

# PRACTICE MAKES PERFECT

**UF prepares student** pharmacists for the patient-care team



Dear colleagues, alumni & friends,

This promises to be an exciting year not only for the College of Pharmacy, but for the entire university as we welcome Dr. Kent Fuchs as our new UF president. President Fuchs (pronounced Fox) was most recently the Provost at Cornell University and we are all excited about the leadership he brings to help UF achieve top 10 status. Our college is very well positioned to contribute toward his vision for national and international preeminence.

Over the past year, our faculty, staff and students have worked tirelessly to strengthen Gator pharmacy on all fronts — academics, research, pharmacy practice and service. In a few short months, we will launch our new doctor of pharmacy curriculum, and I want to emphasize what a team accomplishment it has been. It began with our committees who worked so hard over the past year in researching and defining the new curriculum. Many others then began working together through teaching partnerships to build new courses to be presented in an interprofessional clinical context. New accreditation standards will go into effect in summer 2016 and we have built our new curriculum around these standards. As such, our new curriculum and co-curriculum may well serve as a national model for other colleges of pharmacy.

In research, we set a new funding record in the college, with a nearly 30 percent increase over the 2013 academic year. This at a time when federal funding for research is flat (and declining when adjusted for inflation), and most institutions are happy if their funding is not falling. This is a testament to our excellent faculty and the impactful research they are conducting. Some of the stories in this edition of GATORx feature a few of the many ways our faculty are contributing scientifically. You will also find stories about the efforts of Dr. John Gums and our clinical faculty to advance high quality practice models.

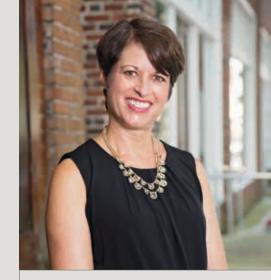
We are also very pleased to welcome many new faculty members since our last edition, including several new hires through the UF preeminence initiative. As they join accomplished faculty in the college, who are leaders in education, clinical pharmacy and innovative research, we also look forward to their contributions in raising our college's national and international recognition.

Our students also continue to make us very proud, through their performance in the classroom, their leadership and contributions in their many organizations, and the level to which they perform in the practice setting that shine a bright light on the Gator Nation. This spring, our fourth-year students are beginning to think about life after pharmacy school; some interviewing for jobs, others will soon hear the outcome of their residency search, with a few entering graduate school or other unique opportunities. And our admissions committee is working hard to identify the most highly qualified students who will replace our soon-to-be graduates.

Finally, I want to thank our many alumni and friends who champion all that we do for the pharmacy profession and the research that is making a difference to patient health and quality of life everywhere. I hope to be meeting with many of you this spring and in the fall to let you know more about the Gator Good in Pharmacy that you are helping to support.

Julie a. Somool

Julie A. Johnson, Pharm.D. Dean and Distinguished Professor



## GATORX

The University of Florida College of Pharmacy publishes the *GATORx* magazine annually to share its news and achievements in research, education and service.

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# GATOR COLLEGE OF PHARMACY | 2015

### Lesson Plans

Beginning this fall, a new Pharm.D. curriculum will be taught through multidiscipline teaching partnerships



## Interprofessionalism

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Preparing graduates to work in a team-based environment focused on patient care

# Brand or Generic?

Comparing the effectiveness of a generic heart drug against the brand name

### or c? less rug me



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So many ways to connect, mark your calendar!

ON THE COVER: UF College of Pharmacy faculty, postdoctoral fellows and student pharmacists work as part of the patient care team at the UF Health Family Medicine at Main practice in Gainesville, Florida. The practice is part of the UF College of Medicine's Community Health and Family Medicine network, which cares for more than 40,000 patients. The pharmacy team shown from left: Eric Dietrich, Pharm.D., a clinical assistant professor, Steven Smith, Pharm.D., a clinical assistant professor, Nicholas Carris, Pharm.D., a postdoctoral fellow, John Gums, Pharm.D., associate dean for clinical affairs and fourth-year student pharmacists, Kaylen Keen and Vincent Solomon.

# LESSON PLANS PREPARING PHARMACISTS FOR THE FUTURE

By Linda Homewood

ver the past year, faculty in the University of Florida College of Pharmacy have added a new task to their busy lesson plans: Reforming the doctor of pharmacy four-year educational program to prepare graduates to work in an interprofessional, team-based environment that focuses on patient care.

Ready to roll out this fall, the college has built upon and enhanced the best features of its Pharm.D. program, integrating fundamental basic sciences with clinical sciences, so that courses will be taught within a clinical context. Course

# New Elements of the 2015 Pharm.D. Curriculum

#### Context-based Curricular Integration Promote Better Understanding and Retention:

- » Integration of basic & clinical sciences
- » Material is learned in the context in which it will be used in practice
- » Skills labs will simulate practice provide simultaneous development of knowledge, skills, attitudes and professional values

#### Personal & Professional Development of Students

- » Development of soft-skills (interpersonal communication skills and personal attributes such as self-awareness, leadership, teamwork, flexibility and an innovative mindset)
- » Development of self-directed learning skills so graduates are prepared for lifelong learning

#### Capstone/Milestone Assessments

- » Annually document students are progressively achieving the learning outcomes
- » Milestone at Year 3 will document student readiness for clinical rotations in final year
- » Milestone at Year 4 will document students are "Team Ready" and "Practice Ready"

development for the first semester began through teaching partnerships that bring together faculty from different disciplines and expertise. Each faculty team is collaboratively planning these first courses with the aid of an instructional designer and educational technology staff members who will help them develop innovative learning activities.



Diane Beck, Pharm.D., Associate Dean for Curriculum & Accreditation

There also will be increased focus on the elements of personal and professional development that are key to a highly effective clinician, what some refer to as soft skills, said UF College of Pharmacy Dean Julie A. Johnson, Pharm.D., a distinguished professor who is a researcher and a clinical pharmacist. Johnson made curriculum reform a high priority in her first year as dean, appointing a Curricular Revision Task Force in November 2013.

"We have always provided a high caliber of pharmacy training, which is evident by the successes and national leadership exhibited by so many of our alumni today," Johnson said. "But, health care is changing rapidly and there are new and increasing opportunities for pharmacists. Our faculty, students and alumni are embracing this curricular change, which will help ensure our students' success when they enter practice."

Led by Reginald Frye, Pharm.D., Ph.D., a professor and chair of pharmacotherapy and translational research, the 15-member task force was asked to develop a curriculum for innovative pharmacy education with an integrated approach that seamlessly prepares graduates for new practice models while continuing the college's involvement with new technology that advances learning. With a vision of preparing graduates for practice into the 2060s, the task force evaluated current literature from all health professions, examined educational programs at other health science colleges at UF and peer colleges of pharmacy, and held faculty forums to gain input and promote discussion.

Working under the guidance of Diane Beck, Pharm.D., an associate dean for curricular affairs and accreditation in the college, the task force proposed a new educational model that uses a body-systems approach so that students can learn by applying their knowledge in the context in which it will be used in practice. The new curriculum, which will begin for all entering Pharm.D. students this August, also will have milestone assessments that document student mastery of learning outcomes and readiness for practice experiences.

"Faculty members working across disciplines under 'teaching partnerships' will deliver a course together in this new model," Beck said.

Designed using a "block" structure, courses with a common theme are taken over a shorter time period than the

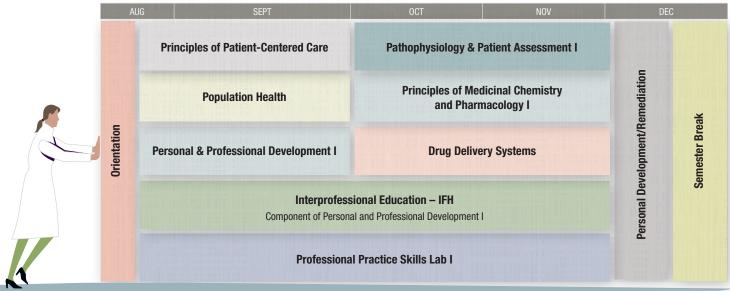
traditional semester. The structure includes designated time periods for capstone assessments, personal development and remediation to ensure that students are progressively developing knowledge, skills, attitudes and values expected of them. The milestone assessments will document that the student is ready to begin community pharmacy practice training.

Denise Klinker, Pharm.D., a clinical assistant professor, is charged with the coordination of the experiential portion of the Pharm.D. degree program. This includes administering 44 credit hours of pharmacy practice experiences. These courses span all four years of the Pharm.D. curriculum, providing increasing levels of clinical experience opportunities as students progress through their program toward graduation.

A cornerstone of the new curricular model is the development of a tandem co-curriculum that will provide students with the skills to enhance their interactions, job performance and career prospects, Beck said. These skills focus on self-awareness, interpersonal communication, patient advocacy, leadership, entrepreneurship and an innovative mindset. The co-curriculum program is being developed collaboratively with pharmacy and other health disciplines faculty to build a rich resource of student experiences to complement their classroom learning.

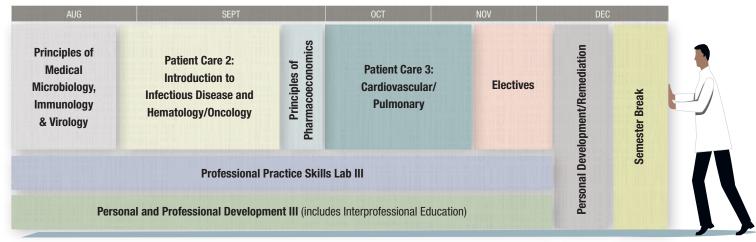
Mark Wilson, a fourth-year student who will graduate this spring, served on the task force. He sees great educational training and opportunity ahead for the incoming class of 2015.

"The new integrated model will enable graduates to become lifelong learners on the cutting edge of pharmacy practice and invaluable members of an interprofessional health care team," Wilson said.



### Year 1 Fall Semester

#### Year 2 Fall Semester





# A Leader of Health-Systems Pharmacy in Florida

By Dorothy Hagmajer

atherine Vogel Anderson, Pharm.D., a clinical assistant professor in the University of Florida College of Pharmacy, is taking a leading role in health-systems pharmacy practice in the state of Florida.

Vogel Anderson, who serves as president-elect, will be sworn

in as president of the Florida Society of Health Systems Pharmacists at its annual meeting in August this year. The third largest state affiliate of the American Society of Health Systems Pharmacists - FSHP is a professional association of pharmacy practitioners that promotes and supports improvement of pharmaceutical care and the profession of pharmacy in the delivery of health care.

In addition to her teaching role, Vogel Anderson practices five days per week at the UF Health Internal Medicine

Vogel Anderson received her Doctor of Pharmacy degree from the UF College of Pharmacy in 2003, and completed a Primary Care Pharmacy Residency in the North Florida/South Georgia Veterans Health System. She worked as a clinical pharmacist at the VA from 2004 until 2010. She was named Outstanding Young



Vogel Anderson consults with patient Ruth Glines about her medications.

outpatient practice as part of an interdisciplinary team. In her pharmacotherapy clinic, she works directly with patients while training student pharmacists and pharmacy residents in patient care.

The UF pharmacy ASHP-accredited residency program allows pharmacists who have earned their Pharm.D. degree to obtain postgraduate clinical training for a career as a health-system pharmacist. Although residency programs are more commonly associated with the medical profession, the first pharmacy residencies date back to the early 1930s.

"Pharmacists are important members of the health care team. Student and residency training provide clinical skills necessary for patient care, and may be a requirement if pharmacists wish to obtain provider status," Vogel Anderson said.

will complete the UF pharmacy residency program in June 2015. For Sierra, the ambulatory practice setting at the UF Health Medical

Plaza was one of the biggest factors in her decision to apply to Vogel Anderson's residency program.

"I knew I wanted to be involved with patients in an outpatient setting," Sierra said. "I like that our patients return to clinic every so often - you really get to know these patients and interact with them and that's always been my favorite part."

Vogel Anderson has served two terms as president of the North Central FSHP chapter and was recognized as FSHP Regional Society President of the year in 2007. She also served three years on the FSHP Board of Directors, and five years on the Education and Student Affairs Councils. In 2009, Vogel Anderson and her husband, Shawn Anderson, established the Vogel Anderson Exceptional Leader Scholarship for third-year pharmacy students.

Alumnus for the UF College of Pharmacy in 2009. In 2010, she joined the college's department of pharmacotherapy and translational research as clinical assistant professor.

"I think that in order for me to be a good teacher, I have to practice pharmacy and take care of patients," Vogel Anderson said. "My residency training prepared me to take care of patients and my current clinical practice allows me to train students and pharmacy graduates."

Johanna Sierra, Pharm.D.,

# Teamwork in Patient Care

By Linda Homewood

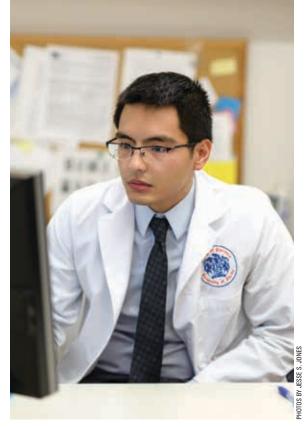
ohn Gums, Pharm.D., an associate dean for clinical affairs in the University of Florida College of Pharmacy, leads a team of clinical pharmacists in the department of community health and family medicine, or CHFM, at the UF College of Medicine. Clinical pharmacists and student pharmacists in training work closely with physicians and other health care professionals in shared practice settings. They provide high quality, team-based care to patients on the CHFM inpatient service at UF Health Shands Hospital and throughout the CHFM practices within the UF Health system.

Working within an interdisciplinary health care team, pharmacists provide daily patient care services at multiple centers throughout the North Florida communities system, including Family Medicine at Main and Family Medicine at Eastside in Gainesville, Family Medicine at Old Town, and Family Medicine at Haile Plantation. In addition to the clinical pharmacy services provided within the CHFM network, UF College of Pharmacy clinical pharmacists also provide services to patients at Archer Family Health Care Center and UF Health Internal Medicine at the Medical Plaza.

Pharmacists at all locations work closely with other health care providers to insure optimal drug therapy. The transitions of care service provided specifically to the CHFM inpatient team is working on reducing hospital readmissions for high-risk patients. These settings provide clinical pharmacy services in which specialty-trained pharmacists in ambulatory care are improving the quality of care patients receive. They also participate in the education of medical residents as they learn to provide the optimum treatment options to their patients. They consult directly with patients to help them better understand their medications and address any questions or concerns.

At UF Health Family Medicine at Main, 30 student pharmacists a year are trained in ambulatory care. It is also the home for the UF College of Pharmacy two-year postdoctoral fellowship program, established in 1987, and for the family practice residency program for the UF College of Medicine.

In addition to their clinical training, the student pharmacists learn valuable research and communication skills by contributing manuscripts to PharmaNote,<sup>®</sup> a physician newsletter written by students and reviewed by faculty (*pharmacy. ufl.edu/pharmanote*). The national newsletter, created by Gums, is now in its 30th year and has a national circulation across multiple health care professions.



- ▲ Vincent Solomon works on a PharmaNote<sup>®</sup> manuscript.
- A family medicine resident reviews a patient treatment plan with Kaylen Keen.







# Dean Johnson Lends Health and Research Expertise to Institute of Medicine

By Linda Homewood

ulie A. Johnson, Pharm.D., dean of the University of Florida College of Pharmacy, was honored to be elected to the Institute of Medicine of the National Academies, making her one of only a handful of pharmacists in the country to receive the honor. At its 44th annual meeting last October at the National Academy of Sciences in Washington, D.C., the IOM announced 70 new members, including Johnson, who is also a distinguished professor of pharmacy and medicine at UF.

IOM membership has been held by fewer than 10 faculty at UF, all men, starting with the university's seventh president, Robert Marston, M.D., who was elected in 1973. Johnson's appointment is the first ever for a faculty member in the UF College of Pharmacy. David S. Guzick, M.D., Ph.D., senior vice president for health affairs at UF and president of UF Health, was elected to the IOM in 2008.

"Dr. Johnson's election to the IOM by its membership reflects her fundamental contributions to our understanding of how drugs affect people differently depending on their genetics," Guzick said, "which has led to clinical application in the areas of antihypertensive drugs and drugs such as warfarin that are used to prevent clot formation. Because of her extensive knowledge and insights about pharmacogenomics and personalized medicine, she will be of great service to the IOM and the nation."

Johnson has been continuously funded by the National Institutes of Health or the American Heart Association since 1990, with a research focus on pharmacogenomics. As director of the UF Health Personalized Medicine Program, she leads studies on interpatient variability in cardiovascular drug response and the influence of race/ethnicity on drug response and pharmacogenomics. She also leads the International Warfarin Pharmacogenetics Consortium, which has more than 40 researchers across the United States and in other countries working in collaboration to advance improved drug therapies for patients who are prescribed the common blood thinner.

Johnson is a fellow of the American College of Clinical Pharmacy, an honorary fellow of the American College of Clinical Pharmacology, and a fellow of the American Heart Association Functional Genomics and Translational Biology Council.

The National Academy of Sciences was established 150 years ago as an independent scientific advisory service to the nation under President Abraham Lincoln. By 1964, the National Research Council and the National Academy of Engineering joined the NAS, and in 1970 the IOM was established. Collectively the four nonprofit member organizations, known as the National Academies, continue to serve as independent advisers to our national government.

More than 2,000 IOM members and foreign associates collectively provide scientific information related to health and medicine to Congress and other policymakers as part of a shared goal of improving health.

Members of the IOM are elected by their peers based on their outstanding research contributions and achievements in medicine and health. Active participation and contribution to the institute's efforts in conducting research and evaluating policies is required of all members.

Also announced last fall, Steven M. Smith, Pharm.D., M.P.H., a clinical assistant professor of pharmacy and medicine at UF, was selected as the 2014-16 Institute of Medicine Anniversary Fellow in Pharmacy.

In commemoration of its 35th anniversary in 2005, the IOM established two anniversary fellows programs in medicine. A two-year pharmacy fellowship was added in 2012 through the support of the American Association of Colleges of Pharmacy and the American College of Clinical Pharmacy.

Johnson felt doubly honored that a faculty member in her college was chosen for the pharmacy fellowship.

"Dr. Smith has a unique opportunity to enhance his knowledge and experience through the pharmacy fellowship," Johnson said. "But, moreover, he will carry the responsibility of representing, at the national level, the interprofessional role of all pharmacists charged with improving patient care in clinical practice settings."

# A DRUG BY ANY OTHER NAME

Pharmacy Researchers Lead Heart Drug Study Comparing the Effectiveness of a Generic and Brand-name Drug

#### By Linda Homewood

niversity of Florida Health researchers are investigating whether a generic form of a common heart medicine used for high blood pressure, heart failure and many other conditions works as well as the brand-name prescription.

Through a \$2.3 million, three-year grant from the U.S. Food and Drug Administration, UF Health researchers hope to learn if patients taking a generic form of the drug Toprol XL for high blood pressure and other heart conditions are receiving the same effective treatment as the brand-name prescription. The researchers will compare the generic and name brand treatments by investigating drug concentrations in the blood and the effect the drugs have on blood pressure and heart rate.

More than 80 percent of U.S. drugs offer an approved generic option, saving patients more than \$150 billion a year in medical costs, according to the FDA. Extended-release, or ER, drugs are designed to release the drug in the body over a longer period of time, so that patients don't have to take the drug as often. For some ER drugs, the rate at which the drug enters the blood may affect treatment outcomes in patients, and the ER formulation is often more challenging to copy. The FDA is proactively conducting a post-market clinical trial regarding generic modified-release products.

Approved by the FDA in 1992, Toprol XL, a beta-blocker heart medication, has been effective in treating patients with high blood pressure, heart failure and other heart diseases. Generic formulations of the drug later became available, offering a cost savings of up to \$2,000 a year to patients. In 2013, metoprolol was the fourth most commonly prescribed drug in the United States with about 84 million prescriptions.

When switching from a brand-name to a generic drug, the FDA looks for bioequivalence, meaning the same amount of drug is absorbed from a given dose whether the medication be brand name or its generic counterpart. Similarly, the bioequivalence of other extended-release



drugs, such as those used for treating depression and epilepsy, also have been examined recently by the FDA.

"Our study will employ state-of-the-art approaches for determining drug levels in the bloodstream, gastric pH and genetic makeup to address questions regarding the bioequivalence of various extended-release metoprolol products," said Larisa Cavallari, Pharm.D., an associate professor of pharmacotherapy and translational research in the UF College of Pharmacy.

Led by Cavallari, the UF Health study will look at levels of different drug formulations in the blood to understand how the body absorbs and metabolizes each generic drug as compared to the brand-name product. The research team also will evaluate the effects of each formulation on the body, including their abilities to lower blood pressure and affect heart rate. Julie A. Johnson, Pharm.D., a distinguished professor and dean of the UF College of Pharmacy, is the co-principal investigator on this study.

Cavallari and Johnson also will work closely with other health researchers and practitioners to further demonstrate the drug's stability and release into the intestinal tract. Physiological factors, including pH levels, and gastric motility might cause differences in blood levels between brand name and generic products. Varying with each patient, these and other factors may determine how much of the drug's active ingredient actually becomes available in the bloodstream after metabolism.



#### JESSE S. JONES

#### UF Health researchers in

discussion: (from left) Siegfried Schmidt, M.D., Ph.D., a professor of family medicine at the UF College of Medicine, Stephan Schmidt, Ph.D., an assistant professor of pharmaceutics, Larissa Cavallari, Pharm.D., an associate professor of pharmacotherapy and translational research and Julie A. Johnson, Pharm.D., a distinguished professor and dean — all at the UF College of Pharmacy, and Qing Zhang, M.D., an assistant professor of medicine at the UF College of Medicine.

Not shown are study co-investigators in pharmacotherapy and translational research at the UF College of Pharmacy: Reginald Frye, Pharm.D., a professor and department chair, Taimour Langaee, Ph.D., a research associate professor, and Yan Gong, Ph.D., a research associate professor. "A collaborative team of UF Health researchers in the colleges of Pharmacy and Medicine and a cardiologist from the Ohio State University allows our study to apply our combined experience in pharmacology, cardiology and gastrointestinal medicine to clearly define any differences between products," said Cavallari, who joined the college's faculty in 2014 and also directs the UF Center for Pharmacogenomics.

The researchers will use patient facilities at the UF Clinical and Translational Science Institute to conduct studies on 30 to 40 volunteers who have participated in Johnson's previous pharmacogenomics studies of common antihypertensive drugs. Funded by the National Institutes of Health, the earlier studies sought genetic predictors of patient responses to blood pressure-lowering medications. Siegfried Schmidt, M.D., Ph.D., a professor of community health and family medicine at UF participated in the earlier studies and will oversee the clinical components of the FDA-funded study.

In the new study, the patient volunteers, who are being treated for chronic high blood pressure, will undergo three overnight hospital stays that will allow doctors to monitor blood pressure and heart rate and take blood samples to track drug levels. They also will track pH levels in the gastrointestinal system.

The researchers are also investigating how common genetic variations in the drug metabolizing enzyme CYP2D6 — which acts on one-quarter of all prescription drugs — may affect the brand and generic forms of the drug in its ability to lower blood pressure and regulate heart rate.

To better understand the combined effects of genotype and gastric pH on drug performance in the study patients, mathematical modeling will be used to understand the movement of the drug in the body to determine how much metoprolol is in the blood. The amount of medication in the body will be linked with the effect it is having on the patient, such as lowering blood pressure or heart rate.

"The results of this study will help the FDA determine the criteria necessary for improving generic extended-release metoprolol products to ensure safe and high-quality generic alternatives for patients," Cavallari said.

# Marine Natural Products Researcher Named UFF Preeminence Term Professor



The center's multidisciplinary research investigates the therapeutic potential of marine natural products. **HENDRIK LUESCH, Ph.D.**, the Debbie and Sylvia DeSantis Chair in Natural Products Drug Discovery and Development in the University of Florida College of Pharmacy, was one of two faculty at UF named as the University of Florida Foundation 2014 Preeminence Term Professors.

In support of UF's preeminence goals, the UF Foundation each year awards two term professorships to faculty members with substantial research programs and outstanding records of accomplishment. Term professorships reflect UF's commitment to invest in faculty members whose work is transforming lives by providing each recipient with a \$25,000 award to extend their work. Faculty members who receive the Preeminence Term Professorships are chosen from UF's top faculty members, nominated by their deans.

Director of the Center for Natural Products, Drug Discovery and Development, Luesch's research focus is on unique marine natural products to fully exploit the biosynthetic and therapeutic potential of untapped biodiversity for drug discovery. His multidisciplinary research program interfaces chemistry and biology. His work in the center combines classical natural products chemistry with high-throughput screening, chemical genomics and medicinal chemistry to identify, characterize and optimize novel drug candidates for cancer and other diseases.

One investigation making progress in the center and published in the Journal of Medicinal Chemistry last year, developed an improved synthesis of apratoxin S4, a drug candidate, for treating colon cancer. Guided by Luesch, the researchers in the center further engineered the molecule, a hybrid of the natural products apratoxins A and E, to improve its stability and reduce its toxicity. Their findings show greater potency and efficacy in treating a colorectal tumor than the parent compound in early models.

Luesch is building infrastructure in the center to develop more rigorous screening and exploration of natural products. The center also develops unique chemical libraries with natural product-like properties as a starting point for drug discovery. In a complementary approach, the center increasingly accumulates genomic material and information from microbes and develops synthetic biology approaches to translate the biosynthetic potential of these organisms into real compounds that might show promise in treating diseases.

Several compounds in the center's pipeline give Luesch confidence for future drug development and hope for patients seeking to prevent and treat some of today's biggest health threats.

# The Fight Against Childhood Leukemia

By April Frawley

uring her postdoctoral training at the St. Jude Children's Research Hospital, Jatinder Lamba, Ph.D., noticed something — much progress had been made in the treatment of acute lymphoblastic leukemia, but patients with acute myeloid leukemia were not faring as well.

The disease is the second most common form of leukemia in children, yet it has the worst prognosis of all cancers in children.

"The outcome in acute myeloid leukemia is still very dismal," said Lamba, an associate professor of pharmacotherapy and translational research at the University of Florida College of Pharmacy. "Despite initial remission, the relapse rate is pretty high with a significant proportion of AML patients experiencing relapse or refractory (not treatment-responsive) disease. Five-year overall survival varies from 30 percent in the elderly population to 60-70 percent in the pediatric population. There is an unmet need to develop better treatment strategies to improve patient outcomes."

A pharmacogenetic researcher by training, Lamba took on the challenge of discovering these new strategies in hopes of devising more effective treatments for patients with AML. She's spent her career primarily focused on discovery and validation of pharmacogenomics biomarkers in hopes of understanding why treatments work in some patients and not in others. After six years on the faculty of the University of Minnesota, Lamba came to UF in 2014, attracted to the university because of its reputation with personalized medicine. Led by College of Pharmacy dean Julie Johnson, Pharm.D., UF's personalized medicine program tailors treatments for patients based on their genetic profile. This focus dovetails with Lamba's own goal of developing personalized strategies for patients in treatment for AML, using genetic biomarkers to determine which therapies will be more or less likely to succeed.

Lamba's research has been funded by the National Cancer Institute since 2008. She also has received funding from the American Society of Hematology to support her research in AML. Currently, her team is working on two NIH-funded projects. In September 2014, Lamba received a five-year, \$1.55 million grant from the National Institutes of Health to study the most common therapeutic agent used in chemotherapy for AML — cytarabine, also known as ara-C.

Although ara-C is the most effective treatment for AML, outcomes vary greatly, with some patients developing resistance to it and others experiencing toxic effects.

"In most of the cases, development of resistance to the chemotherapy is one of the biggest challenges faced by clinicians," Lamba said. "The relapsed disease is more aggressive and is nonresponsive to chemotherapy."

A major challenge in improving outcomes in AML is how response to therapy differs from patient to patient. Although the reason is generally multi-factorial, genetic factors, such as genetic variations, often play a significant role. Lamba's team is studying how these variations, called single nucleotide polymorphisms, or SNPs, affect how patients respond to treatment with ara-C and other agents used in leukemia. Identification of these genetic factors may help in developing individualized treatment strategies that optimize outcome and reduce unnecessary toxicities and cost.

Specifically, SNPs can affect uptake of ara-C into cells by influencing drug transporters, can affect enzymes involved in activating/inactivating the drug and can affect proteins involved in drug action.

Using a novel statistical method she and her team developed called PROMISE (Projection Onto the Most Interesting Statistical Evidence), Lamba is trying to identify SNPs that can predict poor outcomes with ara-C chemotherapy. Her team has already pinpointed several SNPs that affect ara-C therapy and are evaluating how well they predict outcome in clinical trials with St. Jude and the Children's Oncology Group.

"Our results so far have identified candidate genes that have potential for being a biomarker to identify patients most likely or less likely to respond to therapy, providing opportunities to modify treatment strategies accordingly." Lamba said. "Additionally these biomarkers are being explored as targets for new drug development in AML."

Over time, Lamba hopes to establish a program for AML at UF Health that is similar to the personalized medicine program in place for cardiovascular disease treatment. In this program, study participants receive treatment based on their genetic makeup — meaning their treatment plan is tailored to their individual genes.

"Since AML is a very heterogeneous disease with leukemic cell genetics having a significant impact on clinical outcome, integrating the genomic/epigenetic markers of response to ara-C into current prognostic features would present an opportunity to increase our accuracy in forecasting therapeutic outcomes in AML and allow more tailored, risk-stratified treatment approaches — a major advancement over current strategy," she said.



"There is a need to develop better treatment strategies to improve patient outcomes."

# Over-the-Counter Medicine Not the Best Option for Asthma

By April Frawley

For the approximately 25 million Americans who have asthma, quick relief medication is a lifeline when breathing becomes difficult. But what many asthma sufferers may not realize is there is a drastic difference between prescription medication and what is available for purchase over the counter.

A University of Florida pilot study found that an over-the-counter asthma medication containing racemic epinephrine was drastically less effective than albuterol, the standard inhaled prescription medication. The study was published last spring online in the Journal of Allergy and Clinical Immunology: In Practice.

Although albuterol has long been considered the gold standard for quick relief of asthma symptoms, some patients may opt for



an over-the-counter alternative for a variety of reasons, such as convenience or because they lack health insurance, said Leslie Hendeles, Pharm.D., a professor in the UF colleges of Pharmacy and Medicine and the senior author of the study.

"It is important for people with chronic asthma to be under the care of a physician and receive an inhaled steroid for prevention of symptoms," Hendeles said. "If their asthma is under good control, they should not need albuterol more than twice a week."

Asthma is a chronic disease that causes inflammation in the airways, making breathing difficult at times for those who have it. Patients with asthma use an albuterol inhaler to help open narrow airways and ease breathing when they have symptoms such as coughing or wheezing. Other medications, such as inhaled steroids, also often are used on a daily basis to control the signs and symptoms of asthma.

"There is no shortcut method of treating asthma. Asthma is a chronic disease of inflammation," said Pritish Mondal, M.D., a fellow in the College of Medicine's department of pediatrics pulmonary and allergy division and the first author of the paper. "The progression of the disease should be assessed by medical personnel from time to time. Secondly, overuse of quick relief medication, whether prescription or nonprescrip-

tion, has the potential to harm asthma patients because it can suppress the signs and symptoms, so that they only come to medical attention when the condition is really bad. We don't want that."

UF researchers studied the active ingredient in a product called Asthmanefrin, which is marketed by Nephron Pharmaceuticals Corp. To obtain their findings, they tested what happened when patients received a standard dose of albuterol or racemic epinephrine at four different strengths prior to giving them a second medication, methacholine, which would safely narrow their airways. This allowed them to test how well the medications protected the lungs, which is an accurate test of how well some asthma treatments work, Hendeles said.

According to the findings, albuterol worked markedly better to protect the airways than racemic epinephrine — even when twice the dose of the over-the-counter medicine was given.

"This product is only for the transient relief of mild asthma symptoms. If someone cannot afford preventive medications, they might use an over-the-counter medication instead. The problem is you are not treating the inflammation, you are just temporarily opening up the airways. A patient could die from undertreatment," Hendeles said.

Although the research shows albuterol is vastly superior in relieving asthma symptoms, there is a place for over-the-counter asthma medicines, Hendeles said.

"These products are good if you have mild intermittent asthma and run out of your prescribed medication or are traveling and you forgot your albuterol inhaler. There is a rationale for someone in those circumstances to access this," he said. "But it is important people don't use this on a regular basis. These are only for occasional use for mild symptoms."

# Service & Support For Distance Education in the Health Sciences



he University of Florida College of Pharmacy has a 15-year history of successfully developing and supporting online graduate and professional programs that expand the educational reach of the college to students worldwide. Ian Tebbett, Ph.D., an associate dean for entrepreneurial programs and IT in the College of Pharmacy, established a new UF Health Distance Education Support Services center to offer a host of support services to any UF health sciences college for its online programs.

"Online graduate programs that were developed in our college beginning in 2000, today are generating around \$11 million annually to support the college's mission," Tebbett said.

The new service unit also works with investigators on grant proposals requiring an outreach component. From recruitment to commencement, services developed for the college's online programs are available to any UF Health college wishing to start or grow a successful entrepreneurial online educational program, Tebbett said.

#### A Program Incubator

The growing service center is supporting 12 online programs from the colleges of pharmacy, medicine and veterinary medicine and is meeting with other colleges and institutes that are developing new online educational programs. The service center is supporting programs such as Medical Anatomy & Physiology and Addiction & Recovery in the College of Medicine, and Wildlife Forensic Science and Shelter Medicine in the College of Veterinary Medicine. The College of Pharmacy has developed five unique online master's programs: Forensic Science, Pharmaceutical Chemistry, Clinical Toxicology, Pharmaceutical Outcomes & Policy, and Medication & Therapy Management.

Graphic, instructional and website designers, and video production teams, provide proven approaches to assist other units in creating and maintaining successful and sustainable programs. Working with UF admissions and graduate school staff, a student support team processes more than 1,800 online enrollments each semester. Additionally, the service team offers assistance with marketing, course development and extended technical support for students, many of whom are working professionals or reside in different time zones outside of our local work hours.

#### Instructional Design

Instructional design staff work with faculty to help design and develop online, blended and traditional courses. While adhering to the UF Standards our instructional designers will create courses that effectively facilitate learning to ensure a high quality of education. Services include:

- Course shell setup in our Learning Management System (Sakai, Canvas)
- Writing learning objectives and mapping to engaging learning activities & assessments
- Planning and developing partial learning modules or activities
- Brainstorming technology solutions for teaching and learning
- · Course conversion from traditional to a flipped or online format

To see the online programs being supported and learn more about the service, visit http://distance.ufhealth.org.

#### UF College of Pharmacy

# FY 2013–14 Annual Report in Brief Scholarship and Research

#### **Publications & Invited Presentations**

Department	Refereed	Non-refereed	Books	Abstracts	In Press	Presentations
Medicinal Chemistry	20	2	1	29	2	22
Pharmaceutical Outcomes & Policy	31	16	3	26	10	27
Pharmaceutics	36	0	11	16	3	35
Pharmacodynamics	13	0	1	23	7	6
Pharmacotherapy & Translational Research	90	19	27	64	54	128
TOTAL	190	37	43	158	76	218

#### **Funding by Department**

Medicinal Chemistry	22%	\$2,542,235
Pharmaceutical Outcomes & Policy	14%	\$1,655,173
Pharmaceutics	23%	\$2,777,028
Pharmacodynamics	8%	\$1,079,622
Pharmacotherapy & Translational Research	33%	\$4,090,587
COLLEGE TOTAL	100%	\$12,144,645



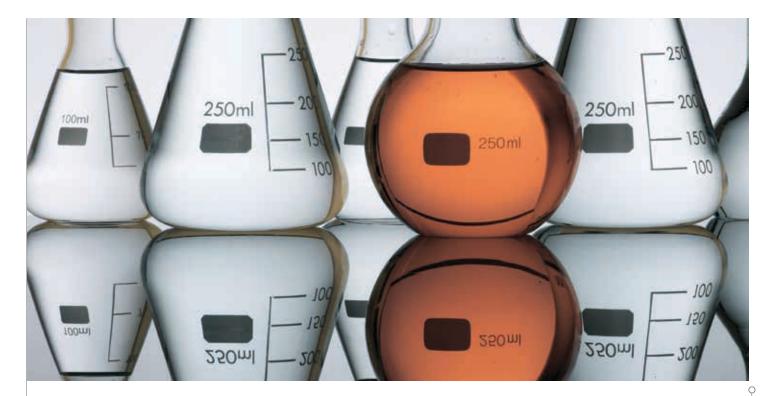
Patent Activity		Patents
Department/Center	Apps Filed	Issued
Medicinal Chemistry	11	3
Pharmaceutical Outcomes & Policy	0	0
Pharmaceutics	2	0
Pharmacodynamics	0	0
Pharmacotherapy & Translational Research	2	0
TOTAL	15	3

Funding by Category		
Federal Agencies	50	\$8,425,933
Florida State Agencies	6	\$450,480
Corporations and Companies	34	\$2,031,107
Foundations & Societies	18	\$1,167,223
Other	11	\$69,902
TOTAL	119	\$12,144,645

#### **Federal Agencies**

AHCA/CMS	4	\$412,999
AHRQ	1	\$42,189
BARDA – Cubrc	1	\$12,500
Dept of Defense	1	\$785,514
Food & Drug Administration	5	\$1,785,365
HRSA – Univ South Florida	2	\$42,122
NIH	36	\$5,345,244
TOTAL	50	\$8,425,933

# FL State AgenciesDepartment of Health5\$442,980Florida State University1\$7,500TOTAL6\$450,480



#### **Corporate Awards**

Abbott Products Operations	1	\$1,060
Aegerion Pharmaceuticals	1	\$18,750
AstraZeneca	1	\$21,240
Bayer Group	1	\$26,000
Biogen IDEC	1	\$137,500
Compleware Corp	9	\$141,102
Gilead Sciences	1	\$89,850
Glaxo SmithKline, Inc.	3	\$179,153
Golin-Harris Int'l., Inc.	1	\$5,000
Jacobus Pharmaceuticals	1	\$35,000
Parexel International Corp.	8	\$51,457
Pfizer, Inc.	1	\$100,000
Sideris Pharmaceuticals	1	\$900,000
Simulations Plus	1	\$58,750
Takeda Pharmaceuticals Int'l.	1	\$150,000
Teva Pharmaceuticals USA	2	\$116,145
TOTAL	34	\$2,031,007

#### Awards from Foundations & Societies

Adventist Health System Sunbelt	1	\$43,979
American Dental Association Foundation	1	\$11,813
American Foundation for Pharmaceutical Education	1	\$3,250
American Heart Association	4	\$211,500
Am Soc Health System Pharm Foundation	1	\$235,028
Brigham & Women's Hospital	1	\$5,610
Critical Path Institute	3	\$341,211
PhRMA Foundation	2	\$150,000
UF Health Shands Hospital	1	\$56,436
Schlumberger Foundation	1	\$50,000
UF Foundation	1	\$25,000
University of California – SD	1	\$33,396
TOTAL	18	\$1,167,223
Other		
Drexel University	2	\$25,680
Embassy Arab Rep Egypt	1	\$9,500
MOI Univ Col Health Science	1	\$2,981
Univ South Alabama	1	\$5,000
Multiple Sponsors	6	\$26,741
TOTAL	11	\$69,902



Dear Alumni and Friends,

At our Dean's Leadership Council meeting last spring, the college's Philanthropy Committee brainstormed ways to financially support our students, while also setting a clear example of philanthropy for them

early in their academic careers. The White Coat Fundraiser was conceptualized from this meeting and our inaugural year has been a tremendous success! By the end of 2014, and just six months into the fundraiser, approximately 200 alumni and friends donated to the project — and many of you gave well beyond one coat. Thank you for all of your enthusiastic support of our students, the next generation of Gator Pharmacists.

Due to this success, the college is now able to provide coats to every rising second-year student which they will proudly receive at the 2015 white coat ceremony. It is our hope to continue this fundraiser for the upcoming classes and we ask that you remain strong supporters each year to continue the tradition of *Giving the Gift of Professionalism*. For more information on how you can join our White Coat Fundraiser, or to learn more about our Philanthropy Committee, please contact me at zipper@cop.ufl.edu.

In addition to the White Coat Fundraiser, the Development and Alumni Affairs office is planning events where we hope to connect with all of you this spring, summer and fall. Please look for us soon at APhA in San Diego, FPA in St. Augustine and FSHP in Orlando.

Furthermore, you will receive our reunion brochure in your mailboxes this summer. The brochure will include everything you need to know to join us this fall for the 29th Annual Alumni BBQ Reunion in Gainesville!

Go Gators,

Elizabeth Zipper Director of Development and Alumni Affairs



# Please consider making a gift of \$35 to purchase a white coat for a pharmacy student.

Each year, the University of Florida College of Pharmacy holds a White Coat Ceremony for our rising second-year Pharm.D. students and their families. Coating day is symbolic of their progression through the rigorous academic and professional program at the completion of their first year.

The Wellcare Community Foundation has generously supported student pharmacist professionalism through a gift of \$4,400 toward the college's White Coat Fundraiser.

We also would like to thank those donors who purchased 10 or more white coats in 2014. They have been invited to personally join our students & faculty on stage and participate in this year's professional coating ceremony.

The following list reflects donations made between January 1– December 31, 2014:

- Carl & Joan Allison
- Greg & Elizabeth Astle
- Diane Beck
- Jake & Mary Beckel
- Sally Brenner
- George & Jeannine Browning
- James & Denise Burry
- Robert & Barbara Crisafi
- Stacey & Ryan Curtis
- Paul & Cheryl Doering
- Gretchen & Daniel English
- Carinda Feild & Jeffery Johnson
- Ed & Ann Hamilton
- Heather & Dan Hardin

- Leslie & Donna Hendeles
- Mark & Kim Hobbs
- Guenther Hochhaus
- Gary & Connie Hogrefe
- Julie Johnson & John Lima
- James & Carolynn Le Fils
- Lawrence Lesko
- Daniel & Nancy Maysilles
- James & Anita McAllister
- McKesson Drug Co.
- Anthony Menezes & Megan Murphy-Menezes
- William Millard
- William & Lorraine Mobley
- Ruth Ann Mulder

Jennifer Raquipo

Sven Normann

 Mitchel Rothholz & Julie Gerhart-Rothholz

Katherine & Arthur Petsos

Jeenu & Celina Philip

- Katherine Vogel Anderson & Shavvn Anderson
- Wellcare Community
  Foundation
- Karen & Thomas Whalen
- Maureen Keller-Wood & Charles Wood

For more information or to donate online, visit: www.uff.ufl.edu/appeals/whitecoat

Thank you for your support of our pharmacy students!

# UF College of Pharmacy Scholarships and Awards

Blake and Cassidy Lawrence Bridget Ngwa

Cardinal Health Community Pharmacy Scholarship Maryam Khazraee, Linh Le

Cardinal Health Scholarship Jamie Schuber

Charlotte Liberty Scholarship Julia Bosacki, Lena Charafi, Esther Garcia, Stanley Luc

Community Pharmacy Business and Entrepreneurial Peter Alvarez, Michael Napoleon, Seung Pyo

CVS Scholarship Meghan Bloxam, Beatriz Hernandez

**Debbie DeSantis Endowment** Karen Fong, Rebekah Kronenwetter

**DuBow Family Graduation Education** *Wei Liu* 

Eckerd Pharmacy Scholarship Elda Agastra, Rachel Britnell, Nicole Cisler, Leonard DeLeon, Roman Digilio, Lauren Downing, Karina Esquivel, Stephen Hare, Shira Hinds, Aklil Hiruy, Lauren Holliday, Maryam Khazraee, Linh Le, Marlin Martin, Sheena Mathew, Amanda Mott, Ouynh Nguyen, Tran Nguyen, Rishita Patel, Kara Pawlikowski, Gregory Rodriguez, Camilo Rozo, Taylor Schenley, Karlyn Scott, Courtney Willis, Gerard Woolyhand

Francene Trainor Memorial Jordan Almazan, Carly Hendrix, Danielle Underwood

Jack and Betty Jones Scholarship Michael Walsh

Jeanne Scheibler Scholarship Briana Brawley, Michelle Chung, Michelle Ensor, Nista Gracien, Austin Hewlett, Megan Morgan, Brian Nocito, May Tran, Michael Walsh, Jaclyn Yodice

Johnston Scholastic Achievement Paige Bishop

Kazarian Family Scholarship Khanh Trang Vo

Lamar and Hilda Massey David Reynaud

Laura and Philip Dean Scholarship James Love

Leigh Medal for Outstanding Leadership Jon Fannin Lilly Medal for Scholastic and Professional Achievement, Leadership and Ethical Conduct Janis Dolembo

Lydia Foote Service Award Roya Tran

Monteen Johnson Gold Merit Award Peter Fosse

Morris and William Skor Clare Anderson, John Prybylski

**NACDS Foundation Pharm Partners** *Tuyet M.N. Le* 

Neal Family Scholarship Michael Fanus

**Oscar Araujo Alumni Scholarship** Natalie Eick, Chris Fronczek, Robin Prunczik, Kristin Rieser, Beichen Tian

**Perry Foote Award for Distinguished Scholarship, Service and Leadership** *Petra Estep* 

**D.W. Ramsaur Distinguished Scholar Award** Joseph Abbatematteo

Randolph Andrew Cone Memorial Scholarship Balarama Rico

Robert Littler Scholarship Albert McKee

Russ and Carol Blaser Memorial Scholarship Jonathan Jernigan, Maxine Wilkerson

Valerie Calkin Griffith Scholarship Kevin Pham

Victor Micolucci Scholarship Mark Priddy

Vogel Anderson Exceptional Leader Scholarship Kelsey Lubbers

Walgreens Company Scholarship/Award *Tina Wang* 

Wal-Mart Geraldo Neziraj, Devin Steiner, Elizabeth Torres, Jacob Walls

Walter Van Munster Scholarship Pamela Nguyen

William T. and Jackie C. Reid Scholarship in Pharmacy Daniel Zambrano

Yachbes Family Scholarship Shira Hinds

# **DEAN'S CIRCLE**

This report reflects donations made January 1 — December 31, 2014

**The Dean's Circle** recognizes our alumni and friends who support the college with an annual gift of \$500 or more. Private donations provide the college with flexibility to offer leadership opportunities for our students and educational initiatives for our faculty. Generous support also helps to ensure that the college's ceremonial traditions continue despite the economy or state allocations.

Your gift is the fuel that allows us to move forward and adapt to the ever-changing health care environment and keeps the Pharmacy Gator Nation in the top tier of colleges in the nation. Thank you!

#### You can give a gift online at:

www.pharmacy.ufl.edu/alumni-friends/giving, or contact Elizabeth Zipper at 352.273.6605 or zipper@cop.ufl.edu.

### \$100,000+

American Heart Assn., National Center American Society of Health-System Pharmacists Robert Anderson (d) The Bill & Melinda Gates Foundation Critical Path Institute Debbie DeSantis Direct Relief GlaxoSmithKline Pfizer USA LLC Pfizer, Inc. PhRMA Foundation Takeda Pharmaceuticals North America, Inc.

### \$50,000+

Paul & Charity Ackerman American Heart Assn. Florida/Puerto Rico Affiliate Amgen USA

### \$30,000+

Alliance Healthcare Foundation McKesson Corporation Michele Weizer & Gil Lichtsein University of California

#### \$10,000 +

ADAHF Carl & Joan Allison Jared Allison (d) George & Jeannine Browning CVS Pharmacy, Inc. Edyth Bush Charitable Foundation Julie Johnson & John Lima Kenneth & Janelle Massey Sven Normann Partners in Health Pittsfield Anti-Tuberculosis Association PricewaterhouseCoopers LLP Richard & Susan Skor Target Corporation Walgreens Family of Companies

#### \$5,000+

Ayco Charitable Foundation Mark & Kim Hobbs Josiah Macy, Jr. Foundation Michael & Robin MacLeay Oscar & Lillian Marina John & Gloria McDonald Merck Ramon & Miriam Moreno Robert & Donna Pelot Pharmaceutical Research Associates. Inc. Lawrence & Jennifer Skor Susan Sorrells Teva Pharmaceuticals University of Kentucky Research Fdtn. Katherine Vogel Anderson & Shawn Anderson Wal-Mart Stores, Inc. Olga Osuna Wejebe

#### \$1,000+

Murvin Abas Abbott Laboratories Carly Acquaviva Julian Ray & Mary Sue Adams Jonathan Afiat Alcon Laboratories, Inc. American Foundation for Pharmaceutical Education Greg & Elizabeth Astle Rae Austin Temitope Avvofeso Baya Pharmacy

Britney Bisio Kathryn Blake & John Oliver John & Carolyn Boyle Sally Brenner Andre Budgewater Gary & Anh Dam Cacciatore Cardinal Health Foundation Octavio Casanova Noreen Chan Marilyn & Robert Clark Jeanette Connelly Joseph Arthur Cooley Sherri Costello Cale Courtney Robert & Barbara Crisafi CVS Charitable Trust, Inc. Cathy & Richard Donnellan Kevin & Alyssa Duane Nana Fening Rebecca Gallo Monica Gervais Mercedes & Ruben Gonzalez **Reggie Groves** Armando & Maria Guerra The Guerra Family Foundation, Inc. Mark & Mary Haumschild HCA West Florida Gary & Connie Hogrefe Michelle Huynh Raymond & Catherine Johns April & Michael Johnston David Kelemen Beth King Patty Kipp Leslie Kutner Sara Kutner Scott & Carrie Lagasse Richard & Lisa Lawrence Gary Levin Massachusetts Mutual Life

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Wambua Mwanthi

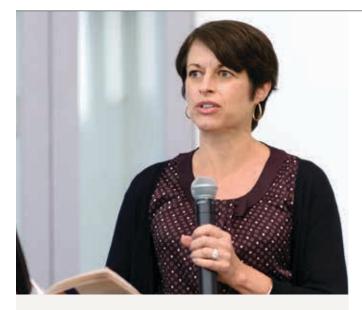
Phillip Biddlecome Michael Brito Christine Brown Clayton Burke Yenmy Chaviano Shane & Lisa Chordas Travis Coffev Elizabeth Colley John "Dolph" Cone III Jeffry Consaul David Crane Corey DeWitt Frank & Mary Dodge Janis Dolembo William Droste Leonard & Serita Edloe Petra Estep Yoscatirin Evans J T Fannin **Beckie Fenrick** Florida Hospital Medical Center Peter Fosse Kate Franskousky Tony Giang Manuel & Velma Glaros Melinda Golden & James Esker. Jr. Mercedes & Ruben Gonzalez Chris Goodman Ryan Guess John & Ivey Gums Heather & Dan Hardin Antoinette & Charles Harrison Amber Hart Katie Hitzel Katie Hoehn Julie Huvett Matthew Irwin Michael Jackson Ben Jacob Natalie Johnson Jamie & Rebecca Kisgen Denise & Kenneth Klinker Randi Krouskos James & Carolyn Le Fils Saskia & David Leather Abbey LeBlanc Leesburg Regional Medical Center James Leggett, Jr. David Leonard Robert (d) & Phyllis Levitt Joshua Lynn John Montaad

Cynthia Moreau Carol & Brent Motycka Maida Muratagic John & Debbie Murphy Megan Murphy-Menezes & Anthony Menezes, Jr. Jordan Mustonen Mai-Thao Nguyen My Nguyen Cheryl & Paul Giacomuzzi Carol Novick & Larry Stahler **Crystal Parker** Khushbu Patel Monank Patel Puja Patel Virat Patel Ratna Peesapati Laura Perkins & Robert Meeks Eric Peterson Pharmacists Mutual William & Marjorie Phillips Nicholas Piccicacco **Cristina Prades** Miquel Ramos Lynn Richards Kellie Rodriguez Glenn Schulman Michael & Karan Schwartz Steven & Lauren Skor Jeffrey Smith, Jr. Mitchell Snyder Kevin Steele Casey Stewart Jane Thai Kavla Tibbetts Win Tin Theresa & Joseph Tolle Katrina Tuazon Marilyn Underberg The U.S. Charitable Gift Trust **Richard Waithe** Virginia Walker Jennifer & Michael Williams Robert & Carol Wilson Jerry Wong Matthew Worsfold Jason Wynn Scott Wynocker

Names are listed as they appear on checks or correspondence. We have made every effort to acknowledge each donor giving \$500 or more. If your name is missing, please notify us so we may correct our records. We do apologize for any oversight and want to assure you it was unintentional.

Benton Pediatrics, Inc.

# Honors & Distinctions



### Dean Johnson Named President-Elect of ASCPT

Julie A. Johnson, Pharm.D., dean and distinguished professor of the University of Florida College of Pharmacy, is the new president-elect of the American Society for Clinical Pharmacology and Therapeutics. Johnson assumes her new leadership role at the ASCPT 116th annual meeting in New Orleans in March, where she also is a featured speaker.

The first of two featured speakers at the annual meeting, Johnson shares an overview of her current research efforts through her presentation, *Pharmacogenomics: Discovery through Clinical Implementation.* 

The national society, based in Alexandria, Virginia, has more than 2,100 members who work to advance the science and therapeutic practice of human pharmacology for the benefit of patients and society.

During her tenure as president-elect, Johnson — a nationally recognized researcher in pharmacogenomics — will become a member of the ASCPT executive committee and an ex efficio member of other board-designated committees.

"Dr. Johnson has been a member of ASCPT since 1993 and has a strong scientific background that well-positions her to help advance the strategic priorities of the society," said Sharon Swan, chief executive officer for ASCPT.

As a member, Johnson has published many papers in Clinical Pharmacology & Therapeutics, and currently serves as an editorial board member for the journal. She also previously chaired the Scientific Program Committee and the Scientific Awards Committee.

### **Faculty Honors**



**Rhonda Cooper-Dehoff, Pharm.D.**, a professor of pharmacotherapy and translational research was named Fellow of the American College of Clinical Pharmacy Class of 2014.

She has been selected by the American College of Cardiology to receive the 2015 Distinguished Associate Award. Awarded

in March at the ACC Convocation of the College's 64th Annual Scientific Session, Cooper-DeHoff is being recognized as a nonphysician member, for her outstanding contributions to the ACC and the field of cardiology that have taken a team approach to cardiovascular care.



**Hartmut Derendorf, Ph.D.**, a distinguished professor of pharmaceutics, received an honorary membership to the Brazilian Association of Pharmaceutical Sciences at their Annual Meeting Sept. 24, in Buzios, Brazil. The award recognizes his contribution to the Brazilian Pharmaceutical Sciences. Derendorf has trained and hosted more

than 30 graduate students and visiting scientists from Brazil over the last 25 years.



**Carinda Feild, Pharm.D.**, an assistant dean of the UF College of Pharmacy St. Petersburg campus, has been selected as a Fellow of the American College of Critical Care Medicine and receives the honorary title of FCCM at the convocation held in January at the 44th Critical Care Congress in Phoenix, AZ. She was chosen for membership based on her

demonstration of excellence in collaborative practice models of critical care, program development, scholarly activities related to critical care and leadership.



**Dean Julie A. Johnson, Pharm.D.**, a distinguished professor, received an American College of Clinical Pharmacology Honorary Fellowship Award.



**Leslie Hendeles, Pharm.D.**, a professor of pharmacotherapy and translational research, published his findings about alternative asthma treatment for at-risk youths. Published Jan. 2015 in the Annals of Allergy, Asthma & Immunology, Hendeles demonstrated the use

of omalizumab, as a once- or twice-monthly injection, as an alternative treatment for children and young adults with poor adherence to inhaled steroids. His study, *Omalizumab therapy for asthma patients with poor adherence to inhaled corticosteroid therapy*, focused on young patients with asthma who frequently missed doses of their medication required to prevent asthma symptoms and attacks (inhaled steroids). Current methods of trying to change adherence behavior often don't work well, and poor adherence can result in poor outcomes such as needing to go to an emergency department or be hospitalized.



**Lawrence J. Lesko, Ph.D.**, a professor of pharmaceutics and director of the Center for Pharmacometrics and Systems Pharmacology in the UF College of Pharmacy at Lake Nona, received the Distinction in Biomarkers Research Award from the American Association of Pharmaceutical Scientists.



**Charles A. Peloquin, Pharm.D.**, a professor of pharmacotherapy and translational research, received a 2014 University of Florida Research Foundation Professorship. The three-year award supports his research, which is focused on the treatment of patients with serious infections, including tuberculosis, HIV and fungal infections.



**Richard Segal, Ph.D.**, a professor and Dr. Robert and Barbara Crisafi Chair in Pharmaceutical Outcomes and Policy, began 2015 as the first-ever associate dean for faculty affairs. In this new role at the college, Dr. Segal will support faculty in their clinical, teaching, research and

administrative roles. He will facilitate recruitment, retention and promotion practices of faculty members across all departments and faculty lines. He also provides leadership and assistance to the dean in developing, implementing and assessing programs that enhance faculty development, improve promotion and tenure processes and advance diversity in the college.



**Kristin Weitzel, Pharm.D.,** a clinical associate professor of pharmacotherapy and translational research and associate director of the Personalized Medicine Program, received the 2014 American Pharmacist Association, Academy of Pharmacy Practice and Management Distinguished Achievement Award in Service.



Almut Winterstein, Ph.D., a professor and interim chair of pharmaceutical outcomes and policy, has been awarded a four-year contract for just over \$2 million from the Centers for Medicare and Medicaid Services under a subcontract from the Health Services Advisory Group Inc. The new funding will allow

her to continue her work developing and testing eight new performance measures for inpatient psychiatric facilities. The measures will be used in CMS' various quality improvement initiatives, including public performance reporting and pay-forperformance programs. UF Health Shands Hospital will serve as the alpha testing site for measure development.

# Welcome New Faculty







**Childs-Kean** 





Dietrich





**Dupree** 



**Farland** 



Hatton



Huesgen



Jourjy



Khoury

With some assistance provided by UF preeminence funding, the college has added more than 20 new faculty over the last two years. The addition of these faculty will increase research productivity, improve faculty-to-student ratios and create new practice models.

Jane Aldrich, Ph.D. professor, Drug Discovery and Development Preeminence Program

Larisa Cavallari, Pharm.D. associate professor and director of Center for Pharmacogenomics

Lindsey Childs-Kean, Pharm.D. clinical assistant professor (St. Petersburg campus)

Stacy Curtis, B.S., R.Ph. assistant director of Experiential Programs

Eric Dietrich, Pharm.D. clinical assistant professor

Yousong Ding, Ph.D. assistant professor

Lori Dupree, Pharm.D. clinical assistant professor (Jacksonville campus)

Michelle Farland, Pharm.D. clinical associate professor and interim director of the Co-Curriculum

Randy Hatton, Pharm.D. clinical professor

Emily Huesgen, Pharm.D. clinical assistant professor

Jacqueline Jourjy, Pharm.D. clinical assistant professor (Orlando campus)

Adonice Khoury, Pharm.D. clinical assistant professor

# Since Summer 2013









V. Lamba



**McLaughlin** 



Miller



**Murphy-Menezes** 









**Powell** 



**Ratnayake** 



Denise Klinker, Pharm.D., M.B.A.

clinical assistant professor and

Jatinder Lamba, Ph.D.

Preeminence Program

Vishal Lamba, Ph.D.

Jay McLaughlin, Ph.D.

assistant professor

associate professor,

Preeminence Program

director of Experiential Programs

associate professor, Metabolomics

Drug Discovery and Development

Smith





Voils



clinical associate professor and assistant director of the Orlando campus

Megan Murphy-Menezes, Pharm.D. clinical assistant professor and assistant director of **Continuing Education** 

Haesuk Park, Ph.D. assistant professor

Priti Patel, Pharm.D. clinical associate professor and assistant director (St. Petersburg campus)

Jason Powell, Pharm.D. clinical assistant professor

Ranjala Ratnayake, Ph.D. assistant scientist

Steven Smith, Pharm.D., M.P.H. clinical assistant professor

Mirjam Trame, Pharm.D., Ph.D. assistant professor (Lake Nona, Orlando)

Stacy Voils, Pharm.D., M.S. clinical assistant professor

# SOAR 2015

UF College of Pharmacy Student Organization Annual Retreat, or SOAR, Agents of C.H.A.N.G.E., sponsored by Target, was held January. The daylong workshop enhanced leadership skills and fostered communication among student leaders and organizations from our four campuses.



From left standing, students: Bao Lam, Aubrey Kim, Anne Saintil, Kevin Martin, Claire Fraser, Clara-Jessica Rances and Diana Cruz. Sitting: Sponsor Reps from Target.





### Patient Counseling Competition

Kacie Clark, a third-year student pharmacist from the Jacksonville campus, won the 2015 all-campus patient counseling competition. Kacie will be representing UF at the Annual APhA meeting, March 27 in San Diego, to compete for the national title. Kacie is a member of APhA-ASP, FSHP and Kappa Epsilon — Beta Alpha fraternity. She is a Jacksonville campus ambassador and works as an intern for CVS Pharmacy. She graduated from Florida State University with a B.S. in Chemical Science before coming to UF for her pharmacy education.



Juan Hincapie Castillo, Pharm.D.

#### American Association of Hispanics in Higher Education Graduate Student Fellow

Juan Hincapie Castillo, Pharm.D., a graduate student in pharmaceutical outcomes and policy was selected by the American Association of Hispanics in Higher Education as a 2015 Graduate Student Fellow. Created in 2005, he is the second Florida student and first from UF to receive the fellowship.

Hincapie Castillo, who received his Pharm.D. degree in 2013 from the UF College of Pharmacy, is working toward a Ph.D. under mentorship from Almut Winterstein, Ph.D., a professor and interim chair of pharmaceutical outcomes and policy. His concentration is pharmacoepidemiology and his research interests include pain management, substance abuse and medication safety with a focus on controlled substances policy and regulations.

He has held many student leadership roles in the college and in professional associations, including student chapters for the Florida Society of Health System Pharmacists and the International Society of Pharmacoepidemiology. He is also currently serving as the president of the UF College of Pharmacy graduate students and a member of the Alumni Association committee.

The fellowship provides funding to attend the AAHHE Graduate Student Fellows Program at its 2015 national conference, "The Decade Ahead: Inquire, Innovate, Impact" in March 2015, in Dallas. Hincapie Castillo will present his research at the Graduate Research Symposium there, and will provide staffing support for AAHHE activities.

### FPA Emerging Leaders in Pharmacy Practice Conference

University of Florida student pharmacists attended the Florida Pharmacists Association Emerging Leaders in Pharmacy Practice Conference in Orlando on January 10. The one-day conference, accredited by the Accreditation Council for Pharmacy Education, provided a short course for leadership skills of new and aspiring pharmacy leaders. Instructional presentations and team-based projects presented students with practical situations for applying leadership principles. The workshop was designed for new and aspiring pharmacy leaders, managers, directors and clinical pharmacy leaders interested in developing skills to lead people or to advance new services and programs within an organization.



From left: Mario Pedraza, Kemel Zaldivar, Christa Creech, Bao Lam, Brett Fleisher, Kristina Colmenares, Jason Hoffmann, Jennifer Orozco, Ashley Rowand, Stephany Nunez Cruz, Kevin Martin, Alan Luo and Dr. Scott Tomerlin (photo by Bao Lam, Class of 2017 historian).

# 2014 Gator Pharmacy BBQ Reunion

UF Homecoming weekend, October 17-18, 2014, was the perfect time for Gator Pharmacy alumni, faculty and friends to reconnect over an exciting Gator football weekend. More than 400 alumni and friends honored the classes of '64, '69, '74, '79, '84, '89, '94, '99 and '04. The Gator weekend got off to a great start Friday evening at the Dean's Welcome Reception, hosted by Dean Julie Johnson and the Office of Development and Alumni Affairs. Saturday's barbecue tailgate before the game, featured time to visit with Gator mascots Albert and Alberta. There were plenty of fun activities for adults and kids...barbeque plates, Pharm.D. student fundraiser booths, not to mention, face painting and pies-in-face! Did you get caught in our photo booth?

Stephen Reeder was presented with an award for his long-standing leadership as Chairman of the college's Ken Finger Memorial Golf Tournament for 20 years.





### College of Pharmacy Reunion

# **Photo Booth**

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R

Alan ('84) and Paige Beauregard

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Ray (65) and Mary Sue Adams



Deborah (89) and Darryl Johnson



Tom Munyer (71 & 76) and Paul Doering (72 & 75)



Who doesn't love a pie in the face?

#### GATOR IUU The fastest-growing. Gator-led companies in the world.



Benjamin Epstein, Pharm.D.

## Pharmacy Alumnus Ranks 22 Among Gator Business Owners

UF's Gator100 honored the 100 fastest-growing, Gator-owned or Gator-led businesses in the world with an awards luncheon and celebration on Feb. 6. The UF Warrington College of Business Administration Center for Entrepreneurship & Innovation recognized these entrepreneurs, ranking them by rate of growth of their businesses.

Benjamin Epstein, Pharm.D., was ranked #22 among the 2015 inaugural Gator100, for his medical research company, East Coast Institute for Research.

Epstein graduated in 2003 with his Doctor of Pharmacy degree from the University of Florida, where he completed a residency and fellowship. In 2007, he co-founded and served as chief executive officer and medical director of the East Coast Institute for Research, or ECIR, an institute that focuses on the advancement of medical care through clinical research opportunities. ECIR has been recognized by the Jacksonville Business Journal as one of the fastest growing companies in Northeast Florida.

Also serving as president and chief scientific officer of ECIR Medical Communications, Epstein has led lectures nationally and internationally. He has authored numerous articles published in periodicals, including the *New England Journal of Medicine, Drugs, American Family Physician, Current Opinion on Investigational Drugs, Pharmacotherapy* and *Annals of Pharmacotherapy.* He currently serves as co-founder and chief medical officer of Medimix Specialty Pharmacy in Jacksonville. He established the University of Florida Internal Medicine Pharmacotherapy Clinic and previously served as an assistant professor for the UF colleges of Pharmacy and Medicine.

In April, Epstein will also be recognized as the College of Pharmacy's 2015 Outstanding Young Alumnus.



Dean Johnson presents award to Katelyn Dervay, Pharm.D.

## Outstanding Young Alumnae

Katelyn Dervay, Pharm.D., a pharmacotherapy specialist in emergency medicine at Tampa General Hospital, was presented the UF College of Pharmacy's 2014 Outstanding Young Alumnus award at a spring ceremony hosted by the UF Alumni Association. After receiving her Doctor of Pharmacy degree in 2005 from UF, Dervay applied to hospital residency programs. Her postgraduate training included a pharmacy practice residency at UF Health Shands Hospital and an emergency medicine residency at Detroit Receiving Hospital. Dervay, who serves as a member of the college's Pharmacy Alumni Committee, also directs a two-year emergency medicine pharmacy residency program (PGY2) at Tampa General Hospital. She has served on state, local and hospital bioterrorism preparedness teams and has been involved with providing humanitarian relief and disaster management on medical mission trips to Haiti for the past four years. She also works with a local Haitian hospital to develop their pharmacy services and practices.



Marcus on a visit to the college in 2007, met with graduate students in pharmaceutics to discuss the latest trends in drug development.

### MARCUS BREWSTER

Marcus E. Brewster III, Ph.D., a native Floridian who rose to international prominence in pharmaceutical research, passed away unexpectedly in September at his home in Beerse, Belgium. Marcus, 56, was vice president and scientific fellow for the Pharmaceutical Development and Manufacturing Sciences group at Janssen R&D, a division of Johnson and Johnson. After receiving his doctorate in Pharmaceutical Sciences from the University of Florida studying under Nicholas Bodor, Ph.D., Marcus worked and lived in Europe for the past 18 years. He was president-elect of the board of Scientific Advisors of the Controlled Release Society, an international organization with 3,000 members from more than 50 countries whose mission is to improve the quality of life by advancing science, technology and education in the field of controlled delivery of bioactive substance. Marcus was also a Fellow of the American Association of Pharmaceutical Scientists, an editor of the Journal of Pharmaceutical Sciences and numerous other scientific societies. A prolific writer, he published 270 peer-reviewed journal articles, book chapters and proceedings, presented 400 meeting abstracts and was named as inventor or co-inventor on more than 70 patents. He graduated from Samuel W. Wolfson High School in Jacksonville and earned a B.S. in pharmacy at Mercer University in Macon, Georgia, before attending UF.

# In Memory of...

### JARED ALLISON

Jared C. Allison, Pharm.D., graduated from the College of Pharmacy in 2008, following his father, Carl Allison (class of 1976). After earning his doctor of pharmacy degree, Jared worked in his family's business, Baya Pharmacy in Lake City, Florida, and became the pharmacy manager. Growing up, Jared attended Lake City schools and set several school records as a member of the swim team. Known as a "North Florida Renaissance Man," Jared's wide range of interests included literature and writing, Gator sports, hunting and fishing. But, what friends and relatives remember most about Jared was his sense of humor, kind heart, easy smile and open acceptance of others. He was considered a friend to all: a man who

loved and was loved by many. Jared generously



Jared doing what he loved — showing off his catch on a fishing trip with his father, Carl.

left \$25,000 to the UF College of Pharmacy through his estate plans. His parents, Carl and Joan Allison, established the "Jared C. Allison Memorial Fund" in his honor to support Pharm.D. students who are following Jared's path in the pharmacy profession.

#### Friends Remembered

Ira B. Adams, Jr., '50 Jared C. Allison, '08 Miriam A. Alvarez, '78 Dixon F. Armstrong, '51 Billy W. Arrington, '61 William G. Bevis, '47 Marcus Brewster, '82 Richard D. Briggs, '79 Doris B. Carkhuff, '44 Edwin D. Carkhuff, '51 Michael A. Cinotti, '51 Jon D. Couch, '76 Edward P. Cox, '50 Steven M. Cupach, '93 Barry M. Epstein, '67 William W. Fecht, '47 Robert W. Fields, '63 Theron D. Gilmore, '64 James M. Harper, '78 James M. Harvey, '50 John S. Lincoln, '83 Jerry P. Meyer, '61 Hartsell Morrell, '50 David E. Perry, '50 Eric D. Petersen, '95 Brian W. Poetz, '10 Edgar S. Pope, '50 Linda L. Richardson, '81 Eleanor M. Sala, '53 Shirley N. Seckinger, '55 Fernie L. Spires, '72 Kenneth D. Stewart, '58 James L. Templeton, '78 Rose Marie Threatte, '78 Joseph A. Tolle, Jr., '59 John W. Van Hoozer, '53 John C. Weir, '61 Edward P. Winters, '59 Thomas C. Wisler, '63 Phyllis Wright James A. Young, '83 Otto J. Zuhlke, '63



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2015 COLLEGE EVENTS APhA Annual Meeting – Gator Reception March 28 – San Diego, CA

Commencement May 4 – Gainesville, FL

**FPA Annual Meeting – Gator Reception** June 26 – St. Augustine, FL FSHP Annual Meeting – Gator Reception August 7 – Orlando, FL

Homecoming & Alumni BBQ Reunion November 6-7 – Gainesville, FL

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