

GATOR_x

MAGAZINE



Research Focus on Safety & Efficacy:

Natural Products 🌿 Herbal Medicine 🌿 Food/Drug Interaction



In every issue of *Gatorx*, I ask our editor what the theme will be for the current edition. What I am finding is that instead of a "theme" we try to report some of the great things going on in our college. I am so full of wonder at what our faculty is doing in the research lab and the classroom that I find it difficult to adequately communicate to all of you the exciting things that are currently in progress. Please take a moment to review the following list for yourself. Each of these bulletpoints represent current research topics conducted by our faculty:

- Pharmacist involvement for improved patient care in rural health clinics
- Potential therapeutic agents for the treatment of transusional iron overload related to Cooley's anemia
- Therapeutic agents for use as antineoplastic agents
- Public policy related to pain management and drug diversion
- Herbal medicine therapy for pathologies such as depression and anxiety
- The causes of glaucoma and ALS
- Therapy for geriatric memory dysfunction and temporal lobe epilepsy
- The role of genetics in drug interactions
- A nationwide database to help identify causes of resistance to antibiotics in specific institutions
- Enhancing patient safety
- Mechanisms within the brain responsible for feeding behavior and obesity to find therapeutic agents for obesity
- Links between patients' adverse drug events and improper medication use
- Methods to improve the lung selectivity and reduce side effects of inhaled glucocorticoids
- Potential therapeutic genes and treatment for Alzheimer's disease
- The impact of environmental chemicals on the metabolism of drugs
- A genetic approach to the prediction and optimization of drug therapy
- Improving therapy for children with asthma
- Angiotensin converting enzyme inhibitors (ACE inhibitors) and angiotensin receptors
- Physiological adaptations during pregnancy and these effects on major organ systems
- Pathology associated with the central nervous system and Parkinson's disease and the contribution of pesticides, heavy metals and infectious agents to those pathological changes
- Neurological changes in ethanol addiction and prediction of susceptibility to addiction
- Compounds for possible treatment of stroke, traumatic brain injury, depression and drug addiction
- Effects of drugs on patient quality of life and the psychosocial aspects of elderly patients and psychotropic drug use
- Automated systems, personal interviewing approaches and pharmaceutical care models that increase medication adherence, improve health care outcomes and decrease total health care costs
- Transient synthetic modifications of drugs to improve delivery through biological membranes
- Gene therapy for diabetes, cancer and genetic diseases
- Non-viral gene therapy for brain cancer
- Pharmaco-epidemiologic methods to evaluate the effectiveness and safety of medications
- Cardiovascular disease and drug treatment

Collectively, this talented group of teacher/scholars generated more than \$8 million in grants and contracts last year and is ahead of that productivity this year. Our faculty has improved the level of productivity that allowed our college to move from up from No. 13 to No. 7 ranking among U.S. schools and colleges of pharmacy in individual grants per FTE research faculty. At the same time, these teacher/scholars have almost doubled the enrollment in the College of Pharmacy through the use of distance education and additional instructional innovations.

What I have been observing over the last few years is the development of a college faculty that will truly revolutionize pharmaceutical research and teaching over the coming decades. Sure, the players may change, but there is culture of success growing among our faculty which will be automatically observed and absorbed by those who wish to join us over the coming years. I hope you will join me in recognizing a wonderfully dedicated and talented group of teacher/scholars known as the University of Florida College of Pharmacy.

William H. Riffie, Ph.D.
Associate Provost for Distance,
Executive & Continuing Education
Dean, College of Pharmacy

GATORx

MAGAZINE

GATORx Magazine is produced by the University of Florida College of Pharmacy for its alumni, faculty and friends

FACULTY

Dean and Associate Provost of Distance Education
William H. Riffie, Ph.D.

Executive Associate Dean
William J. Millard, Ph.D.

Associate Dean for Professional Affairs
Michael W. McKenzie, Ph.D.

Assistant Dean for Distance, Continuing and Executive Education
Sven A. Normann, Pharm.D.

Assistant Dean for Administration and Financial Affairs
Michael Brodeur

Associate Dean for Curriculum
L. Douglas Ried, Ph.D.

DEVELOPMENT & ALUMNI AFFAIRS
Kelly Markey, Director
Megan Bailey, Asst. Director

EDITOR
Director of Public Relations,
Editor GATORx Magazine
Linda Homewood, APR

CONTRIBUTORS

Design
JS Design Studio

Editing
Lisa Sperry
Jessica Orr

Writers
Linda Homewood
Lisa Sperry

Photography
Jeff Knee
Linda Homewood



contents

spring/summer 2004



LINDA HOMEWOOD

4. features
college news

10. research & innovation
trends in pharmacy

14. blackboard notes
faculty news, honors & awards

20. making the grade
spotlight on students

26. roll call
alumni & development news

ON THE COVER:

Profiling College of Pharmacy educators who are leading research efforts in herbal medicine and drug interactions. Read about them in *Features*.

College of Pharmacy takes international approach in reviving the study of herbal medicine

By Lisa Sperry



LINDA HONEWOOD

Veronika Butterweck, Ph.D.

Herbal supplements have become more and more popular as Americans look for natural alternatives to replace or complement conventional medicines or treatment methods.

Americans spent \$4.13 billion on herbal supplement sales in 2000, according to Nutrition Business Journal. Some of the most popular herbal supplements, including ginkgo biloba, St. John's wort and echinacea, are purchased as alleged remedies for central nervous system disorders or as immune system boosters. Herbal medicinal products have been reported useful in alleviating almost any health problem, including diseases of the respiratory tract; disorders of the stomach, bowel, liver and bile; dermatologic conditions; urinary tract disorders; inflammatory conditions; and cardiovascular disorders.

Currently manufacturers and distributors do not need Food and Drug Administration approval to sell dietary supplements, including vitamins, minerals, and herbs or other botanicals, but are responsible for determining their safety. Still, medical studies have reported certain herbal supplements, including St. John's wort, often used as a natural antidepressant, may interact with prescription drugs, rendering them ineffective.

"The emergence of interactions between St. John's wort and certain prescription medicines has necessitated regulatory action worldwide and has highlighted the need for health-care professionals to have up-to-date scientific information on the quality, safety and efficacy of these products," said Veronika Butterweck, Ph.D., assistant professor of natural products at the University of Florida College of Pharmacy.

The DeSantis Term Professorship in Natural Products was established in 2002 through a \$1.5 million gift by 1982 alumna Debbie DeSantis and her mother, Sylvia DeSantis. Debbie is the daughter of the founders of Rexall Sundown, a major manufacturer of herbal supplements.

While Debbie was a student, a professor named Koppaka V. Rao, Ph.D., of the department of medicinal chemistry, taught pharmacognosy—the study of herbal medicines—at the College of Pharmacy. Known for his knowledge of medicinal plants and folk medicine, Rao shared his knowledge with students until his death in 1998.

Recognizing the void Rao's death left and that the gradual loss of pharmacognosy in U.S. pharmacy schools may close the door on the knowledge and potential benefits of medicinal plants, Debbie and her mother made the gift to establish the faculty position in the department of pharmaceuticals, to focus on the biopharmaceutics, pharmacokinetics and pharmacodynamics of natural products.

"I always regarded my natural products class as one of the most interesting, informative, and practical classes I had experienced during my pharmacy education. I also found that the majority of pharmacists who had not been exposed to such a class were very interested in the material," Debbie added.

The college began an extensive search for a professor with experience in teaching about herbal medicines. It became evident that this was not a field of expertise easily found in the United States.



St. John's wort



Ginkgo Biloba



Gundelia Tournefortii



LISA BALTOZER

Grad student Sasiporn Sarawek

"Through our collaboration with European universities, we were very successful in recruiting a highly qualified educator and researcher in herbal medicine," said Hartmut Derendorf, chairman of the pharmaceuticals department.

Butterweck came to UF in September 2003 from the Institute of Pharmacology and Toxicology at the Westfälische Wilhelms-Universität, Munster, Germany, where pharmacognosy is part of the curriculum. She became interested in the field as a pharmacy student at the same university.

Now, drawing on Butterweck's expertise, the College of Pharmacy offers a course called Herbal Medicines for students interested in learning about natural supplements. The course introduces students to aspects related to safety, quality and efficacy of herbal medicinal products, including techniques for ensuring quality control, batch-to-batch consistency, specification concepts and relevant international guidelines. Considering the distinctive characteristics of herbal medicinal products, the course will address problems in the evaluation of efficacy in pharmacological and clinical studies.

College of Pharmacy Dean William Riffe, Ph.D., sees pharmacists as having a vital role in recognizing drug interactions and advising patients about the herbal remedies they may be taking but not reporting to their doctors.

"Americans spend billions of dollars a year on natural products. It's imperative that pharmacists have adequate knowledge in this area," Riffe said.

With the college's support, Butterweck is studying herbal medicines with central nervous system activity. She is focusing on the investigation of plants with antidepressant or anxiety-relieving activity, phytomedicines for the treatment of restlessness and sleep disturbances, and herbal remedies for the prevention of alcohol dependency. She also studies the pharmacokinetics of herbal medicinal products, or how the body absorbs, distributes, metabolizes and excretes these products, which provides valuable information on potential drug-herb interactions, aiding practitioners in prescribing herbs safely and effectively.

Butterweck cites the high degree of trust that the majority of consumers have in herbal medicines as one of the advantages of botanicals.

"Furthermore, when compared with conventional drugs, herbal medicines have fewer side effects, leading to a better compliance of patients," Butterweck said. "The use of herbal medicines can be recommended for the treatment of mild to moderate disorders; for this indication, herbal medicines might be superior compared to synthetic drugs."

Debbie is delighted to see this specialty return to the College of Pharmacy.

"This was certainly an area worth reviving," Debbie added, "Dr. Butterweck's expertise is a valuable addition to the reintroduction of the study of herbal medicine."



"...when compared with conventional drugs, herbal medicines have fewer side effects, leading to a better compliance of patients. The use of herbal medicines can be recommended for the treatment of mild to moderate disorders; for this indication, herbal medicines might be superior compared to synthetic drugs."

— Veronika Butterweck, Ph.D.

College of Pharmacy teams with Tufts University to advance studies of food-drug interactions

By Lisa Sperry/Linda Homewood

A new University of Florida research center is investigating how foods and drugs interact to prevent potentially harmful side effects and improve patient outcomes.

The Center for Food-Drug Interaction Research and Education, established by UF College of Pharmacy and the Tufts University School of Medicine, brings together researchers in pharmacy, medicine and food science to investigate known food-drug interactions and anticipate new ones.

Common use of prescription drugs combined with daily consumption of over-the-counter medications, herbal supplements, foods and alcohol makes this an important area of research for patients and their doctors.

Center researchers first will focus on the "grapefruit juice effect," a phenomenon that has gained widespread media attention since its discovery in 1989. Scientists have learned that grapefruit juice interferes with the body's ability to breakdown certain drugs, increasing drug absorption.

"There is an immediate need for further research to identify exactly which drugs are affected by grapefruit juice and which ones aren't so that drug substitutions can be recommended," said center founder Hartmut Derendorf, Ph.D., a distinguished professor and chairman of the UF department of pharmaceuticals. Derendorf directs the center with David Greenblatt, M.D., a professor and

chairman of the department of pharmacology and experimental therapeutics at Tufts.

After seeing a 25 percent decrease in national sales of grapefruit products, the Florida citrus industry turned to research to answer consumer concerns. The U.S. Department of Agriculture provided a renewable grant of \$232,000 to open the center last fall.

Steve Talcott, Ph.D., an assistant professor at the UF College of Agricultural and Life Sciences, joined the center because of his research in phytochemicals — the compounds responsible for food interactions.

Established community outreach services and public awareness programs through his college's Institute of Food and Agricultural Sciences also makes this collaboration a perfect fit, Talcott said.

With additional support from the federal Food and Drug Administration and the Florida Department of Citrus, Derendorf and others are working to develop a research strategy that considers both the welfare of the public and the grapefruit industry.

"Without up-to-date research providing factual information, patients sometimes feel that they should avoid



Food-Drug Interaction Center director Hartmut Derendorf, Ph.D. and co-director Veronika Butterweck, Ph.D.

drinking grapefruit juice to be safe," Derendorf said. "This is not always the best solution since the juice contributes valuable health benefits."

Sharing its findings with the public and health-care community is one of the center's main missions. Researchers will provide specific guidelines and dosing recommendations, and educate the public about the risks and potential significance of food-drug interactions.

Plans include disseminating balanced and objective information through the center's Web site (www.cop.ufl.edu/safezone/pat/citrus/); organizing scientific symposia on food-drug interactions at national meetings of physicians, pharmacists and nurse-practitioners; maintaining a speaker's bureau available for lectures and presentations to professional groups and consumers; and providing scientific consultation with professionals working with public media outlets.

Research and educational efforts will expand to other food products and to complementary and alternative medicines, which have become increasingly popular in recent years.

"Many studies have begun to identify prescription drug interactions with natural products such as St. John's wort," said Veronika Butterweck, Ph.D., center co-director. "We want to ensure the safety and effectiveness of natural products since interactions can result in unwanted side effects, toxic responses or treatment failure."

Research groups are being established at UF and Tufts, with research and educational activities monitored by the center's Medical Scientific Oversight Committee. This committee has already had a meeting with the FDA to get input on regulatory concerns related to food and drug interactions.

"We have been involved in education and research at the University of Florida for 80 years," said William Riffie, Ph.D., dean of UF College of Pharmacy. "Now, working with researchers from several disciplines, we have an opportunity to extend our college's service beyond our own campus to share research and to educate pharmaceutical consumers worldwide."



LISA BALTOZER

Graduate students (front to back) Immo Zdrojewski, Stefan Galler and Whocely Victor de Castro

Study shows St. John's wort may compromise cancer drug's ability to prevent relapse

By Linda Homewood

St. John's wort, an herb thought to be a safe, natural remedy for mild depression, may interfere with a powerful cancer-fighting drug's ability to prevent relapse in leukemia patients, Reginald F. Frye, Ph.D., associate director for the UF Center of Pharmacogenomics reported March 27 at the annual meeting of the American Society for Clinical Pharmacology and Therapeutics.

Researchers who studied healthy volunteers to determine whether the herbal preparation interacts with the prescription drug imatinib mesylate, known by the trade name Gleevec, found that taking the two together caused the amount of Gleevec in the blood to drop nearly 30 percent.

Because it targets only cancerous cells, Gleevec has been called a "magic bullet" drug that fights aggressive cancers such as chronic myelogenous leukemia, researchers say. Leukemia patients who go into remission must continue to take daily oral doses of the medicine to prevent a recurrence.

"A 30 percent decrease in the level of Gleevec is significant to cancer patients," said Frye. "It is the same as lowering the dose — which is enough to allow for a relapse in the cancer growth."

Frye began the study while he was still working at the University of Pittsburgh Schools of Pharmacy and Medicine, prior to arriving at UF's College of Pharmacy in 2003.

Patients should be aware that any product they take, whether herbal, nonprescription or prescription, has the potential to alter how their body handles other drugs they are taking, said study collaborator Merrill J. Egorin, M.D., co-director of the Molecular Therapeutics and Drug Discovery Program at the University of Pittsburgh Cancer Institute.

"The interactions of herbal preparations and even certain foods can be an important factor in how well a patient may absorb or metabolize certain drugs, and those differences can have important clinical consequences," Egorin said.

Clinical trials performed on St. John's wort in the United States show that while it doesn't appear useful for major depression, it may help treat mild depression, Frye said.

The first indication that St. John's wort interacts with other medications came after physicians noted drugs designed to prevent organ rejection weren't as effective in transplant patients who were taking the herbal supplement, he added. A few years ago, the U.S. Food and Drug Administration issued a public health advisory after federal research showed St. John's wort interferes with medicines used to treat

patients with HIV. Those findings raised concerns that the herb also might interact with drugs taken by patients with heart disease, depression or seizures.

The National Nutritional Foods Association reported in 2000 that more than 242 million Americans used some form of dietary supplement, vitamins, minerals, herbal remedies or specialty products. Although St. John's wort is available over-the-counter at most national drug stores, little is known about how it may interact with prescription medications. Herbal products aren't evaluated or regulated by the FDA, and don't normally go through the interaction studies required of marketed prescription drugs.

"The emergence of studies such as this shows the need for health-care professionals to have current scientific information on the safety and efficacy of natural supplements," said Veronika Butterweck, Ph.D., assistant professor of natural products at UF College of Pharmacy.

For the current study, researchers focused on 12 healthy, nonsmoking volunteers, six men and six women, who took one 400-milligram dose of imatinib mesylate. Researchers then took a series of blood samples over a 72-hour period to see how much of the drug had been metabolized. For two weeks after the blood tests, study participants took 300 milligrams of St. John's wort three times each day. On the 15th day, they again were given one dose of imatinib mesylate, and the blood tests were repeated to measure drug levels.

Frye noted a marked decrease of imatinib mesylate in the subjects' bloodstreams after they took the St. John's wort regimen, indicating the herbal product caused the body to metabolize the medicine at a faster rate, weakening its effectiveness.

"Often, patients don't think of herbal supplements as being a drug, and when their doctor asks what other medications they are taking, they may not report taking herbal products like St. John's wort," Frye said.



"Often, patients don't think of herbal supplements as being a drug, and when their doctor asks what other medications they are taking, they may not report taking herbal products like St. John's wort," Frye said.



College honors three leaders in pharmacy

The College of Pharmacy presented distinguished pharmacy awards in May's commencement ceremonies to two college alumni and a nonalumnus for their significant contributions to the pharmacy profession.

Distinguished Pharmacy Alumnus Award

V. Ravi Chandran, Ph.D., who is now researching and developing several innovative drugs with Signature Pharmaceuticals, received the Distinguished Pharmacy Alumnus Award for his work in drug development and strong support of the college.

Chandran earned a Ph.D. in pharmaceutical sciences from the UF College of Pharmacy in 1986 and in 1999 established the V. Ravi Chandran Professorship Chair for drug design and targeting in the UF College of Pharmacy.

Chandran received his bachelor's and master's degrees in pharmacy from Jadavpur University in Kolkata, India before attending UF. He has since supported pharmaceutical education by giving an endowment to establish the V. Ravi Chandran Center for Pharmaceutical Sciences and the V. Ravi Chandran Endowment Fund to promote graduate research and student scholarship in the College of Pharmacy at Jadavpur University.

He began his career as a senior research scientist with Sterling Drug Company and has served as president and chief executive officer for both Signature Pharmaceuticals, Inc. and American Generics, Inc., both located in Bolton Landing, N.Y.

Distinguished Pharmacy Alumnus Service Award

This year's Distinguished Pharmacy Alumnus Service Award was presented to **Michael MacLeay**, who previously served as president of the College of Pharmacy Alumni Association for two years, helped to develop a fund to build a new UF pharmacy building and assisted with the college homecoming reunion.

He is recognized for his work with the alumni association and for playing a major role in developing the UF pharmacy distance education campus in Orlando. MacLeay graduated with a bachelor's degree in pharmacy from the UF College of Pharmacy in 1976, and he and his wife, Robin, are lifetime members of the UF Alumni Association, members of Gator Boosters and longtime supporters of the College of Pharmacy.

MacLeay began his career as a staff pharmacist at Florida Hospital Orlando, and in 1979 he opened Douglas Square Pharmacy in Longwood, Fla. He later started Nutritional Support, Inc., one of the first home infusion pharmacies in Florida, in 1980. He served as the vice president of new business for Healthdyne, Inc. in 1987, started Parenteral Therapy Associates, Inc. in 1989 and founded and served as president of ProHealth Medical, Inc. in 1990.

Distinguished Pharmacy Service Award

The Distinguished Pharmacy Service Award was presented to **Thomas D. Keith, Pharm.D.**, the operations administrator for oncology and director of the department of pharmacy for the Mayo Clinic at St. Luke's Hospital in Jacksonville.

He received the award for his significant leadership in hospital administration and hospital pharmacy practice in his career, his active interest in pharmacy education and for his contributions to the pharmacy profession.

Keith received bachelor's and master's degrees from the School of Pharmacy at the University of Mississippi and continued his education at the Philadelphia College of Pharmacy and Sciences, where he received his doctor of pharmacy degree.

He has held several leadership positions in hospital practice and hospital administration in the Southeast, including serving as the executive vice president and chief operating officer for Shands Jacksonville Medical Center, which he helped turn into a world-class pharmacy.



V. R. Chandran



M. MacLeay



T. D. Keith

LINDA HOMEWOOD



Do You Have the Entrepreneurial Spirit?

If you are an independent pharmacist seeking succession/exit strategy for business, or a pharmacist looking to transition to independent pharmacy ownership – you will want to attend this weekend workshop, August 27-29, at UF College of Pharmacy.


Practical information:

- Business plans
- Selling your business
- Wealth succession & estate planning
- Managing for growth equity
- Retirement Planning

Our expert speakers will present case studies, lead discussion groups and facilitate networking opportunities. This productive learning environment with colleagues, who share your goals, will empower you to start making career plans.

One inclusive fee of \$395 includes two nights hotel, and all weekend meals and activities. Transportation is also provided to and from UF campus. Registration is limited to 75 participants.

The course has been approved for 11 contact hours (1.1 CEU). UPN: 012-000-04-119-L04

 The University of Florida College of Pharmacy is accredited by the Accreditation Council on Pharmacy Education as a provider of continuing pharmacy education.

For more information contact:

UF College of Pharmacy Development Office
(352) 265-8034, e-mail Kelly Markey:
markey@cop.ufl.edu, or visit our Web site:

www.doce-conferences.ufl.edu/ipe



JEFF KNEE

(l-r) UF President Bernard Machen, Ph.D., Dean William Riffe, Ph.D., Advisory Board Chairman Stephen Reeder, R.Ph., and Vice President for Health Affairs Douglas Barrett, M.D.

College growth & new beginnings

In fall 2003, the College of Pharmacy had the largest entering class of pharmacy students in the United States. At that time, the college's three distance learning campuses completed their first academic year. With 935 applicants, the college admitted a total of 306



JEFF KNEE

UF President Machen speaks at the College of Pharmacy's spring National Advisory Board meeting.

new students at four campus locations: Gainesville (147), Jacksonville (48), Orlando (52) and St. Petersburg (59).

This year, more than 2,400 applications were received through a centralized application service (PharmCAS) for 300 openings for fall 2004,

of which 1,854 were referred to the college for review and consideration. Fifty-five percent of these applications were from Florida residents and were given priority for admission consideration. Nonresident applications with superlative academic and personal credentials were also reviewed. The strength of the applicant pool insures the continuity of a high-quality group of

new pharmacy students for the 2004 entering pharmacy class.

New developments are now underway at UF as well. The UF Board of Trustees unanimously elected James Bernard Machen, Ph.D., as the university's 11th president. Machen, who previously served as president of the University of Utah, assumed his new position January of this year.

President Machen addressed pharmacy leaders and educators at the college's spring National Advisory Board meeting. His message focused on the importance of the role of advisory boards to professional schools like the College of Pharmacy.

"Professional schools must be grounded in terms of what's going on in the world, and advisory groups are one of the best connectors between the academic world and what I call, the real world," Machen said.

Machen also presented his belief that colleges within the university system should be allowed a degree of independence to chart their own course.

"The whole idea of the administration is to help the faculty through the college to do the things that they do best, which is teaching and research," Machen said.

Pharmobility

pharmacy students travel abroad

By Lisa Sperry

An exchange program linking U.S. and European universities enables pharmacy students to see firsthand how pharmacy programs vary from country to country. The Transatlantic Mobility of Pharmacy Students program gives students the opportunity to travel abroad and learn how pharmacy practice varies in different cultural and political systems. Supported by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education, or FIPSE, the program links schools in the United States and Europe, creating a global classroom.

The program began in 2000, when Chris Cullander, Ph.D., of the University of California at San Francisco, obtained the FIPSE grant totaling more than \$200,000. The University of Florida College of Pharmacy was one of four schools included in the original proposal and has been a program partner since its inception. L. Douglas Ried, Ph.D., an associate professor of pharmacy health care administration, is the UF coordinator.

The College of Pharmacy hosted six European students and sent five students to France, Spain and the United Kingdom in 2003. Students traveling to UF send



Patricia Saunders in Barcelona, Spain

Ried a "wish list" of what they would like to incorporate into their learning experience, and he tries to accommodate them.

While at UF, the European students worked in a variety of settings in the UF Health Science Center and the community, including

the Shands at the University of Florida Drug Information and Pharmacy Resource Center, a regional drug information center serving health-care professionals (mentored by center co-directors Paul Doering, M.S., and Randy Hatton, Pharm.D.); Tacachale, a residential facility for children and developmentally disabled adults in Gainesville (Tom Munyer, R.Ph., and Mark Heller, R.Ph.); the College of Pharmacy Asthma Lab (Leslie Hendeles, Pharm.D.); research laboratories in the departments of pharmacodynamics and pharmaceuticals (Maureen Keller-Wood, Ph.D., and Guenther Hochhaus, Ph.D.); the UF Shands Eastside Community Practice (Kristin Weitzel, Pharm.D.); and Eckerd Pharmacy (Timothy-John Grainger-Rousseau, Ph.D., R.Ph.).

Ried meets annually with preceptors from host countries to assure experiences will meet UF requirements. Before traveling to international institutions, UF students must be fluent in the language of the country they will visit.

"As the program matures, we will be working toward allowing the students to acquire their community pharmacy clerkship in the host country, as well as one of their elective clerkships," Ried said.



Heather and Matt Huentelman in Bath, England

"Students are officially students at UF and pay tuition and fees."

Conceicao Ferreira, who was a pharmacy student at the University of Lisbon, Portugal, traveled to UF in June 2003, shortly after completing her pharmacy coursework there.

"The time spent in University of Florida was absolutely unforgettable," Ferreira said. "At the same time that I had the opportunity to work and learn with excellent people and improve my English skills, I also had the most amazing personal experience of my life."

During her visit, Ferreira observed and participated in various clinical pharmacy-related activities. She first stayed in Tacachale, helping review patient's drug regimens and attending seizure and psychological clinical meetings.

The second part of Ferreira's program was based at Shands at UF, primarily in the Drug Information and Pharmacy Resource Center. There, she helped answer patient-specific questions received by the center. She also participated alongside UF Pharm.D. students in all aspects of their drug information clerkship instruction, presenting an article in the journal club and taking part in weekly quality-assurance meetings.

Ferreira, now considering returning to UF for a doctoral degree in pharmacy, had the opportunity to visit cities throughout Florida (including St. Augustine, Ocala, Orlando, Tampa, St. Petersburg, and Miami), the John F. Kennedy Space Center at Cape Canaveral and theme parks during her three-month stay.



Conceicao Ferreira (front) at work with recent Pharm.D. grad, Erin Collins (back) at the UF Drug Information and Pharmacy Resource Center

"The students also benefit by participating in and experiencing cultures that are very different from our own," Ried said. "Americans are sometimes very ethnocentric, and it is helpful for the students to see practices in other countries that are different and possibly better than in the United States.

"On the other hand, when one sees things in other countries, it also makes them appreciate the good things about home, as well," Ried added. "Hopefully, it makes them more aware and sensitive practitioners."

Although funding for the program ends this year, Ried hopes to see it continue.

"We are trying to find alternative sources of funding for students to continue the program to try to offset a portion of the students' expenses," Ried said. "Whether we are successful in developing alternative funding or not, we will continue the program. If we are unsuccessful, students will have to pay for the whole program — travel, food and housing — out-of-pocket."

The program is open to all UF pharmacy students. For more information, e-mail Ried at ried@cop.ufl.edu or visit www.pharmobility.org.

We would like to extend a special thank you to our students for their photo contributions.



(l-r) Sherry Gresser and Heather Myers Huentelman in London

Nathalie Merle visits a pharmacy in Paris.

Asthma assessment service

College of Pharmacy partners with Walgreens

By Linda Homewood

As part of his UF College of Pharmacy residency training in patient care, Michael Ward, Pharm.D., has implemented a new asthma assessment service for Walgreens to add to its patient health screenings at its Gainesville drugstore on East University Avenue and Waldo Road.

A community pharmacy practice resident at Walgreens working under UF faculty advisers Kristin Weitzel, Pharm.D., and Brad Van Riper, Pharm.D., Ward said he wants to educate asthma patients on how they can get the best results while following their doctor's prescribed plan. Ward has been trained in the use of spirometry — a breathing test that measures lung function, which was previously available only in hospitals or in a pulmonologist's office. Walgreens is the first to offer the test in a community pharmacy, Ward said.

By participating in the free service, patients can learn why particular medications are used to treat asthma, how they work and how to improve their asthma condition. In private counseling sessions, Ward teaches patients how to avoid asthma triggers and demonstrates proper inhaler techniques. All visits are documented and with patients' consent their physicians are notified.

"Because it is easy for a patient to access a walk-in clinic at their local drugstore, pharmacists are in a position to aid physicians in treating asthma patients," Ward said. "By helping the patient to better understand asthma control, pharmacists also help the doctor achieve a better success rate in asthma therapy."

The Walgreens Patient Care Center, established in 1998 in collaboration with the UF College of Pharmacy, offers screenings for hypertension, cholesterol, osteoporosis and diabetes in addition to the new asthma service.



LINDA HOMEWOOD
Michael Ward, Pharm.D., demonstrates a spirometry tool.

You've invented a new drug that will improve people's lives dramatically, if only you can get it into their hands. What's the fastest way to take your discovery from lab to market? If you said, 'Share my research results publicly where other researchers and drug manufacturers can freely access the information,' you may be preventing your groundbreaking research from ever benefiting anyone.



From bench top to marketplace – a researcher's guide to drug discovery

By Andrea Huisden

Pharmaceutical companies will not touch a technology – no matter how incredible – unless they are fairly confident their roughly \$800k development investment will ultimately be profitable. No drug will be profitable if the company can't protect its interests in it – and the only way to do that is through the patent process. If a drug company finds enabling information about your new pharmaceutical in the public domain, unprotected, there's no way that company can protect its interest either. So the best route from your UF lab to drug store shelves where people can actually access your discovery is through the Office of Technology Licensing (OTL).

Just ask Raymond Bergeron, Ph.D., graduate research professor, eminent scholar and Duckworth professor of drug development at UF College of Pharmacy. He worked for decades to better understand the role of iron metabolism and polyamine metabolism in disease processes. This work led to the discovery of a number of new therapeutics. Two of the drugs are now in clinical trials; one for liver cancer and one for the treatment of iron overload disease in children.

Initially licensed by SunPharm Corp, Bergeron's technology then passed through the necessary preclinical and early clinical trials. SunPharm was later acquired by Geltex Pharmaceuticals, then by Genzyme Corporation, which is now handling the manufacture and ongoing clinical trials of Bergeron's drugs. This is the last step before putting it in consumers' hands.

But in order to get to the licensing stage, Bergeron went through the Office of Technology Licensing. OTL works with UF researchers to patent their work, a prerequisite for such work to be licensed by a pharmaceutical company. Licensing involves the protected transfer of intellectual property, and it's the only way pharma companies will accept university innovations.

Researchers like Bergeron have shown that it is possible to share their discoveries with the scientific community and to bring them to the marketplace as well. He is responsible for 168 patent filings, 77 of which have issued. He has also generated nearly 200 publications and several books. Almost all of the patent filings were paid for by the corporate sector.



Raymond Bergeron, Ph.D.

Knowledgeable about the complex patent process, OTL negotiates licensing agreements like the one between Bergeron and SunPharm. They assist researchers and technology experts through the business process, which can be difficult to navigate.

One of the larger university licensing offices in the country, UF's Office of Technology and Licensing consistently ranks in the top 10 of license revenue generation. Inventors keep between 25 to 40 percent of net income from a technology license as personal income, with the remainder divided between the inventor's department, college and other UF programs to fund additional research. Income from licenses has no strings attached and can be used for pioneering research that might otherwise be difficult to fund.

Licensing agreements can also lead to close relationships between researchers and corporations that yield research sponsorship or outright gifts and grants for basic research, as well as job offers for UF graduates.

"We view our customers as potential long-term partners," said Jane Muir, OTL's associate director. "Our relationship with them does not end when the licensing agreement is signed – we continue to work alongside these companies to ensure their success with our technology."

There are four basic steps in the OTL process:

1. First, you must recognize that you've conceived of or developed something unusual, unexpected, unobvious and usable.
2. Write a brief description of the discovery on OTL's Confidential Invention Disclosure form (a streamlined version is available online at www.otl.ufl.edu).
3. OTL's licensing team evaluates the discovery and researches its patentability and marketability. This process often involves discussions with the researcher to make an informed decision on whether patent protection is appropriate.
4. Filing the patent: OTL facilitates the process with patent lawyers to determine the breadth of claims. The licensing team also works with inventors to identify corporations that might make good licensing partners. They look for companies that can provide resources and expertise necessary to take the discovery through further development and through approval processes of multiple agencies.

UF researchers propel FDA decision to regulate pancreatic enzymes

By Linda Homewood

Leslie Hendeles, Pharm.D., a professor in the colleges of Pharmacy and Medicine, calls the recent decision by the Food and Drug Administration to regulate pancreatic enzyme replacements "a huge step in the protection of patients with cystic fibrosis."

Hendeles, also a clinical pharmacist in the Pediatric Pulmonary Clinic at Shands at UF medical center, has spent more than 10 years documenting the health risks faced by cystic fibrosis patients who take unregulated generic enzyme products. Pancreatic enzymes were available before the 1938 Federal Food, Drug and Cosmetic Act and thus were "grandfathered" in — escaping regulation, Hendeles said.



Leslie Hendeles, Pharm.D.,
professor of pharmacy
and pediatrics

FDA reviews dating back to 1989 concurred that some enzyme products did not provide consistent doses or release of the enzymes, which could result in treatment failure in patients with pancreatic diseases, such as cystic fibrosis.

According to the Cystic Fibrosis Foundation, cystic fibrosis is a genetic disease that affects nearly 30,000 people in the United States. In addition to causing changes in the lungs that lead to chronic infection, the defective gene that causes cystic fibrosis also impairs digestion, rendering 90 percent of patients dependent on pancreatic enzyme replacement. Under the new ruling, unless a manufacturer voluntarily withdraws its product, it will continue to be available to patients for four years.

Hendeles, a consultant to the FDA's pulmonary division, said there were 30 to 40 cases of treatment failure reported by doctors last year to the Cystic Fibrosis Foundation.

A long-time activist who has sought FDA regulation of enzyme replacements for years, Hendeles first reported treatment failures in three UF patients in 1990. Subsequently, he conducted research with Guenther Hochhaus, Ph.D., a professor of pharmaceutics at UF College of Pharmacy, to analyze all enzyme products on the market. Published in 1994, their research showed important differences among products and urged pharmacists not to substitute one for another. Although these products are available on the market, many have never been tested in humans, Hendeles said.

FDA officials said manufacturers of pancreatic enzyme replacements have been notified their products must be approved by the agency within the next four years in order to remain available to patients. This means product efficacy and safety must be proven in patients with CF.

"It will still be several years before the FDA weeds out the unreliable products," Hendeles said. "Meanwhile, it will be absolutely necessary that pharmacists do not substitute generic products without discussion with the prescribing physician."

UF Web site spotlights Paul Doering

If you visited the University of Florida Web site this spring, you may have seen College of Pharmacy Professor Paul Doering who was featured on the home page spotlight (www.ufl.edu).

An expert on many drug issues in the news, Distinguished Service Professor Paul Doering can't afford to be camera shy.

Because when people need bottom-line drug information, Doering is a bedrock source of reliable information — a public resource.

For example, when ABC News reporter Jamie Floyd recently prepared a report on diet supplements for the "20/20" program, she needed an expert. She called Doering, who co-directs the UF Drug Information and Pharmacy Resource Center.

But members of the news media are not the only ones who seek Doering's expertise. He recently testified about national trends in prescription drugs at a federal House of Representatives subcommittee hearing aimed at developing strategies to prevent prescription drug abuse.

An educator who understands how pharmacists' roles have changed in the past 30 years, Doering hopes to shape his students into patient-centered, pharmacy practitioners. Known for his honest and direct approach to issues of drug use and abuse, he sees education as something that should be shared outside the classroom.

"As a pharmacist, I am in position to give people the plain facts so that they can make informed choices about any kind of drug use," Doering said.

"Cystic fibrosis is a genetic disease that affects nearly 30,000 people in the United States."

— Cystic Fibrosis Foundation



JEFF KNEE

College of Pharmacy researchers working with the UF McKnight Brain Institute, (from left) Dr. Katalin Prokai-Tatrai, Dr. Laszlo Prokai and Dr. Alevtina Zharikova, are hopeful that new insight into how estrogen works could lead to better treatments for stroke patients.

Pharmacy researcher unravels estrogen's antioxidant mechanism

by John Pastor

New insight into how estrogen works may lead to better treatments for stroke patients, say researchers associated with the University of Florida's Evelyn F. and William L. McKnight Brain Institute.

The hormone estrogen is commonly accepted as an antioxidant that can minimize brain damage from stroke, but it's not widely used therapeutically because of potential side effects, including uterine cancer and breast cancer in women, and feminizing effects in men.

Now, Laszlo Prokai, Ph.D., a professor of medicinal chemistry at UF's College of Pharmacy has solved the mystery of how the body naturally regenerates estrogen after a stroke, implicating a compound that he believes may also provide estrogen's benefits without its risks.

Researchers at UF and the University of North Texas Health Science Center collaborated to make the discovery, which was reported in the Proceedings of the National Academy of Sciences. More investigation is required, but the findings may lead to therapies for post-menopausal women who no longer benefit from estrogen's neuroprotective qualities, as well as for men who are at risk for stroke.

"During a stroke, free radicals damage important cells in the body, most notably, nerve cells," said Prokai. "That's where much of the debilitating effect of the stroke comes

from, not from the primary incident — the clogging of the arteries and the shortage of blood — but after the surgeon opens an artery, for example, and the blood starts flowing through the previously blocked territory. Then the reactive oxygen species (free radicals) just start going rampant."

Free radicals are unbalanced molecules that have lost an electron and try to stabilize themselves by stealing an electron from a nearby molecule, which creates a jumble of high energy particles that ricochet wildly and damage cells. In the case of stroke, the hydroxyl radical — a chemical compound consisting of one atom of hydrogen and one of oxygen — does a large part of the damage.

Estrogen comes to the rescue by capturing the hydroxyl radical.

"In layman's terms, a spill occurs when the blood starts flowing into the blocked territory, and the overflow hydroxyl radical is the spill," Prokai said. "The estrogen is the mop, soak-

ing up the hydroxyl radicals before they do damage. But when the mop is saturated, you have to squeeze it to continue mopping. This mechanism has never been fully understood before."

When the estrogen and hydroxyl radicals combine, an unusual molecule called a quinol is produced. In this form, the hydroxyl radicals are harmless, but the estrogen is no longer useful as an antioxidant. Prokai investigated more deeply and discovered chemicals in the body transform the quinol back to estrogen, effectively wringing out the mop and making it useful again.

"It has been talked about for years that estrogen somehow participates in an (antioxidant) cycle, and until this work, no one really knew what the cycle was," said Bruce McEwen, Ph.D., a professor of neuroendocrinology at Rockefeller University in New York. "The cycle implies that estrogen doesn't have to be used up, that it can be rejuve-

Teacher of the Year



JEFF KNEE

Gause and Dean Riffie

Gerald E. Gause, Ph.D., assistant scholar in the department of pharmacodynamics, is this year's recipient of the Teacher of the Year award.

Gause, who lectures on the physiological basis of disease and pharmacological basis of therapeutics, has received the award from the College of Pharmacy twice in previous years. The award recognizes the

faculty member whose dedication to excellence in teaching represents the highest standards of the College of Pharmacy and the University of Florida.

He received both his bachelor's and doctor of philosophy degrees in zoology from UF and began his academic career as a research associate in the UF College of Veterinary Medicine and later was appointed as a visiting assistant professor. In 1980, he received the Freshman Class Teacher of the Year Award in the College of Veterinary Medicine and was recognized by the freshman class of 1981 for his dedication to teaching. Recently, Gause was recognized in *Who's Who Among America's Teachers* for 2002 and 2004.

Gause's devotion to teaching is complemented by his interests in research activities. Gause has also published several articles on perinatal pulmonary physiology and pulmonary and systemic hypertension caused by endogenous compounds.

nated to produce a chemical shield that gets rid of free radicals. Further, you can use tiny amounts of the estrogen derivative to set off this cycle. Showing a mechanism in which these effects can take place is an important step forward."

In terms of therapies, scientists believe administering the quinol — the saturated mop — will deliver the protective benefits of estrogen, because the body will naturally wring it out and convert it to estrogen, while side effects associated with direct estrogen therapy, such as feminization in men, may remain in check.

This could be a viable alternative to hormone replacement therapy, which is a combination of estrogen plus progestin, a synthetic substance that mimics the hormone progesterone to oppose estrogen's undesirable effects on the uterus. While the natural loss of estrogen as women age may contribute to higher risk of stroke and heart disease, the American Heart Association does not advise women to take hormone replacement therapy. Furthermore, scientists at the National Heart, Lung and Blood Institute in 2002 stopped a large study of such therapy because it increased the risk of invasive breast cancer and blood clots in the legs and lungs and failed to protect women from stroke.

"Many women are interested in hormone replacement therapy, but they are afraid of the side effects," said James Simpkins, Ph.D., a professor of pharmacology and neuroscience at the University of North Texas Health Science Center and a co-author of the paper. "But if a compound can retain estrogen's protective benefits and reduce the side effects, because the estrogen is produced in a controlled fashion in the body, it could change the way one treats acute events, such as stroke and heart attack, and chronic conditions such as Alzheimer's disease."

Production of such a drug will require additional experimentation, clinical testing and is at least five years away, Simpkins said.

Paul Doering

Faculty Recognition Award

Paul Doering, M.S.P., distinguished service professor of pharmacy, was selected by College of Pharmacy students to receive the Faculty



Recognition Award for outstanding teaching and service to students.

This is the second time Doering has received the award, which recognizes an individual who has demonstrated continued commitment to student achievement.

Doering, who is also the co-director of the Drug Information and Pharmacy Resource Center at the Health Science Center, has

earned the respect and admiration of students for his creative approaches to teaching pharmacotherapy, drug abuse and drug information services.

He has maintained an active clinical practice in drug information services and made significant contributions to professional literature in book chapters, journal articles and book reviews and has served as an expert witness in several legal cases involving drug therapy.

Doering also has received the Teacher of the Year Award five times, the most of any professor in history of the College of Pharmacy.

Medical relief to Honduras

In April, Doering volunteered with a dozen other health care professionals to accompany high school students on a medical mission bringing relief to a small town in Honduras.

They established a temporary clinic in the west central part of Honduras near Santa Rosa de Copan to bring health care services to an area of the world where otherwise there would be little to no healthcare available.

The group's mission was also to "bring the message of hope to people who are disadvantaged in just about every way possible," Doering said.

The group, which was comprised of mainly members of the Trinity United Methodist Church, also included 15 high school students,



(l-r) Gabriel Ortiz, Casey Head and Ben Dunn help pre-package vitamins for the children of Honduras.



With a hand-made sign, Doering declared himself "El Jefe de Farmacia" — Chief Pharmacist.

mostly seniors, who gave up their spring break to learn what it means to sacrifice for others and to get the experience of working in the health care arena, he said.



Gyula Gál (l) presents award with diploma to Bodor.

Professor Nicholas Bodor receives high honor from Hungary

Hungarian President Ferenc Madl has awarded one of his country's highest state honors to University of Florida scientist Nicholas Bodor, Ph.D., D.Sc., who was lauded for his contributions to the worldwide scientific community in the field of drug development.

The Gold Cross of Merit of the Hungarian Republic was given to Bodor as a representative of Hungary in recognition of his many achievements, including the successful introduction of new drugs to the marketplace and his leadership of the research and development activities at the IVAX Drug Research Institute in Budapest. Bodor, a UF College of Pharmacy graduate research professor emeritus who maintains an active research program, also was recognized for his work in pioneering the engineering of drugs with improved effectiveness yet fewer adverse effects.

The award was bestowed at a private ceremony attended by Bodor's family and six dignitaries from the Hungarian government, held May 19 in Budapest. István Csillag, Ph.D., the Hungarian Minister of Economy and Transport, attended as President Madl's designated representative and the State Secretary, Gyula Gál, presented the award to Bodor.

In his acceptance speech, Bodor noted the numerous contributions from his collaborators and students at UF, as well as the IVAX Drug Research Institute.

"I would also like to thank my family," he added, "for the support they have shown me through many years of odd work hours and frequent traveling."

Bodor is chief scientific officer of the IVAX Corp. and managing director and chief executive officer of the IVAX Drug Research Institute in Budapest. He also serves as executive director of UF's Center for Drug Discovery, which he founded in 1986.



Pharmacy researcher receives \$3.5 million grant to study drug effectiveness based on genes

By Linda Homewood

The key to prescribing the right antihypertensive medication may be as simple as knowing a patient's genetic make-up. UF pharmacy researcher Julie A. Johnson, Pharm.D., is on a quest to confirm that hypothesis, armed with a \$3.5 million federal grant.

More than 50 million people in the United States have high blood pressure, according to the American Heart Association. Although many antihypertensive drugs are available to treat the condition, statistics show only half the patients treated have a good response to any one of these drugs, Johnson said.

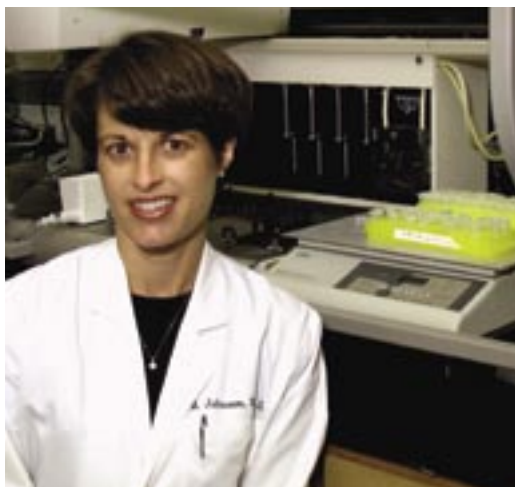
By studying genetic markers that might be related to the response to blood pressure-lowering medicines, Johnson, chairwoman of the department of pharmacy practice at the College of Pharmacy, said she hopes to show that the best treatment responses can be predicted. This would mean patients would be prescribed the drug best suited to their personal genetic profile, eliminating or limiting the need to try multiple drugs before finding the right one, she said.

Working with DNA taken from cheek cells, Johnson and a team of 13 researchers will focus on a number of genes they think are important to predicting response to blood pressure medicines. If genetic markers for response are successfully identified, they could be used to develop a screening test. Such a test would aim to help doctors determine which drug would result in the best outcome for individual patients.

The beta-blocker atenolol and the calcium antagonist verapamil, commonly prescribed to treat high blood pressure, will be central to the study. The variability in patient responses to these types of drugs has been well-documented, said Johnson a member of the UF Genetics Institute. Two other drugs used for treatment — hydrochlorothiazide, a diuretic, and trandolapril, an angiotensin-converting enzyme inhibitor — will also be studied to see how their effectiveness is related to specific genes. The data and genetic samples being analyzed in this research were collected earlier from patients in a large clinical trial.

Johnson's four-year award from the National Institutes of Health was made possible by a collaborative UF effort initiated in 2001. While conducting clinical trials in hypertension pharmacogenetics, Johnson and Carl J. Pepine, M.D., UF's chief of cardiovascular medicine, saw a real need for early investment funding that would enable them to begin collecting large numbers of genetic samples from patients with high blood pressure. These patients were participating in a large international trial led by Pepine called the International Verapamil SR-Trandolapril study, or INVEST.

The UF Division of Sponsored Research agreed to provide \$100,000 of the initial funds. The colleges of Medicine and Pharmacy added to the investment, providing a total of \$175,000 for Johnson to continue her work. Johnson credits



MADELAINE CAJAL (AT/BMS)

Julie A. Johnson, Pharm.D., department of pharmacy practice chair

this UF seed investment with helping to secure a small NIH grant, followed by a larger grant from Abbott Laboratories, the sponsor of the INVEST trial, and finally the \$3.5 million grant from NIH. Thus, in a period of less than three years, the \$175,000 investment made by UF led to more than \$5 million in external funding.

"We felt that if we could begin genetic sample collection, we might be able to secure substantial funding for our future research, but without these samples in hand, acquiring such funding would be difficult," Johnson said.

Then, working with Pepine and Rhonda Cooper-DeHoff, Pharm.D., a research assistant professor in the College of Medicine, Johnson began collecting genetic samples in spring 2001. By late 2002, 6,000 genetic samples had been collected by having study participants in INVEST provide a sample of mouthwash they had gargled.

With such a large sample population, Johnson built the foundation for her study and was able to continue by developing a research plan with a cross-departmental team, mostly comprising colleagues from UF's colleges of Pharmacy and Medicine and also collaborators from three other universities. Last fall, she received notification that her team was to receive the \$3.5 million NIH grant for the study of hypertension pharmacogenetics.

"The work that Dr. Johnson is doing with Dr. Pepine and others is very exciting," said Kenneth Berns, M.D., Ph.D., director of the UF Genetics Institute. "The link between patient genotype and response to drugs is the cutting edge of patient care. Beginning with this new look at the treatment of hypertension, I think there will be cross-over to treatments of many other health conditions in the future."

Meet Our New Faculty...

Department of Pharmacodynamics

Dorette Ellis, Ph.D., Assistant Professor

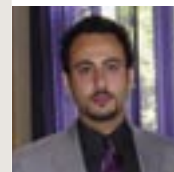
Dr. Ellis was an instructor in Neurobiology at Harvard Medical School since 1998. She joined the department of pharmacodynamics in January 2004. Her research focuses on the Na,K-ATPase protein, which is responsible for fluid regulation. Two diseases that can result from increased fluid build up are central to her research. One disease, glaucoma is the leading cause of blindness in the U.S. It is caused by excessive fluid that increases pressure on the optic nerve. Another disease, hydrocephalus, is caused by excessive accumulation of cerebrospinal fluid, with infantile hydrocephalus occurring in one out of 2,000 births. By better understanding how this protein can be regulated, Dr. Ellis hopes that new drugs can be developed to prevent these diseases.



Department of Pharmacy Practice

Issam Zineh, Pharm.D., Assistant Professor

Dr. Zineh joined the college in Aug. 2001 as a post-doctoral fellow in cardiovascular pharmacogenomics. Through Dec. 2003, he taught pharmacy students, and conducted research in genetics related to drug response in people with high blood pressure and heart failure. His current research is focused on how cardiovascular and endocrine drugs, commonly used to treat high cholesterol, hypertension, heart disease and diabetes, regulate immune functions.



Office of Distance, Continuing and Executive Education for the College of Pharmacy

Diane Beck, Pharm.D., Director of Educational Initiatives

Dr. Beck was a faculty member of the Harrison School of Pharmacy at Auburn University for 25 years before joining UF College of Pharmacy in April 2004. Her responsibilities now involve student assessment, quality assurance of clinical activities and curriculum review/revision for the Working Professional Pharm.D. program and to collaborate with faculty and staff in enhancing the delivery of the Distance Education curriculum.



Faculty Recognition

Honors & Awards

Hartmut Derendorf, Ph.D.

Professor and Chairman of Pharmaceutics, Director of the Center for Food-Drug Interaction Research and Education

President-elect of the American College of Clinical Pharmacology. He will begin his two-year term as president in 2006. Derendorf has previously served as a member of the Board of Regents and as secretary of the ACCP.

In 1969, the organization was founded and dedicated to a new branch of pharmacology that dealt with the effectiveness and safety of drugs in man, and today it has a membership of about 1,000 professionals.

Earlene Lipowski, Ph.D.

Associate Professor of Pharmacy Health Care Administration

Elected as the 2004-05 president of the American Pharmacists Association's Academy of Pharmaceutical Research & Science and will serve on the APhA Board of Trustees.

APhA, the national professional society of pharmacists, is the first established and largest professional association of pharmacists in the United States. Its more than 50,000 members include practicing pharmacists, pharmaceutical scientists, pharmacy students, pharmacy technicians and others interested in advancing the profession.

Lipowski also has been appointed through the American Pharmacists Association as the representative to the Pharmaceutical Sciences Section Committee of the American Association for the Advancement of Science.

Lipowski is serving a three-year term that will end February 2007. She will serve to promote pharmaceutical sciences and

assist in arranging programs for presentation at the annual AAAS meetings. She will serve as a liaison between the APhA the AAAS.

The AAAS is the world's largest general scientific society whose mission is to foster the exchange of knowledge of all disciplines of science.

Diane Beck, Pharm.D.

Director of Educational Initiatives at the Office of Distance, Continuing & Executive Education for the College of Pharmacy

Elected to serve as the president of the American Association of Colleges of Pharmacy starting July 2004 and ending July 2005.

Beck, who joined the UF faculty in April 2004, is also the recipient of the AACP's Robert K. Chalmers Award as the distinguished pharmacy educator for 2004. It will be presented to her at the group's annual meeting in July.

Founded in 1900, the AACP is a national organization representing the interests of pharmaceutical education and educators and is comprised of all 89 U.S. pharmacy colleges and schools.

Grants & Awards

Carrie Haskell-Luevano, Ph.D.

Assistant Professor of Medicinal Chemistry

Received a new grant from the National Institutes of Health entitled "Characterization of Human Melanocortin-4 Receptor Polymorphisms."

Haskell-Luevano will study mutations of the Melanocortin-4 Receptor protein that have been identified in morbidly obese humans. The purpose of the four-year grant, of nearly \$993,000, is to attempt to design drugs that can treat these specific mutant proteins to reduce the associated obesity.

Julie Johnson, Pharm.D.

Professor and Chairwoman of Pharmacy Practice, Director of the Center for Pharmacogenomics

2004 Leon L. Goldberg Young Investigator Award, received from the American Society for Clinical Pharmacology and Therapeutics.

Johnson was formally recognized at the annual ASCPT meeting in Miami Beach on March 25, 2004 where she gave a keynote address and then received a commemorative plaque and a \$1,000 honorarium.

The award was established in 1986 with the purpose of encouraging and recognizing young scientists active in the field of clinical pharmacology.

Issam Zineh, Pharm.D.

Assistant Professor of Pharmacy Practice

Received a three-year Scientist Development Award of \$240,000 from the American Heart Association Florida/Puerto Rico affiliate.

His project, called "Systemic Immunomodulatory Effects and Pharmacogenetics of Atorvastatin in Early Atherosclerosis," begins July 1, 2004.

Jason Frazier, Ph.D.

Assistant Professor of Pharmacodynamics

Received a one-year, \$75,000 award from the University of Florida McKnight Brain Institute to support his work on memory dysfunction.

Frazier looks to obtain detailed mechanistic information about how the cholinergic system normally works in memory processing with the hopes of identifying more specific targets and more precise goals for therapeutic interventions that are designed to address age-related memory dysfunction.



Dr. Derendorf



Dr. Lipowski



Dr. Beck



Dr. Haskell-Luevano



Dr. Johnson



Dr. Zineh



Dr. Frazier

Pharmacy students convene for first patient care colloquium

By Lisa Sperry

University of Florida pharmacy students from four statewide campuses met recently in Gainesville for the Patient Care Colloquium, a new program designed by faculty to help students improve their communication and problem-solving skills related to patient care.

The two-day program, held in March, included a course in professional communications and two in pharmacotherapy, the use of drugs for the treatment of disease and mental illness. The program's goal was to help prepare second-year professional pharmacy students for communication with patients and health-care providers and to simulate patient-care experiences through active learning exercises and demonstrations of clinical skills.

Carole Kimberlin, Ph.D., a professor, and Lynda McKenzie, R.N., M.Ed., a clinical associate professor, coordinated the professional consultation activity through the Harrell Professional Development and Assessment Center at the UF Health Science Center. In this state-of-the-art facility equipped to conduct standardize video recordings of patient consultations, students incorporate interviewing skills, patient education, and new prescription counseling. Paul Doering, M.S., a distinguished service professor, Tom Munyer, M.S., a clinical associate professor, and Bernadette Belgado, Pharm.D., a clinical assistant professor, coordinated the students' activities in a pharmacotherapy patient case study.

"We saw this as a great opportunity to bring our second-year students from three distance learning campuses to Gainesville," said Michael W. McKenzie, Ph.D., R.Ph., associate dean for professional affairs.

Through this new program, the college faculty and administration hope to create new avenues for students in each professional-year class within the four-campus program to convene not only for meaningful and challenging learning experiences, but also for an enjoyable professional and socialization event.

As part of the Professional Communications class, students were video recorded during a 30-minute simulated patient consultation. The activity enabled students

to practice interviewing, educating, and counseling a patient on a new prescription. Standardized patients used scripted patient roles to provide consistent interviews for students. The students were evaluated on their ability to assess how well therapeutic goals are being met for the patient and address problems that the patient may be having with current treatment, as well as to assess the patient's understanding of the newly prescribed medication and provide information the patient needs to manage a new therapeutic regimen effectively.

In this simulated yet realistic setting, students had the opportunity to practice their patient interview skills, preparing them for working with real patients during their internships later on, Munyer said.

Students also were assessed on how well they recorded the patient interview in a SOAP (subjective, objective, assessment, and plan) note, used for medical documentation. The SOAP note details what a patient tells a health-care professional, what the professional observed, what the professional thinks the patient is experiencing, and what will be done to help the patient.

"They can't assume that the records they have been given are complete," Munyer said. "It requires problem solving to document accurate patient-care information, while at the same time demonstrating caring empathy."

The pharmacotherapy classes enabled the students to work together on a patient case study. All campuses were represented in each study group of five to six students. After evaluating a case together, the students reported back to the class. They were called upon to interact with the instructors.

A first-time approach to educating students in hands-on patient interaction skills, Munyer said the Patient Care Colloquium was successful and impressive.

"Working together to meet challenges in developing their communication and problem-solving abilities, the students also have an opportunity to socialize with their peers," McKenzie said.

"The demanding day of learning also should develop an 'esprit de corps' among the students," McKenzie added.

Each day ended with an in-depth clinical discussion of the case, remarks from College of Pharmacy Dean William Riffie, Ph.D., and an interesting and entertaining videotape on professional communications produced by the American Society of Health System Pharmacists. Students also gathered for a pizza social.



LINDA HONEWOOD



Spring 2004 professional coating ceremony



March 2004, first-year pharmacy students prepare to make the pledge of professionalism ▶



PHOTOS BY JEFF KNEE

Pledge of Professionalism (Verbal format)

At this time, I pledge to develop a sense of loyalty and duty to the pharmacy profession.

I will accept responsibility and accountability for membership in the pharmacy profession.

I will pursue all academic and professional endeavors with integrity.

I will foster professional competency through life-long learning.

I dedicate my life and practice to excellence.

I accept the responsibility for providing pharmaceutical care to patients.

I commit to abiding by the Oath of the Pharmacist and the Code of Ethics for Pharmacists as I advance toward full membership in the profession.

I voluntarily make this pledge of professionalism.



◀ Student representatives from each campus lead pledge: Lauren Riley, Jacksonville; Mirta Soto, Gainesville; Craig Rosier, Orlando; Elena Mazziotta, St. Petersburg

Genelyn Baroso from the Jacksonville distance learning campus receives her white coat from Executive Associate Dean Bill Millard, Ph.D. ▶



▲ Student speaker and graduating senior Marfreea Clarke



Richard and Lisa Lawrence with daughter, Cassidy, completed first year of pharmacy college ▶

Student speaker for Class of 2004

Keith Teelucksingh was selected by the graduating seniors in the Doctor of Pharmacy degree program to have the honor of giving remarks about their time and experiences in the College of Pharmacy.



Keith attended the New College at the University of South Florida where he received a B.S. degree in neurobiology. He participated as an undergraduate in a National Institutes of Health grant in neurobiology and presented the research results at a poster session held at the Society of Neuroscience in Los Angeles.

He was a member of the Academy of Students of Pharmacy (ASP), the Student Chapter of the Florida Society of Health-System Pharmacists and has served on the College of Pharmacy Curriculum Committee as a student representative. Keith has been supportive of events in the College of Pharmacy such as the ASP Cultural Dinner, National Pharmacy Week, the Mobile Health Care Unit and Legislative Day in Tallahassee.

Keith has worked with Walgreens as a pharmacy technician. After graduation, he had plans to attend the School of Pharmacy at the University of California at San Francisco as a pharmacy practice resident.



(above photo)
Front: Amanda Tjong, Stephanie Elwell, Erin Crawshaw; Back: Cary Ferree ('05), Leslie Masem, Kevin Ferguson, Melissa McCracken



Working Professional Doctor of Pharmacy Graduate

"Dean Riffie,

After three years, it was a pleasure to meet the faculty and staff who are such an important part of the WPPD program.

Graduation was truly an experience not to be forgotten or missed. Words cannot express the pride and emotion felt by myself and my family as I walked across the stage to shake your hand. My children, wife and I will always cherish the time spent at Gainesville."

— Anthony J. Vitale, Pharm.D.
WPPD graduate from Cheshire, CT
December 2003



Assistant Dean Sven Normann with Vitale and daughter



Makiko Hisamoto

Student Awards and Recognition

College of Pharmacy graduate student wins APhA best paper award in clinical sciences

Sharrel L. Pinto, Pharm.D., a UF College of Pharmacy student and research coordinator, is the recipient of the 2004 American Pharmacists Association Academy of Pharmaceutical Research and Science Postgraduate Best Paper Award in the clinical sciences category.



Awards are presented annually by the APhA to one paper in each of three categories: clinical sciences, economic, social and administrative sciences and basic sciences. Each award recognizes the best contributed papers by postgraduate authors, presented at the APhA annual meeting in Seattle, Wash., March 26-30.

The award is given on the basis of originality of the work, rigor of the experimental methods, clarity of the presentation of the results, appropriateness of the conclusions, potential significance of the study and overall quality of the presentation.

Sharrel won the award, a \$500 honorarium and a certificate, for her paper, Evaluation of Pharmacists Interventions in Diabetic Patients from Rural Community Health Centers. Pinto's research interests include adherence of ethical guidelines

by physicians and disease management and health care quality improvement for diabetic patients. She is also the recipient of the UF Outstanding International Graduate Student Award in the pharmacy health care administration department.

APhA national patient counseling competition for student pharmacists

Cary Ferree was selected as one of five students among colleges of pharmacy to receive the Pharmacy Student One-to-One Counseling Recognition at the American Pharmacist Association annual meeting held March 26-29.

The award recognizes exemplary one-to-one patient counseling resulting in better health, superior communication and improved outcomes for their patients.

Spring semester, Cary was president of the Iota Chapter of the Phi Lambda Sigma chapter. She was chosen by a panel of nine judges from the Pharmacy Student Editorial Advisory Board.

Cary, who was guest of honor at the APhA 2004 opening reception, received airfare to Seattle for the 2004 APhA annual meeting, three nights' hotel accommodations and full complimentary registration to the meeting.



Student Scholarships and Awards

Al and Belle Meyerson Scholarship
Kayla Holston
Resident of Broward County, academic performance and financial need

Albertsons Scholarship
Priya Patel
Academic performance and an interest in community pharmacy

Brevard County Pharmacy Association Scholarship
Sabrina Jennings
Resident of Brevard County, academic performance, currently a second or third year professional student

David W. Ramsaur Award for Distinguished Scholarship
Binh Nguyen and Lisa Taylor
Deserving student who has excelled academically

Eckerd Pharmacy Scholarship
Shawn Anderson, Kimberly Austin, Amy Barnett, Bitu Bijanfar, Michelle Demus, Erika Diaz, Judy Duncan, Felicia Fong Kong, Kinh Huynh, Marie-Therese Jackson, Leandre LePorte, Benjamin Lowe, Russell McKelvey, Jennifer Mize, Adriana

Natoli, Shenjin Paul, Sarah Rainey, Amanda Sartin, Denisse Reyes, Carol Stauffer, Rebecca Turville, Wisener Young

First Coast Award
Sarah Rainey
Resident of Baker, Clay, Duval, Nassau or St. Johns counties prior to enrollment; demonstrated academic excellence; well rounded as exhibited by regular participation in community and student activities

FSHP Scholarship
Claudia Lopez and Amanda Sartin
Interest in pursuing career in hospital Rx, open to current second or third year students in the PharmD program. Applicants must include a letter stating interest and experience in hospital Rx and completion of FSHP membership application.

Victor Micolucci Memorial Scholarship
Benjamin O'Neal
Preference to orphans, community-oriented students without parental financial support

North Central Florida society of Health System Pharmacists Award
Victoria Hemstreet
Interest in hospital pharmacy, leadership/ extracurricular activities. Priority given to students currently in their second professional year. Must submit a short essay describing the role of hospital pharmacists/own experience in hospital pharmacy.

Pinellas Pharmacists Association Scholarship
Michelle Demus
Students from the Tampa Bay area, must be able to attend one scheduled meeting for introduction to the membership.

Walgreens Company Scholarship
Daniel Brum

Wal-Mart Scholarship
William Terneus Jr.
Student in 3rd or 4th professional year with high scholastic standing, financial need, strong leadership qualities. Must show a desire to enter community pharmacy practice and have current/ previous experience in community pharmacy. Must submit a letter describing his/her experience in a community pharmacy setting.

Student award essay challenge



Senior **Heather Myers-Huentelman**, was selected as the third-place winner in the Seventh Annual *US Pharmacist* Essay Challenge competition for her essay on the treatment of insomnia.

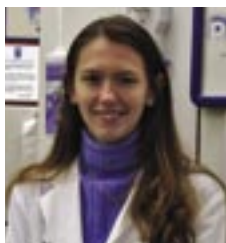
The essay was selected by the College of Pharmacy's Financial Aid and Awards Committee to be its representative in the national competition.

Heather and the college each received a \$250 award, and she was recognized in the *US Pharmacist* December issue.

She entered the contest while completing three months of pharmobility exchange rotations at the University of Bath in the United Kingdom. Before graduating, Heather was a member of the American Society of Health-System Pharmacists, Florida Society of Health-System Pharmacists, Kappa Epsilon, and Rho Chi.

"I thought the contest was a great opportunity to learn more about insomnia and to compare pharmacy practice in the United Kingdom and the United States," said Heather.

NACDS Awards: national organization for chain drug stores



Kimberly Terhune

This year, four College of Pharmacy students received awards from the National Organization for Chain Drug Stores Foundation.

Mary Hopple, **Heather Hardin** and **Cary Ferree** all received the NACDS Foundation Pharmacy Student Scholarship, and **Kimberly Terhune**, from the college's Jacksonville distance learning campus, was one of four students who received additional recognition by being awarded the Robert J. Bolger Scholarship. The

scholarship is donated by Barr Laboratories and named for its former board member and past NACDS president. The awards are given each December.

The students were all recognized with scholarships from the organization, which received about 400 applications from 77 pharmacy schools and awarded a total of 25 scholarships to future leaders of chain community pharmacy. The foundation has provided more than \$1.1 million in support to U.S. schools of pharmacy and students in the past.



LINDA HOMEWOOD

Heather Hardin, Dean Riffe, Cary Ferree and Mary Hopple

IN MEMORIAM



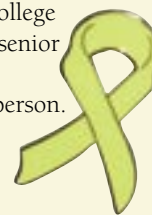
Claire Somera Duncan

Members of the graduating class of 2004 wore green ribbon lapel pins to honor a former classmate, Claire Duncan, who was meant to join them at commencement.

While traveling in May 2001, Claire, tragically died in a car accident. She had been admitted to the College of Pharmacy in 2000, and was working toward her doctor of pharmacy degree.

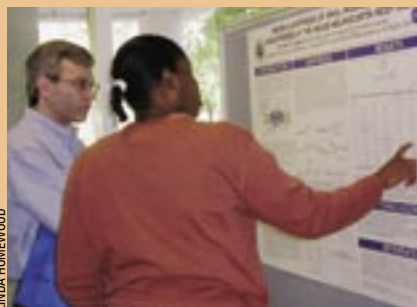
The loss is deeply felt by her family, fellow pharmacy students and the faculty of the College of Pharmacy. In her memory, the student chapter of the Florida Society of Health System Pharmacists presents the Claire Somera Duncan Leadership Award each year to a deserving pharmacy student.

Claire was a member of several pharmacy student organizations, including FSHP, and was a recipient of the FSHP scholarship award. She showed promise in her academic work and pharmacy career and will be remembered by the College of Pharmacy faculty and senior class of 2004 as a bright, beautiful and dedicated person.



17th Annual Research Showcase

On April 15, the College of Pharmacy held its 17th Annual Research Showcase and Awards Recognition Day. Divided into two categories, the competition had three winners in the oral division and three winners in the poster division. The event was sponsored by three College of Pharmacy Alumni — Robert Bell, Ph.D. of Barr Laboratories (and Maria Bell), Francisco Alvarez, Ph.D. of Andrx Corp., and Robert Levitt, Ph.D. (and Phyllis Levitt).



Faculty judge, Reginald Frye, Ph.D., listens as graduate student Christine Joseph explains her research.

Poster Competition Winners:

Graduate Student: **Mei Tang**

Department: Pharmaceutics

Title: *rAAV1 Mediated hAAT Gene Therapy Modulate Cellular Immune Response*

Postdoctoral Fellow: (Two post-doc winners tied)

Christine Formea

Department: Pharmacy Practice

Title: *Cytochrome P450 3A4, 3A5, and P-glycoprotein as Pharmacogenomic Predictors of Tacrolimus Pharmacokinetics and Clinical Outcomes in Liver Transplant Recipients*

Nicole Hebert

Department: Pharmacodynamics

Title: *High Temporal Resolution Analysis of Neurotransmitters Utilizing On-line Capillary Electrophoresis with Laser-induced Fluorescence Detection*

Oral Competition Winners:

Junior Division: **Aleksandar Todorovic**

Department: Medicinal Chemistry

Title: *Peptide Bond Modifications of Melanocortin Agonists Result in Conversion of the Agonist into an Antagonist*

Levitt Division: **Michael Taylor**

Department: Pharmacy Health Care Administration

Title: *Surgery Versus Radiation: Is there a difference in Prostate Cancer-specific Mortality?*

Senior Division: **Boman Irani**

Department: Medicinal Chemistry

Title: *Benefits of Voluntary Exercise in Controlling Obesity and Sexual Dysfunction in Melanocortin-4 Receptor Deficient Mice.*

Fall 2003 reunion Student organizations



Kappa Epsilon members raised money at the 2003 reunion by having bidders choose a faculty member to receive a pie in the



(l-r) Bethany Collop and Candice Apple volunteer at FSHP Kids booth

2004 College of Pharmacy Career Days



Walgreens representatives present a check to Dean Riffe for student support.



face. The highest bids were tied between (l-r) Professor Paul Doering and Executive Associate Dean Bill Millard.



Leandra LePorte, Anne Rafidi and Emerson Molina at SNPhA booth selling T-shirts

Next year's Career Days will be held January 21-22, 2005 at UF's new College of Pharmacy building HPNP complex.

Thanks to our 2004 Participants:

- Albertson's
- Atkinson's Healthcare Providers
- Baptist Health
- Cardinal Health
- Caremark Rx, Inc.
- CVS/pharmacy
- Eckerd
- Eli Lilly
- Indian River Memorial Hospital
- K-Mart Corporation
- Leesburg Regional
- McKesson Medication Management
- Medco Health Solutions
- Memorial Healthcare System
- MP TotalCare
- Publix
- Rite Aid Pharmacy
- Sacred Heart Health System, Inc.
- Shands Healthcare
- Target
- US Air Force
- Walgreens
- Wal-Mart
- Winn Dixie

ASP 3rd Annual Cultural Dinner



UF's Academy of Students of Pharmacy, the student section of the American Pharmacists Association had a record turnout of more than 400 attendees at its Third Annual Cultural Dinner. The January event, sponsored by CVS Pharmacy at the Indian Cultural & Education Center, featured a student-prepared feast of homemade ethnic dishes and entertainment that included a variety of student performances and an international fashion show. ASP student leaders from the College of Pharmacy Janette Garcia and Sonia Sosa coordinated the event, which raised money to send eight pharmacy students to the Feb. 4 International Pharmaceutical Students' Federation conference in Panama.



(l-r) Sonia Sosa; pharmacy faculty: Jeff Hughes, Joanna Peris; and Janette Garcia



LINDA HONENWOOD

LETTER FROM YOUR ALUMNI PRESIDENT

Dear Fellow Gators,

What an exciting year! As president of the University of Florida College of Pharmacy Alumni Association, I would like to tell you a little about what is going on in my life as well as in the life of our alma mater.

I can't believe it has been 25 years since I walked out the gates of the University of Florida and into the pharmacy profession. Since that time, I have spent 11 years in hospital pharmacy and 14 years in community pharmacy. While I practiced hospital pharmacy, mostly in Central Florida, I held several offices with Central District Florida Society of Health-System Pharmacists (formally called Hospital Pharmacists). When I moved to beautiful Brevard County 14 years ago, I started my career in community pharmacy practice and became a member of Brevard County Pharmacy Association as well as its executive committee. Eventually, I became president of BCPA and also became very involved with the Florida Pharmacy Association and the American Pharmacists Association. In the midst of all this, I got married and have a wonderful husband and a beautiful 13-year-old daughter. Finally, this year I will be installed as president-elect of the Florida Pharmacy Association.

Looking at my calendar, the College of Pharmacy has enough to keep us all busy this fall. The first big event, the 2004 Reunion Weekend, will be held on September 10-11 at the new pharmacy building. The weekend begins with an opportunity to earn two hours of CE credit on Friday afternoon followed by a class party. On Saturday, we will all meet in the courtyard for barbecue and catching up with old friends. Later that day we will head up to the Swamp to watch the Gators play Eastern Michigan.

The class of 1954 will also celebrate a special reunion this year during Grand Guard weekend on October 1-2. This campus-wide event will help the class of 1954 commemorate their 50th reunion. That same month, on October 15, the college will host the 11th annual Ken Finger Memorial Day and Golf Tournament. The day will begin with three hours of continuing education in the morning and an afternoon on the course at Haile Plantation. The funds raised from this event will help support graduate fellowships.

I am proud to be a Gator because we have one of the best colleges of pharmacy in the nation with nationally recognized faculty, students who are involved with their professional organizations and alumni who are well respected by their peers for their work with professional organizations. Many fellow Gators have worked hard to advance the profession of pharmacy and to make pharmacists a respected member of the health care team.

I look forward to seeing you in Gainesville this year.

Go Gators!

Kathy Petsos, R.Ph.

Class of 1979

2004 College of Pharmacy Alumni President



Alumni Reunion

Fall 2003



Dean Riffie greets Bert Smith.



Albert and Alberta welcome students and alumni.



Kirsten and Philip Diaz enjoy Friday's reception.



Gator fan

Alumni Update

The 70s

Deborah Wood ('73) is presently earning her Pharm.D. online from the University of Colorado, Boulder, Colorado. She has been elected to the Academy of Long Term Care State of Colorado Pharmacist Society for a two-year term.

Danny Soles ('74) sold his pharmacy to Eckerd.

Mirta S. Soto ('74) is married to Manny Soto, CPA and has two daughters – Mirty Soto who is a first year pharmacy student at UF and Michelle, a senior at Our Lady of Lourdes Academy.

Ralph Watson ('75) became a grandfather for the first time July 15, 2003: Sarah Elenor Grijalua was born at Dekalb Medical Center in Decatur, Georgia.

Gerald R. Dominey ('78) is an independent pharmacist with a drug shop in Pensacola, Florida. He and his wife, Deana, have an 8-year-old son, Edward, and a 5-year-old daughter, Sarah.

John Murphy ('79) received the "Award for Sustained Contributions to the Literature of Pharmacy Practice in Health Systems" from the ASHP Research and Education Foundation in December of 2003 at the ASHP meeting in New Orleans.

The 80s

Barbara Kelly Ferguson ('83) is a Clinical Pharmacist at Veteran's Affairs in Brevard County. She has one son and one daughter and is living in Melbourne, Florida.

Theresa Wells-Tolle ('88) was sworn in as the Florida Pharmacy Association President in June 2003 at the annual convention in Wesley Chapel. She is the co-owner of Bay Street Pharmacy in Sebastian, Florida. She and her husband, Joe, have two children, Taryn (age 7) and TJ (age 5). Still avid Gator fans, the Tolles have season football tickets and stay with Gail Wells ('74), Theresa's Aunt in Gainesville.

The 90s

Susan Durden Beltz ('93) is Coordinator of the Investigational Drug Service at Shands UF. She and her husband, Billy, have twin boys Blake and Bryce who are almost three years old.

Ted Morton ('93) has been promoted to the associate professor of pharmacy at the University of Tennessee College of Pharmacy. He was also named Health-System Pharmacist of the Year by the Tennessee society of Health-System Pharmacists.

Tony Posser ('94) just celebrated 10 years with Gold Standard Multimedia.

Kevin Ellis ('97) has been married to Michelle since 1995 and is the father of two boys - Kevin Lee and Nicholas Charles.

Joseph Geber ('95) and Jean Geber (Finnman '98) welcomed their first child, Stephanie Kate Geber into their hearts on February 5, 2003. The Gebers live in Oviedo where both Joe and Jean are employed at the Orlando VA Healthcare Clinic.

Gary Levin ('90) began working for Nova Southeastern University in December of 2003. Gary serves as a professor and chairman of the department of pharmacy practice.

Jeana (Everett) Skora ('97) had a career change in September 2001 when she joined the Air Force. She has been located at Luke AFB in Phoenix, AZ and is in charge of the 7th busiest satellite pharmacy AF-wide. She also recently married an AF pilot (Chris) and will be promoted to deputy commander of the base pharmacy later this summer.

The 00s

Katherine (Siar) Andorfer ('03) was married August 2003 in Clearwater, Fla., then relocated to Connecticut to start her job with Wal-Mart. She and her husband purchased their first home.

2004 Events College of Pharmacy

Join friends & alumni at these events...

July 1

FPA Gator Reception – Gaylord Palms Orlando, FL

August 7

FSHP Gator Reception – Caribe Royale Orlando, FL

August 27-29

Institute for Pharmacy Entrepreneurs Gainesville, FL

September 10-11

18th Annual COP Alumni Reunion Weekend Gainesville, FL

October 1-2

Grand Guard Reunion "Class of 1954" Gainesville, FL



Alumni show Gator spirit at reunion barbecue.

October 15

11th Annual Ken Finger Memorial Day Gainesville, FL

For more information visit www.cop.ufl.edu/alumni or call 352-265-8034

Creating a Lasting Legacy

By Kelly Markey

When Russ Blaser, class of '76, and his wife Carol unexpectedly died in a plane crash two years ago, their sons, Rich and Mike Blaser, experienced a deep loss that was difficult to reconcile.

The brothers wanted to honor their parents and find a way to bring meaning from the tragic loss. Knowing how important pharmacy education and practice was in their dad's life, and the obstacles that he had overcome in reaching his life's goal, they realized that a scholarship fund was an ideal tribute.

"The best legacy we can leave for them is to help another pharmacy student who is in the same situation that my parents were in when my dad started pharmacy school," Rich said. "My brother and I think a lot of the College of Pharmacy and the pride my dad took in being a pharmacist"

Russ was first introduced to pharmacy when he enlisted in the U.S. Army during the Vietnam war. He dispensed medications and was promoted to a captain in the infantry. It was this experience that led him to Gainesville after leaving the military. He applied repeatedly to UF College of Pharmacy. While waiting to be accepted to pharmacy school, he and his wife worked various jobs to support their two sons. Not one to give up, Russ was accepted after his third attempt and graduated

at the top in his class. He continued to work while attending college and still managed to participate in Florida Blue Key and Student Senate.

"Russ was always an optimist. I never remember seeing him without a smile on his face. He brought a "can-do" attitude to everything he touched and it was contagious," remembers College of Pharmacy Dean Bill Riffie.

After graduation, Russ served as a community pharmacist in the Gainesville area, consultant pharmacist in psychiatric hospitals and jails, and as a new drug educator for doctors. He was president of the Alachua County Pharmaceutical Association and was awarded FSHP Pharmacist of Year in 1982.

Each year, the Russ and Carol Blaser Memorial scholarship will benefit a pharmacy student, in good academic standing, who has a family and is in need of financial support.

In the coming years, Rich and Mike hope to grow the fund to help even more pharmacy students.

"Our parents never left anything unsaid—they embraced every minute of life," Rich added. "The power they had on people and the way they touched people lives was unbelievable. They still continue to touch lives yet unknown."



"Our parents never left anything unsaid—they embraced every minute of life."

— Rich Blaser

In Memoriam

Byron Barnes ('54) dean emeritus and trustee of St. Louis College of Pharmacy passed away February 24, 2004 in Chesterfield, Missouri. Born and raised in Illinois, he enrolled in the Merchant Marine Academy in King Point, NY. Byron graduated from St. Louis College of Pharmacy with his bachelor's degree and received his master's and doctorate degrees from the UF College of Pharmacy. Professor Barnes joined the faculty at St. Louis in

1957, and was named dean in 1970. He co-authored "Cutting's Handbook of Pharmacy." Very close with his grandchildren, Byron enjoyed giving talks on "Pink Pills for Pale People," and "Old Time Pharmacy." Among his survivors include his wife of 55 years, Enid Chandler Barnes; a daughter, Julie Burchett; a son, Jeffrey Barnes; and four grandchildren.

Richard H. Beach, Jr. ('83) a registered pharmacist in the Pensacola area for 20

years, passed away on October 21, 2003. Rich was a graduate of Bay High School in Panama City ('79) and Gulf Coast Community College. Rich is survived by a partner, Dwight Brown, his parents Dick and Pat Beach, sisters, Jennifer (Tim) Ramsey and Beth (George Scott) Biddle, nieces and nephews: Christopher and Katie Landry, and Mason and Jordan Biddle; Uncle, John (Andora) Beach.

Steven Bevis ('74) a pharmacist for

Eckerd drugstores, died July 26, 2003 in Daytona Beach. He was a graduate of Jefferson County High, where he was valedictorian of the class of 1967. He was also a graduate of Emory University. After graduating from UF he joined the Jack Eckerd Corp., where he remained for 28 years. Survivors include his mother, Lorena Bevis; a brother Ken Bevis; and a niece, Logan Bevis.

John Canova ('54) of Cross City passed away in December of 2003. Born in Jacksonville, and raised in Gainesville, John attended P.K. Yonge Developmental Research School and Gainesville High School. He earned bachelor's degrees in pharmacy and English from the UF, and did graduate work at University of North Carolina Chapel Hill. Mr. Canova taught English at Georgia Tech and served on the Board of directors

of the Lentel Corporation, a family owned telecommunications business in Georgia.

Dwight Ferguson ('38) passed away April 24, 2003, he retired as chief pharmacist after 20 years at the VA Medical Center at Bay Pines. Mr. Ferguson was a past president of the Florida Society of Hospital Pharmacists, a Navy veteran of World War II who received a Purple Heart. Survivors include his wife of five years,

...In Memorium continued

Claire B.; three sons, David Dunedin, Stephen and Robert; a daughter, Jean Ferguson and a granddaughter, R. Lee.

Frank Ferreri ('54) passed away peacefully on October 24, 2003. Frank was a pharmacist and co-owner of Metropolitan Pharmacy in Ybor City for more than 40 years. He was a past president of Hillsborough County Pharmaceutical Association, a retired Captain of the United States Air Force, city councilman for the City of Temple Terrace for 10 years, a charter member Krewe of the Knights of Sant' Yago, and a member of Corpus Christi Catholic Church. He is survived by his wife of 49 years, Evelyn (Sugie); sons, Samuel J. and wife Donna, Frank Sergio, Jr. and his wife Susan and four granddaughters, Jennifer, Rachel, Francesca; brother, Dr. Sam Ferreri and mother-in-law Tessie Capitano.

Jack Joseph Hatfield ('86) died February 25, 2004, at home in Merritt Island, FL. He graduated from Indiana University and the University of Florida College of Pharmacy in 1986. He worked as a pharmacist at Liggett, K-Mart and Walgreen's pharmacies. He was past president of Brevard County Pharmacy Association. He also served as chairman of the FPA Professional Affairs Council and other state level

committees. He received the Sydney Simkowitz Pharmacy Involvement Award from the Florida Pharmacy Association in July 2000. Survivors include his loving wife, Marie-Frances Clusel; daughters, Melissa Hatfield and Elise Hatfield; his sisters, Pamela Valdes, Kristen Shealy, Heidi Chavers and Kitty Lyons; and several nieces and nephews.

M. Roland Hitt ('53) died November 8, 2002. He was an avid boater and fisherman who loved the water, and held two world records for snook fishing. Survivors include his wife, Better (Detter) Hitt; daughter Novella (Blaise) Maugeri; son, Stephen (Beth) Hitt; adopted daughter, Deborah Hitt; 14 grandchildren; 15 great-grandchildren.

David Lewis ('53) died in December of 2003. He was owner-operator of Lewis Pharmacy in Safety Harbor, was an officer in the Save Our Suwannee organization and member of San Juan Catholic Mission in Branford. Survivors include his wife, Rose-Marie Lewis; daughters Jeanne Schultz and Vicky Abramowitz, Terry S Lewis, Michelle West, Elaine Davis and Mary Lovell; son David Kirk Lewis; and 11 grandchildren.

Mardis Meyer ('48) of Austin, Texas died December 14, 2003. While at the University of Florida he was a member

of the Sigma Phi Epsilon Fraternity, Kappa Kappa Psi, the Mortar and Pestle Society, the University Band, the University Orchestra and the Glee Club. His time at the University was interrupted so he could serve his country in the United States Navy. He had a long and distinguished career in the pharmaceutical field that included five years with Abbott Laboratories, ownership and operation of a drug store, and various pharmacy positions in Miami, Fort Lauderdale and Pompano Beach, culminating in his eventual retirement as a Chief of Pharmaceutical Services in North Broward Hospital in May 1989. He was a member of the UF Alumni Association, the Florida Society of Health System Pharmacists, the Broward County Pharmacy Association, the American Society of Hospital Pharmacists, the Florida Pharmaceutical Association and the Woodmen of the World. He is survived by his three daughters, Melanie Louise Meyer, Michelle Meyer Turner, and Melinda Meyer Gross; two grandchildren, Trace Michael Turner and Marielle Delaney Turner; his son in law, Kenneth Gross; two sisters, Juanita Crews and Tamea Kelly; nieces and nephews.

Sarah Ruth Norred ('50 & '54) died June 6, 2002. She completed a B.S. degree at Howard College and a master's

and Ph.D. degree at the University of Florida. She spent 37 years conducting and managing research studies in pharmacology at Schering-plough Corporation of New Jersey. She is survived by her brother, Robert Gaines Norred (Pana) of Chattanooga, Tennessee; niece Sarah A. Norred of New York City; grandniece, Sarah Elizabeth Norred and a grandnephew, Robert Emory Norred of Chattanooga, Tennessee.

Douglas Ossenfort ('54) died March 5, 2004. Mr. Ossenfort graduated from the University of Florida in 1954 with a Bachelor of Science degree in pharmacy and was a member of the Phi Kappa Tau fraternity. He was co-owner of Osceola Pharmacy, Vero Beach, for 15 years. He also was associated with Broward Drugs and Gray Drugs, and later retired from Eckerd Drugs in 1994. He was a volunteer for the Indian River County Sheriff's Office and the Vero Beach Volunteer Ambulance Squad. Survivors are two sons, Douglas Scott Ossenfort, of Vero Beach, and Kevin Ossenfort, of Jacksonville; one daughter, Alecia Ann Blazei, of San Carlos, California; and one grandson.

Charles Pempey ('51) died October 26, 2003 in Orlando. After serving as a US Marine and earning a purple heart, Charles

entered the University of Florida College of Pharmacy and received his pharmacist license in 1952. After graduating, he worked with Albert's Drug Store, and later operated Broadway Pharmacy in Kissimmee. Mr. Pempey completed his career as a pharmacist at Kissimmee Memorial Hospital in 1988. He was a member of Masonic Blue Lodge 69, the Scottish Rite and the Bahia Shrine. Charles is survived by his wife of 42 years, Dorothy (Eckholdt), his daughter, Sharon R Miller and his brother Harry Pempey, Sr., his sister-in-law Betty Jo (Mrs. Charles) Abbott, five nieces and one nephew.

James M. Plaxco, Jr. ('49) died September 11, 2000 in Lexington, SC. He earned his Ph.D. in Pharmacy from the University of Florida in 1949. He was a retired professor of pharmacy with the University of South Carolina.

John Riherd ('50) passed away at his home in May 2003. John was a retired pharmacist and a U.S. Navy veteran of World War II. He was past president of Volusia County and Central Florida Pharmaceutical Association and served on the Florida Pharmaceutical Board. He was a member of the Daytona Beach Country Club, Halifax Audubon Society, Daytona Beach Quarterback Club, UF Alumni Association and Calvary

Baptist Church. He was an avid Gator fan and enjoyed golf. Survivors include his wife of 54 years, Shirley Graham Riherd; a son, John M Riherd Jr.; daughters Nancy Wilson and Susan Riherd; a sister Frances White and three grandchildren.

William Thomas Sparks, Sr. ('54) died April 29, 2004 after a short battle with cancer. Mr. Sparks was a life-long resident of Pensacola. He was a veteran of the U.S. Navy, serving during WWII. He graduated in 1952, with honors from Pensacola Junior College and was the Class Valedictorian, and from the University of Florida in 1954, with honors, with a BS degree in Pharmaceutical Medicine. Mr. Sparks was a retired Pharmacist. He purchased the Hannah's Pharmacy in 1961, and operated it until he sold it in 1982. In 1981, he served as president of the Escambia County Pharmacy Association. He is survived by his wife of 57 years, Sue Eller Sparks; son Bill Sparks (Cathy); two grandchildren Carolyn Sparks and Tim Sparks; sister Katherine Dearing; brother Lowery Lee Sparks, Jr.; eight nieces and eight nephews.

Also Remembered:

- Odis Burnett '54
- Paul Leonard '64
- George Burnett '60
- Phong Anh Ta '82



www.cop.ufl.edu/alumni

Your New Alumni Web Site

Our new Alumni Web site has all the information you need to keep up with what's going on at UF College of Pharmacy. You can find out about upcoming events and planned reunions. See who is on our advisory board, meet our staff, or look at job opportunities—you can even post a job opening. We have useful links to the college, professional associations and helpful information to those who want to give back to the college. We will keep you up-to-date with photos and copies of our publications.

Visit our Web site, www.cop.ufl.edu/alumni today, and click on "Stay in Touch." We would love to hear from you and find out your latest news.

Meet Our Development Team...

Kelly Markey

Director of Development and Alumni Affairs
markey@cop.ufl.edu



After spending more than a year learning the ropes from previous long-time director, Deborah Klapp, Kelly officially has taken the reins as the new Director of Development. Building lasting relationships with the many College of Pharmacy graduates and supporters and friends is her main goal. Kelly's prior endeavors before joining the college include running her own advertising company and working with the Florida Diabetes Camp. If you want to know what's going on or how to get involved with your College of Pharmacy, contact Kelly.

Megan Bailey

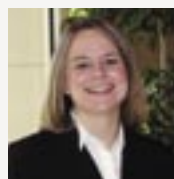
Assistant Director of Development and Alumni Affairs
megan@cop.ufl.edu



Megan earned her bachelor's degree in special events from UF and later received advanced certification in the Event Management program at George Washington University. While in school, Megan had internships with Florida House Congressman John Mica, the Ronald McDonald House, and the Ladies Professional Golf Association. Megan spent the past year planning our many college events and meeting alumni. This year, with new duties as assistant director of development she looks forward to working with alumni and friends of the college.

Laura Lentz

Program Assistant
lentz@cop.ufl.edu



Laura, who is just starting at the College of Pharmacy, is a long-time resident of Gainesville and comes from a proud Gator legacy family. She will be graduating from UF in special events in August. Laura spent the past six years working at the UF Alumni Association and assisted with membership, marketing out outreach events. In the year ahead, Laura will be planning our alumni events and is looking forward to working with a new group of alumni and friends.

11th Annual Ken Finger Memorial Day features continuing education & golf



Planned this fall for Oct. 15, the 11th Annual Ken Finger Memorial Day and CE Program will offer alumni and friends three hours of continuing education credits and an afternoon of golf followed by an awards dinner. This annual event is held in honor of Dr. Finger's contributions to the University of Florida, where he served many years as vice president for health affairs, and to the College of Pharmacy where he served as dean from 1968 to 1978. Promoting the concepts of continuing education and clinical pharmacy, Dr. Finger helped establish a curriculum that prepares pharmacists for a patient-oriented role in health care.

Alumni and area pharmacists are encouraged to attend a 3-hour live CE course in the morning, which will include lunch. Taught by UF faculty, the course, "Current Issues in Pharmacy Practice," will highlight innovative research and techniques in the areas of diabetes, HIV and mental health.

A golf scramble is scheduled for the afternoon featuring a silent auction, awards ceremony and steak dinner. For golf sponsorship opportunities, or to register for golf and/or CE course, contact the College of Pharmacy Office of Development and Alumni Affairs at 352-265-8034, or e-mail Laura at lentz@cop.ufl.edu.

Thanks to our 2003 Ken Finger Memorial Day and CE Program Sponsors

Platinum Sponsor \$5,000

- Barr Laboratories / Dr. Robert Bell
- Novartis
- Pfizer

Bronze Sponsor \$1,000

- AmeriSourceBergen
- AstraZeneca
- Bill's Prescription Center
- CVS/pharmacy
- Eckerd Corporation
- GlaxoSmithKline
- Intelicis
- McKesson
- Purdue Pharma
- PharMerica
- Roche Diagnostics
- UF Bookstores
- George & Dorothy Vuturo

Our Alumna in the Spotlight APhA recognizes Theresa Wells-Tolle

College of Pharmacy alumna Theresa Wells-Tolle, R.Ph., is the recipient of the 2004 American Pharmacists Association Good Government Pharmacist of the Year Award. The award was presented during the APhA Annual Meeting and Exposition, in Seattle, Wash., March 26 – 30.



The award, established in 1990, recognizes an individual pharmacist who actively contributes to the community through his or her voluntary involvement in the political process. It is presented to an individual who has raised the profession's awareness of the political process and worked to achieve legislative objectives that will improve the ability of pharmacists to provide care to patients.

Wells-Tolle, of Grant, Fla., is the president of the Florida Pharmacy Association and the owner of Bay Street Pharmacy and Home Health Care in Roseland, Fla. She has worked to advance the interests of pharmacists and pharmacy in the Florida legislature and has made regular trips to Tallahassee to testify on legislation affecting pharmacists and the community. She has also worked to enhance the visibility of Florida Pharmacists and their valuable role in patient care in her leadership of the Florida Health Fair. Wells-Tolle received her Bachelor of Science degree in pharmacy from the University of Florida College of Pharmacy.



1954 class representatives
(l-r) Anita Thompson and Jean Plowden

Class of '54 celebrates 50 years

Fifty years after graduating from the College of Pharmacy, the Class of 1954 will celebrate their Grand-Guard reunion this year Sept. 30 – Oct. 2. Alumni from the Class of 1954 are invited back to campus for a weekend full of events that include a football game and induction ceremony. The College of Pharmacy will host a tour of its new building on Oct. 1, and a special lunch and with Dean Riffe and other faculty members has been planned. This will be a great opportunity to catch up with old classmates and recall memories of pharmacy school.

As a way to show their appreciation for the opportunities a pharmacy education offered, the class of 1954 is making a special reunion gift. The goal is to assist pharmacy students with partial scholarships by raising \$10,000 to create the "Class of 1954 Scholarship Fund." To commemorate this accomplishment, the college will place a brick in the courtyard in front of the new pharmacy building.

For more information about Grand Guard, please call Megan in the Development and Alumni Affairs office at (352) 265-8034, or e-mail megan@cop.ufl.edu.



GATOR^x
MAGAZINE

18th Annual **2004**
College of Pharmacy
Alumni
Reunion
Barbecue
& CE Program



Sponsored by:
Novartis &
McKesson

Empowering Healthcare

UF v. E. Michigan Football Weekend
Friday & Saturday
September 10th & 11th, 2004
Gainesville, Florida

Check us out online at www.cop.ufl.edu/reunion



**UNIVERSITY OF
FLORIDA**
COLLEGE OF PHARMACY
P.O. BOX 100484
GAINESVILLE, FL 32610

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
GAINESVILLE, FL
PERMIT No. 726