

*2004  
Annual Report*

**Office of International Programs  
in Agriculture**

*College of Food, Agricultural, and Environmental Sciences*



April 2005



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## 2004 Annual Report

# Office of International Programs in Agriculture

### *Mission*

*The Mission of the Office of International Programs is to incorporate an international dimension into the student learning, discovery and engagement dimensions of the college so that (a) our graduates understand and appreciate the global environment in which agriculture functions; (b) our research and engagement programs have access to the best ideas and technologies regardless of where they are generated or developed; and (c) the above strengthen U.S. international competitiveness within a sustainable global agricultural and natural resource system.*

## INTRODUCTION

The Office of International Programs has aggressively carried out its mission during 2004. It has provided important support services relating to all three of the major operational dimensions of the College of Food, Agricultural, and Environmental Sciences, namely, student learning, discovery, and outreach to students, faculty and staff. Their increased efforts to secure extramural funding through grants and contracts has better aligned them with the university-wide responsibility based budgeting system.

The Office has greatly benefited from support given to it by the OSU Extension Service, the Ohio Agricultural Research and Development Center, and the College Office of Academic Affairs. It also continued to benefit from inputs provided by other offices and programs on the OSU campus, in particular the Office of International Education, the Office of International Affairs and its affiliated Area Studies Centers, and the Center for International Business Education and Research.

Innovations in communication technologies and in transportation systems increasingly impact rural Ohio and its economy. The ultimate beneficiaries of activities carried out by the Office of International Programs in Agriculture (IPA) are stakeholders in Ohio, the U.S. and the world. The Office seeks to maximize the ability of these stakeholders to adequately address their rapidly changing economic, social, and political environment.

## ACTIVE PROJECTS DURING 2004

The Office of International Programs in Agriculture had the following sponsored active grants and contracts during the year.

| Project Title  | Amount             |
|--|--------------------|
| IPM /CRSP Graduate Student Degree Completion (East Africa)   | \$ 35,395          |
| Seed Vigor Testing and Seed Quality Assurance Measures for Serbia-Montenegro   | \$ 14,733          |
| Agricultural Exports and Rural Income (Egypt)  | \$ 97,840          |
| Technical Assistance - Food Processing, USDA/Armenia   | \$ 161,222         |
| EARTH University/Ohio State University Collaborative Program on Environmental Research in Humid Tropics (Costa Rica)           | \$ 482,000         |
| Punjab Agricultural University and Food Processing: New Linkages with the Private Sector (India)                               | \$ 299,632         |
| USDA Marketing Assistance Project (Armenia)  | \$ 11,220          |
| Development of M.S. Degree Programs in Soil Sciences, Agroecology, and Biotechnology (Dominican Republic)                      | \$ 418,205         |
| Development of an Executive Agribusiness Masters Program through Distance Learning (Puerto Rico)                               | \$ 111,124         |
| Maintaining American Agriculture's Global Competitiveness: Globalizing Agricultural Science and Education Programs for America | \$ 15,000          |
| Globalizing Agricultural Science and Education Programs for America  | \$ 19,758          |
| University Partnership for Management and Economic Analysis of Forest Resources and Products (Tomsk Oblast, Russia)            | \$ 298,000         |
| Integrated Pest Management/Collaborative Research Support (IPM CRSP/East Africa)   | \$1,119,937        |
| Faculty Exchange Program Training (USDA/Newly Independent States)  | \$ 115,801         |
| <b>Total...</b>  | <b>\$3,199,867</b> |

## STUDENT LEARNING

### *Study Abroad*

Students continued to find the academic term study abroad programs managed by our Office to be popular. During 2004, 64 students used them to study overseas. **Mandy Pillivant** continued to serve as the coordinator for these programs. Her personal experience with these programs as an undergraduate student has been extremely beneficial to her in this position. In all, 46 CFAES students and 18 students from other university programs participated in 15 credit formal programs. Students also took advantage of other opportunities to study abroad, including internships, short-term study tours, and individual travel.

During the year, the Office of International Programs prepared a six year plan for study abroad. This plan envisions meeting the goal set by Dean Bobby Moser to have half of our undergraduate students experience learning abroad as part of their formal educational programs by 2010. It envisions an expansion of study abroad opportunities to include international internships and shorter study abroad experiences that will be organized as adjuncts to existing and new courses offered during academic terms. The Office prepared a proposal for funds to support this diversification of study abroad opportunities. It was submitted to USDA/CSREES as part of a new International Science and Education Competitive Grants Program.

The OSU Office of International Education has overall responsibility for managing study abroad programs. We are grateful to its Director, **John Greisberger**, and to several staff of his office, in particular, **Grace Johnson** and **Jeannie Bonner**, for their excellent collaboration.

Resident directors for the 2004 study abroad programs were:

- Brazil - **Garee Earnest**, Director, OSUE Leadership Center.
- Czech Republic – **Grady Chism**, Professor, Food Science & Technology.
- Dominican Republic – **Brian Slater/Frank Calhoun**, Professors, Soil Science.
- Australia, **Joy Pate/Normand St-Pierre**, Professors, Animal Sciences.
- Poland, **Earl Epstein**, Natural Resources.

CFAES students benefited from partial scholarships that were generated from endowments established by former faculty members and staff of the college and from other sources.



## *Internship Program*

The international internship program had another busy and productive year. During 2004, it placed 209 international students on farms and agribusinesses in Ohio and other states. It also placed nine students on internships overseas, of which six were from The Ohio State University. The impact of this program continues to be strong as reflected in letters received and news articles from publications in the U.S. and abroad.



Grzegorz Lecki visiting horticultural students interning at a greenhouse in Florida, Lindsay Krone currently interning in New Zealand with a sheep farm, and Syngenta Scholarship awardees with Michael O'Keeffe (IPA staff) & Karl Danneberger (OSU Hort & Crop Science): Chris Hodgkinson, Elizabeth Crowley, Dave Shettlar, Jenny Feng, Lucas Corbella.

### *International Travel Related to the Program*

**Michael Chrisman**, Program Director, and **Annette Duetz**, Horticulture and Crop Science, attended the *Internationale Pflanzen Messe* in Essen, Germany. This show is one of the largest international horticultural shows in the world, with 60,000 visitors and 50 countries represented. Their participation was in cooperation with the Wiesbaden University of Applied Sciences in Geisenheim with which we have had a student exchange program since August 2003. **Mike Chrisman** and **Annette Deutz** made presentations to students at Osnabrück University of Applied Sciences as part of this trip.

**Michael O'Keeffe** attended the *British Turf Management Exhibition*, Europe's largest indoor turf management exhibition.

**Michael Chrisman** met with administrators and faculty of the Czech Agricultural University in Prague to discuss future exchange opportunities.

**Michael Chrisman** and **Pablo Jourdan** visited the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) in Monterrey, Mexico, where they made presentations and held discussions about future exchange possibilities.

In June, **Yining Zhang** and **Michael O'Keeffe** traveled to Japan and China to visit with key players in international trade organizations and U.S. diplomatic posts. In Japan they met with **David Chang**, U.S. Consul General, and **Charles Reese**, U.S.

Commercial Consul of the U.S. Consulate, Osaka. In China the two met with **Vlad Lipschutz**, Consul General of the U.S. Embassy in Beijing. **Michael O’Keeffe** then traveled to Australia to attend the Australian Turf Managers Show while **Yining Zhang** traveled to Ningxia University, where he met with faculty, administrators and students.

During September, **Gabriella Pearse-Danker** traveled with **Marc Sulc**, Horticulture & Crop Science, and **John Yost**, Extension Agent, Fayette County, to Brazil. **Gabriella** held meetings and made presentations at the following agricultural universities: Paraná, Londrina, Maringá, Ponta Grossa, and Rio Grande do Sul. She also visited a research center of EMBRAPA (Brazil’s USDA), as well as a large farming cooperative.

In the fall, **Michael Chrisman** participated in the Agro International 2004 in the Netherlands, a conference bringing together all international agricultural exchange programs. After the conference he was joined by **Grzegorz Lecki** who organized meetings and presentations at the following agricultural universities in Poland: Bydgoszcz, Lublin, Poznan, Krakow, Szczecin, Tarnow, Warsaw, and Wroclaw. While in Poland, **Michael** and **Grzegorz** met with **Sally Ironfield** and **Dr. John Grondelski** of the U.S. Embassy, Warsaw. **Michael** then traveled on alone to the Ukraine where he gave presentations to Sumy National Agrarian University and the Ukrainian National Information Centre. He also met with **David Mico**, U.S. Embassy, Kiev.

**Michael O’Keeffe** attended The National Turf Foundation Conference in Southport, United Kingdom. His presentation at the conference on the importance of human resource management on golf courses was very well attended.

In early December, **John Beardmore** traveled to the United Kingdom and gave presentations at the following agricultural colleges: Harper Adams, Reaseheath, Cannington, Moreton Morrell, Merrist Wood, Moulton, Lackham, and Brooksby. **John** also arranged an exhibit booth at The Royal Smithfield Show. **Michael O’Keeffe** and two host farmers from Kansas, **Lon Frahm** and **Jim Deibert**, assisted. A notable visitor to the booth was The Right Honorable **James Paice**, UK Shadow Secretary of State for Agriculture & Rural Affairs, and father of former program participant, **Gordan Paice**. The show was a huge success and, it was commented, “the Ohio Internship Program booth was the most visited exhibit at the show.”



L to R: James Paice (Shadow Secretary of State for Agriculture & Rural Affairs), John Beardmore, Jim Deibert, at Royal Smithfield Show, UK

### ***U.S. Travel Related to Program***

**Michael O’Keeffe** and **Karl Danneberger**, Horticulture & Crop Science, attended the 2004 GCSAA’s Education Conference in San Diego. While there, **Mike**



negotiated a major scholarship donation from Syngenta International to support four international students.

During July, the Internship Program and the Department of Horticulture and Crop Science exhibited at the Ohio Floral Association Short Course held annually in Columbus. This is the largest floriculture and education show in the U.S.

The 9<sup>th</sup> Annual International Short Course on Turf Management was hosted by the Internship Program at Sea Pines Resort, South Carolina in October 2004. This event was organized by **Michael O’Keefe** and **John Beardmore**. Participating OSU faculty and staff were **David Shetlar**, **Karl Danneberger** and **Barbara Bloetscher**. Attendees came from Europe, China, Australia, and New Zealand, as well as the United States.

During the summer and autumn **Yining Zhang**, **Grzegorz Lecki**, **Michael Chrisman**, **Michael O’Keefe** and **John Beardmore** traveled throughout the U.S. visiting international interns and their host companies. **John Beardmore** also visited Miles Enterprises, a host agri-business in Kentucky, with **Paddy Browne**, Assistant Director of Training and Development Services for TEAGASC, a firm that provides agri-food research, training and consulting services in Ireland. **Mr. Browne** was in the U.S. to observe the progress of Irish students during their U.S. internships. **Colm Dockrell**, Warrenstown Horticultural College, Ireland, also visited Irish students on internship in the U.S.

### ***International Visitors***

**Jiri Tvrdon**, **Jan Hron** and **Miroslav Svatos** of the Czech Agricultural University visited the International Programs in Agriculture Office in May. They were presented with commemorative Ohio clocks during a special dinner held at the home of **David** and **Aida Hansen**. The dinner was organized and hosted by IPA staff **Mandy Pillivant** and **Pat Rigby**.



L to R: Jiri Tvrdon, Jan Hron, Bobby Moser, Miroslav Svatos

**Gabriella Pearse-Danker** and **Steve Letson**, Ohio Department of Agriculture, co-hosted a Japanese Buyers Mission to Ohio in August. The group traveled to various horticultural businesses throughout the state, as well as horticultural and historical sites of significance. The group also toured OSU’s horticultural department and the USDA Germplasm Center with the assistance of **Steve Myers**, **David Tay** and **Claudio Pasian**. Before departing, the group met with **Hope Taft** and had a private tour of the Governor’s Mansion and grounds.



**Yining Zhang** coordinated the visit to the Columbus campus by **Jieguo He**, Vice-President of Ningxia University.

During October the Internship staff received a visit from **Susan Tjoelker** of Stichting Uitwisseling, a well-renowned exchange association in The Netherlands.

### ***U.S. Students Placed on Internships***

March saw the departure of three of the program's OSU outbound students, **Shaun Charters**, Horticulture & Crop Science graduate in 2004, and Lindsay Krone, Animal Science graduate in 2004. Both were bound for internships in New Zealand. **Cody Dinger**, ATI, took part in an internship with St. Pierre Golf Club in Wales. The program also organized international internships for undergraduate and graduate students enrolled with other U.S. universities.

### ***Notable News Articles on Internship Program***

During the course of 2004, the internship program was mentioned in several publications in Australia, New Zealand and UK. Among the more notable ones were those written by **Adam Mortimer**, a program intern with Pine Valley, the top U.S. golf course and another by **Mark Finnegan** in *The Horticulturalist*, The Journal of the Institute of Horticulture.

### ***Peace Corps***

The Ohio State University Peace Corps Recruiting Office has been located in the International Programs in Agriculture Office since 1974. The mission of the Peace Corps is to promote world peace and friendship by promoting a better understanding of other people. Volunteers commit to 27 months of training and service overseas, during which time they learn to speak another language and to adapt to the culture and values of the people with whom they work and serve.

This year has been a very successful year for the Recruiting Office. Ohio State currently ranks 20<sup>th</sup> in the nation for the number of alumni serving in Peace Corps, with 51 active Peace Corps volunteers worldwide. The program year 2004 ended in October with 43 new Ohio State graduates having been nominated for Peace Corps programs. Since October, another 47 Ohio State graduates have been nominated for 2005 programs.

**Kristina Monroe**, the current Peace Corps representative at OSU, holds information meetings each month across the OSU campus and on other Ohio college campuses. She participates in all major OSU career fairs, is available for presentations to classes and organizations, holds office hours to visit with interested students, and assists in interviewing applicants. Each year hundreds of students call, visit, or write for information on Peace Corps opportunities.

## DISCOVERY THROUGH RESEARCH

During 2000, the IPA Office continued to support several programs which facilitate active participation by its research scientists in the global agricultural research network. These programs are important contributions to the overall research output of the faculty in that they provide financial support for research and access to global networks in which to carry it out. Most of these programs are funded by U.S. Government agencies.

### ***Integrated Pest Management Collaborative Research Support Program***

This OSU sub-grant completed its twelfth year with funding from the United States Agency for International Development (USAID) through a grant to Virginia Tech University. This program involved faculty from an informal consortium of member Universities that included Penn State, Lincoln, Purdue, Montana State, California/Davis, Fort Valley, Maryland Eastern Shore, Florida A&M and North Carolina A&T. Together, the consortium has undertaken collaborative research activities at eight different global research sites – Philippines, Bangladesh, Ecuador, Guatemala, Jamaica, Albania, Uganda, and Mali.



Dr. Kyamangua, IPM CRSP Uganda Site Coordinator, discussing field trials with Women's Farmer Association members.

The IPM CRSP Management Entity was re-bid and awarded to Virginia Tech this past year. OSU participants in the proposal development process were **Sally Miller**, Plant Pathology and **Mark Erbaugh**, IPA/HCRD. Both **Sally Miller** and **Mark Erbaugh** have since submitted proposal preparation grants to develop programs for Disease Diagnostics and a Regional IPM Program for East Africa.

In August, The IPM CRSP organized a final symposium in Washington, D.C. to present a summary of findings from the first phase of the project. Vice President **Bobby Moser**, Chair of the IPM CRSP Board of Directors, gave a keynote address titled, *The IPM CRSP: Benefits of Collaboration*. **Mark Erbaugh** and **Sally Miller** also made presentations at the symposium. Other OSU faculty who have participated in the IPM CRSP are **Roger Williams**, **Mike Ellis**, **Clive Edwards**, **Richard Pratt**, **Ronald Hammond**, and **Melanie Ivey**.

### ***Aquaculture CRSP***

**Konrad Dabrowski**, Natural Resources/Fisheries, continued his participation in the Aquaculture CRSP. This has included collaboration with counterparts in Peru and Mexico on projects involving fish genetics. He has also hosted several visitors from these sites in his laboratories on the OSU campus.

### ***Sustainable Agriculture/Natural Resources Management (SANREM)***

**Douglas Southgate**, Agricultural, Environmental, and Development Economics participated in the SANREM CRSP. He researched the economics of water resource development in Ecuador. His research was carried out in collaboration with an NGO in Ecuador and focused on the value which consumers place on watershed conservation as well as the costs of water.

The Management Entity for the SANREM CRSP was also rebid in 2004. The Office of International Programs in Agriculture joined Cornell University in preparing a proposal, which was not awarded to them. This CRSP contract was awarded to Virginia Tech. **Douglas Southgate** was awarded a "bridging grant" from Virginia Tech to continue his work in Ecuador during 2005.

### ***Uganda Coffee Wilt Project***

Special funding was allocated to the IPM CRSP by the USAID Mission in Uganda to conduct studies on coffee wilt disease (*Fusarium xylarioides*). **Mark Erbaugh** negotiated the funding and has provided research administrative oversight for this effort. The actual research has been conducted in the OARDC laboratory of **Sally Miller**, Plant Pathology, with research assistance provided by **Melanie Ivey** to two Ugandan pathologists, **Georgina Hakiza** and **Africanano Kangire**.



Sally Miller, Melanie Ivey, and Ugandan Pathologists in lab at OARDC.

### ***Punjab Agricultural University Project***

A project titled "*Punjab Agricultural University and Food Processing: New Private Sector Linkages*" was awarded to the IPA Office in 2004. It partners OSU/CFAES with the Punjab Agricultural University (PAU), a University OSU helped establish back in 1955. Funding for this project comes from USAID through the Association Liaison Office of ACE. **Dave Hansen**, IPA, is the Project Director and **Mark Erbaugh**, IPA is the project Co-Director. The partnership focuses on developing the capacity of PAU to promote the cultivation of alternative crops and their value-added processing.



Fred Bok (2nd from right) and others at food industry center.

**Mark Erbaugh** and **Fred Bok**, Director of the OSU Food Industries Center, traveled to PAU in April to launch the project and initiate discussions on the development of a Pilot Food Industries Center.

Dr. **G.S. Chahal** joined Mark Erbaugh in August to attend the Annual ALO Synergy in Development Conference.

**Dave Hansen**, IPA, **Bob Birkenholz**, Chair of the Human and Community Resource Development (HCRD)



L to R: Dr. David Hansen, Dr. Luther Tweeten, Dr. Sidhu, Dr. Fred Bok, Dr. Padda, and Dr. Chahal.

Department, and **Susie Whittington**, also of HCRD, traveled to PAU to develop a monitoring plan and to focus on classroom teaching practices.

In January **Dave Hansen**, **Luther Tweeten**, **Fred Bok** and **Mark Erbaugh** participated in a workshop that initiated direct participation by Punjab food industries in the new program at PAU.

### ***OARDC Competitive International Grants Program***

Three competitive grants, awarded under the OARDC International Competitive Grants Program, were carried out during 2004. These programs are designed to promote research collaborations between OSU/CFAES and international scientists from around the world. Funding for the program was discontinued in 2004 due to State of Ohio budget reductions for OARDC. Research under this program included:

- **Mark Sulc** – Horticulture and Crop Science – *Integration of Livestock Grazing and Row Crop Systems in Ohio and Southern Brazil* – Cooperating Country, Brazil.
- **David Ferree, Doug Doohan, and John Cardina** –Horticulture and Crop Science – *Comparative Biology, Management, and Herbicide Resistance in Weeds Invading Vineyards in Ohio and Chile* – Cooperating Country, Chile.
- **Parwinder Grewal** – Entomology – *Determining the Mechanism of Symbiosis between the Slug-Parasitic Nematode Phasmarhabditis Hermaphrodita and Associated Bacteria* –Cooperating Country, Scotland.

### ***India Natural Resources Management Project***

CFAES continued to pursue an active international research program, building on fifty years of involvement with institutions in northwest India. **Rattan Lal**, School of Natural Resources, has provided the leadership for this program. Collaboration continued on the Research Project on *Food Security and Soil and Water Quality* during 2004. This project is administered by the M.S. Swaminathan Research Foundation in Chennai, India with funding from the Sir Dorabji Tata Trust. Funding has involved OSU research scientists in field research in three regions of India, namely, Punjab, Jabalpur and Tamil Nadu. During the year, **Rattan Lal**, Natural Resources, **Larry Brown**, Food, Agricultural, and Biological Engineering, **Warren Dick**, Soil Sciences, **Luther Tweeten**, Agricultural, Environmental, and Development Economics, **Steven Slack**, OARDC, and **David Hansen**, IPA Office, visited the sites in India and gave recommendations for continued research.

In December, **Prof. M. S. Swaminathan**, Director of the M.S. Swaminathan Research Foundation, visited the campus to receive an Honorary Doctoral Degree of Science at Fall Commencement. While on campus, he met with administrators, faculty

and students and discussed the content of a workshop in January 2005 which will review progress to date on the research project and program activities for a Phase II of the project.

### ***American University of Beirut***

Funded by a special project through USDA and the University of Toledo, OSU scientists continued collaborating with counterparts at the American University of Beirut (AUB) on a project designed to identify potential medicinal properties of flora indigenous to Lebanon. Under this project, OSU continued to host two Ph.D. graduate students from AUB who are undertaking their programs. On the OARDC campus, **Floyd Schanbacher**, Biochemist/Animal Sciences, is hosting one of the students. On the OSU campus, **Martin Quigley** and **Daniel Struve**, Horticulture and Crop Sciences, are advising the other student. This project has involved reciprocal visits by scientist from AUB to OSU and from OSU to AUB as well as considerable interaction among scientists at these institutions and those at the University of Toledo.

### ***EARTH University Collaborative Research Project, Costa Rica***

OSU received a special grant through the U.S. Department of Energy to collaborate with the Escuela Agrícola Regional del Trópico (EARTH) to work on issues of energy and environment in Costa Rica. During Spring 2004 a team consisting of **David Hansen**, IPA Office, **Gary Mullins**, Natural Resources, and **Richard Fortner**, IPA Project Coordinator, visited EARTH University to discuss with its leadership how to proceed in charting collaborative research projects during the year. Subsequently, seven OSU scientists were involved in this research through sub-projects, namely:

**William Mitsch**, School of Natural Resources (Wetlands).

**Rattan Lal**, School of Natural Resources (Carbon Sequestration).

**Roger Williams**, Entomology, and **Michael Ellis**, Plant Pathology (Pesticide Use).

**Jay Martin**, Food, Agricultural, and Biological Engineering (Landscape Management).

**Floyd Schanbacher** and **Lynn Willett**, Animal Sciences (Biomass Conversion to Energy).



Field instruction at EARTH.

During the year, collaborating scientists visited EARTH University to discuss mutual project interests with counterparts at EARTH and to initiate research activities.

**Richard Fortner**, IPA Office project coordinator, made an additional visit to EARTH University to consult with its leadership on how to address the requirements of the U.S. Department of Energy in order to secure release of research funds awarded to EARTH.

## INTERNATIONAL TRAINING/VISITATIONS

### *India*

During the year, several faculty members and research scientists from India visited the OSU campus. Most of them were sent for training by the Indian Council on Agricultural Research using funding from a World Bank-funded National Agricultural Technology Project. Those who participated in this activity are listed below along with their areas of specialization and the faculty members with whom they worked.

#### Biotechnology

**Desh Pal Verma**, Department of Molecular Genetics

- **Dr. Akijam Bijaya Devi**
- **Dr. Phanjoubam Sobita Devi**
- **Dr. Joykumar Meitei**

#### Biotechnology

**Dr. Guo-liang Wang**, Department of Plant Pathology

- **Samindra Baishya**

#### Geographic Information Systems

**Dr. Brian Slater**, School of Natural Resources

- **Sushamoy Chatterji**

#### Soil and Water Management

**Dr. Rattan Lal**, School of Natural Resources

- **Dr. Kuldip Raj Sharma**
- **Dr. Ram Prashad Yadav**
- **Dr. Vinad K. Sharma**
- **Dr. Susama Sudhishri**
- **Dr. Prodip C. Bora**
- **Dr. Kuldip L. Sharma**

OSU also conducted a short-term training program for four Indian scientists under projects funded by the Sir Dorabji Tata Trust Fund. These scientists were:

- **Dr. V.K. Nayyar**, Head, Department of Soil Sciences, Punjab Agricultural University.
- **Dr. Dharwinder Singh**, Soil Scientist, Punjab Agricultural University.
- **Prof. A.Chandrasekaran**, Project Coordinator, MSSRF, Pudukottai, Tamil Nadu.
- **Prof. Deepa Varma**, M.S. Swaminathan Research Foundation, Chennai.

FAES faculty who contributed lectures and other presentations to the group included:

|  |   |
|--|---|
| International Programs in Agriculture                            | <b>Mark Erbaugh, David Hansen</b>   |
| Ohio Agricultural Research & Development Center (OARDC), Wooster | <b>Steve Slack</b> , Director   |
| School of Natural Resources                                      | <b>Joe Arvai, Virginie Bouchard, Frank Calhoun</b> (OARDC), <b>Warren Dick</b> (OARDC), <b>George Hall, Rafiq Islam</b> (Extension South Center), <b>Tom Koontz, Rattan Lal, Brian Slater</b> |
| OSU Extension  | <b>Steve Baertsche</b> (OSUE Administration), <b>Martin Shipitalo</b> (USDA, South Center), <b>Tom Worley</b> (Director, South Center)  |
| Animal Sciences  | <b>Herb Ockerman, Floyd Schanbacher</b> (OARDC), <b>Mark Schmittgen</b> (Waterman Farm)   |
| Food, Agricultural & Biological Engineering                      | <b>Larry Brown, Reza Ehsani, Norman Fausey, Harold Keener</b> (OARDC), <b>Karen Mancl, Jay Martin, Randall Reeder</b>   |
| Horticulture & Crop Sciences                                     | <b>Jim Beuerlein</b>  |
| Agricultural, Environmental & Development Economics              | <b>Luther Tweeten</b>   |
| Entomology   | <b>Clive Edwards</b>  |
| Human & Community Resource Development                           | <b>Cathy Rakowski</b>   |
| Geography  | <b>Paul Robbins</b>   |

### ***Seed Technology Short Course***

From July 12-23, 2004, a short-course on *Seed Technology and Vigor Testing Application for the Seed System in Serbia-Montenegro* was sponsored by USDA. Participants from Serbia-Montenegro included:

**Jasmina Stojadinovic**, Quality System Manager, Seed Testing Laboratory, Maize Research Institute "Zemun Polje", Belgrade.



**Marija Milivojevic**, Laboratory Coordinator, Seed Testing Laboratory, Maize Research Institute "Zemun Polje", Belgrade.

**Aleksandar Simic**, faculty member, Department of Field Crops, Belgrade University.

**Natasa Jakovljevic**, Quality System Manager, Seed Testing Laboratory, Agricultural Station, Novi Sad.

OSU administrators **Mark Erbaugh**, International Programs in Agriculture (IPA), and **Stephen Myers**, Horticulture and Crop Sciences (H&CS), provided an overview of Ohio State University and agriculture in Ohio. H&CS faculty providing technical presentations included **Miller McDonald**, **Mark Bennett**, **Peter Thomison**, **Dan Struve**, and **David Tay**. Contributions were also made by Graduate Student **Samuel Contreras** and Research Associates **Andrew Evans** and **Jerron Schmoll**. The group toured Pioneer seed corn production in Tifton, Indiana and the Ohio Seed Improvement Association in Dublin. **Mandy Pillivant**, IPA, coordinated the visitors schedules.

### ***International Seed Biology Project***

The Horticulture & Crop Science Seed Biology Program participated in the following international activities:

**Miller McDonald**, Horticulture and Crop Sciences, **Ken Kulka**, **Jodi Miller** and **Walter Warkus**, Office of Communication Technologies, visited Lavras and Piracicaba, Brazil in March. They took coffee and tropical forage grass seed production videos under an American Distance Education Consortium (ADEC) grant. Hosts included **Laene Moreira Carvalho** from the University of Lavras and **Julio Marcos** from Escola Superior de Agricultura "Luiz de Queiroz", Universidade de Sao Paulo (ESALQ-USP). In addition, a video end-point conferencing unit was installed at ESALQ-USP to facilitate communication between the two campuses. A DVD video of "Seed Production in Brazil" was completed and is now available for distribution.

**Miller McDonald** and **Mark Bennett** hosted **Julio Marcos**, an ESALQ faculty member on assigned research leave, from April to September. **Dr. Marcos**, sponsored by FAPESP, conducted research on seed vigor imaging. Preliminary results of this research have been summarized in a joint manuscript submitted for publication.

**Jianhua Wang** and **Sun Qun**, Chair and faculty member, respectively in the Department of Seed Science and Technology, China Agricultural University (CAU), Beijing visited with **Miller McDonald**, **Mark Bennett** and **David Tay** in September. Their visit was sponsored 50% by CAU and 50% by an ADEC

grant to **Miller McDonald**. The purpose of their visit was to discuss the consortium and a visit by OSU faculty and staff in 2005 to film vegetable seed production in China.

Establishment of the Consortium for International Training of Seed Technologists continues to be a focus of the OSU Seed Biology Program. Partners include ESALQ-USP, CAU, and the Pontifica Universidad Catolica de Chile in Santiago. Mustering the four universities together allows greater faculty numbers covering a broader range of disciplines. It permits a presence in both the southern and northern hemispheres as well as providing expertise in English, Portuguese, Chinese and Spanish. As the seed industry becomes more globalized, this approach using advances in distance education technologies will become the academic model to better serve students, seed technologists and industry personnel.

### ***Ataturk University Visiting Scholar Program***

As an outcome of a visit made by a U.S. delegation to Ataturk University in 2002, FAES has received several Turkish scholars for periods of three to six months. This program, which is funded by the Turkish Government, matches faculty members from Ataturk University with hosts at Ohio State University. During the past year, the following Turkish scientists participated in the program:

- **Dr. Murat Arslan**, School of Natural Resources.
- **Dr. Merhit Aras**, School of Natural Resources.
- **Dr. Ispir Hamya Polat**, School of Natural Resources.
- **Dr. Huseyin Guler**, Food, Agricultural & Biological Engineering.
- **Dr. Nurinisa Esenbuga** and **Dr. Mahammet Irtfan Aksu**, Animal Sciences.

### ***Korean Rural Development Administration***

FAES received a visit by **Dr. Chung, Jun Yong**, and **Choi, Jong Tae**, representatives of the Korean Rural Development Administration. They were on campus to learn more about the overall scope of the OSU model of agricultural extension. They also visited Extension offices in surrounding counties and visited several dairy farms. **Barbara Ludwig**, Department of Extension, and **Jeff Layman**, Extension staff, served as their primary hosts.

### ***Moldova Fulbright Program***

FAES was visited by **Dr. Oleg Stiopca**, Moldova Agricultural University, who was interested in learning more about the College's programs in agricultural extension education, technology diffusion, and agricultural communications. While on campus he spent his time visiting with faculty and staff in the Departments of Human and Community Resource Development, Agricultural, Environmental and Development Economics, and the Office of Information Technology. His visit was hosted by **David Hansen**, IPA Office, and by **Robert Furbee**, Director, Office of Communication and Information Technology.

### ***Lithuania Agricultural Cooperatives Visit***

As part of an on-going cooperative program between the Ministry of Agriculture of Lithuania and Ohio State University, FAES hosted **Mr. Demigijus Urbonas**, Director of the Lithuanian Agricultural Chamber, and **Dr. Julius Ramanauskas**, Lithuanian University of Agriculture, for a two week visit. They were hosted by **John Ellerman**, OSUE Piketon Center. While here they visited with OSU Extension and Department of Agricultural, Environmental and Development Economics faculty and staff, as well as with representatives of Ohio agricultural cooperatives. This program was initiated several years ago through a visit to Lithuania by **David Hansen**, IPA Office, along with **Mr. Fred Dailey**, Director of Agriculture for the State of Ohio. **Ms. Ingrida Bublys**, Honorary Counsel of Lithuania, was also instrumental in developing this cooperative program.

### ***Japan Rakuno Gakuen University Visit***

**Dr. Hitoshi Sasaki** and **Dr. Osamu Dochi**, Rakuno Gakuen University, visited OSU's Columbus and Wooster campuses to discuss continued exchange of students. In the past, their university has sent students for internships, primarily through the Agricultural Technical Institute in Wooster, Ohio, in coordination with Animal Science faculty at the Ohio Agricultural Research and Development Center.

### ***Makerere University Visit***

Several representatives of Makerere University, Kampala, Uganda, visited the OSU campus during July. They were hosted by **Dr. Mark Erbaugh**, IPA Office. **Dr. Samuel Kyamanywa** and **Dr. Mateete Bekunda** worked with **Dr. Erbaugh** on the final report for the Integrated Pest Management CRSP in addition to working on a proposal for participation in follow-up CRSP activity. While here they traveled with **Dr. Erbaugh** to Washington, D.C. to participate in a CRSP conference as well as to Blacksburg, Virginia to work on related activities at Virginia Tech which is the lead institution for the Integrated Pest Management CRSP.

### ***Namibia Polytechnic University Visit***

**Dr. Frederik Bok**, Director of the Food Industries Center, hosted a visit by **Dr. Salomo M. Mbai**, from the School of Natural Resources and Tourism at Polytechnic University of Namibia. **Dr. Mbai** was on the OSU campus to explore future cooperative programs between his university and FAES. While on campus, he and **Dr. Bok** prepared a formal Memorandum of Agreement between the two institutions that would permit cooperation across various disciplines.

### ***Prague Agricultural University Visit***

FAES hosted a December visit by representatives of the Prague Agricultural University. Led by **Dr. Jon Hron**, Rector, the delegation also consisted of **Dr. Mrioslav Svatos**, Dean, College of Business and Economics, and **Professor Jiri Tvrdon**,

Department of Economics. The purpose of their visit was to reaffirm the partnership between our institutions that has been in effect for over twelve years and to explore alternative opportunities for collaboration in research and technical assistance. The delegation met with **Dean Bobby Moser** and with other leaders of the college. Hosted by **Mr. Michael Chrisman**, Ohio International Agricultural Internship Program, and **David Hansen**, IPA Office, the delegation spent considerable time interacting with members of the Department of Agricultural, Environmental and Development Economics.

### ***Center for Agricultural and Forestry Development Visit***

**Ms. Vikki Pimentel**, Center for Agricultural and Forestry Development, Dominican Republic, visited the Department of Food Science & Technology. While on campus, she was hosted by **Dr. David Hansen**, IPA Office, and by **Dr. Valente Alvarez**, Department of Food Science & Technology. **Ms. Pimentel's** visit was sponsored by CEDAF as part of the on-going partnership program with FAES.

### ***Fachhochschule Wiesbaden Visit***

FAES received a visit by **Dr. Volker Behrens**, Chairman of the Cooperation Committee of the Fachhochschule Wiesbaden University of Applied Sciences, Germany. The purpose of Dr. Behrens' visit was to formalize the participation by FAES, and in particular, the Department of Horticulture and Crop Sciences and Agricultural, Environmental, and Development Economics, in its M.S. program in Global Horticulture. A supplemental agreement



L to R: Dean Moser, Dr. Behrens, Dr. Randall, AEDE  
Back: Dr. Hansen, IPA, Dr. Myers, H&CS, Mike Chrisman, IPA

was signed by **Dr. Behrens** and by **Dr. Bobby Moser** and **Mr. Michael Chrisman**, Assistant Director, IPA Office, during the visit confirming this participation. This Agreement was negotiated by **Dr. Detlev Reymann**, Dean for Academic Affairs of the Fachhochschule Wiesbaden University of Applied Sciences and by **Mr. Michael Chrisman**, IPA Office. Under this Agreement, FAES will provide opportunities for participants in the M.S. program to take classes at OSU.

### ***Limbe Botanic Garden, Cameroon***

**Dr. Fominyam Chris Njok**, Curator of the Limbe Botani Garen in Limbe, Cameroon, visited FAES to explore cooperation between our respective institutions. While on campus, he was hosted by **Dr. David Tay**, Director of the OSU Plant Ornamental Germplasm Center. A formal agreement was signed between the two institutions at that time, providing for the exchange of plant ornamental germplasm. In addition, the participation by OSU in a larger program sponsored by the U.S. Department of Agriculture was also discussed and preliminary plans were made for direct participation by **Dr. Tay**.

## OUTREACH

CFAES continued its tradition of quality outreach programs, designed primarily to provide opportunities to its faculty to gain international experiences while providing useful services in other nations. Most of these activities have been funded using resources from third parties.

### ***USDA Faculty Exchange***

For the third consecutive year, CFAES participated in a Faculty Exchange program managed by the Office of International Cooperation in USDA. This program brings young agricultural economics scholars to the United States from regions that formerly were part of the Soviet Union for four month periods of residency at land-grant university Departments of Agricultural Economics. Its purpose is to expose them to liberal western agricultural economics and to the U.S. land-grant university system. While on campus they attend courses being taught in agricultural economics with the purpose of modifying courses they are currently teaching at their home universities and/or introducing new courses. The program allows for FAES faculty involved in the program to make follow-up visits to former scholars at their home institutions during the year as well.

During 2004, FAES received the following scholars:

- **Dilbar Khalmirzaeva** – Tashkent State Agrarian University, Uzbekistan.
- **Shuhrat Sattarov** – Samarkand Agricultural Institute, Uzbekistan.
- **Inna Novak**, Uman State Agrarian University, Ukraine.
- **Pirnazar Elmuratov**, Tashkent State University of Economics, Uzbekistan.

This project was managed by **Jeff Layman**, OSU Extension, with assistance by **Allan Lines**, Department of Agricultural, Environmental and Development Economics. Faculty participating in the project include **Donald Larson**, Marketing; **Thomas Sporleder**, Agribusiness; **David Hahn**, Cooperatives; **Marvin Batte**, Farm Management; **Bernie Erven**, Labor and Human Resources Management; **Lynn Forster**, Farm Management; **Stanley Thompson**, Marketing; and **Frederick Hitzhusen**, Cost/Benefit Analysis.

During Summer 2004 **Jeff Layman** visited several of the returned participants in Uzbekistan – Samarkand Agricultural Institute and Tashkent State Agrarian University. The Office also arranged three follow-up 2005 visits by OSU faculty to 2004 program participants in Uzbekistan and Ukraine.

### ***USDA Armenia Marketing Agricultural Products Project***

Several CFAES faculty members provided technical assistance to this important project during 2004. **Kelso Wessel**, Agricultural Economist, undertook several short-

term assignments in Armenia during the year. He contributed to the development of competent record keeping by farmers and agribusiness men. **Poul Hansen**, Food Science & Technology, also undertook a six month assignment in the area of dairy product development, with an emphasis on cheese making.

### ***USDA Georgia Agricultural Quality Improvement Project***

Also funded through USDA, this project was initiated in Georgia with the headquarters office in the capital, Tbilisi. **Allan Lines** was helpful in getting it initiated and spent time in Tbilisi during the early part of 2004. **Jeanne Bartholomew** spent the entire year on assignment in Georgia where she worked in the rural areas to improve the quality of agricultural production and the quality of transformation of agricultural products.

### ***Higher Education Partnership for African Development (HEPAD)***

The Higher Education Partnership for African Development (HEPAD): Long-term Training for Regional Agricultural Development in East Africa: Kenya, Tanzania, and Uganda Project was competitively bid and awarded to the IPA Office in late 2004. Funding comes from USAID through the Association Liaison Office (ALO) of the American Council of Higher Education. The title of OSU's winning proposal is: *Strengthening the Capacity of East African Faculties of Agriculture to Improve Smallholder Productivity*. It partners OSU with Michigan State University (MSU), the Regional Forum for Capacity Building in Agriculture (FORUM), and three Faculties of Agriculture in East Africa, namely **Makerere University** in Uganda, **Egerton University** in Kenya, and **Sokoine University of Agriculture** in Tanzania. The goal of the project is to strengthen the capacity of Faculties of Agriculture (FOA) to improve smallholder agricultural productivity through their research, training and outreach activities.



M. Erbaugh (OSU) and E. Crawford (MSU) meet with Deans and Department Chairs at Sokoine University of Agriculture, Tanzania.



Deans, FORUM staff, M. Erbaugh (OSU) and E. Crawford (MSU) hold first Regional Committee Meeting.

The project will include twelve participants at OSU and MSU. These degree programs will include a year long component of graduate course work at either OSU or MSU and subsequent in-country research.

In addition to this training, four faculty development activities will be provided in the region including workshops on:

- agribusiness management.
- survey research methodology.
- computer-based modules for econometric training.
- research issues that explore linkages between HIV/AIDs and the agricultural sector in the region.

The major participants in this project include **Mark Erbaugh**, who will serve as the project director, **David Kraybill**, AEDE, and **David Hansen**, IPA, who will provide technical inputs. Other faculty members will be identified to provide technical inputs to the project during the coming three years.

### ***Egyptian Agricultural Exports and Rural Income (AERI) Project***

The Institutional Linkages Activity of the Egyptian Agricultural Exports and Rural Income (AERI) Project is a Midwest Universities Consortium for International Activities (MUCIA) project led by the University of Illinois. The Ohio State University is a partner institution and subcontractor. The project includes four partnering Egyptian Universities which are: Cairo University, Cairo Univeristy Fayoum Branch, Assuit University and Minya University.

Institutional linkages activity is designed to strengthen the capacity of the graduates of these institutions to contribute to the export of agricultural products as well as to raise rural incomes in the process. It also focuses on creating stronger public-private-international linkages, and on strengthening Egyptian biotechnology research to help transform and link Egyptian agriculture to the global economy. The OSU activity is managed by **Mark Erbaugh**, IPA. CFAES faculty who have contributed to this effort are **David Hahn**, Agricultural, Environmental and Development Economics; **David Zartman**, Animal Sciences; **Jamie Cano**, Human and Community Resource Development; and **Richard Funt**, Horticulture and Crop Sciences. **Ike Kershaw**, Adjunct Professor in Human and Community Resource Development and Coordinator of the Ohio Department of Education, and **Ken Hoblet**, Chair, Veterinary Preventive Medicine, have also provided important technical assistance to this project.

### ***Agribusiness Development Partnership Project with Sokoine University***

Funded by the Association Liaison Office of the American Council of Higher Education with USAID funding, this project involves **Mark Erbaugh**, International Programs in Agriculture, **Don McFeeters**, **Tom Worley**, **Julie Fox** and **John Ellerman** from the OSU South Center, and **Dave Hahn** from the Department of Agricultural, Environmental, and Development Economics. Its title is *Building Institutional Capacity Through Linkages with the Private Sector: Developing an Agribusiness Management Program at Sokoine University of Agriculture*. Located in Morogoro, Tanzania, the main purpose of the project is to strengthen Sokoine University of

Agriculture's capacity to provide business-oriented training and outreach activities through enhanced linkages with the private sector. **Melchior Mlambiti** from the Sokoine Department of Agricultural Economics undertook a three month sabbatical at the South Center and then joined **Mark Erbaugh** in presenting a project summary at the ALO annual meeting held in Washington, D.C. in August. **Mark Erbaugh** and **Julie Fox** then traveled to Tanzania to design and implement a survey of agribusinesses in five regions of Tanzania.

### ***Carbon Sequestration in Latin America Workshop***

This workshop was organized to assess the potential for terrestrial carbon sequestration in Latin America. Sponsored primarily by the U.S. Department of State, it was co-organized by OSU/FAES, the Center for the Application of Nuclear Energy to Agriculture (CENA), Universidade de Sao Paulo, and the Institut de Recherche pour le Developement, Montpellier, France. The workshop drew scholars from numerous nations on the Latin American continent. Outcomes of the workshop are the Latin American Soil Carbon Network (LASCANet) and a book of proceedings that will be published in 2005.

This activity formed part of the 40<sup>th</sup> anniversary celebration of a close partnership between The Ohio State University – largely through FAES – and the University of Sao Paulo – largely through the Escola Superior de Agricultura “Luiz de Queiroz.” Representatives of FAES at the workshop included **Bobby Moser**, FAES Dean, **Rattan Lal**, co-organizer of the workshop, and **Dave Hansen**, IPA Office. In September, **Dave Hansen** returned to Brazil to participate in an event on the ESALQ campus to commemorate the 40 years of collaboration. A similar event was held on the OSU campus with the participation of representatives from the University of Sao Paulo.

### ***CEDAF Dominican Republic Project***

The program to strengthen higher agricultural education and research in the Dominican Republic continued through the year. Under this program financed by the Dominican government, three students continued their graduate degree programs at Ohio State University.

- **Silvia de Camps** – Veterinary Preventative Medicine
- **Susana de Jesus** – Plant Biotechnology
- **Elba Yanira Disla** – Rural Sociology (Organic Farming)

A fourth student arrived in September to initiate a PhD program in Food Science. **Danis Feliz-Perez** obtained an M.S. degree at the University of Arkansas under the Fulbright program immediately preceding this. The Agreement between OSU and the Center for Agricultural and Forestry Development (CEDAF) provided him with support for the Fall Quarter.



Under this program, CFAES is supporting three on-going M.S. degree programs in the Dominican Republic, namely, Soils at the Autonomous University of Santo Domingo, Biotechnology at the Superior Institute of Agriculture (ISA) in Santiago, and Ecology at the National University "Pedro Henriquez Urena" in Santo Domingo.

### ***Puerto Rico: Universidad del Este Project***

CFAES continued its collaboration with the Universidad del Este in San Juan, Puerto Rico. Supported by a USDA Hispanic Serving Institution grant, this effort to establish an Executive Agribusiness M.S. degree program continued during 2004. **Rocio Perez**, who initiated an M.S. degree program in agribusiness on the OSU campus in 2003 resigned and a new student, **Carolina Prado**, took her place. **Carolina** continued her course work during 2004 and is expected to complete her degree program in June 2005. **David Hahn** continued as the OSU principal investigator, as did **Wilfredo Colon**, for the Universidad del Este.

### ***Globalizing Agricultural Science and Education Programs for America***

Ohio State University continued to give leadership to this important national initiative nicknamed GASEPA. This initiative has resulted in a new competitive International Science and Education grants program administered by USDA/CSREES. A proposal to support a broadening of study abroad opportunities for FAES students was prepared for submission under this program in 2004. OSU received financial support for its efforts on behalf of GASEPA from the Office of International Programs of USDA/CSREES, the entity that administers the competitive grants program.

### ***World Food Day Celebration***

The title for the 21<sup>st</sup> year of World Food Day was *Politics of Hunger: What's at Stake?* It was held on October 16<sup>th</sup> with twenty-two faculty, staff and students attending the teleconference hosted by **Mark Erbaugh**, IPA.

### ***Catholic University of Argentina***

FAES continued to work with the Catholic University on development of mutually beneficial activities. **Leslie Malek** has provided valuable inputs to this process. During the year, an agreement was reached to utilize the services of **Herb Ockerman**, Professor in Animal Sciences, as the Editor-in-Chief of a new electronic journal titled, *The International Journal of Applied Food Safety*. Several areas in which to collaborate on graduate training, including organic agriculture and food and agribusiness, were also explored.

## NEW AGREEMENTS SIGNED DURING 2004

Various new agreements were signed between CFAES and counterpart institutions throughout the world during 2004. They are designed to facilitate additional program development. Among them are:

|                   |   |   |
|-------------------|---|---|
| <b>Argentina</b>  | - | Catholic University of Argentina (Buenos Aires) |
| <b>China</b>      | - | Tianjin University of Science and Technology    |
| <b>Costa Rica</b> | - | EARTH University                                |
| <b>Germany</b>    | - | The Fachhochschule Wiesbaden                    |
| <b>Namibia</b>    | - | Polytechnic of Namibia                          |
| <b>Uzbekistan</b> | - | Samarkand Agrarian Institute                    |
| <b>Ecuador</b>    | - | Municipal Government of Quito                   |

FYI: **Kenya** . . .



has the distinction of being the world's second largest producer of roses.

*M. Erbaugh*