DRAFT STRATEGIC PLAN: 2013-2018

International Programs in the College of Agricultural Sciences 2013-2018: The Fourth Dimension: Globalization

1. Executive summary

At the beginning of the new millennia, the College of Agricultural Sciences renewed its commitment to international programs as an important component of its research, teaching and outreach missions. Since that time, the College has made great strides in boosting the number and level of international research collaborations, the number of students engaging in international learning opportunities, and in the increased global perspective in our outreach efforts.

Through the years, our efforts have been guided by a robust strategic planning process with carefully considered rationales as captured in the following plans: 1) 2001-2005: Preparing the College for the Future; 2) 2005-2008: Sustaining Success; and 3) 2008-2013: Creating the Global Network. Today, more than ever, the call for an activist and integrated international programming effort is critical to all aspects of the higher education mission. The College has worked locally, at the state level, and with our national partners. Today, we move to the next dimension—the global—and fully embrace our global land grant mission based on the following:

- -Challenge is global. The U.S. Government has made addressing chronic hunger one of the cornerstones of its foreign and national security policies with the U.S. Department of State leading the "whole of government" charge. Under the Obama administration's Feed the Future initiative, roughly \$3.5 billion in funds have been committed to new programs to improve agriculture production and rural economic livelihoods in the world's poorest countries. With nearly 1 billion still going to bed hungry, the College has an obligation to work internationally, to share expertise and work towards a healthy global population and environment---it is the right thing to do.
- -Markets are global. Exports of Pennsylvania food, agricultural, and forestry related products are more than \$1.5 billion annually and account for roughly 11,000 jobs, according to the Pennsylvania Department of Agriculture. Moreover, exports of ag products nationally are an important part of our overall trade portfolio and account for a large part of our trade surplus. *The College needs to prepare its graduates to be players in the global marketplace*.
- -Research is global. International partnerships are crucial to leveraging scarce research dollars and to gain access to unique sites, ideas, technologies, and populations. According to a review of 25 million papers and summarized in Nature magazine, domestic output of research papers in the past three decades has "flatlined" in the United States. The growth area is in international (specifically bilateral) collaboration and indeed, according to Nature, "the best science comes from international research collaborations." *The College needs to ensure that our faculty has*

regular interactions with centers of excellence around the world...to leverage resources and expertise and access unique research sites and populations.

-Communities are global. Analysis of the most recent census data shows a remarkable change in Pennsylvania's demographics. The Hispanic/Latino population, which increased by 70% between 1990 and 2000, increased by another 82% between 2000 and 2010, one of the largest increases of any state in the U.S., according to World Population Review. The Asian population grew by 60% again between 2000 and 2010, making Pennsylvania home to one of the largest Asian populations of any U.S. state in terms of numbers. The Black and African American community has grown by 13%, the largest increase of any state as well. *The College needs to make sure its faculty, graduates and extension professionals have opportunities to experience other cultures and learn other languages, particularly those that are forming the Pennsylvania of the future.*

2. Mission, core values and vision

Our mission is to create a globally engaged College; one that fosters a welcoming climate for international students, scholars and visitors, where the free flow of information and ideas can lead to creative and innovative solutions for the global challenges we face as a united global population. We seek to empower the next generation of global citizens and leaders by providing them with a living laboratory to explore the boundaries of their current world views.

Through all of our work, we stand mightily for integrity. Our work will be transparent, inclusive, and embrace diversity of thought and action. Our work will always be geared toward the notion of transformation of ideas into action and with the importance of program impact foremost in our planning and assessment.

We see a future that includes enhanced partnerships toward common goals; one where we grow our linkages in a never ending quest to improve the global food system in the context of change. We see a future where our faculty, staff and students turn to our office as a place to learn, share inspiration, and create new programs.

3. Strategic planning process that indicates a participative process from all members including stakeholders.

Since 2000, the strategic planning process for the Office of International Programs has engaged our academic units, our extension educators, and our students. The first International Programs Advisory Council (IPAC) was established in 2000 and was recently revamped to reflect the reorganization of our College from 12 to 9 academic units. Plans and notes from our meetings are posted on our International Programs homepage and are easily accessible by interested stakeholders.

This current plan is the outcome of process that included an office retreat in December 2012 and a series of IPAC meetings throughout the Spring, Summer, and Fall, 2013. A current list of IPAC members is attached in Appendix A.

4. Achievements under current unit plan and contributions to CAS plan, specifically to special initiatives.

In the last five years, the Office has experienced unprecedented growth in its programs. These programs often help provide an international component to the College's special initiatives.

- Extramural funds. Since 2000, the office has regularly collected data on all grants with an international component in the College. Total awards to date are approaching \$42M and the trend line is positive. The average annual grant income for international programs in the last five years is almost \$5.5 million, compared with an average of \$3.2 million average over the 13 year period. Moreover, the success rate of proposals running through the office has increased to 42.6% over the past five years, although the success rate of proposals running through the individual academic units has declined. Some of the most successful international grants in the last three years have been in support of the College's special initiatives, particularly Pest Prediction and Response and Food, Diet and Health. (For a detailed report on grants and contracts, see Appendix B.)
- *Undergraduate programs*. This past year, a record, all-time high of 243 of our students traveled abroad, up from 85 students five years ago. These students traveled to 26 different countries, the widest scope of international travelers to date! Since the office took over advising and managing the International Agriculture (INTAG) minor two years ago, enrollment in the minor has tripled from 8 to 23 enrolled in 2013. (For a detailed report on student numbers, see Appendix C.)
- *Graduate Programs*. The Dual-Title Degree Program in International Agriculture and Development was launched and five graduate programs in our College have enrolled (Entomology, Plant Pathology, Agricultural Economics, Rural Sociology, and Agriculture and Extension Education), with three more in the pipeline (Plant Sciences, Soils, and Forestry). 25 students have enrolled and 3 have graduated from the program.
- Special initiatives/highlights. In 2010, we launched the Ag2Africa initiative to highlight and leverage our work in the region, as well as to set out Penn State's College of Agricultural Sciences as a leader in the fight for a more secure global food system. Since its launch three years ago, funding for project work in Africa has increased by \$3.3M, increasing from 3% of our overall portfolio to 15%. In 2010, the State Department selected our College to host a special Fulbright training program for 70 scholars from around the world to learn about Food Security. In 2012, our office partnered with the

Center for Community and Economic Development to support the successful application and launch of the UNESCO Chair in Rural Community, Leadership and Youth Development. This chair is the first of its kind at a College of Agriculture in the United States.

5. Strategic challenges and opportunities

We are presented with a huge opportunity in the coming years to continue to grow our programming, thanks to the renewed interest in global food systems and the investment by the Obama administration in international agricultural development funding, especially through the government's Feed the Future program. To take full advantage of the opportunities, we need to work more collaboratively and synergistically with other colleges at PSU as the need for interdisciplinary approaches to domestic and international challenges is great. Furthermore, many of the funding opportunities in the future will be for "big" projects addressing broad issues. Finally, finding better ways to integrate the extension community more effectively into international programming will be crucial.

That said, we find ourselves working with an increased level of workload and opportunity at a time of continued budget pressures in the College. The heightened level of student interest, the increased level of inquiries from partners overseas, and the higher numbers of international students and scholars entering our College is putting strain on our current structure. In particular, as this office has taken on a more academic role by coordinating the INTAG and INTAD programs and teaching responsibilities for all of the core courses associated with those program, we have found ourselves providing an important function for the College, but without adequate resources to shoulder the extra load.

6. Unit goals and strategies that are aligned with our current goals and strategies that include key performance indicators and targets

Goal A: Increase Enrollment and Enhance Student Success

We believe our programs enhance the efforts underway across the College to increase enrollment and enhance student success. According to our analysis of the Senior Exit Survey, data illustrates that students who study abroad have a positive attitude towards the Penn State experience; gain skills relevant to successful career placement; and would recommend Penn State to others (*at higher levels than those who did not study abroad*).

Looking ahead, we will increase student engagement by building on and extending the following successes:

<u>INTAG</u>: Since the office took over advising and leading the International Agriculture (INTAG) minor curriculum, enrollment has increased threefold. We will be offering the introductory

course for the minor (INTAG 100) on line for the first time in Spring 2014 to the campuses as a way to introduce more students at an earlier stage in their undergraduate career to issues in international agriculture. We expect this will lead to even higher levels of interest in our College and particularly the minor and our international programs.

<u>INTAD</u>: The office led the College's effort to launch a new dual title degree program, International Agriculture and Development (INTAD). Five College departments joined the program (Entomology, Plant Pathology, Rural Sociology, Agricultural Economics, and Agriculture and Extension Education) and 25 students enrolled in the first two years, with first three graduates in 2013. This has become a recruitment tool for our participating departments and we expect additional departments (Soil Sciences, Forestry, Plant Sciences) to join in the next few years with continued increase enrollment.

Study Abroad: The last 5 years we have concentrated on reaching students in a "horizontal" manner with study abroad. We have encouraged international programming generally by discipline focus, and have achieved international opportunities within each major cluster area. This has encouraged global competency focused on a student's future field and by industry area and we have had huge success with numbers increasing from 85 to 243 in these past five years. Looking ahead, we want to take a more "vertical" approach to our study abroad programming to help students develop a skill set for global competency by introducing them to international issues early as freshmen and supporting this development by integrating global experience into developing communication, leadership, critical thinking skills, and more. We hope to achieve this initiative in working within freshmen seminar courses, leap courses, the INTAG minor, and development of new programming.

Other: In the coming five years, we will also look for additional ways to improve language literacy of our students (modeled after the Spanish for Ag program). We will also support our students through co-curricular activities (the International Association for Agriculture Students club) and by improving our efforts to assist with internship and job placement at both the undergraduate and graduate levels.

Goal B: Enhance Knowledge Discovery and Translation

In the coming five years, we will build on our successes in securing grants in support of international partnership for our teaching, research and outreach. In the last five years, we have garnered an average of \$5.5 million in external grants annually, with key successes such as:

- Participation in four of USAID's Collaborative Research Support Programs, now renamed Innovation Labs at USAID (Horticulture, Pulse, SANREM, IPM).
- Three funded NSF-BREAD projects, which brings together NSF funds with a donation from the Gates Foundation.
- New Feed the Future funding, such as our innovATE grant in partnership with Virginia Tech.

Moreover, we have developed notable strengths in five key thematic areas. According to a review of grant successes in the past 3 years, our College excels globally in the following areas:

- 1. Improved Crop Productivity, Adaptation and Social Behavior
 - a. Root traits (water/nutrients)
 - b. Cropping systems and adaptation to stressful soils
 - c. Bean Production in low fertility soils
 - d. Bean Productivity and Households
 - e. Seed Systems in SEAsia
 - f. Sustainable technologies for potatoes
 - g. Seed networks and participatory projects
- 2. Pollinator Health, Pest Prediction and Response
 - a. IPM CRSP for South Asia
 - b. IPM CRSP for Latin America
 - c. Web based pest prediction systems
 - a. Honeybees (COD with Israel)
 - b. Honeybees
 - c. Pollinator Health
 - 3. Sustainable Agriculture in Context of Climate Change
 - a. Water Resources in Asia
 - b. Global Ecology (Spain)
 - c. SANREM CRSP
 - d. Reduce greenhouse gas emission in Norwegian Ag
 - e. Conservation Ag and Subsistence Ag (soil)
 - f. Livestock nonC02 mitigation
- 4. Health and Security
 - a. Malaria in SEAsia
 - b. Malaria in Hainan Island
 - c. Malaria in India
 - d. Bacterial Pathogens/Public Health/Spatial Ecology and Epidemiology (DTRA)
 - b. Pathogen Identification (DTRA)
 - c. Biological Threat Reduction (DTRA)
- 5. Education and Capacity Building
 - a. Graduate Education
 - b. Training (Overseas; at Penn State)

In the coming years, we will work more closely with the College's Associate Dean for Research and Graduate Education to boost the visibility of our successes, leverage our resources, and reach out to other Colleges and programs at the university. We will do this by launching a new Global Faculty Fellows program in areas to support the College's broader strategic plan. Faculty will be appointed jointly by the Associate Dean, Director, and appropriate unit leaders as affiliates to the Office of International Programs. Each appointment will be for 2 years and each Fellow will be allotted seed funding to spur additional program development in his/her key area. At the end of two years, the program will be evaluated and extended/revised or terminated based on an IPAC review that assesses success is gaining new funding and increased level of engagement of our faculty and students in each area.

Goal C: Strengthen Meaningful Communication and Mutual Education with Current and New Stakeholders

To support Goal C in the coming years, our office is planning three major efforts:

Ag2Americas. Given the success of our Ag2Africa program, we are creating an Ag2Americas initiative that should hold special appeal to our stakeholders. Such an initiative will highlight the expansive growth in the Hispanic/Latino population in Pennsylvania over the past two decades and build upon a groundswell of interest from Penn State Extension in organizing and coordinating outreach efforts to the local population that capitalizes on interest and expertise in language and cultural knowledge of countries and regions in the Latin American/Caribbean region.

<u>UNESCO</u>. The Chair in Rural Community, Leadership, and Youth Development offers a new opportunity to partner with the College's Center for Community and Economic Development to build a global perspective into the work of the Center. Working in partnership with the Chair and the Center's Co-Directors, we will seek funding for programs that build healthy communities by promoting leadership and youth engagement for sustainable growth—whether at home or abroad.

Global Learning Initiative. The College is also considering an initiative to capture and extend the efforts already underway to promote global competency. The initiative would develop a research program to measure impact on global competency of our global learning efforts, take international issues into our teacher education and extension programs, and conduct workshops and events to promote Penn State as the leader for global agricultural competency education.

Goal D: Lead and Manage the College as a System.

The Office of International Programs is a comprehensive office with programs and activities that touch on every one of our mission areas. As such, this office is uniquely positioned to help the College achieve this goal, but it is crucial that faculty and staff from this office engage regularly with the College leadership. In the last five years, we have improved processes and resource sharing opportunities with our Offices of Undergraduate Education and Research and Graduate

Education. For example, funding for our portfolio of embedded study tours is coordinated and augmented with funding from OUE. Support from both offices enhances funding for our research programs for INTAG and INTAD students and for our travel opportunity for INTAG and INTAD students to attend the annual World Food Prize events in Iowa every October. This approach builds on a long-standing tradition of communication and collaboration with our academic units to leverage funds in support of our students and faculty initiatives. For example, our Tag Along fund depends on 100% match from the unit or program. Our Study Abroad fund is allocated to support (as a seed fund) new international education programs in the units. Our INTAG and INTAD student programs also provide a unique vehicle for integration and communication across the College. Continued opportunity to engage in regular conversation and exchange of information with the College's leadership will be critical to continued growth and success. Looking ahead, we will make a special effort to engage with the units for joint seminars. A special emphasis in the coming five years should be to develop a deeper relationship with Penn State Extension.

7. Diversity planning-contributions to the 7 challenges identified in the framework to foster diversity.

The Office of International Programs has been an active player in the College's diversity planning and programming. Both the Director and Assistant Director of the Office have or are currently serving on the College's Diversity Coordinating Committee. There is a rich overlap in the philosophies and goals of the diversity/multicultural initiative and the international work of the College and the new Global Learning Initiative will further the progress to date. In particular, our Office supports the 7 challenges in the framework to foster diversity by creating a welcoming climate and by promoting international and intercultural learning opportunities. Looking forward, we can improve on these efforts by holding joint meetings with the Diversity Coordinator and creating joint programs that serve our common goals. Especially given the changing demographics in Pennsylvania outlined above, a closer partnership between these two efforts will be critical.

8. Undergraduate learning outcomes assessment

Four years ago, the Office undertook a new research plan to develop a tool to assess the global competency of our students. With an emphasis on graduating students with the skills ready to work and lead in a global society, we set out to: 1) define global competency in agriculture; and 2) develop a measure and process to assess this learning outcome. We administered the survey to incoming Freshmen in Ag 150 four years ago and then administered it again to our graduating seniors last year. We are in the process of analyzing the results and considering how to regularize this learning outcomes assessment for our College. (NOTE: In addition to this long-term research, we also conduct regular pre- and post-surveys of students participating in our international programs to assess impact and outcomes.)

9. Practices that promote integrity and ethical behavior

Our Office was the first to create a student code of conduct for both students AND faculty participating in international learning opportunities. Our student code of conduct was established more than 10 years ago and has become a model for the university's policies. The faculty code of conduct, as far as we know, is the only one of its kind in the University. Moreover, our faculty adhere to the academic code of conduct in all INTAG and INTAD class offerings, promoting integrity and ethical behavior in student conduct. In these classes we also help students develop the skills to have rational, ethical debates about the challenges of the global food system. Our goal is to prepare our students to be thought leaders on ethics in the context of international agriculture and development.

10. Contributing towards PSU goals for sustainability

Our greatest contribution to PSU goals for sustainability is our effort to expose students to other countries and their ways of defining and addressing issues of sustainability. These new lessons—gleaned from exploring eco-tourism in Costa Rica or the sustainability policies of Brazil, for example—may shed light on new ways of doing in our own backyard. Our INTAG and INTAD students are dedicated to the cause of sustainable development and the curriculum opportunities our programs offer are a feature that draws students to our College.

11. Prioritized list of key investments. Include information from stakeholders where appropriate.

Despite the phenomenal growth in programs, the office's budget has not changed considerably in the 13 years since the office was established under new leadership. Indeed, we take great pride in our ability to manage our budgets efficiently, leverage our resources, and deliver a substantial return on investment to the College. Our operating budget was 25K in 2000 and has remained at that level every year since, despite increased staffing and activity. As our office has taken on a greater academic role as described above, our greatest need for the near future is for funds to support our student programs (INTAG and INTAD would receive an additional 5K each) and additional support for program implementation (via a full time graduate student allocation). We have also asked for a 10K increase in the operating budget. In addition, our request includes a reallocation of space for our Study Abroad Coordinator:

Operating Budget 35K (up from 25K) Program 40K* (no change)

INTAD 15K and graduate student (up from 10K and GIA) INTAG 15K and graduate student (up from 10K and no support)

Tag Along 15K (no change) Study Tour 20K* (no change) *NOTE: This assumes continued budget coordination and cooperation with the Offices of Undergraduate Education and Research and Graduate Education for Study Tour support and Program support, respectively.

The Office for International Programs would like to request an additional office in the hallway by the Study Abroad Lounge (122 Ag Admin). The preference would be for room 134, an intern office directly across from and in sight of the Study Abroad Lounge. Currently, the Study Abroad Coordinator is housed in the Study Abroad Lounge in an internal office which does not offer privacy needed. The Coordinator regularly meets with students, faculty, and staff, and topics discussed are often of a confidential nature (policy or budget, personal or behavioral issues, or program development discussions that should remain confidential until finalized). We plan to use the current Coordinator office space for Study Abroad Intern space, so the lounge will still be occupied and students will enjoy an additional resource to assist them with their study abroad inquiries.