

UGA **RX**

THE UNIVERSITY OF GEORGIA
COLLEGE OF PHARMACY MAGAZINE

W I N T E R 2 0 1 5

**Success
Through
Teaching,
Research
and Service**

**Stem Cell
Transplant
Specialty**

**Obesity
Studies**





Dear Friends,

After being in a job for a number of years one would think the work would be starting to become routine and repetitive. But in this job it ain't so! Although many things are a-changing, fortunately a few things have stayed the same, such as still having an outstanding applicant pool, student body, supportive alumni, a faculty who are actively engaged, and football Saturdays that still excite.

But most other things are changing at an accelerated pace.

To better train our students and better serve Georgia, we will be opening our third 2+2 campus site in the fall, the second in three years, and this time in Savannah. Our goal is that in a few years, half of the third-year PharmD class will be trained outside Athens.

This coming fall we will also initiate a new curriculum with all that it entails. Without losing the knowledge base we teach, the new curriculum will increasingly be focused on people skills and the focus will be not only about knowing but increasingly on doing. We are also hard at work on including inter-professional education into our curriculum. To better meet the demands of the changing health care environment, where team work is increasingly the chosen approach to improve outcome and lower costs, the ability of our students to work in groups and in conjunction with other health care providers is essential for this success. Our 2+2 campuses, co-located with medical students from MCG, are ideal for this development.

But the need for inter-professional education during the first and second years requires identifying innovative approaches and we are hard at work with other units on and off campus to develop such opportunities.

Equally exciting is that the new curriculum allows for some "specialization" through our electives. For instance, students can earn certificates in entrepreneurship by selecting a sequence of electives. They can also choose sequences that will prepare them for residencies or for careers in industry that can earn a certificates in Regulatory Affairs or Clinical Studies. Options of combining the PharmD with a Masters in Public Health are already available.

As a consequence of the new curriculum we are moving several courses from the Pharmacy to the pre-Pharmacy curriculum. The faculty have decided to offer some of these courses on-line for pre-pharmacy or pre-med students, a new endeavor for the College in offering on-line courses.

Our residency program is still expanding. Although we have reached our initial goal of 20 residents associated with the College this year, we are in the process of finding new ways of expanding our Community, Ambulatory Care and Specialty residencies.

We are also expanding our other educational offerings. Students in the BS program in Pharmaceutical Sciences that the College started almost two years will soon have the option to combine the BS with a Masters. The number in the BS program is rapidly increasing and we already have had to expand our teaching laboratory to be able to accommodate the larger class sizes. We also find that courses in the BS program are of interest to other students on campus and we expect that our undergraduate educational offerings will become an important part of the College activities over time. We believe these programs will contribute in a significant way to the Biotech and Pharma Industry in Georgia.

We are also increasingly interacting with other units on campus. We already have joint faculty appointments with the College of Family and Consumer Sciences in the area of Food and Nutrition, and with the College of Education in the area of Counseling and Human Development Services. The College offers a joint degree program with the College of Public Health, and we hope that our inter-professional education will strengthen our collaboration with MCG, the medical partnership, and the College of Veterinary Medicine. Our next step is to open up collaborations with the College of Engineering, the Department of Chemistry and the Complex Carbohydrate Research Center to enhance our research and broaden our undergraduate programs.

Wherever I turn in the College I see changes and quality improvements, and yet again I see things that have remained the same. You, our alumni and all of our friends have continued to demonstrate steady support and dedication to the College and the Profession. You have a great College and you have made the difference. 📷

Svein Øie, Dean

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in this issue

Success Through Teaching, Research and Service	2
Stem Cell Transplant Specialty	5
Obesity Studies	7
College Highlights	9
Student Highlights	10
Development Highlights	15
Alumni Notes	16
Announcements	Back Cover

Attaining Success Through Teaching, Research and Service

By Sheila Roberson

Marie Chisholm-Burns (B.S. '92, PharmD '93) has been Dean of the University of Tennessee Health Science Center in Memphis since 2012. She is the first female College of Pharmacy graduate to attain such an academic distinction and also the College's first African American to become a dean.

When asked how she feels about these accomplishments, she said, "Diversity is important and I appreciate the diversity highlighted by my career successes; I hope I am the first of many more to come. However I attribute my success to perseverance and the capable and caring people who helped me pursue the three goals that have been the focus of my career in pharmacy – excellence in teaching, research and service."

In 2014 Chisholm-Burns became recipient of the prestigious American Pharmacists Association Academy of Pharmaceutical Research and Science Research Achievement award (APhA/APRS) in recognition of her numerous clinical science and research endeavors. She is also recipient of the acclaimed Nicholas Andrew Cummings award from the National Academies of Practice for her service to the health profession.

Chisholm-Burns likes to think of herself as a role model for others and cites her own first experience in appreciating the support and encouragement from a mentor.

"Even before I started thinking about careers I worked in a hospital pharmacy in Covington while attending college. I saw how my boss and mentor regarded his profession and his patients and decided that's what I wanted to be. I enjoyed science courses and helping people, so it seemed to be a good fit."

Once the decision was made, her education became even more important to her as she embarked on a path of lifelong learning. Chisholm-Burns first completed a dual bachelor's degree in psychology and biology at Milledgeville College in 1989; she followed with a B.S. in pharmacy and a Doctor of Pharmacy (PharmD) degree at UGA, then a one-year pharmacy practice residency at Mercer University Southern School of Pharmacy and Piedmont Hospital in Atlanta.

"Initially I had planned a career in hospital pharmacy but my residency made me change my focus toward teaching and clinical research," she said.

Her next degree was a master's of public health from Emory University, which she began while maintaining a full-time faculty position at the College of Pharmacy's Augusta campus.

Chisholm-Burns cites her faculty work as pivotal to her success, as she focused on integrating the components of teaching, research and service into all aspects of her career. She explained that her research and service provides information for her role as a teacher in that she could disseminate the knowledge acquired through her clinical work to her students, to be applied for the greater good as service to others.

"Some of my research centers on measuring the impact of having pharmacy services for transplant patients," she said. "Findings suggested that a lot of patients were noncompliant and needed better access to medications, which were not only needed for care but expensive."

As a result of her early work at the Medical College of Georgia (now called Georgia Regents University) she established a medication access program, called MAP, for solid organ transplant patients. This service helps solid organ transplant patients, living in Georgia, obtain prescription medications at little or no cost from a variety of different programs. As knowledge of MAP spread, the program expanded to cover other health care facilities around the state, thanks to funding from the Carlos and Marguerite Mason Trust. MAP's expansion translated into increased compliance and a healthier population as a proven program. MAP is now used as a national model for other such programs, according to Chisholm-Burns, who continues as MAP's director.





Chisholm-Burns still finds time to teach pharmacy students.

"More than 800 Georgia patients have benefited from \$54M in medications through MAP, and it all started with research and service working hand in hand," she said, adding that for every \$1 spent MAP puts \$7 to \$8 back into medications for solid organ transplant recipients.

Chisholm-Burns' administrative experiences increased when she was recruited by the University of Arizona in 2006 to be head of the Department of Pharmacy Practice and Science, one of the country's Top 10 pharmacy schools.

"Academic pharmacy administration is challenging and rewarding," she said. "As I was promoted through the faculty ranks, I also pursued leadership development courses to enhance my leadership and administrative capabilities."

Her administrative duties have included faculty recruitment, facilitating faculty development and success, increasing the college's research extramural funding, fostering a diverse and equitable department environment, cultivating external collaborations and partnership, supervising and developing staff, overseeing budget and finances, and facilitating student success, she said.

After more than five years at Arizona she accepted the dean's position at Tennessee, also one of the top pharmacy schools in the country. Almost immediately she enrolled in a master's in business administration program at the University of Memphis and initiated a new dual PharmD/MBA degree program at the UT College of Pharmacy.

Her research efforts continue to blossom at Tennessee. Her ongoing work, including pharmacists' impact on patient care and health disparities, adherence, pharmacy education and transplant research, continues to receive major recognitions and awards. She is a nationally known educator and an accomplished scholar and author, who considers writing to be "therapeutic." Her efforts have paid off.

Her most noteworthy honors include the 2014 APhA/APRS award, given by the American Pharmacy Association, and the 2013 national award for Sustained Contributions to Biomedical Literature, given by the American Society of Health-System Pharmacists Research and Education Foundation. She has twice received the Rufus A. Lyman Award for the most outstanding publication in the American Journal of Pharmaceutical Education; she also received the Robert K. Chalmers Distinguished Pharmacy Educator Award, the highest teaching award in the pharmacy academy, for her achievements in pharmacy teaching. Chisholm-Burns is a Fellow in the American Society of Health-System Pharmacists and in the American College of Clinical Pharmacy.

"Receiving these awards is humbling, as these organizations are pioneers in pharmacy," she said. "The recognition is nice and the awards not only highlight my contributions but, more importantly, the contributions of many others. I have had the pleasure of having masterful teams throughout my career who believe as I do. It's all about making a difference."

Chisholm-Burns has 169 peer-reviewed papers, books and book chapters published; 108 abstract presentations; 38 funded grants as principal investigator; and approximately \$10M received in competitive extramural grants, including support from the National Institutes of Health and the Mason Trust.

Since her beginnings in the profession Chisholm-Burns has exemplified what it means to care for others through her work and to excel in her profession. Her awards and honors are many and she doesn't put boundaries on what can be accomplished through hard work, perseverance, role modeling and relationship building.

"I don't know what the next step will be, but I know there will be a next step. For now I love doing what I am doing," she said, adding that she enjoys being with students and facilitating their successes, improving health care and education, and enhancing positive outcomes. 🐾

Stem Cell Transplant Specialty is Enriching Experience

by Sheila Roberson

Amber Clemmons has a unique position in the College of Pharmacy as the College's only clinical oncology pharmacist with an active practice site in inpatient stem cell transplantation. She has worked in that specialty at Georgia Regents University (GRU) Medical Center in Augusta since 2011 and has witnessed the rapid expansion of the field.

GRU opened the region's first stem cell transplant program in 1997 to treat adult leukemias, lymphomas and other types of blood cancer. The hospital offers both autologous transplants, which utilize the patient's own hematopoietic stem cells to rescue the patient from the hematologic toxicity of high dose chemotherapy, and allogeneic stem cell transplants that utilize healthy hematopoietic stem cells from a matched relative donor, haploidentical donor, or unrelated donor from a registry, such as bethematch.org. GRU's adult bone marrow transplant program is one of only three in the state of Georgia and is accredited by both the Foundation for the Accreditation of Cellular Therapy (FACT) and the National Marrow Donor Program (NMDP).

Clemmons works as a member of a multi-disciplinary medical team that includes transplant-trained physicians, physician assistants, nurse practitioners and inpatient nurses as well as numerous consulting specialists. As a clinical pharmacist she reviews medications for appropriateness, including ensuring that each



Amber Clemmons reviews a patient's chart

medication choice and prescribed dose are compatible with patient specific factors such as age, renal or hepatic function, financial abilities, and other medications that may interact and cause harmful effects. Additionally, she educates physicians and other healthcare workers about medications, including any recently reported data or guideline updates and safety information.

Transplants, she noted, can be the infusion of either stem cells taken directly from the bone marrow or stem cells mobilized into the peripheral blood and then collected via apheresis, which is the process utilized at GRU. Stem cells are pluripotent cells within the

bone marrow that give rise to the key components of blood, i.e., red cells that carry oxygen, white cells that are part of the body's immune response, and platelets that aid in clotting.

In the autologous transplant setting, the stem cells are collected from the patient and frozen to save them from being destroyed by the high doses of chemotherapy that are administered to kill the residual cancer cells. After high dose chemotherapy is complete, the stem cells are infused back into the patient, in a procedure similar to a blood transfusion, to regenerate normal blood cells. In the allogeneic transplant setting, volunteer donors undergo stem cell collection either before or concurrent to the patient receiving high dose chemotherapy with or without radiation. These donor cells are then infused into the patient after the administration of chemotherapy and initial immunosuppression medications. Engraftment of healthy hematopoietic stem cells takes several weeks.

"The most common complications for allogeneic stem cell transplants are infections, which can be bacterial, viral or fungal, and graft-versus-host disease (GVHD), which can ultimately affect any organ but generally the skin, gut, and liver are impacted in the acute phase. For the infectious risk we provide prophylactic antimicrobials and strict monitoring to screen for infections during the transplant process and continuing while the patient is on immunosuppression. For GVHD, patients will receive immunosuppression with medications that require precise monitoring. The pharmacist plays a role in monitoring for both these complications and recommending appropriate medication management strategies," she said.

Clemmons must anticipate and manage predictable side effects of the various medications and complications from the transplant process during each patient's hospitalization.

"Patients undergoing bone marrow transplants often require intense care over a prolonged period of time," said Clemmons, a clinical assistant professor. "This allows me the opportunity to create relationships with patients and work closely with the medical team to optimize their pharmacotherapy plans, not only with respect to their transplant medications but also with regard to their comorbidities and overall health. Given the complexity of this patient population, I am able to work as an oncology specialist while also keeping an internal medicine and infectious disease focus."

Clemmons' enjoyment of her work occurs, in part, due to the relationships she establishes with her patients during transplant and recovery and her close ties to the other members of her medical and pharmacy teams.

"I truly enjoy forming relationships with my patients and their families," she noted. "It is my hope to be an informational resource for patients and be a part of their support network as they go through the transplant process."

Clemmons first meets with patients on admission to the hospital for their transplant and discusses all the planned chemotherapy and other supportive medications. She sees from six to eight patients daily during rounds with the multi-disciplinary team where they evaluate the patient for any ongoing or new medical issues. Then they discuss each medical problem, such as diabetes or hypertension, and work together to create a pharmacotherapy plan to optimize clinical outcomes.

Clemmons communicates medication information to patients and caregivers. They develop a good understanding of why they are prescribed each medication and how to take the medication accurately, as well as what side effects to look for. She also provides supportive care, such as optimizing pain control, managing nausea, and making nutrition recommendations.

Once the patient has completed therapy and is ready for discharge, Clemmons performs discharge medication reconciliation with the provider and counsels the patient and their caregivers on the medications to be administered at home. The hospitalization process takes a minimum of two to three weeks.

Clemmons is also involved in clinical research and works with the other bone marrow transplant practitioners to update policies and procedures.

"In the past, our transplant and pharmacy group has evaluated and published on the potential differences in dosing and outcomes for obese patients with regard to specific chemotherapy and supportive care medications, the utility of novel dosing protocols, as well as the clinical outcomes and adverse events we have seen with specific treatment regimens in various patient populations," said Clemmons.

In her short time on faculty, Clemmons has received honors for her work as a clinical oncology pharmacist. She was the first recipient of the American Society of Blood and Marrow Transplantation (ASBMT) Pharmacy SIG New Practitioner Award in the field of hematopoietic cell transplantation (HCT) in 2013, recipient of the STaR (Southern Translational Education and Research Conference) Young Investigator of the Year award for 2011, recipient of the Georgia Society of Health-System Pharmacists' (GSHP) Outstanding Young Health-System Pharmacist award in 2014 and appointed Chair of the program committee for the Hematology/Oncology Pharmacy Association (HOPA) for 2015-16. 📧

**"Given the complexity of
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Liu and Murph Research Labs Study Obesity and Disease: **Reducing Obesity with a Chemical Found in Coffee and Obesity's Role in Breast and Ovarian Cancer**

Researchers in Professor Dexi Liu's lab at the College of Pharmacy have discovered that a chemical compound commonly found in coffee may help prevent some of the damaging effects of obesity.

In a paper published recently in *Pharmaceutical Research*, scientists found that chlorogenic acid, or CGA, significantly reduced insulin resistance and accumulation of fat in the livers of mice who were fed a high-fat diet.

"Previous studies have shown that coffee consumption may lower the risk for chronic diseases like type 2 diabetes and cardiovascular disease," said Yongjie Ma, a postdoctoral research associate in UGA's College of Pharmacy and lead author of the paper.

"Our study expands on this research by looking at the benefits associated with this specific compound, which is found in great abundance in coffee, but also in other fruits and vegetables like apples, pears, tomatoes and blueberries."

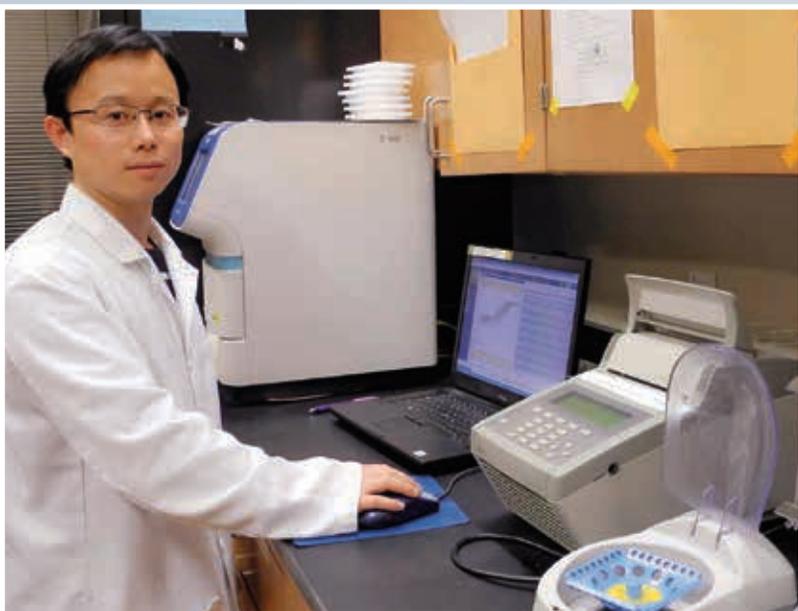
During the past 20 years, there has been a dramatic increase in obesity in the United States. More than one-third of U.S. adults and approximately 17 percent of children are obese, according to the Centers for Disease Control and Prevention, and the annual medical cost of obesity is more than \$147 billion.

Aside from weight gain, two common side effects of obesity are increased insulin resistance and the accumulation of fat in the liver. Left untreated, these disorders can lead to diabetes and poor liver function.

To test the therapeutic effects of CGA, researchers fed a group of mice a high-fat diet for 15 weeks while also injecting them with a CGA solution twice per week.

They found that CGA was not only effective in preventing weight gain, but it also helped maintain normal blood sugar levels and healthy liver composition.

"CGA is a powerful antioxidant that reduces inflammation," said Ma, who works in the laboratory of Professor Dexi Liu in the Department of Pharmaceutical and Biomedical Sciences. "A lot of evidence suggests that obesity-related diseases are caused by chronic inflammation, so if we can control that, we can hopefully offset some of the negative effects of excessive weight gain."



Yongjie Ma

But the authors are quick to point out that CGA is not a cure-all. Proper diet and regular exercise are still the best methods to reduce the risks associated with obesity.

The mice in this study received a high dose of CGA, much higher than what a human would absorb through regular coffee consumption or a diet rich in fruits and vegetables.

However, the researchers do believe that CGA may form the foundation of a treatment for those who need extra help. They plan to conduct more research to develop an improved CGA formulation specifically for human consumption.

"We're not suggesting that people start drinking a lot of coffee to protect themselves from an unhealthy lifestyle," Ma said. "But we do think that we might be able to create a useful therapeutic using CGA that will help those at risk for obesity-related disease as they make positive lifestyle changes."

For a full version of the study, see <http://link.springer.com/article/10.1007%2Fs11095-014-1526-9>. Research in this article was supported in part by grants from the National Institutes of Health under grant numbers RO1EB007357 and RO1HL098295

by James Hataway

Continued on next page

Assistant Professor Mandi Murph's career at the College of Pharmacy has focused on therapeutic challenges in the treatment of cancers, such as melanoma and epithelial ovarian carcinoma. More recently her interest has shifted to the role of obesity in the promotion and development of women's cancer, both breast cancer and ovarian cancer.

A \$426,849 grant from the National Institutes of Health is supporting Murph's studies on identifying which biomarkers occurring in blood and body tissue might indicate the development of these cancers in women.

"Breast cancer remains the most frequent malignant tumor among North American women," she said. "Research indicates that, even though standard treatment modalities have improved the overall outlook and quality of life for these cancer victims, obesity in post-menopausal women has become a major risk factor for breast cancer."

Since fat cells and cancer cells feed off one another, she proposes they communicate their whereabouts early during tumorigenesis – the production or formation of a tumor or tumors – so that cancer cells can hone in on the location of fat. Together they create a symbiotic environment where cancer cells thrive.

"We expect to develop a biomarker profile to show who might be at risk by studying obese

mice. Not all obese mice develop breast cancer but some will, and the differences in biomarkers in obese mice with breast cancer as compared to the non-cancer group might confirm the likelihood of developing breast cancer."

Female reproductive organs, she added, are also highly sensitive to fat in the body. Polycystic ovarian syndrome, for example, develops in women of child bearing age due to ovulation and cysts on ovaries. The occurrence in lean women is only five percent, but rises to 28 percent in obese women.

"We will plan to identify the early signals that drive the growth of fat and cancer cells," she said.

Most people realize that diet and exercise promote good health, said Murph. However easy access to a high calorie diet and a sedentary lifestyle has produced an increase in obesity with profound medical and socioeconomic implications. Lifestyle preferences play a leading role in the development of obesity in that consumed, but unexpended, calories are stored as fat; yet diet and exercise have become low priority solutions to weight gain, especially in the older population.

Current pharmacological and surgical strategies for weight loss/weight maintenance are largely aimed at reducing caloric consumption. However, factors that are at least partially under genetic control may also influence susceptibility to obesity, noted Murph, who is an American Cancer Society Research Scholar and a Georgia Research Alliance Distinguished Cancer Scientist.

Using transgenic mouse models that have been genetically altered for obesity, i.e., those having a body mass index (BMI) of 30



Mandi Murph

or higher, have provided her with important information relating to the initiation and progression of breast cancer and have emerged as powerful tools for preclinical research.

"Our study of 250 female obese mice that have been bred and given birth to multiple litters will show that roughly 50 percent of them spontaneously contracted breast cancer by 12 to 18 months of age," she noted.

In her research Murph is specifically looking at fragments of microRNA material in the obese mice that are involved in the regulation of cancer gene expression.

"MicroRNAs are small noncoding RNAs, 18 to 25 nucleotides in length, that negatively regulate gene expression," she stated. "The mere existence of miRNA in biological systems reveals complex layers of epigenetic regulation that govern the outcome of cellular signaling. It also reveals the possibility for an alternative therapeutic strategy for exploitation among disease states, particularly cancer," she said.

However, Murph emphasized that the transition from bench to bedside in the development of therapeutics is a long and challenging process, where sensitivity and accuracy of biomarkers is critical. So far the biomarkers used in breast cancer aid long-term treatment decisions, but none are predictors of non-familial malignancy.

Many scientists, she said, are studying whether circulating microRNA are actually analogous to the signals sent by hormones in the body. Murph believes that hypothesis and is investigating specific kinds of microRNA circulating in the blood.

"Whatever we find could eventually be applied to patient populations," she noted, adding that any discovery can provide a pathway toward more discoveries.

"There is so much anxiety about breast cancer that we need much more information about its cause and growth," said Murph. "Cancer can take years to develop so time is on our side if we know what to look for. The more information we have then the better our decisions on how to act."

By Sheila Roberson

Kudos



Cory Momany talks with a student in his biochemistry class.

Momany Named CTL Fellow

Cory Momany, associate professor in the College of Pharmacy's Department of Pharmaceutical and Biomedical Sciences (PBS), has been selected as one of only 24 UGA faculty to participate in the newly established Center for Teaching and Learning (CTL) Fellows for Innovative Teaching program.

The new faculty development opportunity is available to individuals who teach full-time at the University of Georgia, and is funded in part by the Office of the Vice President for Instruction. Focus topics will change each academic year to align with topics of strategic importance for the University.

The 2015 activities for the CTL Fellows for Innovative Teaching focuses on "Flipping the Classroom," a popular teaching strategy in higher education today.

Russell Mumper, UGA's new vice provost for academic affairs and a professor on the College's PBS faculty, recently gave a presentation on his experiences with a three-year "Flipping the Classroom" study with Doctor of Pharmacy students at the University of North Carolina-Chapel Hill School of Pharmacy. Mumper also reflected on important personal and educational lessons learned that may be useful for improving health sciences education and higher education.

According to the CTL website, flipping typically refers to approaches that require students to significantly engage with

instructional content **before** coming to class. Class time is then spent engaging in activities other than traditional lecturing. In some discussions, flipping has been framed as a panacea for all of the learning challenges faced by colleges and universities. The reality is that successful flipping requires a great deal of creativity and planning, and simply pushing lecture content online is not an effective approach.

Well-designed flipped activities can prove to be an effective and rewarding instructional strategy that increases students' time engaged with course material. It can result in deeper learning, agreed Momany, who teaches coursework in biochemistry and immunology.

Two cohorts of 12 fellows were selected to participate in the inaugural year of this program. Fellows meet once a month for discussions and workshops on core topics, such as pre-class activities and delivery methods, motivating students to engage before class and active learning approaches during class time.

"CTL has been tremendously helpful in coordinating learning sessions and providing resources for the flipping fellows. The participants are exchanging ideas and have been open in sharing their findings," said Momany.

Bruckner Receives National Recognition

Professor James Bruckner received the 2013 Scientific and Technological Achievement Award Level III from the U.S. Environmental Protection Agency for research and publications resulting from a six-year EPA grant. The award was given for making significant contributions to the agency's priority area of infants and children's health and risk assessment of pesticides.

The publications were: Evaluation of deltamethrin kinetics and dosimetry in the maturing rat using PBPK model in Toxicology and Applied Pharmacology; Age, Dose, and Time-Dependency of Plasma and Tissue Distribution of Deltamethrin in Immature Rats in Toxicological Sciences; and Ontogeny of Hepatic and Plasma Metabolism of Deltamethrin in Vitro: Role in Age-Dependent Acute Neurotoxicity in Drug Metabolism and Disposition.



Student Ambassadors Program Benefits Students and Applicants

The College of Pharmacy has developed a Student Ambassadors program that personalizes the admissions process for student applicants and recognizes the value of interactions between current and prospective students. Building rapport between students and applicants early in the admissions process is an important way to showcase the College and its programs, according to Alan Wolfgang, assistant dean for student affairs.

"Over the years the College of Pharmacy has been fortunate to have so many pharmacy students willing to interact with applicants during admission interview days, but we have failed to acknowledge their help in a formal way," he noted. "The development of the Student Ambassadors program is designed to correct this oversight by setting up guidelines for the ambassador responsibilities and then acknowledging their support."

Fall 2013 was the beginning of the program and more than 80 first-, second- and third-year students participated during that first year, with 120 so far this year, added Wolfgang.

Interested students must attend a short training session that reviews the College's admission process and outlines the requirements expected of the ambassadors. Between late October and late March prospective ambassadors must participate in a minimum of 10 activities involving the admissions process. Examples include speaking with applicant groups about the College prior to their interviews, either in person or via video connection from a regional campus; assisting with tours of the Pharmacy South and the Wilson buildings; serving on the student panel for Visitor's Day; and writing congratulatory notes to students who have been offered admission to pharmacy school.

"Once a student has documented participation in at least 10 activities, we will prepare an appropriate certificate for their files and resumes," said Wolfgang.



Jennifer Heider, Felipe Lopez, McKinley King and Sammy Kolofske

Jennifer Heider, a first-year student, said she appreciated pharmacy students' participation in the admissions process when she applied to pharmacy school "because they offered another dimension of the school experience."

"Students were so honest and friendly. Now I can help facilitate new students in the same way," she said. "Plus it's a good leadership opportunity for me to promote the roles of pharmacists as leaders in the community. I also get the opportunity to show my Georgia pride in being a UGA student."

McKinley King and Felipe Lopez are both second-year student ambassadors.

Lopez wants to maximize the amount of precise information given to each

admissions candidate and excite future pharmacy students about the great education that UGA provides.

"It's fun to interact with candidates from so many different backgrounds and extract good things from everyone," he added.

King finds being an ambassador an easy way to become more integrated into the community of the school.

"I remember admissions interviews as being stressful for me, so I like to help others relax and become more comfortable by speaking with them before the actual interview," she said.

Sammy Kolofske is a third-year student who enjoys answering questions and having conversations about the school and the pharmacy program. She also likes writing congratulatory notes to those who have been accepted.

"Leading tours is another enjoyable part of being an ambassador and a less intimidating way to show different aspects of the school," she said.

Wolfgang noted that these four students are among the most active and enthusiastic ambassadors.

LKS continues to raise money to fight cancer and other diseases

Lambda Kappa Sigma professional pharmacy sorority has the highest fundraising record among the various student organizations at the College of Pharmacy. Its most popular event is the annual 13.1-mile “In Their Shoes” one-day walk to honor breast cancer survivors and raise funds for the Loran Smith Cancer Center in Athens. The center provides information and educational, emotional and spiritual support for cancer patients and their families, free of charge during and after cancer treatment.

The most recent walk, held in October 2014, raised more than \$161,000 from all participants, a record amount in the history of the event. LKS has raised more than \$40,600 in its six years of participation, including \$6,600 in 2014. The LKS team consisted of five members who had to earn a minimum of \$900 per person to participate. Other LKS members manned a Pit Stop table of water and fruit to refresh the walkers and provide moral support for their efforts.

“Women are fighting breast cancer every day and they need to be recognized for surviving,” said LKS philanthropy chair Caroline Alter about the event. “But it’s also important to support the Loran Smith Center because it not only helps women fighting breast cancer, it serves people with other types of cancer, too. It helps address the social and mental aspects of fighting cancer that most people don’t think about. It’s wonderful to raise money



for services like that and witness the impact of our support.”

LKS President Shannon Bear noted that LKS also supports the Project Hope national LKS philanthropy that focuses on global healthcare, especially AIDS, tuberculosis and diseases in Third World countries.

“We support this effort through smaller events, such as a corn hole tournament planned for this spring where we hope to raise \$300-\$400,” she said, adding that LKS has joined with other pharmacy organizations to host a chili cookoff to also raise money for Project Hope.



National Wear Red Day

On February 6 the American Pharmacy Association Academy of Student Pharmacists (APhA-ASP) Operation Heart and the Student National Pharmaceutical Association (SNPhA) Power to End Stroke committees invited students and faculty to be part of the National Wear Red Day movement. Wearing red showed support and encouragement for “changing lives one healthy decision at a time.”

National Wear Red Day was established by the American Heart Association (AHA) as a promotion for heart disease and stroke prevention; it also recognizes AHA’s great strides in encouraging others to lose weight, make healthy diet choices, increase exercise, and lower cholesterol levels, thus reducing their risk for heart disease and stroke.

Pharmacy Student Project Helps Improve Toddler Nutrition

by Sheila Roberson

Cara McCalley, a fourth-year student at the College of Pharmacy, loves her hometown of Moultrie and “giving back” to her community is a priority for her. “I know it sounds like a cliché but it’s important to me to help out a place that has given so much to me.”

That desire to help is how she came to develop a program on toddler nutrition for Moultrie’s Hope House Pregnancy Care Center, a non-profit outreach ministry designed to help teens and young women make good decisions about their pregnancy and parenting. The center offers pregnancy testing, information on birth control, classes on parenting and even a thrift shop for clothes and baby items.

McCalley’s idea initially was part of a final project for a public health elective she took during her third year in pharmacy school. Her assignment was to develop an education awareness project that would promote wellness and positive lifestyle choices and could be implemented in a community. McCalley chose toddler nutrition since her research showed that a child’s diet impacts cell development and lifelong health, beginning in the toddler years.

“I was amazed to learn that one third of America’s children are overweight or obese, and \$2 million are spent annually on nutrition education,” she said, adding that the last decade has witnessed a distinct rise in childhood obesity, diabetes and hypertension, which could be attributed to poor nutrition and physical health.

“Parents make the choices for what kids eat from the ages of 1 to 4, and later kids choose for themselves,” she added. “So we need to make sure parents receive the appropriate knowledge to make good nutrition choices for their young children. The Hope House was a natural place to implement my project after the elective course ended.”

McCalley took it upon herself to develop a curriculum, design visual aids and create handouts for the four-week class she taught in August. Some 10-12 parents attended the classes and each was given the opportunity to earn attendance vouchers – called mommie money or daddy dollars – to use for purchases in the thrift shop.

“Since most of the parents were young and undereducated, I dealt with nutrition basics including the importance of protein intake



Cara McCalley

at a young age,” she said, adding that she was surprised by their overall lack of knowledge about nutrition. “Coursework focused on practical eating habits, portion size, healthy alternatives and foods that harm good health.”

She also offered pre- and post-class quizzes to measure what the parents had learned during the course.

“My goal was to promote an awareness for establishing healthy eating habits in a child’s early years and the importance of making the connection to future health problems, such as diabetes, obesity, high cholesterol and high blood pressure, through poor dietary choices.”

Even though her course only lasted four weeks, McCalley organized her course materials so they could be used in future classes at Hope House. In fact, she is working with the Moultrie Junior Women’s Club to continue the toddler nutrition course as its community service project.

“This was such an interesting experience for me in many ways,” said McCalley, who hopes to do a residency after she graduates in May 2015. “As a future pharmacist it was interesting to be on the front end of promoting lifestyle choices rather than on the back end of fixing health problems.”

SNPhA Hosts Regional Conference

The College of Pharmacy chapter of the Student National Pharmaceutical Association (SNPhA) hosted the 2015 Regions I & II conference in February in Atlanta.

"SNPhA is the first College of Pharmacy student organization to host a regional meeting," said SNPhA's faculty advisor, **Deborah Elder ('91)**. "This is a great honor and point of recognition for the College and UGA."

More than 475 student pharmacists and 10 pharmacists from across the nation attended workshops, continuing education programs, and guest lectures and shared experiences as pharmacy leaders in the community.

"Regional meetings provide opportunities for the discovery and implementation of innovative ways to improve service and commitment to patient care," said Elder. "These meetings also allow for the evaluation of current issues facing the pharmacy profession."

This year's theme was "Igniting the Passion." Key speakers were National Pharmaceutical Association (NPhA) President Carleton Maxwell; Arbor Pharmaceuticals Medical Science Liaison, Chinonso Akano; and Dean and Professor at the University of Tennessee Health Science Center, **Marie Chisholm-Burns ('93)**.



Keynote speaker, Marie Chisholm-Burns ('93), center, dean of the University of Tennessee Health Science Center in Memphis (see story on page 2), is flanked by Deborah Elder ('91), clinical associate professor, and Vivia Hill-Silcott, the College's diversity coordinator.

Conference Highlights

Workshops: Four professional workshops were offered to student pharmacists. College of Pharmacy faculty and residents delivered a Residency workshop designed to prepare students for the residency application process. A pharmacy entrepreneurship workshop was co-delivered by Ashford Advisors, **Andy Ullrich ('77)** of Hawthorne Drugs, and **Ashley Hannings ('11)** of the College of Pharmacy. Target and Walmart pharmacies each sponsored and presented workshops designed to enhance leadership skills and foster the personal and professional development of student pharmacists in preparation for future endeavors in their professional careers.

Clinical Skills Competition: The Clinical Skills Competition, sponsored by Kroger, allowed pharmacy students to demonstrate their clinical knowledge and patient interaction skills; 78 students from 22 pharmacy schools competed in pairs, setting the record for the most participants at a SNPhA Regional Conference to date. Competition judges included Kroger representatives and faculty members from both the UGA College of Pharmacy and Mercer University Southern School of Pharmacy.



First-year students, Rosalyn Reese and Janee Jones, attend a CE program on diabetes.

Continuing Education (CE) Seminars: A variety of CE workshops appealing to a diverse set of interests was provided for both National Pharmaceutical Association (NPhA) and SNPhA attendees. UGA College of Pharmacy faculty, Robin Southwood, J. Russell May, and Catherine White, delivered CE workshops entitled "Diabetes Therapy," "New Drug Update," and "Mass Casualty Triage," respectively. Each presenter gave an in-depth discussion of the topic and engaged the audience through scenario-based questions.

UGA SNPhA officers who coordinated the conference were Huang Pham, president; Lillian Otieno, vice-president; Ife Anachebe, secretary; Meha Shah, treasurer; Michelle Morales, social chair; Winifred Ofili, fundraising chair; Divya John, historian; Hema Patel, public relations liaison; Darryl Patman, webmaster; and Jenny Yook, graphic designer.



Huang Pham, Lillian Otieno and Aimee Shin enjoy the Awards Banquet dinner.

Service Learning Expo Held

Twenty-one community service organizations took part in the fifth annual Service Learning Expo at the College of Pharmacy recently. The participating organizations ranged in focus from indigent care to medical needs and smoking cessation.

The Service Learning program was initiated by UGA in 2009 to promote campus-community partnerships by integrating relevant community service with academic coursework to enhance student learning, develop civic responsibility and address community needs.

The College's service-learning program, which is designed according to Accreditation Council for Pharmacy Education (ACPE) guidelines, is part of the Introductory Pharmacy Practice Experiences (IPPE) curriculum for second- and third-year pharmacy students. It allows a certain amount of IPPE hours to be designated by the College as service-learning hours to the community that also enhance the students' ability to educate the public.

This year's participants were Athens Neighborhood Health Center, Athens Nurses Clinic, Barneys Pharmacy, Camp AcheAway, Camp Braveheart, Camp Breathe Easy, Camp Carpe Diem, Camp Courage, Camp Independence, Camp Crazy Legs, Camp Kudzu, Camp No Limb-itations, Camp Oasis, Camp Strong4Life, Camp



Weekaneatit, Dougherty County Extension Office, Farm Worker Family Health Program, Good News Health Clinic, Samaritan Clinic, St. Joseph's/Candler Hospitals and UGA Beat the Pack.

Emergency Preparedness Training Benefits Pharmacists



During the emergency preparedness exercises, some students role play as victims and others as healthcare personnel.

Every year, second-year students participate in a mass dispensing exercise, led by Trina von Waldner, director of Postgraduate Continuing Education, and a mass triage exercise, led by Catherine White, associate professor of Pharmaceutical and Biomedical Sciences. These experiences aim to expose students to different aspects of emergency preparedness and non-traditional roles for pharmacists.

These simulations were incorporated into second-year Introductory Pharmacy Practice Experiences (IPPEs) following the Georgia Board of Pharmacy mandate that pharmacists be trained in disaster preparedness. The training can be particularly useful when dealing with such catastrophes as Hurricane Katrina and Superstorm Sandy.

New Scholarships/Endowments Established

Renee McDonald ('84) and David Hay have invested again in the University of Georgia College of Pharmacy through the **Renee and David Hay Scholarship**. Through this scholarship, the Hays will be supporting students who have an interest in retail pharmacy. It is their desire that the recipients of this scholarship will be encouraged to "pay it forward" in a gift to the College in the future. This contribution places their name on the Wall of Honor in the R.C. Wilson Pharmacy Building lobby among the Dean's Society.

John H. Fields, Jr. ('72) has created the **John H. Fields Jr. Scholarship** in support of pharmacy students who have been active with professional, service, and/or student organizations during their first year of pharmacy. His gift underscores the importance of involvement in the pharmacy as well as the unity that is represented by these professionals. This contribution places his name on the Wall of Honor in the R.C. Wilson Pharmacy Building lobby among members of the White Coat Society.

The David K. Leitch Endowed Student Scholarship has been created to honor the more than 20-year relationship between **David K. Leitch ('73)** and the University of Georgia College of Pharmacy. This scholarship will be awarded to a student who exhibits an interest in community pharmacy and a strong sense of loyalty to the profession, qualities similar to that of Leitch.

The George E. Francisco Faculty Development Endowment was initiated by **Lamar Pritchard ('84)** to honor the career of Dr. George E. Francisco, associate dean of the College of Pharmacy. Pritchard stated, "Dr. Francisco's career embodies excellence in academics and faculty mentorship. His legacy will have a lasting impact on the academic standard set at our College for years to come." This endowment, also gratefully supported by George and Libby Francisco, will allow the College to maintain excellence in faculty development now and for future generations.

Sharon Deason ('75) has created the **Sharon B. Deason Endowed Student Scholarship** in support of the students with financial need and an interest in community pharmacy. Her contributions place her among a prestigious group of individuals in the Dean's Society, whose names are displayed on the Wall of Honor in the R.C. Wilson Pharmacy Building lobby. Additionally, Deason is a community pharmacist who works with Publix, a matching gift company that doubles her generosity at the College. A pharmacist for nearly forty years, Deason feels like the most important advice she could give to students would be to get involved with local pharmacy associations to maintain a voice in the profession. She also urges students, and fellow pharmacists, to get to know and be interested in their patients. "There's a deep satisfaction in being able to invest in a patient's needs by helping them better understand their medication and disease," commented Deason. The University of Georgia College of Pharmacy would like to thank Sharon Deason for her commitment to excellence in our students, our College, and our interaction with others. Contributions such as these are what keep the University of Georgia College of Pharmacy one of the top programs in the nation.



Tommy and Patsy Bryan with Claire, Thomas, and Maggie

Tommy Bryan ('80) and Patsy Bryan (BSHE, '79) have invested in the University of Georgia College of Pharmacy through the **Tommy and Patsy Bryan Independent Pharmacy Scholarship**. This endowment supports pharmacy students who wish to pursue a career in independent pharmacy. Tommy shares his fondness for this area of work, "As an independent pharmacist, I have a deep sense of community and am able to get out and make a difference there. I love having the ability to make strong bonds with people and interact with them to assist in their healthcare needs. It's also nice to know that all of the decisions that affect you and your business are made by you."

The Bryans are a three-generation family of UGA Pharmacy professionals. Tommy's father, **Thomas Edward Bryan**, graduated in 1953 and his daughter, **Maggie Bryan**, in 2012. Tommy stated, "Watching my daughter recently graduate and become the third generation of our family educated by the UGA College of Pharmacy made me reflect on what this College means to my family and me. I decided it was time to show our appreciation."

Though a family of many memories at the College of Pharmacy, Tommy may have one of the most vivid, commenting, "Fall quarter of my first year in Dr. Ziance's physiology class, I didn't pay attention to the fact that the Pharmacy school had a separate final schedule from the University as a whole. I was holed up in the library studying for a test that I had already missed. I learned a lot of lessons from that mistake, and I got to retake the Physiology class again winter quarter." Bryan shares another life lesson with current students, "Get active at the Pharmacy school, both socially and academically. I tried the lone wolf method; it was hard, and I missed out on a lot of things. Get involved and it will be rewarding."

Tommy and his wife, Patsy, have received several honors for the impact they make in pharmacy. In 2010 and again in 2012, they received the Bulldog 100 award for their pharmacy, St. Simons Drug Company. This recognition is given to the 100 fastest-growing businesses that are owned or operated by UGA alumni. Also, their contributions to the **Tommy and Patsy Bryan Independent Pharmacy Scholarship** have placed their names among a prestigious group, the Apothecary Society, showcased on the Wall of Honor in the R.C. Wilson Pharmacy Building lobby. Additionally, the Bryans have created the **Karen Leigh Newton Scholarship Fund** in memory of Patsy's sister.

The University of Georgia College of Pharmacy is proud of the accomplishments made by the Bryan family and are extremely grateful for their commitment to our students, our profession, and our future.

A Word From Jim Holley ('95, '96)

Alumni Association President



Spring brings three events to the College of Pharmacy that celebrate some of the different stages of a pharmacist's career. The first of these is the annual Pinning Ceremony and Banquet that will be held at the Classic Center on April 14th. This Rite Aid-sponsored event marks the completion of third-year students' didactic coursework and entrance in the Advanced Pharmacy Practice Experiences. The students each receive a pin for their lab coats to commemorate this step in becoming a pharmacist.

This year's students and their families will be inspired by keynote speaker David Pope, a 2004 graduate of the College of Pharmacy. David founded his company, Creative Pharmacist, to help neighborhood community pharmacists improve their patients' outcomes by providing clinical pharmacy solutions.

The second event is one that I am sure each student in the Class of 2015 is looking forward to. This year's commencement ceremony will be held on May 2nd in the Performing Arts Center. As one of my duties, I get to welcome the graduates into the Alumni Association. At last year's graduation I enjoyed seeing the joy and excitement in the faces of both the graduates and their families.

The third event that comes each spring is the Albert W. Jowdy Memorial Golf Classic. This year's event is scheduled for May 18th and will be held at the Athens Country Club. We are excited about playing at a new venue for the tournament. I enjoy reconnecting with the alumni and friends of the College that come and play in this tournament each year. I can't think of a more enjoyable way to support the College of Pharmacy.

Enjoy your spring.

Sincerely,
Jim Holley
Pharmacy Informatics Systems Consultant for HealthcareIS
Monroe

Kim Hamby, Alumni Affairs Director • kihamby@uga.edu • 706-542-4536

1960s

Wallace Arrington ('60) of Carrollton is retired but still does relief work in surrounding counties; also still writing a book. He and his wife Nora Dean Smith Arrington have one surviving son, David.

Charles Maret ('62) and **Steed Hill ('66)** of Dalton retired in January after a combined 100 years in pharmacy. Hill worked as a pharmacist for 48 years, first with Eckerd and then 26 years with Bi-Lo. Maret first worked in Anderson, S.C., then entered the army before returning to Dalton to work with his now-deceased brother **Randall ('54)** at Maret's Prescription Shop for 38 years; when Randall retired in 2001 Maret moved to Bi-Lo to work with Hill.

1970s

Dale Coker ('77) of Acworth has been elected president of the 2015 International Academy of Compounding Pharmacists Board of Directors. He is owner of Cherokee Custom Script Pharmacy in Canton, the first board-accredited compounding pharmacy in Georgia.

1980s

Richard Arrendale (Ph.D. '88) of Acworth received the Graduate School Alumni of Distinction award from the University of Georgia Graduate School, recognizing graduate alumni whose professional achievement and contributions to society exemplify the UGA motto to teach, to serve and to inquire into the nature of things. Arrendale has more than 35 years of research experience and for the past 24 years has held positions in drug discovery and development in research-based pharmaceutical, biotech, and academic organizations. He joined Emory University in 2008 to lead the bioanalytical chemistry, drug metabolism and pharmacokinetics efforts of the Emory Institute for Drug Development.

Hugh Chancy ('88) of Hahira was approved as a newly elected member of the Board of Directors of the National Community Pharmacists Association during the House of Delegates session held in conjunction with NCPA's 116th Annual Convention and

Trade Exposition. Chancy co-owns Chancy Drugs of Adel, Chancy Drugs of Hahira, and Chancy Drugs of Lake Park, all in Georgia. He also co-owns C2 Medical Solutions, a sterile compounding pharmacy in Hahira.

2000s

Carmen Cheng ('05) of Clarksville, MD, is a safety evaluator for the Food and Drug Administration, conducting surveillance of adverse event reports and identifying new safety signals. Her husband John is a Georgia Tech grad and a senior performance analyst at the Social Security Administration. They have two children, Jonathan, 3, and Nicholas 1. She enjoys spending time with family, photography and sewing.

Jenny Pritchett Trammell ('05) of Luthersville and her husband Bob welcomed a new daughter, Virginia Eudora on September 21. She joins her older sister Mary Charlotte.

LET US HEAR FROM YOU!

Please take a minute to fill out this questionnaire and **mail it to the Editor, College of Pharmacy, The University of Georgia, Athens, GA 30602, or FAX it to Sheila Roberson at 706-542-5269 or email it as an attachment to roberson@rx.uga.edu**. Many of our alumni have inquired about former classmates, so we are trying to keep current information available.

NAME _____ DEGREE and YEAR _____

ADDRESS _____ CITY, STATE, ZIP _____

HOME PHONE _____ E-MAIL _____

BUSINESS PHONE _____ FAX _____

PROFESSIONAL INFORMATION (Employer Name and Address, Job Title, Duties...) _____

AWARDS AND HONORS _____

FAMILY INFORMATION (Spouse's Name. Is Spouse a UGA Grad? Is Spouse also a Pharmacist? Any Children?) _____

INTERESTS AND HOBBIES _____



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ANNOUNCEMENTS



PRINT/ONLINE

Beginning with the Fall 2014 issue of UGARx, we will only be printing and mailing the magazine to those alumni donors and friends who have contributed more than \$500 annually to the College of Pharmacy.

All issues of UGARx will continue to be posted on our website (www.rx.uga.edu) for alumni to download and print. We will send emails and online notices to everyone about the quarterly postings of UGARx.

If any alumni would prefer to continue receiving a printed copy, please contact Sheila Roberson, director of publications, at 706-542-5303 or roberson@rx.uga.edu.

FAX your Facts

Everyone wants to know what's happening with their classmates but few take the time to mail in the alumni questionnaire at the back of the UGARx. Now you can take the quick and easy way! Just FAX your information to Editor, UGARx, 706-542-5269, or email it as an attachment to Sheila Roberson at roberson@rx.uga.edu. Mail still works too: Editor, UGARx, College of Pharmacy, University of Georgia, Athens, GA 30602. See you in print!



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The University of Georgia College of Pharmacy

Upcoming CE Programs

46th Southeastern Residency Conference

April 30-May 1, 2015
The Classic Center, Athens, GA
Up to 9 hours of CPE!

For more information, call 706-542-6232
or email pharmce@uga.edu

ALUMNI EVENTS

Albert W. Jowdy Memorial Golf Classic

Athens Country Club
May 18, 2015



Alumni Dinner

Amelia Island
July 2015
Date and Location to be announced



For the latest information on College events
and activities, check out our website at:

www.rx.uga.edu