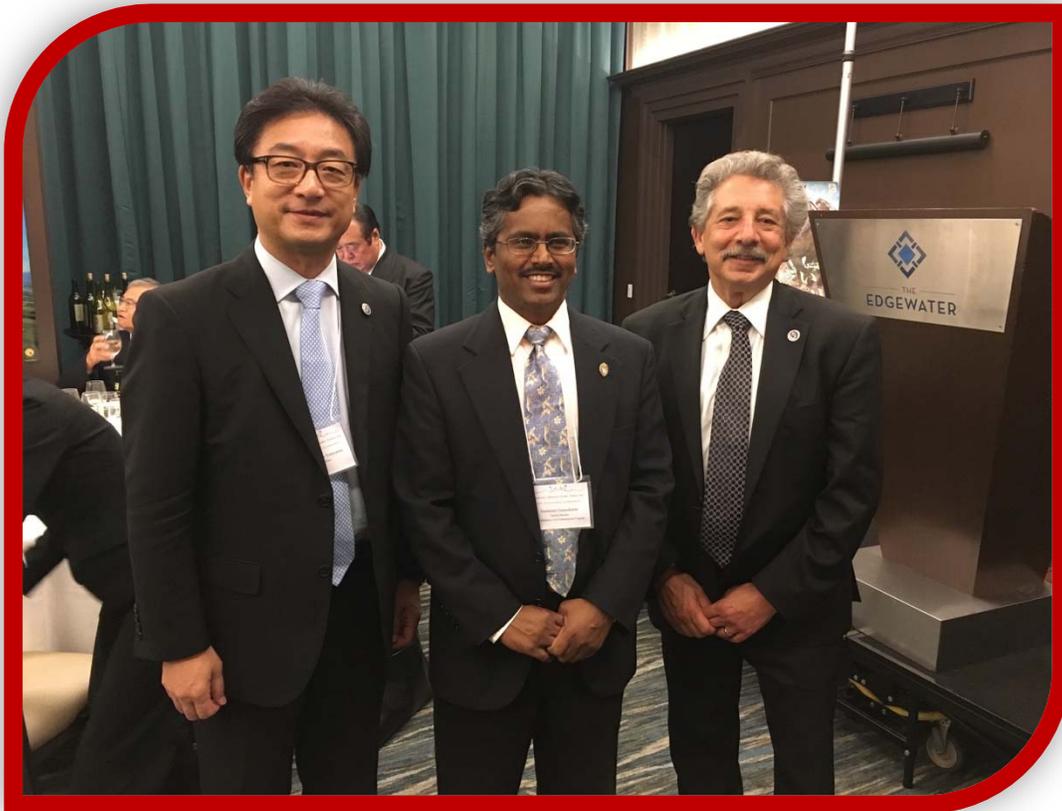




College of
Agricultural & Life Sciences
UNIVERSITY OF WISCONSIN-MADISON
Office of International Programs

ANNUAL REPORT, MARCH 2016-17



Director Gunasekaran with Mayors of Madison and Obihiro, Japan (a sister city of Madison)

>> Growing the future globally <<

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Executive Summary

Professor Sundaram Gunasekaran “Guna” was hired as Director of the CALS International Programs (IP) in March 2016. His primary charge was to strengthen and expand the role of CALS IP in facilitating and supporting the research and outreach agendas of the college. Gunasekaran works closely with Associate Director John Ferrick and Program Assistant Dr. Felecia Lucht.



Gunasekaran & Ferrick at Kasetsart University, Thailand

In his first year, Gunasekaran focused his attentions on learning about the various interests and contacts that faculty have with their international collaborators and in knowing and understanding Wisconsin and U.S. Government agencies, as well as, non-governmental organizations (NGOs) that support international activities of interest to CALS. A 12-member International Programs Committee (IPC) was constituted to assist with the programmatic efforts of CALS IP. Along with IPC, Gunasekaran initiated steps to streamline ways to effectively connect CALS IP with faculty and staff in CALS, the UW and around the world. While seeking, and obtaining large programmatic grants will be a priority going forward, renewing old and establishing new connections with entities here on campus, in the state, US, and globally is deemed critical to strengthening and expanding the international aspects of the college’s research and outreach missions.

China, Costa Rica, Ethiopia, India, Japan, Mexico, Peru, Thailand, and Uganda emerged as countries of major focus due to both faculty interests and potential funding opportunities. CALS IP has also been working through U.S. Government agencies such as United States Department of Agriculture (USDA), United States Agency for International Development (USAID), the Foreign Agricultural Service (FAS) etc., on several large programmatic grants, which target sub-Saharan Africa to support work in Ethiopia and Uganda and additional efforts are afoot in the Congo Basin area.

Going forward, CALS IP will continue to work with faculty, staff, and students on various synergistic activities that cut across the research, outreach, and scholarship missions of the college. Strengthening the college’s collective interests and talents is critical to positioning CALS as an important entity in addressing important issues and solving pressing challenges that span across international agriculture, the environment, natural resources and the life sciences. An updated CALS IP website has more details on our activities: <https://ip.cals.wisc.edu/>.

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Mission and Vision

The CALS IP mission is to facilitate, expand and support the international activities of CALS faculty, staff and students, which complements our vision to become among the leaders in the nation's land-grant colleges for international engagement that affect positive change in the global agricultural enterprises through research, education, and outreach.



DATCP Secretary Ben Brancel and Ethiopian delegation

Both the mission and vision are centered in beliefs that the capabilities of CALS faculty, staff and students can help address some of the most pressing issues facing the world today and tomorrow. We believe that our collective expertise can help alleviate poverty while also helping people to help themselves through collaborative partnerships in basic and applied research, the development of creative outreach and capacity building programs and the creation of interconnected educational experiences for our students.

Background

In 2009, the academic portions of the IP office were integrated into the college's Academic Affairs office and the leadership title was changed from Associate Dean to Director and support for the research and outreach work was significantly curtailed. Specifically, the IP office was asked to focus on international opportunities for undergraduate students and not on the research and outreach done by faculty and staff. Following this, the IP office submitted and was awarded several Madison Initiative for Undergraduates (MIU) grants to support the following:

- Increasing and supporting study abroad and international exchange programs for CALS students;

- Developing international internships;
- Working with faculty/staff to internationalize their curricula;
- Developing an undergraduate certificate in global health.

However, while there was success in creating new prospects for undergraduate student involvement in international opportunities, the support for faculty and staff to engage in more programmatic international research and outreach/capacity building opportunities were lacking. It was felt that there were funding opportunities being missed and that the CALS IP office should be more proactive in pursuing these opportunities. Consequently, in September 2013, Dean Kathryn VandenBosch appointed a committee to review CALS IP to assess its the mission and priorities. The committee report* outlined several recommendations for revitalizing and strengthening CALS IP, specifically for enhancing its mission of assisting faculty and staff in developing their international research, outreach and teaching efforts. Following this, a college-wide search was initiated to hire a faculty member as director of CALS IP, which resulted in March 2016 in the hiring of Professor Sundaram Gunasekaran from the Department of Biological Systems Engineering.

Since assuming the directorship, Gunasekaran has been diligently learning about the interests and strengths of CALS faculty for international engagement. He also made connections with US Government agencies such as USAID, USDA's Center for International Programs and FAS, as well as other foundations and NGOs to learn about how they function and what international projects they support. He spent time learning about and setting a collaborative environment for developing partnerships in several countries, notably in China, Costa Rica, Ethiopia, India, Japan, Mexico, Peru, Thailand, and Uganda. There is clearly a renewed enthusiasm and optimism for continued growth and prominence of CALS in the international agricultural, environmental, natural resources, and life sciences enterprises.

*<https://www.cals.wisc.edu/wp-content/uploads/2013/09/CALS-International-Report.pdf>

College Activities

1. Faculty and Staff Listening & Learning sessions – Three listening & learning sessions were conducted in the Spring and early Summer of 2016. These meetings provided a clear picture of what and where CALS faculty and staff were engaged in international work, as well as providing a rich set of ideas and suggestions for going forward.¹
2. Website and Social Media – The CALS IP website was redesigned and relaunched (<https://ip.cals.wisc.edu/>). The website is used to inform audiences around the world. It also links the CALS International Education and Study Abroad sites to help undergraduate students seeking information to navigate and learn about such opportunities. CALS IP also maintains an active presence on social media, including Facebook (<https://www.facebook.com/UWMadisonCALSI/>) and Twitter (https://twitter.com/CALSIP_UW).
3. eCALS and *Grow* articles – CALS IP periodically features stories highlighting the activities of CALS faculty and staff in these publications. Articles are done on a semi-monthly basis in eCALS and more in-depth articles are solicited for each *Grow* magazine cycle, but with the knowledge that selection of articles is done by the magazine staff.
4. Spring International Reception – started in 2015, this continued in 2016 with greater participation by faculty mentors and international graduate students and post-docs. Plans are underway to have an expanded version of this in 2017.
5. Starting in Fall 2016, CALS IP hosts an annual welcome event known as “CALS Goes Global.” At this event students, staff, faculty, and visitors new to CALS are introduced to college's wide array of international engagement activities. This informal gathering is a great way to form new connections, make friends, and identify collaborators for projects of common interests in various countries.
6. CALS IPC – A 12-member faculty and staff International Programs Committee (chaired by Professor Jiwan Palta of Horticulture²) was reconstituted in 2016 to provide guidance and support for strengthening and expanding the role of the CALS IP office.



CALS Goes Global Fall Reception – Dean VandenBosch & Director Gunasekaran

¹ See attached notes

² See attached committee list

7. CALS IP has representation on the Department of Dairy Sciences' international committee (chaired by Professor Victor Cabrera).

On-campus, State, and National Activities

1. CALS IP has representation on the International Division Associate Deans' Council, and Global Health Institute (GHI) Advisory Committee. These enable the IP office to have a wider voice on campus and seek support for CALS' international work.
2. CALS IP worked with the UW's International Division and Wisconsin Alumni Association (WAA) to connect with UW Alumni in India, Indonesia, Japan and Thailand. CALS IP will continue to try and forge these important connections as they are critical to develop and support our work in their countries.
3. CALS IP is a partner in the selection of Neale Silva scholars from Chile. This program is coordinated by the College of Engineering's International office.
4. CALS IP continues to work with the Department of Agriculture, Trade and Consumer Protection (DATCP) to support the expansion of the state's international presence. Meetings coordinated by DATCP with CALS IP participation include hosting delegations from Ethiopia and China.
5. CALS IP has representation on the Association of Public and Land-grant Universities' (APLU), International Agricultural Section (IAS) and the Commission on International Initiatives (CII). These entities help lobby for and support international activities in land-grant universities.
6. The CALS IP is also a member of the Association of International Agriculture and Rural Development (AIARD). Through this organization, CALS IP is able to connect with other land-grant universities, the private sector and both governmental and non-governmental international development agencies.

Country Activities – (focus countries are in bold type)

1. Cameroon – Ms. Marie Louise Nangoa, CEO of Comagri SA visited to discuss the potential involvement of CALS in a large Cameroon Agribusiness Project.
2. Central Africa Initiative (DRC, Cameroon, Rwanda, Uganda) – project led by Don Waller (Botany), Aliko Songolo (African Lang & Lit) and Nathan Schulfer (Nelson Institute for Environmental Studies). CALS faculty involvement includes: Caitlyn Allen (Plant Pathology) and Josh Garoon (CES). Proposal is being developed for submission to the African Development Bank.
3. **China** – MOUs were signed between CALS and Chinese Academy of Agricultural Sciences, Zhejiang Academy of Agricultural Sciences, and Huazhong Agricultural University. Professor Pam Ruegg (Dairy Science) is leading CALS faculty involvement in the Dairy Farming Institute in Harbin, which is funded by Neslte. Dr. Liping

Yang visited to discuss establishing collaborations between Jinan University and UW-Madison. Dr. Cao Zhijun and 20 students from China Agricultural University visited; this visit, in conjunction with World Dairy Expo, was facilitated by Carolyn Brady of UW-River Falls.

There are many on-going connections and collaborations between CALS faculty and staff and many other entities in China collaborators. CALS IP is working to gather more information about these activities to develop a more complete picture of CALS' engagement in China.

4. **Columbia** – Director Gunasekaran attended Latin American Partnerships Symposium at UC-Davis in October to explore potential opportunities in Latin American countries. One contact made was with Ms. Susan Bell, Counselor for Public Affairs, US Embassy, Colombia. A follow-up was a visit by a Colombian delegation in February 2017 where Hernando Rojas, School of Journalism and Mass Communications and Director, Latin American, Caribbean and Iberian Studies (LACIS), Alberto M. Vargas, Associate Director, LACIS and Michelle Miller, Associate Director, UW Center for Integrated Agricultural Systems (CIAS) organized a meeting to discuss opportunities regarding agricultural and peace related collaborations. The visitors will take back what they learned and contact UW on possible collaborations and funding opportunities and specifically with CALS on agricultural projects.
5. **Costa Rica** – Dr. Claudia Calderon (Horticulture) assumed responsibility for the Costa Rica study abroad program from Professor Jim Nienhuis (Horticulture). She is also looking to expand this to include Guatemala. We had a general MOU with Instituto Tecnológico de Costa Rica Con Sede en San Carlos, which was signed in June 2013



Gunasekaran with faculty and administrators from UCR

and valid until June 2016. Gunasekaran met with Professors Nienhuis, Alfred Hartemink (Soil Science), Michel Wattiaux (Dairy Science) and Bret Shaw (LSC) regarding their work in Costa Rica. Gunasekaran visited Costa Rica and met with faculty and administrators at Universidad de Costa Rica (UCR), Centro Nacional de Innovaciones Biotecnológicas (CENIBiot), Universidad Nacional de Costa Rica, Universidad Técnica

Nacional (UTN), and EARTH University to discuss possible collaboration opportunities and partnerships related to CALS priority

themes. Dr. John Roll (Bacteriology) visited UCR to explore study abroad/exchange program opportunities in Costa Rica; this visit was supported by Susan Huber-Miler, CALS Study Abroad Director. Professor Adrián Pinto Tomás of UCR is collaborating with Professors Garret Suen (Bacteriology) and Frederico Rey (Bacteriology).

6. **Ethiopia** – In 2015, Professors Victor Cabrera and Michel Wattiaux (Dairy Science), visited Bahir Dar University (BDU) to get a better idea of the Ethiopian dairy sector and to discuss possible collaborations. In 2016, these discussions continued with BDU and Hawassa Universities.

In May 2016, a delegation from Hawassa University administrators that included Atkilt Esaiyas, Henok Tadele, and Edilu Shona visited UW and CALS to strengthen collaborations in agriculture.

In October 2016, Dr. Terrance Berry (Animal Sci) was contacted by BDU regarding possible collaborations in the area of fisheries in Lake Tana, the source of the Blue Nile. Conversations are currently ongoing. Also in October, a delegation from Ethiopia that included the First Lady Ms. Roman Tesfaye visited Madison to attend the World Dairy Expo and to discuss possible collaborations on expanding dairy operation in Ethiopia.



Ethiopian delegation with Professors Kent Weigel (Dairy Sci), Jess Reed (Animal Sci), Gunasekaran and Ferrick

In February 2017, a grant proposal was submitted by BDU to the UKAID funded Strategic Partnerships for Higher Education Innovation and Reform (SPHEIR) program with CALS as a partner. The project title is, "Transforming Agriculture-Food Engineering-Agribusiness Education and Training through Innovative Delivery and Enabling Systems." Selection to move on to the proposal development phase is pending.

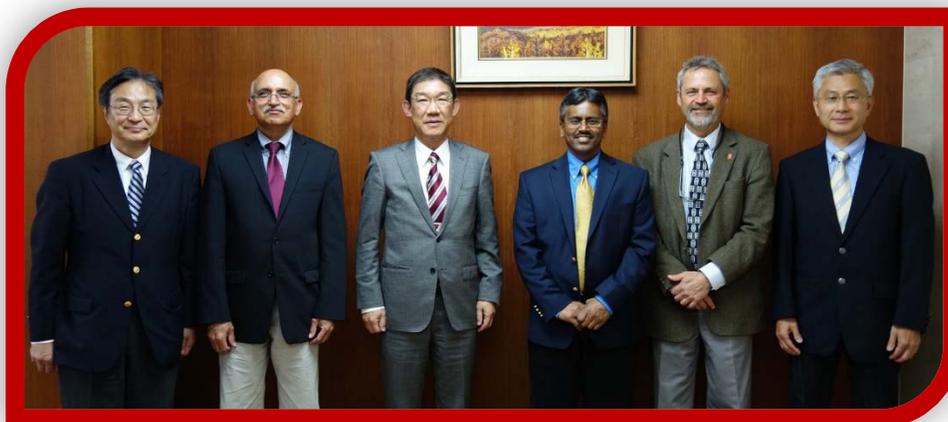
In June 2017, Dr. Gunasekaran will visit Ethiopia along with members of the UW Global Health Institute to discuss collaboration between CALS and BDU and Hawassa University and explore opportunities with USAID.

7. **Guatemala** – Dr. Claudia Calderon (Horticulture) is working with a colleague and collaborator in Guatemala, Dr. Pablo Prado to develop an international research project. This would be a cross-disciplinary effort so they are seeking potential

collaborators connecting with scholars from the humanities and social sciences. Gunasekaran is pursuing collaboration with Universidad de San Carlos de Guatemala.

8. **India** – Mr. S. Sudarsanam, Deputy General Manager, Mahindra & Mahindra visited CALS in July to discuss possible partnerships related to tractor usage. Negotiations are still underway with the help of Professors Richard Straub (BSE), Kevin Shinnars (BSE), and Brian Luck (BSE). In December, Gunasekaran met with Dr. Krishna Ella (PhD'93, Plant Pathology), CEO, Bharat Biotech to discuss possible funding for CALS IP and programs that connect India to CALS. He also went to USAID with Drs. Vishal Bector, Neelam Grewal, and Jaskarn Singh from Punjab Agricultural University to meet with Mr. Bahiru Duguma, Director of Food Security, USAID regarding possible collaborations and support. Gunasekaran was also the featured speaker at Wisconsin Alumni Association (WAA) gathering in New Delhi.
9. **Indonesia** – CALS IP is exploring opportunities in Indonesia through USAID's Sustainable Higher Education Research Alliances (SHERA). Dr. Sherry Tanumihardjo currently does work in Indonesia, which can be leveraged for future collaborations. Connected Lora Klenke (WAA) with Mr. Bernie Burrola of US-Indonesi Joint Council for Klenke's visit to Indonesia in December. Also, connected Susan Huber Miller with Mr. Burrola for undergraduate opportunities. Participated in meetings with Dr. Iwan Surjawan, Head of Department Food Technology of Indonesia International Institute for Life Sciences and Dr. Scott Rankin (Food Sci) with regards to undergraduate summer internship opportunities in the Department of Food Science.
10. **Japan** – Following the signing of MOU with Obihiro University of Agriculture and Veterinary Medicine (OUAVM) in 2014, and with financial support from the Government of Japan, we have an active collaboration to develop research capacities at OUAVM through scholar exchanges. Since March 2016, eight OUAVM faculty visited Madison and 11 UW faculty/staff visited OUAVM.³ Current focus has been on potato research led by Jiwan Palta (Horticulture) and food research by Shinya Ikeda (Food Science). Other CALS faculty who have visited OUAVM hosted visitors are: Shelley Janske, Paul Bethke, David Spooner (Horticulture), Amy Charkowski, Murray Clayton, Walt Stevenson (Plant Pathology), Scott Rankin (Food Science), Hasan Khatib, Jess Reed, Guilherme Rosa (Animal Sciences), Paul Fricke, Kent Weigel (Dairy Science), and Bill Hickey (Soil Science).

³ See last page for full list



Gunasekaran, Ferrick, and Palta with Obihiro University president and faculty

In addition, Gunasekaran and Ferrick visited OUAVM in May 2016. They met with OUAVM leadership and participated in a Madison-Obihiro Sister City event in Obihiro attended by the Mayors and several UW alumni. Gunasekaran and Ferrick also visited Hokkaido University in Sapporo to discuss possible collaborations with Dr. Taichi Takasuka, Assistant Professor and former Post-doc with Professor Brian Fox (Biochemistry). These connections will be pursued further.

11. Nicaragua – Gunasekaran met with a group of Nicaraguan Cochran Fellows and Jimmy Bolanos of US FAS in Nicaragua through Dr. Martin Sieber of AgDevelop in Mount Horeb, WI. Gunasekaran was joined by and Kiko Gandara of DATCP. This meeting was facilitated by Professor Victor Cabrera (Dairy Sci).
12. Nigeria – A visiting scientist training agreement was signed in June 2016 with the University of Illorin, Nigeria. The purpose of this program is to place three Illorin faculty members in UW labs for up to 18 months for training related to stem cell research with the intent of establishing the West Africa Stem Cell Facility in Nigeria. UW mentors for the Illorin scientists are as follows:
 - Dr. Ralph Albrecht (Animal Sci) – Dr. Ibrahim Adisa Raufu
 - Dr. Emery Bresnick (Cell & Regenerative Biology) – Dr. Abiola Samuel Babatunde
 - Dr. Timothy Kamp (Cardiology) – Dr. Olufunke Esan Olorundare
13. Pakistan –Professor Phil Simon (Horticulture) is developing an MOU with Sargodha University and is expected to be signed Spring 2017. Gunasekaran visited with Professor Suleman Tahir of University of Gujrat who was here to explore bioenergy research collaboration with Professor Xuejun Pan (BSE).
14. **Peru** – Professors Victor Cabrera and Michel Wattiaux (Dairy Science) and Jiwan Palta and John Bamberg (Horticulture) are engaged in research and outreach work with the Universidad Nacional Agraria La Molina and the Universidad Nacional Toribio Rodríguez de Mendoza (UNTRM) and with the International Potato Center (CIP), which

is based in Lima, Peru. Funding to bring Peruvian graduate students to UW-Madison is being sought through the government of Peru. CIP is very active in sub-Saharan Africa so CALS IP views this connection as having the potential for expansion in other parts of the world. A group of CALS faculty will visit UNTRM in August 2017 to participate in the Peruvian Association of Animal production and to explore research collaboration.

15. Sri Lanka – A USDA Food for Peace proposal for Sri Lanka focusing on dairy was submitted in January partnering with World Vision. Professor Michel Wattiaux (Dairy Sci) is the principal investigator.
16. **Thailand** – Potential for expanding activities in Thailand continues with an MOU signed between UW and Kasetsart University. Wisconsin Alumni Association of Thailand (WAAT) is interested in re-engaging with UW-Madison and CALS especially. UW alumni leadership in Thailand include Pongsak Payakvichien, Vichai Reutrakul, and Pornchai Matangkasombut.



Gunasekaran, Ferrick, and Roll with members of WAAT and others at Mahidol University

At the undergraduate level, Dr. Jon Roll (Bacteriology) continues to collaborate with Mahidol and Chulalongkorn Universities on summer research experiences. He also teaches a UW bacteriology course for UW undergrads at Mae Fah Luang University in Chiang Rai during summer.

Professor Garret Suen (Bacteriology) is working with Chulalongkorn University on a Microbiome Research Symposium for May/June 2017 with Tim Donohue, Trina McMahon, and Federico Rey, Camron Curry, Jean-Michel Ane or Thea Whitman as possible participants. Expanding this symposium to include faculty from other Thai universities is also under discussion.

Professors Shelley Janske (Horticulture) and Bill Tracy, Michael Havey & Brian Yandell (Agronomy) are in the process of signing an MOU with Kasetsart University. Dr. Piya Kittipadakul (2010 Ph.D., Horticulture with Janske) is the primary contact at Kasetsart.



Roll's microbiology class at Mae Fah Luang University

17. **Uganda** – A proposal to USAID's Food for Peace program is being developed with ACDI/VOCA as the lead for submission in April 2017. This would include a partnership on campus with the Global Health Institute.

This work builds on a long history of UW collaborations with Uganda, which includes the CALS undergraduate program built by Professor James Ntambi (Biochemistry), former CALS IP Director Ken Shapiro and John Ferrick.

Accomplishments

Grants Submitted

1. USDA Higher Education Grant (Michel Wattiaux, PI) Budget Request: \$150,000
2. USAID, University of Florida, Feed the Future Innovation Lab, Dairy training in Ethiopia, (Michel Wattiaux, PI) Budget Request: \$1,000,000
3. USDA, Foreign Agriculture Service (FAS) Cochran Training Programs – Center for Coops. Focus on Moldova and Georgia (Ferrick and Gunasekaran, PIs) Budget Request: \$91, 150
4. USAID, Food for Peace Program, Dairy Training in Sri Lanka – World Vison lead (Michel Wattiaux, PI) Budget Request: \$1,092,000
5. UKAID funding for capacity development grant with Bahir Dar University, Ethiopia. (Sundaram Gunasekaran, PI) Budget Request: \$1,250,000
6. USAID, Food for Peace Program, Agricultural Development in Uganda – ACDI/VOCA lead for submission in April 2017 (Sundaram Gunasekaran, PI) Budget Request: \$1,500,000

Awards

1. Pamela Ruegg (Dairy Sci) - 2016 CALS Award for Excellence in International Activities.
2. Sundaram Gunasekaran (BSE, CALS IP) - Outstanding Faculty Award, International Student Services, International Davison, UW-Madison
3. Alfred Hartemink (Soil Sci) – 2016 International Soil Science Award, Soil Science Society of America

Nominees are continually sought for various major awards to recognize CALS faculty and staff for their outstanding international agriculture work. These include Norman Borlaug World Food Prize, World Agriculture Prize and others, which are solicited by the CALS IP office via announcements in eCALS. Interested faculty and staff are encouraged to contact proactively CASL IP, and self-nominations are strongly encouraged.



Professor Ruegg (Dairy Sci) receives CALS International Award



Professor Hartemink (Soil Sci) receives Soil Science Society Award

Fundraising

1. CALS IP Activities Fund was established with a gift of \$5,000 from CALS alumnus Dr. Aicardo Roa (PhD, Agricultural Engineering) and his wife Sue Byram. The purpose of this Fund is to provide the most flexibility for the IP office, which can include, but are not limited to, supporting faculty, staff and students working on projects with an international scope as well as efforts on campus to build international programs.

Plans for Next Year

1. Continue to work with CALS faculty and staff on expanding and strengthening their international work in our focus countries and others.
2. Work with the IPC on consolidating and strengthen international efforts in CALS through connections that cut across the research, outreach and educational missions of the college.
3. Actively pursue various programmatic funding opportunities.
4. Strengthen existing relationships and initiate new ones with regards to countries and agencies that can support CALS missions.
5. Enhance the profile of CALS IP by actively connecting with academic and industry leaders and by bringing international speakers to campus.
6. Connect with other universities (e.g., Tuskegee, Texas Tech, Michigan State University, etc.) to plan for collaborative submissions of international proposals.
7. Continue to look for and help facilitate grant submissions.



Professor Jiwan Palta (Horticulture) working on potato research in Obihiro, Japan