honorarium per student will be given to each participating faculty member.

### OIP Invites Applications for 2012 ACES Academy for Global Engagement

OIP has opened the competition for our sixth Academy for Global Engagement (Global Academy). We strongly encourage early-to-mid-career ACES faculty, as well as faculty in disciplines that do not traditionally participate in international work, to consider taking part in this year's program. This year's theme is Food Security and Nutrition with a regional focus on East Africa, namely Rwanda and Kenya. The details for the competition, including the deadline and the application form, can be found on our website: <http://intlprograms.aces.illinois.edu/academy>.

## Brown improving *Jatropha* as source of feed, fuel, and hillside stabilization in Haiti



Very few crops can be grown on these steep hillsides that cover much of Haiti, but one crop that can survive these conditions is *Jatropha curcas*, which can be processed into high-protein animal feed and cooking charcoal. Dr. Patrick J.

Brown, assistant professor of plant genetics in Crop Sciences, has received an International Seed Grant from the ACES Office of International Programs (OIP) to study the genetic basis of seed toxicity in *Jatropha* for the purpose of eventually breeding improved, non-toxic *Jatropha* varieties in Haiti.

Dr. Brown is collaborating with Dr. Gael Pressoir, the founder and director of CHIBAS ([www.chibas-bioenergy.org](http://www.chibas-bioenergy.org)), a non-profit bioenergy research center based in Haiti. CHIBAS is focused on improving the biofuel capacity of *Jatropha* and *Sorghum*. USAID has supported CHIBAS in Haiti for the reforestation of close to 1,000 acres of deforested land with non-toxic *Jatropha* and has further agreed to support the establishment of an edible *Jatropha* fruit processing center that will produce chicken and tilapia feed as well as fuel for stoves and generators. Although CHIBAS has access to an extensive collection of *Jatropha* assembled by Dr. Pressoir, the institute currently has little access to advanced technology.

Specifically, with OIP funding, Drs. Pressoir and Brown will be able to perform a lane of Illumina sequencing at the University of Illinois W.M. Keck Center. Dr. Brown will use the sequence data generated to propose projects to larger funding sources to further develop the *Jatropha*. Dr. Brown also plans to invite Dr. Pressoir to the University of Illinois to give a seminar. Dr. Brown says the cultivation of the *Jatropha* presents a unique opportunity for poor Haitians to 1) produce a sustainable cash crop of cooking oil or biodiesel; 2) support their livelihoods with animal feed and cooking charcoal; and 3) contribute to the long-term reforestation, soil conservation, and overall environmental rehabilitation of Haiti.

## Nordberg Fellows hold reunion in Stockholm

Thirty previous recipients of the Nordberg Fellowship gathered for a reunion in Stockholm, Sweden on March 25. The Nordberg Fellowship, which provides support for graduate study for students from Sweden to attend UIUC, is sponsored by Gerry and Linda Nordberg. The Nordberg Fellowship began as an agricultural fellowship in the early 1970s, but has since expanded to additional disciplines.



Director of OIP Dr. Korban (center) thanks the Nordbergs for their support.