

ANNUAL REPORT  
GRADUATE SCHOOL AND INTERNATIONAL EDUCATION  
CALENDAR YEAR 2014

## EXECUTIVE SUMMARY

The appointment of our new dean, Dr. Kim Needy, was the most significant change in the Graduate School and International Education during 2014. Dr. Needy previously served six years as the Head of the Department of Industrial Engineering where she held the 21<sup>st</sup> Century Professorship in Engineering Endowed Chair. GSIE also hired an IT director, Mark Larmoyeux, and moved closer to realizing the vision of an electronic prospecting and admissions system with the purchase and implementation of Hobson's. In Fall 2014, the largest graduate student class to date was enrolled, but the percentage of the total university population continued to fall as a result of the large growth in the undergraduate population. This continues as a concern as the UA is nearing the bottom of its SEC peers with respect to graduate student enrollment as a percentage of the total university enrollment. Enrollment of underrepresented master's and doctoral students increased slightly in Fall 2014 compared to Fall 2013. Enrollment in the interdisciplinary graduate programs remained strong, with an overall increase of 18 students in Fall 2014 compared to Fall 2013. In the 2013-14 graduation year, GSIE graduated fewer students at the master's and doctoral level, compared to the previous year, although this was largely attributable to a decline in degrees earned by Caucasian students. Master's and doctoral degrees awarded to Native Americans, African Americans, and Hispanic Americans increased compared to the previous year. International enrollment remained strong, with an all-time record enrollment of 1,524 international students in the Fall 2014 semester, up by 10% from Fall 2013 and comprising 5.8% of the total University headcount. 810 of these students were at the undergraduate level and 714 were at the graduate level. 901 students studied abroad during the 2014-15 academic year, an increase of 12.6% from the previous year. The number of doctoral degrees awarded to females moved closer to parity; in the 2013-14 graduation year, the ratio of females to males was 46%:54% compared to 40%:60% the previous graduation year.

## SIGNIFICANT ACHIEVEMENTS AND CHANGES

Our former Dean, Dr. Todd Shields, left the Graduate School and International Education (GSIE) for the position of Dean of the Fulbright College of Arts and Sciences. Other notable achievements and changes during calendar year 2014 include:

- Dean Needy earned the following awards in 2014
  - 2014 Franklin B. W. Woodbury Special Service Award in recognition of her unselfish contributions of an extraordinary nature and her continuing support of the American Society for Engineering Management.
  - Fellow of the American Society for Engineering Education, elected June 2014.
  - 2014 Institute of Industrial Engineers Leadership Award in recognition of devotion to duty and outstanding achievements while serving as our President.
- We were approved to search for an Associate Dean for International Education.
- The interdisciplinary M.S. degree in Statistics and Analytics was offered for the first time in Fall 2014 with Dr. Mark Arnold as director.
- Dr. Arnold was named a 2014 Teaching Academy Fellow.

- Northwest Arkansas was in the top 100 areas in the U.S. to receive international students
- JoAnn Kvamme, support staff in the Environmental Dynamics program; Ken Vickers, departing director of the Microelectronics-Photonics graduate programs; and Lynn Mosesso, director of International Recruitment and Graduate & International Admissions, received the Collis R. Geren award for excellence in graduate education in April 2014.
- The film, *After the Tsunami*, directed by Larry Foley, describing the cooperative program bringing Indonesian students to the University of Arkansas, Texas A & M University, and the Clinton School, was nominated for a Mid-American Emmy.
- Yassaman Mirdamadi was awarded the 2014 Service Recognition Award from the National College Testing Association for her contributions as a member of the Governing Council, Conference committee, Sponsorships and Exhibits (Chair), and Strategic Planning Committee.
- The Office of Testing Services was recognized for Excellence in Test Security by Pearson VUE. This Office also was asked to lead a training session in Little Rock in October of 2014 to help other Arkansas test centers understand the processes involved with offered the GED exam.
- We hired an IT director, Mark Larmoyeux, to coordinate our technical infrastructure/web development.
- Dr. Valerie Hunt became a tenure-track associate professor in the Department of Political Science.
- Professor Ken Vickers, director of Microelectronics-Photonics, retired and was replaced by Dr. Rick Wise.
- Dean Needy formed a capital campaign committee (with the Vice Provost for Research and Economic Development) and created a plan for annual giving.
- The *Abstract to Contract* Research Poster competition drew almost 140 graduate student participants.
- We enrolled eight Southern Regional Education Board Doctoral Scholars.
- Adnan Al-Rubaye, Associate Director of the interdisciplinary Cell and Molecular Biology program, received the University of Arkansas' Individual Diversity Award in October 2014.
- Picasolar, a company founded by UA alumni Douglas Hutchings and Seth Shumate won the first-place award at SCSW Eco Startup Showcase, which includes proposals from companies around the world.
- GSIE hosted a GRAD LAB for GEM students in Fall 2014. Other universities that offered such a lab included Rice, the University of Alabama in Huntsville, the University of Louisville, University of Maryland, College Park, University of Florida, New Mexico State University and Northwestern University.
- Nationally competitive awards, including NSF dissertation improvement grants, Rhodes Scholarship Finalists, and a Marshal Scholarship were won by several graduate students.
- We fully implemented the review of faculty-led short-term study abroad programs by the International Education Advisory Council.
- Study Abroad and International Exchange contributed significantly to two RFPs leading to the University of Arkansas being named as the strategic partner in a 100K Capacity Building grant with USMA, Panama, and was awarded a grant from the French Ministry of Education to promote student mobility to France.

## PROGRESS AND ACCOMPLISHMENTS

Within GSIE, progress and accomplishments must be judged against School goals, which provide the framework for this report.

**Goal 1:** Advance the visibility and reputation of the University of Arkansas within the nation and around the world and promote the UA as a destination of choice for students and scholars.

- Fall graduate enrollment was 4,022, an increase of 2.03% from Fall 2013. Enrollment of underrepresented students in master's programs was up slightly in total headcount in Fall 2014 over Fall 2013 but decreased slightly in the percentage of the total domestic master's enrollment. For doctoral students, both headcount and the percentage of total domestic enrollment increased in Fall 2014 over Fall 2013. Overall graduate enrollment of underrepresented students in Fall 2014 was 18.7% of the domestic graduate enrollment. We awarded more master's and doctoral degrees to Native Americans, African Americans, and Hispanic Americans in 2013-14 than in the previous graduation year.
- The U of A welcomed 59 PAPSS scholars to campus in January and June 2014, bringing the total number of scholars in summer 2014 to 91. The retention in this program has been 98% and many have been recognized for their scholarship by being placed on the Dean's and Chancellor's lists. These Scholars have also served as volunteers in a variety of activities at the University and in the community.
- The U of A enrolled an all-time record of 1,525 international students in the fall 2014 semester, an increase of 10% compares to Fall 2013 and comprising 5.8% of the total University headcount. The top five countries sending international students were China, Brazil, India, Panama and Bolivia. The number of international scholars coming to the University decreased to 226. China, India, Brazil, Korea and France sent the largest number of scholars to the University.
- In Fall 2014, we saw a total of 377 enrolled sponsored students, an increase over Fall 2013. Forty-two countries were represented, compared to 44 the year before.
- There were 12 new Distinguished Doctoral Fellows, for a total of 52; and 42 new Doctoral Academy Fellows for a total of 184 in 2014.
- More than 700 graduate student travel grants were awarded and expensed in 2014.
- A reception honoring Distinguished Doctoral and Doctoral Academy Fellows was held in November during Graduate Education Week.
- Domestic recruiters visited a number of student-centered diversity and research conferences, attended graduate school fairs or made presentations at more than 50 schools and hosted on-campus recruitment events such as preview days for prospective graduate students and the Graduate Research Opportunities Forum/Diversity Conference for Prospective Students. Our staff also scheduled individual campus visits for more than 100 prospective students and hosted group visits for students from several universities.
- GSIE domestic and international recruitment teams presented at a variety of conferences and institutional settings.

- Gloria Flores Passmore, Director of the Sponsored Students office, attended several conferences and visited with several embassies in order to promote the UA's academic programs and services provided by SSP and Spring International Language Center.

**Goal 2:** Initiate and maintain strong connections with, and advocate for graduate, international, and study abroad students and scholars from the time of initial inquiry through post completion.

- The iFriend program facilitated 11 events during the Fall 2013 and Spring 2014 semesters, with a total of 1,296 participants, an increase of 24%. Attendance at iFriend events increased by 30% over 2013.
- 197 students made presentations as part of the International Culture Team.
- 350 students attended the New Graduate Student Orientation in August 2014.
- The Graduate Student Congress became official in Fall 2014.
- GSIE held the annual Graduate Student Picnic so students could meet other students and their families.
- The Sponsored Students office held a welcome reception with the Chancellor in September and a recognition reception for graduates and visiting students in the November.
- GSIE made great progress in implementing the software, Sunapsis, and selected Hobsons Radius as our new recruitment and admissions software.
- GSIE planned multiple events to help establish connections with graduate students, including the Teaching Assistant Orientation, the First Year Graduate Student Orientation, the Graduate Student Family Picnic and Graduate Education Week. As part of Graduate Education Week, we hosted the largest-ever graduate student poster competition with nearly 150 graduate students participating.
- In order to meet State Department requirements for cultural programming for Exchange Visitor Scholars, Audra Johnston, in International Students and Scholars, implemented Scholar Saturdays. She took scholars to Oktoberfest in Tulsa, the Grapefest in Tontitown and the Lights of the Ozarks on the Fayetteville Square. Each field trip had a discussion associated with it so that scholars could learn more about the diversity and cultural heritage of this part of the U.S.
- In Study Abroad and International Exchange, staff scheduled over 300 appointments for prospective students seeking general advice and handled over 400 walk-in appointments during Walk-In Wednesday.

**Goal 3:** Actively seek to promote and strengthen strategic relationships with partner institutions, academic units, university departments and the community.

- 165 international students were matched to 114 families and individuals from the Northwest Arkansas region in the Friendship Family Program
- The Office of Study Abroad and International Exchange offered Hogs Abroad 101 sessions twice weekly during the spring and fall 2014; the annual Study Abroad Fair attracted hundreds of students to the Arkansas Connections Lounge in September 2014; the staff continue to be present at almost all campus-wide events and accepted invitations to participate in several events sponsored by the individual colleges; and the "Frequent

Flyer” newsletter was sent out every other week during the spring and fall semester to more than 5,000 subscribers.

- GSIE resurrected the Faculty Advisory Board and added new members.
- GSIE developed materials for the capital campaign, including Points of Pride and interdisciplinary program fact sheets.
- GSIE increased our external and internal promotion of our accomplishments.
- GSIE opened up Distinguished Doctoral Fellow nominations for the spring semester.
- GSIE rolled out a completely on-line Letter of Recommendation process which allows applicants to self-manage the recommendation process. The “blue sheet” also became completely electronic.
- GSIE hosted an Education USA advisor from Astana, Kazakhstan.
- Stacey Clay was elected to the Staff Senate.
- Karl Anderson began serving as the new NAFSA Arkansas State Liaison. Karl organized and presented the NAFSA Arkansas State meeting in April 2014.
- Lynn Mosesso represented the U of A at the Education USA Forum in Washington, DC in June 2014.

**Goal 4:** Serve as the central unit for tracking international education mobility.

- A position in the Office of Study Abroad and International Exchange was created to manage risk.
- 1,091 students, staff and faculty registered their international travel in Terra Dotta during 2014; approximately 20 of those were cleared only after petitions were made to the IEAC for approval to travel despite a travel warning in the target country.
- Study Abroad and International Exchange held a pre-departure meeting for faculty leaders in Spring 2014 and emergency response plans were established for all programs.
- International Students and Scholars worked with the University to assess and minimize the risk associated with Ebola, MERS, polio, and other contagious diseases. This office was also given the responsibility to monitor travel of international students and scholars to and from countries where these diseases are endemic.

**Goal 5:** Adopt an enrollment management plan to meet university goals:

- Increase the number of quality graduate applications: In Fall 2014 compared to Fall 2013, domestic graduate applications decreased by 5.1% and enrollments increased by 2.0%.
- Increase the number of quality international applications: In Fall 2014, there were 1,123 applications from international graduate students compared to 1,267 in Fall 2013, but more international graduate students actually enrolled in Fall 2014 than in Fall 2013 (an increase of 12.6%). International undergraduate applications increased from 882 in Fall 2013 to 1,016 in Fall 2014 and matriculation rates increased 17.8%.
- Increase the diversity of applications: In Fall 2014, 113 countries were represented in our student population, an increase of one from the previous year. The top five countries represented are China, Brazil, India, Panama and Bolivia. Twenty-two academic scholarships were awarded to international students for the 2014-15 academic year,

including seven Silas Hunt Scholarships and seven Silas Hunt Distinguished Scholarships. With regard to domestic students, there were 10 doctoral students funded with SREB-State Doctoral Fellowships during all or part of 2014. Four students graduated and two new SREB fellows were added, leaving eight funded students by December 2014. During 2014, the Benjamin Franklin Lever Tuition Fellowship was able to support a total of 67 graduate students whose enrollment added to the diversity of their degree programs.

- Increase the percentage of enrolled international undergraduate students: International undergraduate students comprised 3.71% of the undergraduate population in Fall 2014 (810 students out of 21,836 total undergraduate students), an increase of 3.23% (132 students) compared to Fall 2013.
- Increase the percentage of enrolled international graduate students: International master's student enrollment decreased from 12.28% of the total master's enrollment in Fall 2013 to 11.71% of the total master's enrollment in Fall 2014 (294 international master's students out of 2,510 total master's students in Fall 2014). International doctoral student enrollment increased from 31.05% of the total doctoral enrollment in Fall 2013 to 31.89% of the total doctoral enrollment in Fall 2014 (412 international doctoral students out of 1,292 total doctoral students in Fall 2014).
- Increase the percentage of graduate students: The enrollment of graduate students decreased from 15.56% of the total University census in Fall 2013 to 15.33% in Fall 2014 (4,022 graduate students out of a total university enrollment of 26,237 in Fall 2014). This was despite an increase of 2.03% or 80 graduate students compared to Fall 2013. The U of A is now the second lowest in the SEC.
- Increase the percentage of graduating seniors integrating a significant international experience into their degree programs: In the 2014-15 academic year, 901 students studied abroad in 51 countries. This reflects a 12.6% increase from the previous year. However, despite this increase, the participation of graduating seniors has dropped from 16% to 14% because of higher university enrollment and graduation rates.
- Increase the number of sponsored students to 20% of the international headcount enrollment by 2020: The 377 enrolled sponsored students in Fall 2014 represented 24.7% of the international headcount.
- Increase the number of enrolled visiting students to 125 each semester: There were 182 enrolled visiting students in Fall 2014.
- Maintain an average of 120 countries represented in the international student population and strengthen the enrollment from countries with less than 10 students on campus: In Fall 2014, there were 113 countries represented by our international students and in 2013-14, there were 46 countries represented by our international scholars.
- Increase the number of outbound UA students enrolling in reciprocal exchange programs to 15% of the total study abroad population per year by 2020: 45 students were enrolled in reciprocal exchange programs in 2013-14. The number of UA students enrolling in reciprocal exchange programs has increased by more than 40% in the last two years, but the growth in over-all study abroad has made this goal more difficult to meet.

**Goal 6:** Facilitate the development and management of innovative and educational graduate, international, and interdisciplinary programs.

Fall 2014 enrollment in interdisciplinary graduate programs was 247, a 7.9% increase over Fall 2013. In the 2013-14 graduation year, GSIE awarded 13 interdisciplinary master's degrees, 1.2% of the total master's degrees awarded, and 25 interdisciplinary doctoral degrees, 16.7% of the total doctoral degrees awarded. The break-down by interdisciplinary degree program is:

CEMBMS	CEMBPH	ENDYPH	MEPHMS	MEPHPH	PUBPPH	SPACMS	SPACPH
4	7	2	8	5	7	1	4

**In Cell and Molecular Biology:** Dr. Rhoads began his third term as director in summer 2012; currently 96 faculty participate in the program. At the end of 2014, program enrollment was 89 students with offers of admission for an additional 20 students for spring 2015. Program enrollment by college is 32 students in the Bumpers College, 45 in Fulbright College, one in Education and Health Professions, and 11 in Engineering.

Program participants (faculty and CEMB students) reported \$5,435,606 in continuing grant support, \$1,176,735 in new grant support, 19 peer-reviewed publications 87 presentations/seminars, and 12 honors/awards for current graduate students for presentations at national and regional meetings.

The most significant changes in the program were

- The program has grown from less than 60 students to above 80, with a trajectory for reaching 100 within the next 1 to 2 years
- Two MOUs were signed between the University and Universities in Iraq to facilitate collaboration, and placement of additional students at UA. This effort has been a partnership between CEMB and Sponsored Student Programs within the Graduate School.
- CEMB has become the third highest program for enrollment of international students behind two programs with both undergraduate and graduate programs.

**In Environmental Dynamics:** The ENDY program remains vibrant and is now recognized in the top 100 Environmental Science doctoral programs in the U.S. (Ostriker et al., 2011). In the same study, ENDY ranked 45<sup>th</sup> in student outcomes. This translates into attracting exceptional students who gain national and international recognition through competitive funding for their doctoral research. In 2014, the ENDY program enrolled 25 students and enrollments remain stable. A total of 6 students graduated during the 2014 calendar year.

This year students in ENDY were awarded nationally competitive fellowships including an American Institute of Indian Studies Hindi Language Fellowship, Sturgis Study Abroad Fellowship, and SREB Doctoral Fellowship, and two U.S. Geological Survey fellowships. ENDY students were also successful in external funding totaling \$184,000 during the 2014 calendar year.

Students authored one book chapter, eight refereed publications, two non-peer reviewed publications, two invited lectures, 16 oral presentations at international/national conferences,

three poster presentations, and a student was a mentor for the Clinton Global Initiative University Meeting.

ENDY program admissions continue to attract DDF and DAF qualified students. For the 7<sup>th</sup> consecutive year, entering students who were offered ENDY graduate assistantships all earned DDF and DAF awards.

**In Microelectronics-Photonics:** The graduate program completed its second 7-year program review in the spring 2014. The reviewers found the program to be "...an impressively vibrant and successful training vehicle for graduate science and engineering education..." Concerns were noted by the reviewers over the need for additional investment by the university into the program as part of a plan for more aggressive growth.

A new director, Dr. Rick Wise, was hired in August to replace the founding  $\mu$ EP director, Ken Vickers, who retired after 16 years with the program.

Fourteen students received MS  $\mu$ EP degrees and six students received PhD  $\mu$ EP degrees during calendar year 2014 (five MS graduates were Caucasian females; one MS graduate and one PhD graduates were African-American males). This was a record number of graduates for the program. Enrollment for fall 2014 was 67students – 31 MS, 36 PhD.

Twenty-four students' major professors were from the College of Arts and Sciences; 43 were from the College of Engineering.

Four DAFs were awarded to  $\mu$ EP in 2014 bringing to nine the total active awardees in the program at the end of fall 2014.

**In Public Policy:** The Public Policy Ph.D. Program (PUBP) completed all follow-ups to its 2009-10 program review by 2012. Students and program faculty continue to publish manuscripts in peer-reviewed academic journals and present many papers at international, national, and regional conferences. In 2014, PUBP students published or had accepted for publication 16 peer-reviewed journal articles and presented 17 conference papers. Program faculty published 57 articles and 2 books. In the aggregate, program faculty and students were PIs, Co-PIs, or collaborators on over \$ 6,000,000 in grant funding. The program awarded 13 doctoral degrees in 2014, bringing the total number to 74 over the last ten years. Students exiting the program continue to be placed in excellent positions. In 2014, placements for PUBP graduates included assistant professor positions at University of North Carolina-Asheville, New Mexico State University, Northeastern State University, Universidad del Norte (Columbia), King AbdulAziz University (Saudi Arabia), and University of Illinois-Springfield.

Several changes have been implemented over the past few years. Professor Tim Killian (AFLS) has been appointed specialization coordinator for Policy Studies in Aging. Professor Chris Goering (COEHP) has also joined the PUBP faculty. A student representative now serves on the PUBP faculty/governing committee. The program is also working with GSIE and the Development Office on strategies for the current capital campaign.



### **In Space and Planetary Sciences:**

The Arkansas Center for Space and Planetary Sciences (Space Center) took control of new permanent space in calendar year 2014. Much time went into re-establishing research facilities throughout the summer and fall of 2014 due to the Space Center's move from the Field House to Ferritor Hall and Stone House North. This required a huge effort on the part of faculty, students, and our Lab Manager Walter Graupner.

A record number of invited oral presentations were given by Space Center students and faculty at major national and international conferences during 2014.

Seven Space Center Ph.D. candidates (a record number for one year) participated in high-quality graduate internships during 2014.

Since the labs were being moved (May – June, 2014) and then offline from July through mid-October 2014 due to unexpected additional renovations to the exhaust systems, many new proposals were generated over this time.

Research grants totaling approximately \$2.52M were active in AY 2015.

Space Center faculty and students regularly host opportunities for the public to participate in astronomical events. For example, on October 23, 2014, they set up telescopes for students on campus to observe the partial solar eclipse that occurred just before sunset.

**In Statistics and Analytics:** The Statistics and Analytics (STAN) MS program was approved by the ADHE to admit students beginning in August, 2014. That Fall semester 11 students enrolled in the program.

The organizing committee, which began work in summer 2013, consisted of 13 faculty and staff representing the colleges of Agriculture and Life Sciences, Arts and Sciences, Business, Education, Engineering, Graduate School and International Admissions, as well as the University Libraries. The organizing committee members were Mark E. Arnold (Mathematical Sciences, Director), Paul Cronan (Information Systems), Kate Dougherty (University Libraries), Susan E. Gauch (Computer Science and Computer Engineering), Patricia R. Koski (Graduate School), Bernard L. Madison (Mathematical Sciences), Andy Mauromoustakos (Agricultural Statistics), Giovanni Petris, (Mathematical Sciences), Ed Pohl (Industrial Engineering), Geoboo Song (Political Science), Ling Ting (Information Services), and Ronna L. Turner (Educational Statistics and Research Methods).

On approval by the ADHE, a STAN Steering Committee was formed consisting of the director, a faculty representative from each of 7 specializations, and two (non-voting, ex officio) faculty. This committee has faculty from 8 academic departments and 5 colleges. The steering committee members were (as of December, 2014) Mark E. Arnold (chair), Paul Cronan, David Douglas (Information Systems, ex officio), Michael E. Douglas (Biological Sciences), Susan E. Gauch, Andy Mauromoustakos (ex officio), Giovanni Petris, Ed Pohl, Geoboo Song, and Ronna L. Turner.

STAN affiliated faculty and staff numbered 59 (from 20 academic departments) in December, 2014.

**Goal 8:** Develop resources as needed to meet the goals of the GSIE.

- Dean Needy formed a capital campaign committee (with the Vice Provost for Research and Economic Development) and created a plan for annual giving.
- GSIE leadership developed materials for the capital campaign, including Points of Pride and interdisciplinary program fact sheets.
- GSIE increased our external and internal promotion of our accomplishments.