

THE PURDUE PHARMACIST

Winter 2016 | Volume 91, Issue 2



PURDUE
COLLEGE OF PHARMACY

FROM THE DEAN



As Purdue University approaches the celebration of its sesquicentennial anniversary in 2019, we are excited to announce the launch of **Ever True: The Campaign for Purdue University**. This campaign is intended to assist us to continue the outstanding legacy of excellence that the University and, in particular, our College have demonstrated throughout the history of our great institution. Over the past two decades, the ability of the State to support institutions of higher education has declined significantly as it has faced pressing demands in other areas of critical need. At present, State allocations provide less than 13% of the revenue needed to operate our institution. While increases in tuition initially assisted in closing this gap in funding, it is neither feasible nor advisable to continue to make up this reduction in revenue through tuition increases. As President Daniels has made improving student affordability a high priority for Purdue University, we have aggressively sought to identify efficiencies and reprioritize activities to enable us to reduce institutional costs. Eventually, however, cost reductions will impact quality. Alternative sources of revenue will be essential for us to sustain the outstanding tradition of Purdue Pharmacy. This is where our alumni and friends can play such an important role.

On the opposite page you will see the three priorities that we have identified for this campaign. We believe that investment in these priorities will enable us to support our students, attract the very best faculty, and assure the future of your College of Pharmacy. Our total College campaign goal of \$37.5 million is ambitious. But then, our College has a long tradition of stretching itself to be the very best. Why should this campaign be any different? Won't you join us in making the Ever True Campaign a success? Or, to borrow and take some liberty with the opening phrase of Hail Purdue, **to our call once more will you rally?**

Hail Purdue!

Craig K. Svensson, Dean

On the Cover:
Venecia Wilson, graduate student
in the Department of Industrial
and Physical Pharmacy.

THE PURDUE PHARMACIST
Volume 91, Issue 2 (Winter 2016)

ADMINISTRATION

Craig K. Svensson
Dean, College of Pharmacy

Eric L. Barker
Associate Dean for Research

Tonglei Li
Associate Dean for Graduate Programs

Holly L. Mason
Senior Associate Dean

Brian M. Shepler
Assistant Dean for Experiential Education

DEPARTMENT HEADS

Elizabeth M. Topp
Industrial and Physical Pharmacy

Val J. Watts
*Interim Head, Medicinal Chemistry
and Molecular Pharmacology*

Alan J. Zillich
Pharmacy Practice

ADVANCEMENT OFFICE

John A. Dinkens
Director of Advancement

Amy K. Chandler
Communications Manager

Dana S. Neary
Manager of Alumni Relations & Special Events

Kathryn J. Skeel
*Manager of Development Operations
& Donor Relations*

College of Pharmacy
Purdue University
Heine Pharmacy Building, Room 104
575 Stadium Mall Drive
West Lafayette, IN 47907-2091
(765) 494-1361
(765) 494-7800 Fax
www.pharmacy.purdue.edu

The Purdue Pharmacist is published biannually for alumni and friends of the College of Pharmacy at Purdue University. We welcome your comments, opinions, and questions.

Publication designed by Dawn Minns,
Uppercase Design.

© 2016 by the College of Pharmacy at Purdue University. All rights reserved. No part of this publication may be reproduced or duplicated without the prior written permission of the publisher. While every effort has been made to ensure the accuracy of the information included in this publication at the time of printing, the publisher shall not be liable for damages arising from errors or omissions. Purdue is an equal access/equal opportunity university.



College of Pharmacy Campaign Initiatives

REDUCE STUDENT DEBT

The cost of education and the related issue of student loan debt is at the forefront of issues of concern in higher education. With your partnership, we can strategically extend support for a deserving, diverse population of students that will continue the College's pursuit to lower the level of student debt.

RECRUIT AND RETAIN THE BEST FACULTY

No program rises above the quality of its faculty. They serve as the distinctive driving force behind highly regarded programs, and the Purdue College of Pharmacy is well known for its quality faculty and their longstanding impact on students. Recruiting and retaining top-tier faculty is of utmost importance to continue our tradition of excellence. Endowed professorships provide an important resource in the recruitment and retention of a high-quality faculty.

PLAN FOR THE FUTURE

Dual-Purpose Endowments. These endowments fund a major facility expansion, renovation, or new construction while simultaneously establishing scholarships, supporting faculty, or providing special programs.

Planned Gifts. A planned gift will leave a legacy that will impact future generations of Purdue students by ensuring that the College has the resources it needs to sustain excellence. A bequest, the simplest and most popular type of planned gift, presents individuals with a wonderful opportunity to support the College without sacrificing assets during their lifetime. Additional opportunities exist to provide a lifetime income stream, an immediate income tax deduction, and/or possible favorable treatment of capital gains taxes.

Unrestricted Gifts. These gifts allow the College maximum flexibility in responding to unexpected needs and opportunities. For example, these flexible funds enable the College to send students to compete nationally and display their skills at conferences, modernize classrooms with cutting-edge technology, and invite guest speakers to campus.





THE PURDUE PHARMACIST

Winter 2016

POINTS OF PRIDE

Lilly Endowment, Inc. Grant	4
2015 Donor Recognition Brunch.....	6
College of Pharmacy Fiscal 2015 Gifts.....	7
Pharmacy Alumni in the East Coast Region of the United States.....	8
Jennifer McComb Receives Sperandio Award.....	9
13th Annual Garnet E. Peck Symposium.....	9
Board Certification in Nuclear Pharmacy.....	10
Preceptor Perception: Lynn Fletcher	11
Purdue Kenya Partnership: Partnering with the Tumaini Innovation Center to Change Lives.....	12
News from the Center for Medication Safety Advancement	13



FACULTY & STAFF

Faculty Spotlight: Dr. James Tisdale	14
Remembering Jackie Jimerson (1942-2015).....	15
Faculty & Staff News.....	16
Dr. Loudon's Retirement & Laboratory Dedication.....	18

STUDENTS & ALUMNI

Nontraditional Doctor of Pharmacy Degree Program: The End of an Era	20
3rd Annual Purdue Day of Giving	21
20th Anniversary BoileRx Golf Classic	22
Pharmacy Alumni News	24
Happenings.....	25
Class Notes.....	28



A Plan for Preeminence for Purdue Pharmacy

Lilly Endowment, Inc. Grant

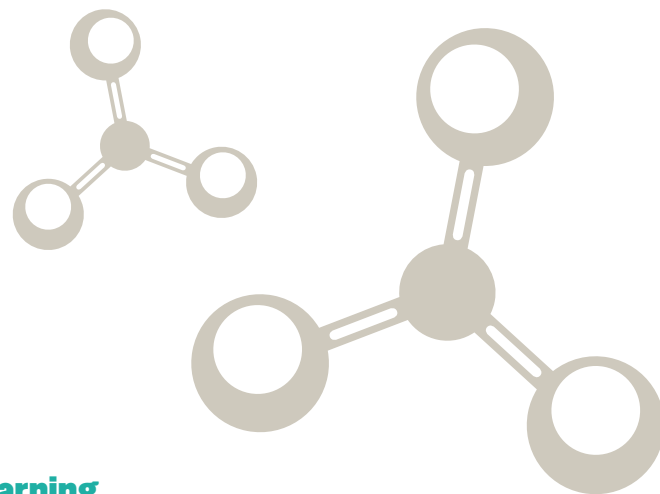
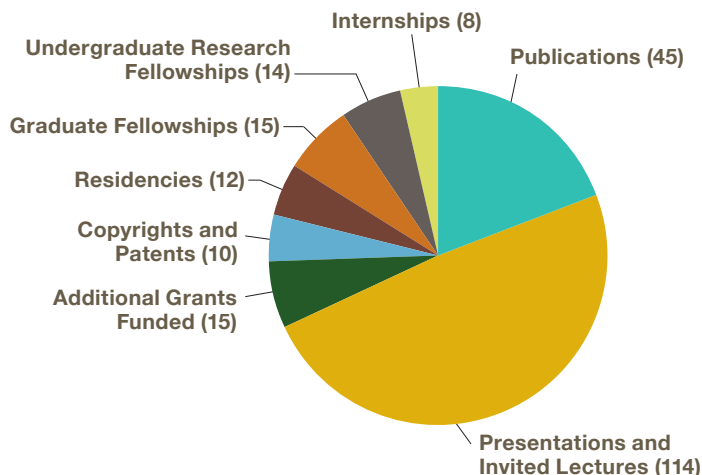
Since the beginning of Purdue's pharmacy program in 1884, we have benefited from many different partnerships. None has had a greater impact on our program than the generous partnership with the Lilly Endowment, Inc. Through its strategic investment in the College of Pharmacy in 2006, the Endowment's \$25 million grant has made a remarkable difference in our College and enabled us to have a far-reaching impact on health care delivery—improving the health of Hoosiers and beyond. Now that the grant has officially come to a close, we would like to highlight some of the key advances that have arisen as a result of this support.

The goal of the Lilly Endowment, Inc. grant to the College of Pharmacy was to support a series of initiatives that would assist the pharmacy program at Purdue University to become the preeminent program in the country. By focusing on various aspects of discovery, learning, and engagement, the Endowment has enabled us to work toward our vision of improving the utilization of the most widely accessible health care professionals (pharmacists), impacting health care delivery in the State of Indiana and nationwide, developing new therapeutic approaches for the treatment of cancer, improving pharmaceutical manufacturing, and promoting economic development through new technology.

Discovery

An important component of our Discovery initiative was the provision of seed funds for pilot projects in the initiative areas of medication safety, counterfeit medications, optimization of drug manufacturing, and cancer therapeutics. The intent of these seed grants was to support exploratory studies that will demonstrate proof of concept and allow faculty members to generate data needed to be successful in obtaining long-term grant funding for the project.

Initiatives Resulting from Seed Grants



Learning

The focus of our Learning initiative was to develop a model for the engagement of community pharmacists in the prevention, detection, and management of adverse drug reactions. This was accomplished through the recruitment of faculty as well as the establishment of postgraduate training opportunities. The College has been able to create endowed chairs, recruit faculty, and establish several postgraduate and undergraduate training opportunities that enhance our Learning initiative.

Creation of Endowed Chairs

- Dane O. Kildsig Chair in Industrial and Physical Pharmacy
- Medication Safety Chair
- Allen Chao Chair in Industrial and Physical Pharmacy
- The Martha and Fred Borch Chair in Cancer Therapeutics

Establishment of Fellowships, Residencies and Undergraduate Training

- Medication Safety Fellowship
- Global Health Residency
- Graduate Fellowship
- Hook Drug Foundation Community Practice Research Fellowship
- International Medication Safety Fellowship
- Migliaccio/Pfizer Fellowship
- Purdue-affiliated PGY-1 Community Pharmacy Residencies
- Postgraduate Residency in Medication Safety
- Undergraduate Fellowship & Research



Engagement

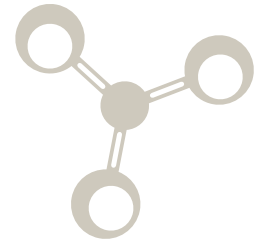
With the goal of preventing significant medication error events in Indiana health care institutions, the Engagement initiative resulted in the creation of the Center for Medication Safety Advancement (CMSA). Prior to the support of the Endowment, there was no visible presence of medication safety at the College. Today, the CMSA is a self-sustaining entity supported fully through extramural funding that is committed to serving the citizens of Indiana and the nation. Through this initiative, we have improved patient safety in Veterans Administration Medical Centers across the country and addressed several critical safety issues in Indiana health care institutions.

Center for Medication Safety Advancement Initiatives

- **Medication Safety Research Network of Indiana (Rx-SafeNet) - over 180 community pharmacies have joined**
- **SafeRx Database of Adverse Drug Events**
- **Medication Management Technology**
- **Medication Safety and Informatics Course**
- **Continuing Education**
- **Teaching Safety by Simulating the Medication Use Process**
- **Medication Safety Fellowship & Partnerships with Industry**

Not only have we been able to combine our discovery, learning, and engagement initiatives for community partnership and outreach, we have reached beyond our borders to have a global impact. Our collaborations with the medical schools at Indiana University, Duke University, and Brown University in Eldoret, Kenya, provide the framework for medication safety initiatives in a resource-constrained environment. By creating a Global Health Residency, we have introduced paper analytical devices (PADS) to combat counterfeit medications and established a diabetes care program in sub-Saharan Africa. The combined initiatives have also allowed for facilities enhancements within the Pharmacy building. Approximately 12,000 square feet of ground level space has been and will continue to be renovated.

Without the support of this grant, none of the initiatives described would have been launched and we would not be having such a magnitude of impact. Opportunities exist today that were not in place when the grant was written in 2006. The Lilly Endowment, Inc. grant has been truly transformative for our program, and we express our sincere gratitude. We invite you to read more about the many exciting opportunities that the Lilly Endowment, Inc. grant has provided the College of Pharmacy over the past several years by visiting www.pharmacy.purdue.edu/lillygrant.



2015 Donor Recognition Brunch

The College of Pharmacy hosted its annual Donor Recognition Brunch on October 31, 2015, at the Four Points by Sheraton in West Lafayette. The brunch provides the College with the opportunity to say thank you to its donors and to allow the donors and their scholarship recipients to meet and visit with one another. Guests were welcomed by emcees Erika Hausenstein and Anne Rodino, both third professional year PharmD students and members of Phi Lambda Sigma. Zack McCormack, also in his third professional year and President of Phi Lambda Sigma, served as the student speaker. Dean Craig Svensson and John Dinkens, Director of Advancement, presented brief updates about the College, and Nancy Lilly (BS 1978), retired Vice President of U.S. Sales and Marketing with Eli Lilly and Company, served as our guest speaker.



Jeannie (BS 1961) and Jim Chaney and Bette Maier pose with scholarship recipients



Guest speaker Nancy Lilly (BS 1978) poses with scholarship recipients



Mary Loftus (BS 1963, MS 1964) visits with scholarship recipient Benjamin Asmah



(L to R) Sang-A Yun, Lily Lin, Cynthia and Jack (BS 1962) Klee, Danielle Field, and Darlene and Jim (BS 1977) Branham

WE APPRECIATE ALL YOU DO TO SUPPORT
THE COLLEGE OF PHARMACY!





Thank You!

COLLEGE OF PHARMACY FISCAL 2015 GIFTS

The College of Pharmacy is grateful to our alumni, friends, faculty, and staff whose support is critical to our continued success. Your generosity enhances the overall success of our programs and future alumni, and we thank you. A list of the names of our individual and corporate donors who made gifts during July 1, 2014 through June 30, 2015 can be found online at www.pharmacy.purdue.edu/alumni-friends/how-you-can-get-involved/donor-recognition.

The College of Pharmacy is profoundly indebted to the generosity of our donors. Your donations greatly enhance the overall success of our programs, our reputation, and our future alumni. We invite all of you to participate at the appropriate giving club level. Make a gift, and make a difference!

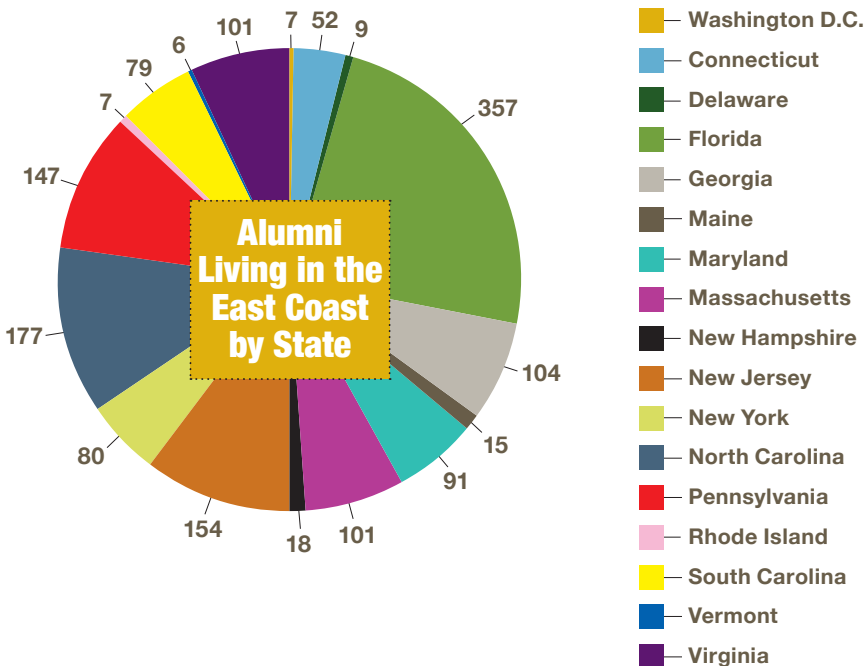
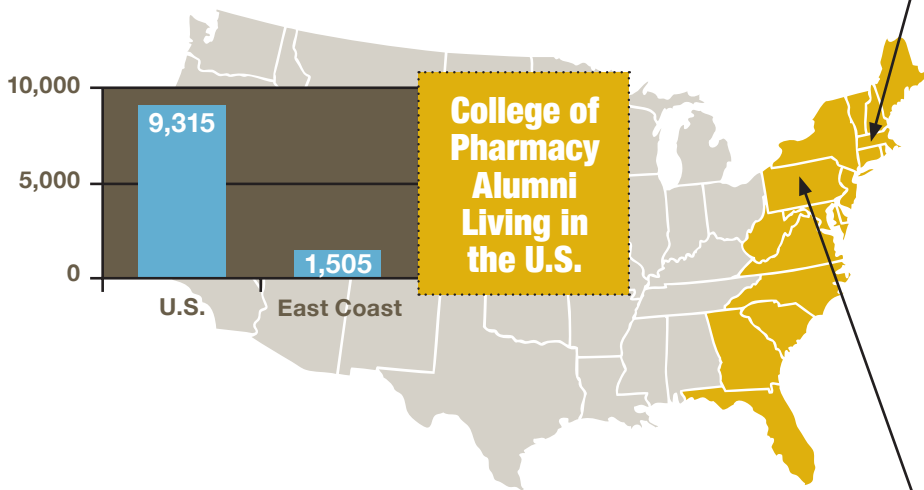
For questions regarding the Donor Honor Roll, please contact Katie Skeel, Manager of Development Operations and Donor Relations, at kjskeel@prf.org or (765) 494-1370.

PHARMACY ALUMNI

in the East Coast Region of the United States

The College of Pharmacy is proud to have alumni represented throughout the United States and around the world. Exactly where are all of our alumni located? We decided to highlight the specific regions of the U.S. in a new series, which we began with the Midwest region in our last edition of *The Purdue Pharmacist*. The East Coast region consists of our nation's capitol, Washington D.C., and these 16 states in the north central U.S.: Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, and Virginia.

Each and every one of our alumni plays a vital role in the profession, and although we can't highlight all those who live and work in the East Coast, we thank each of you for representing the Purdue College of Pharmacy with pride!



Louise Johnson (BS 1973)
Global Head of R&D Quality Assurance,
Takeda Pharmaceuticals
Massachusetts

"Living and working for Takeda Pharmaceuticals on the east coast, specifically Boston/Cambridge, is just great. The Boston/Cambridge campus environment of the local biotech community is professionally rewarding and enjoyable, the atmosphere enables cross company collaboration, and the location puts us in the middle of many renown educational and research facilities. The east coast also provides a diversity of opportunities, culture, arts, and sport activities. We have it all!"



Donald O. Barrick (BS 1976)
Retired from Merck & Company, Inc.;
Pharmaceutical industry consultant
Pennsylvania

"When I chose Purdue, I didn't know what major I wanted to pursue; my freshman roommate got me interested in pharmacy. From there, several things fell into place that resulted in a rewarding career of 35 years with the same company. During my education, I focused on industrial pharmacy. Being from New Jersey, I was likely influenced by the many pharmaceutical companies located in the East coast corridor from Delaware to New England. As fortune would have it, Purdue Pharmacy was highly respected for industrial pharmacy, and I received the best education. Upon graduation, I landed a position with Merck & Co. in Pennsylvania. I am eternally grateful to the College of Pharmacy for enabling my career."



Jennifer McComb Receives SPERANDIO AWARD



Jennifer McComb (PharmD 1994) is the recipient of the 2015 *Glen J. Sperandio Award for Advancement of Pharmacy Practice*. After graduating from Purdue University, Dr. McComb completed a pharmacy practice residency at the Indiana University Medical Center. From there, she worked at Bloomington Hospital as Staff Development

Coordinator and Clinical Coordinator. She returned to Fort Wayne to join Lutheran Health Network where she has held various positions including Clinical Coordinator, Medication Safety Specialist, Student Coordinator, Purdue Faculty, and most recently, Transplant Specialist. She also serves as the PGY1 Residency Program Associate Director.

Dr. McComb has mentored and precepted pharmacy students every year since her graduation. She works with multiple colleges of pharmacy precepting students, lecturing on transplant pharmacy, and leading transplant labs. She has collaborated with numerous students and residents on various transplant, medication safety, and pharmacy practice-related projects. In conjunction with faculty from Manchester College of Pharmacy, she has developed a kidney camp rotation with

the National Kidney Foundation. Under her joint leadership, a team of pharmacists, residents, and students provide medication services to children at camp with kidney disease or those with a kidney transplant. She is very passionate about education, not only of future pharmacists, but of her transplant team, the nurses, her patients, and their caregivers.

The Sperandio Award recognizes a licensed pharmacist with a minimum of 10 years of service to the profession who is an alumna/alumnus of the Purdue College of Pharmacy. Other characteristics of the award recipient include providing leadership in local, state and/or national professional or fraternal pharmacy organizations; assisting pharmacy students and/or practicing pharmacists in advancing their careers; demonstrating innovations in the practice of pharmacy; participating in professional volunteer service activities within the community; and promoting pharmacy as a profession.

"I feel very privileged to receive this award in honor of Glen Sperandio, a pharmacist whom I was fortunate enough to know and work with when I first started in pharmacy and whom I believe has helped pave the way for pharmacists to practice the way we do today," comments Dr. McComb.



13th Annual Garnet E. Peck Symposium

The 13th Annual Garnet E. Peck Symposium will be held on March 30 & 31, 2016.

TOPIC

Pharmaceutical Crystallization: Fundamentals and Applications

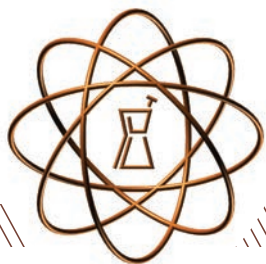
CO-CHAIRER BY

Dr. Lynne Taylor, Professor of Industrial and Physical Pharmacy

Dr. Keith Chadwick, Assistant Professor of Industrial and Physical Pharmacy

The Peck Symposium is hosted by the Department of Industrial and Physical Pharmacy and the College of Pharmacy.

For more information about the symposium, please contact Sarah Ruh, IPPH/CPPR Communications & Events Coordinator, Department of Industrial and Physical Pharmacy, at (765) 494-1484 or sruh@purdue.edu. Registration and further details will be available online at www.ipph.purdue.edu/peck.



PURDUE SELECTED TO OFFER BOARD CERTIFICATION in Nuclear Pharmacy

The national Board of Pharmacy Specialties has appointed Purdue University as the sole provider of continuing education for BPS recertification in nuclear pharmacy for the next seven years, effective January 1, 2016, which is a first for Purdue's nuclear pharmacy programs.

Nuclear pharmacy, which involves compounding and dispensing radioactive pharmaceuticals for use in diagnostic imaging and radionuclide therapy, became the first specialty area designated by the Board of Pharmacy Specialties (BPS) in 1978. Since that time, seven other specialty areas have been approved by BPS for board certification.

"Purdue's College of Pharmacy and its Nuclear Pharmacy Program are considered to be among the best in the nation, but this was the first time the College submitted a proposal to offer professional development for board certification," says Dean Craig Svensson. "We are proud to have a history of providing an excellent education in nuclear pharmacy to our students, but many pieces had to come together for us to be able to offer a robust and rigorous program for all nuclear pharmacists across the nation seeking continuing education opportunities, including those who choose to use continuing education offerings for board certified nuclear pharmacist (BCNP) recertification," he continues. "We are honored to have been selected by the Board of Pharmacy Specialties."

Purdue's nuclear pharmacy continuing education program is a collaboration between the Purdue College of Pharmacy's Continuing Education (CE) and Nuclear Pharmacy Programs. The program is set up as a subscription service. Enrollees have access to both the continuing education component of the program and the "Radiopharmacy Portal"—a reference resource for practitioners—with topics including but not limited to industry news, information about radiopharmaceutical

products, recommended reference materials, and clinically based case presentations which highlight the clinical use of radiopharmaceuticals in patient care. Subscribers pay an annual fee that allows them to pick and choose their educational offerings. The program includes post-testing to identify knowledge gained as a result of the learning experience, thus addressing knowledge barriers and/or new performance gaps that can then be presented in upcoming activities. Post-test assessments aid in evaluating whether educational objectives were achieved. Successful completion status for the subscriber is automatically forwarded to Purdue's CE staff who ensures that the ACPE credit is uploaded to the NABP's CPE Monitor Service within 60 days of completion of the activity, and applicable data is then compiled and submitted to BPS for use toward recertification requirements.

"Our plan for our CE program is to allow users to pick and choose their educational content based on their needs and interests. We are also committed to ensuring that we are consistently supplying a comprehensive program of content each year to add to the repository of content that will be available for our users' needs. As a result, we anticipate having approximately 100 'active' CE courses available across 20 or more broad content areas at any given time, with a minimum of 15 hours of new material provided each year," states Dr. Kara Duncan Weatherman, Clinical Associate Professor of Pharmacy Practice who leads Purdue's Nuclear Pharmacy Program, which includes this continuing education program.

"We set out to create something with educational depth, quality, and ease of use that will provide a wide breadth of information for practitioners in this field," Weatherman continues. "In addition, the portal has been tailored to provide not

only nuclear pharmacy specific offerings, but a rich program of accredited continuing education opportunities for nuclear pharmacy technicians and nuclear medicine technologists, as well."

"The fundamental goal of our program is to allow practitioners to have a choice in their CE materials. As a result, we will have more than a sufficient number of courses for our subscribers to choose from based upon their personal and professional wants and needs," comments Marlene Heeg, Managing Director of Continuing Education and Professional Development for Purdue's College of Pharmacy, who, with her team, will administer the program.

"All pharmacists are required to complete a specific number of hours of ACPE accredited continuing education every year as defined by each state board to meet state licensure requirements, which our program will be able to provide. In addition, with BPS approval, this program now meets the specifications to be used toward the BPS requirement for 100 hours of BPS accredited continuing education in this area of nuclear pharmacy as a recertification option," adds Heeg. "We practice a continuous improvement methodology throughout our entire CE program—identifying gaps, developing plans to eliminate the gaps, reassessment following each activity to ensure improvement has occurred, and readdressing areas where additional learning is desired and/or required—thus the cyclical nature of this process whereby we strive to always provide high quality continuing education programs, both in content and in content delivery."

Subscription pricing for this program includes an annual fee of \$195 for nuclear pharmacists, \$125 for nuclear medicine technicians, and \$95 for nuclear pharmacy technicians. More information is available at <https://nuclear.pharmacy.purdue.edu>.



Preceptor PERCEPTION

LYNN FLETCHER

Lynn Fletcher (PharmD 2012) has been a Purdue College of Pharmacy preceptor for three years and currently serves as our Regional Faculty Coordinator for Northwest Indiana and an affiliate professor of Pharmacy Practice. She is the Pharmacy Manager and a clinical pharmacist at Fagen Pharmacy in Valparaiso where she first began working as a resident. "I fell in love with the company and the job, and thus decided to take a full-time position with them after residency," she says. Her position at the pharmacy is split between spending time in the staff pharmacist role checking prescriptions and counseling patients and working as a clinical pharmacist with the residency program, the diabetes education program, and a variety of other endeavors.

Outside of pharmacy, Dr. Fletcher enjoys running, craft beer tasting, serving on the boards for the March of Dimes and Hilltop Neighborhood House, and coaching Girls on the Run. She's also busy planning her wedding for the summer of 2016. "My fiancé played football at Illinois, so that makes for fun bantering on Boilermaker vs. Illini game days."

What do you enjoy most about serving as a preceptor?

The students' ability to keep me on my toes is enjoyable and helpful. Having students at my site every month means there is never a shortage of fun questions and inquisitive people.

Briefly describe how you involve students in your rotation to advance patient care services. *At my site, students are given quite a bit of autonomy. They are integrally involved with our diabetes education program, insulin titration program, MTM, and other patient care services. Once the students are comfortable with the services, I allow them to teach, call patients, make insulin titration adjustments, etc., and I am there as a final check.*

What is a favorite memory while a student at Purdue?

Friends of mine from IU were visiting one weekend, and I kept talking about my friend Neil and asking if they wanted to meet him. They ignored me for far too long, brushing off my comments about my friend as a joke. Finally, they obliged. I proudly walked them to the obvious location to meet my friend—the Neil Armstrong statue. We all laughed and took photos. I don't think you are supposed to climb on the statue, but we did. Oops!



Rising Star Award

Dr. Fletcher is the 2015 recipient of the AADE Foundation's *Rising Star Award* which recognizes a diabetes educator who has less than three years of diabetes education experience and has demonstrated leadership and commitment in their practice. She was recognized for having started a diabetes education program at Fagen Pharmacy, one of only two community pharmacy diabetes education sites in the state.





PURDUE KENYA PARTNERSHIP:

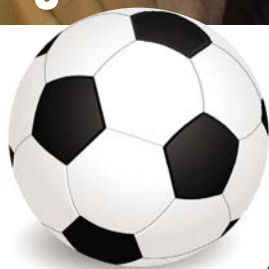
Partnering with the Tumaini Innovation Center to Change Lives

A soccer ball flies across the air, hits the goal post, and falls back into the pitch. A flurry of activity ensues as children at the Tumaini Innovation Center, alongside pharmacy students and residents from Purdue University and the Moi Teaching and Referral Hospital (MTRH), chase after the rebound ball. Behind the goal post on one end, young children from the neighboring community have gathered on a small playground taking turns on the swings and slides, while others play a game of volleyball on a makeshift court. This is a typical Friday afternoon at the new Tumaini Innovation Center, which was opened in March 2014 and is currently home to 11 boys between the ages of 11 to 17 who once lived on the streets in Kenya.

The Tumaini Center was founded in 2010 in Eldoret, a rapidly developing city in Western Kenya, as a drop-in center to meet the needs of street youth who sought reprieve from their hectic daily struggle. The Center is open Monday through Friday from 8 a.m. to 5 p.m. and provides a safe haven where these children can escape street life for a few hours each day. Here they would find a place to shower, have one nutritious meal, and engage in activities such as bead making and dodgeball. However, when night came, this reprieve would end, as the boys would have to retreat back to the streets.

Life on the streets was extremely difficult for the boys, as Kariuki, 11, narrates. “I sniffed glue for a long time and suffered the cold and abuse of the streets. I longed to live a better life like other children.” He found himself on the streets at the age of eight after his mother, who sells local brew, could no longer care for him and his five siblings. Like Kariuki, most of the Tumaini youth faced constant harassment, glue addiction, and harsh weather, all while having to scavenge for food from dumpsites and garbage bins.

“The situation needed to change,” says Dr. Sonak Pastakia,



Associate Professor of Pharmacy, who runs the Purdue Kenya Partnership (PKP) alongside his wife, Dr. Rakhi Karwa, Clinical Assistant Professor. “These boys are very creative, entrepreneurial, and technically gifted,” he says. “We wanted to create a place where they can learn, innovate, and fulfill their potential.” In 2014, Dr. Pastakia and various

collaborators in the AMPATH Consortium in Kenya were able to raise money to build a new boarding center on 2.5 acres of land that would become home to these children.

In less than a year, the Tumaini Center has hugely transformed. PKP has partnered with Purdue’s Colleges of Engineering and Agriculture to help translate what the youth learn in class into innovative, practical applications that they can use to help themselves and their communities. One such project is a highly successful permaculture farm recently featured on Forbes online, developed by Tyler Burgardt, an IUPUI alum living in Kenya with his wife, Claire.

The Tumaini Center is a major highlight of the Kenyan experience for Purdue students and residents as Chelsea Pekny, a Purdue Global Health Fellow living in Kenya, explains. “You see so many kids on the streets having to deal with so much struggle and no one really sees them as children, but you put them in this new environment and realize that they, like all children, just want to play and live out their dreams.”

Purdue hopes to continue to partner with AMPATH consortium members to support the expansion of the Tumaini Innovation Center and to provide opportunities for the hundreds of youth still living on the streets.

For more information about Tumaini Innovation Center and how you can get involved in our efforts, please visit www.tumainicenter.org.



Center for Medication Safety Advancement

Greetings!

How do you measure the absence of something? How many times did you NOT trip and fall down today? How could you even measure that even if you wanted to? There are countless opportunities for someone with my level of coordination and dexterity to trip on a daily basis, but can I truly know exactly how many there are? Even if I could, what benefit would it bring? In the world of medication safety, questions such as these face us every day. If an error occurred in a pharmacy last month, then everyone went through safety training and another error occurred the following month, does that mean the training was ineffective? Perhaps it was blind luck that more errors didn't occur earlier? Or later? As healthcare practitioners, we are all asked to demonstrate the effectiveness of our work or the outcomes associated with our interventions, but with safety we face a unique set of challenges.

This past year, CMSA has engaged in a number of projects specifically targeting how we measure safety. One such project is the creation of our SafeRx database. We have partnered with the Rosen Center for Advanced Computing at Purdue University to develop a large database of adverse drug event (ADE) data. This database already contains tens of millions of records from the FDA on ADEs from around the world and it continues to grow regularly. These records will soon be paired with additional databases containing more records of ADEs and pair them with even more geographical and demographic data to begin to provide our team with a clearer picture of when and why errors occur at a population level. To be perfectly clear—this will not solve the problem, nor will it concretely identify why errors occur, but perhaps even more importantly it will reveal to us where we should be looking. Relationships have already begun to take shape that were previously unknown, and we are excited to share these in hopes of reducing the potential for future errors soon. Ultimately, SafeRx will be developed into a tool that pharmacies and health systems around the world can all use together to identify trends in safety and proactively make changes to prevent ADEs from ever occurring.

Another important area of measurement that CMSA is making significant advances in is unintended errors associated with new technology. In the field of medication safety, we are discovering that the illusion of knowledge can be a seriously unsafe situation. Just what do I mean by illusion of knowledge? Recently, I read an excellent book titled *"The Invisible Gorilla"* and in it the authors discuss how humans have a tendency (well-educated ones are just as guilty) to overestimate their knowledge in many areas. In medication safety, the tendency is to realize that a new technology such as automated dispensing cabinets appears to be safer than the previous alternative of med carts, therefore we make the assumption that it is. CMSA has launched into several operations to uncover what new types of errors exist now as a result of new technology that never existed previously using old methods. Again, I do not wish to be mistaken as an advocate for returning to our old methods—not in the least. Rather, we wish to provide our peers with a more complete understanding of new technology to make it even more powerful by uncovering not only the new errors, but some potential methods to avoid them.

Overall, measuring safety is a multi-factorial, complex issue with no clear answer in sight. But with continued efforts on multiple fronts, we believe that our important work will help our peers continue to provide the safest care possible, and prove it, too.

Thank you very much,



A handwritten signature in black ink, appearing to read 'KH', positioned above the contact information for Kyle Hultgren.

Kyle Hultgren, PharmD
Director, CMSA
(317) 275-6088
khultgre@purdue.edu
www.pharmacy.purdue.edu/cmsa



FACULTY SPOTLIGHT

Dr. James Tisdale

Professor of Pharmacy Practice

Dr. James Tisdale earned his BSc in pharmacy at the University of Manitoba and his PharmD at the State University of New York at Buffalo. He completed a residency at the University of Manitoba Health Sciences Centre and a postdoctoral fellowship in Cardiovascular Pharmacology and Therapeutics at Hartford Hospital and the University of Connecticut. From 1990-2002, he was Assistant/Associate Professor in the College of Pharmacy and Health Sciences at Wayne State University in Detroit, Michigan. Currently, he serves as Professor of Pharmacy Practice at Purdue University and as an adjunct professor for the School of Medicine at Indiana University in Indianapolis.

“I was always interested in science, particularly chemistry, and when entering university, I chose pharmacy as my profession because learning and understanding the process by which drugs exerted their actions in the body was interesting to me,” comments Dr. Tisdale. Through the course of his training, he became interested in cardiovascular pharmacology and pharmacotherapy. “I was drawn to the field of clinical cardiovascular electrophysiology, in part because I found it difficult and challenging, and I wanted to see if I could master it.” It’s no wonder that his own love for learning led him to an academic career where he can foster others. “I really enjoy student interaction and teaching. I enjoy getting to know our students, and I find teaching very rewarding, particularly when it becomes apparent that students have grasped a difficult concept as a result of my explanations and/or examples,” he says.

Please describe your current research. *The focus of my clinical and translational research program is prevention and management of naturally occurring and drug-induced arrhythmias. With my collaborators, I conduct clinical studies with the purpose of preventing atrial fibrillation occurring after lung surgery and esophagectomy. Postoperative atrial fibrillation is common, and is associated with adverse outcomes including hemodynamic instability, stroke, a prolonged length of stay in the intensive care unit and hospital, and an increased risk of mortality. We have conducted studies showing that the antiarrhythmic drug amiodarone is effective for prevention of atrial fibrillation after lung surgery and esophagectomy, and we have studies ongoing to further define the safety of amiodarone when used for this indication. We also are planning studies of the effectiveness of other drugs for prevention of postoperative atrial fibrillation.*

In addition, a major focus of my research is reduction in the risk of the drug-induced arrhythmia known as torsades de pointes (TdP), which is associated with the electrocardiogram abnormality known as QT interval prolongation. TdP is often a catastrophic occurrence, resulting in sudden cardiac death. More than 100 drugs available on the market may cause TdP as a side effect; these are commonly used drugs including macrolide and fluoroquinolone antibiotics, antifungal agents, antidepressants, antipsychotics, methadone, antiarrhythmic drugs, and many others. We recently developed and validated a risk score to identify hospitalized patients at high risk of developing QT interval prolongation. In addition, we developed a clinical decision support computer alert for QT interval prolongation, incorporating our risk score; this computer alert appears to pharmacists and physicians when a) the patient is prescribed a QT interval-prolonging drug, and b) their QT interval risk score is in the moderate or high range. The computer alert is therefore risk-quantified, and does not appear if the patient is at low risk of QT interval prolongation; this risk-quantified approach minimizes the likelihood of alert fatigue, as clinicians know that the alert only appears when there is moderate or high risk. Implementation of this computer alert in the cardiac intensive care units at Indiana University (IU) Health Methodist Hospital resulted in a 35% reduction in the risk of QT interval prolongation. Consequently, this QT interval computer alert system has been implemented at IU Health hospitals across Indiana. We are also currently conducting a series of studies in which we are testing the effectiveness of other unique pharmacological methods of reducing the risk of drug-induced TdP.

What is it that interests you about this research? *I am interested in this research because drug-induced TdP can be catastrophic, resulting in sudden cardiac death, and because more than 100 commonly used drugs can cause this adverse drug reaction. There is a critical need to identify means of reducing the risk of drug-induced TdP, and doing so has the potential to markedly improve medication safety.*

What do you hope to accomplish through this research? *I hope to improve patient outcomes by identifying pharmacological methods of reducing the risk of postoperative atrial fibrillation. In addition, I hope to improve medication safety by identifying means of reducing the risk of drug-induced TdP.*



REMEMBERING Jackie Jimerson (1942-2015)



The Purdue College of Pharmacy regrets to announce the passing of Ms. Jackie Jimerson, former Director of the Office of Multicultural Programs, on August 23, 2015. Ms. Jimerson was born in Chicago, Illinois, and grew up in East Chicago, Indiana. The first of six children, Jackie often served as caregiver for her siblings and cousins, thus developing a parental demeanor at an early age. She spent

her life caring for other people's children as well as her own. After earning her BS and MS in Education (both from Purdue University), she taught Home Economics at Jefferson High School in Lafayette before returning to her *alma mater* to counsel Purdue students.

During her 32 years at Purdue, Ms. Jimerson worked tirelessly to increase the number and success rate of students, particularly minority students. She often worked sixty hours, seven days a week as Director of the Office of Multicultural Programs, a role she held from 1992 until her retirement in 2012. The number of minority students who graduated from the College of Pharmacy doubled during her tenure as Director. The University acknowledged her hard work and students' success with numerous awards, including the *One Brick Higher Award* in 2005. Even after her retirement, she continued to meet with students—listening, advising, and basking in their continued success. Ms. Jimerson made a remarkable difference in many lives. Her legacy lives on through the students, and her impact will continue to be felt for uncounted years to come.

The Jackie Jimerson Scholarship Endowment

Contributions in memory of Ms. Jimerson may be made to the *Jackie Jimerson Scholarship Endowment Fund* established in October 2011 by Charles and Sarah Sanders, Nathaniel Milton, Warren and Aneasha Moore, Ralph Johnson, Joanne Murphy Woods, and Travis Woods to recognize student leaders participating in Multicultural Programs in the Purdue College of Pharmacy. Please send your check made payable to Purdue Foundation to the College of Pharmacy with Jimerson Scholarship written in the memo section. You may also make a gift online by visiting giving.purdue.edu/JackieJimerson.



Ms. Jimerson is surrounded by friends, students, and graduates of Multicultural Programs during her retirement celebration in 2012

FACULTY & STAFF NEWS



Dr. Eric Barker,
Associate Dean
for Research
and Professor of
Medicinal Chemistry
and Molecular
Pharmacology, has

been appointed by the American Society for Pharmacology and Experimental Therapeutics' Board of Publications Trustees as the next editor of *Pharmacological Reviews*.



Dr. Mark Cushman,
Distinguished
Professor of Medicinal
Chemistry, has been
awarded a U.S. patent
as the lead investiga-
tor for the synthesis

and use of azaindenoisoquinoline topoisomerase I inhibitors in the treatment of cancer.



Dr. Daniel Flaherty
joined the Department
of Medicinal Chemistry
and Molecular
Pharmacology as
Assistant Professor.
His research special-

ization includes using traditional and fragment-based drug design methods to study novel antimicrobial and anticancer targets. He received his BA in Chemistry (Central College, Iowa) and PhD in Pharmaceutical Science (University of Nebraska Medical Center). He went on to complete a postdoctoral fellowship at the University of Kansas Specialized Chemistry Center. Prior to joining the Purdue faculty, Dr. Flaherty served as Research Assistant Professor for the Higuchi Biosciences Center at the University of Kansas.



The Purdue Medication Safety Team (L to R) Dan Degnan, Kyle Hultgren, John Hertig, and Chelsea Leeper pose with Dean Craig Svensson

The Indiana Pharmacists Alliance (IPA) held its annual awards banquet on September 17, 2015, in French Lick, Indiana. The 2015 *Medication Safety Award* was presented to the Center for Medication Safety Advancement,

directed by **Dr. Kyle Hultgren**. **Dr. John Hertig**, Associate Director of CMSA, received the 2015 *Excellence in Innovation Award*. **Dr. Dan Degnan**, Senior Project Manager for CMSA, was named IPA President-elect.

Dr. Arun Ghosh Receives McCoy Award

Dr. Arun Ghosh, Ian P. Rothwell Distinguished Professor of Chemistry and Medicinal Chemistry, is the recipient of the 2015 *Herbert Newby McCoy Award*, the highest research award given by Purdue University. Dr. Ghosh's research interests include diverse areas of organic, bioorganic, and medicinal chemistry with particular emphasis on organic synthesis and protein-structure-based design of biomolecules that have improved human health.

The award was established in 1964 by Mrs. Ethel Terry McCoy in honor of her late husband, a distinguished Purdue alumnus. To support her husband's lifelong interest in science, she designated the annual award for a student or faculty member making the greatest contribution of the year to the natural sciences. The McCoy Distinguished Lecture has been established to honor the Herbert Newby McCoy Award winner and to present to the Purdue community the nature of the research and its contribution to the field of natural sciences. Dr. Ghosh presented his lecture, "Harnessing Nature's Insight: Molecules and Molecular Design in Today's Medicine," on November 9, 2015.

"We are doing a lot of exciting research, and I am truly honored to receive the McCoy Award as this recognizes our work in the lab." says Dr. Ghosh.

In additional news, Dr. Ghosh has been named a Fellow of the Royal Society of Chemistry. This is a tremendous honor that recognizes his international reputation and the substantial impact of his work.





IPA President Ron Snow presents Jane Krause with the Bowl of Hygeia Award

Prof. Jane Krause, Clinical Associate Professor of Pharmacy Practice, is the 2015 recipient of the *Bowl of Hygeia Award* for the State of Indiana. This award recognizes pharmacists who possess outstanding records of civic leadership in their communities and encourages pharmacists to take active roles in their communities. Prof. Krause has incorporated community service (often focused on drug abuse prevention) into her teaching at Purdue for several years. Associated with this, she has mentored PharmD students in community service opportunities through the Purdue Office of Engagement Community Service Grant Program. Since 2008, she has served as faculty mentor/sponsor on 24 grants—all focused on community service initiatives.



Dr. Kim Plake, Associate Professor of Pharmacy Practice and the 2015 recipient of the *Charles B. Murphy Outstanding Undergraduate Teaching Award*,

was honored as a Purdue University Teaching Academy Fellow at the Teaching Academy Induction Ceremony on September 29, 2015. Faculty inducted into the Academy have given evidence of their excellence in teaching and are recognized for their sustained commitment to the education of our students.



(L to R) Drs. Alina Alexeenko and Elizabeth Topp (Purdue University photo/Mark Simons)

Purdue University has created a new lyophilization consortium, LyoHUB, to improve freeze-drying technology to make food, pharmaceuticals, and biotech products safer and more affordable. **Dr. Elizabeth Topp**, Head of the Department of Industrial and Physical Pharmacy, and Dr. Alina Alexeenko, Associate Professor of Aeronautics and Astronautics, co-lead the consortium. Visit www.purdue.edu/newsroom/releases/2015/Q3/purdue-to-advance-freeze-drying-technology-through-rocket-science.html to read more.

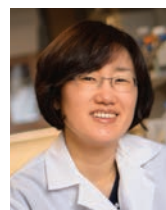
Remembering John Christian (1917-2015)



The Purdue College of Pharmacy regrets to share that Dr. John E. Christian, Professor Emeritus of Health Sciences, passed away on July 12, 2015—his 98th birthday. He received his BS in Pharmacy in 1939 and PhD in Bionucleonics in 1944 from Purdue University. The first formal lecture and laboratory courses in the United States for teaching basic principles of radioactive isotope applications, including the use of tracer methodology in research, were developed and taught by Dr. Christian in the School of Pharmacy starting in 1947. In 1959, the Bionucleonics Department was established as part of the School of Pharmacy, and he served as Head. Later, when the School of Health Sciences was formed in 1979, he was appointed Head of the School, a position he held until his retirement in 1983.

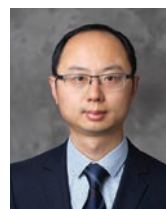
On a personal note, Dr. Christian was also known for having inhabited the Samara home, a house which he and his late wife, Catherine, commissioned Frank Lloyd Wright to design in 1950. The West Lafayette home was designated as a National Historic Landmark in April 2015.

You may read more about Dr. Christian and his history with Purdue at www.purdue.edu/hhs/hsci/about/history.html.



Dr. Yoon Yeo, Associate Professor of Industrial and Physical Pharmacy, has been appointed as a standing member of the Developmental Therapeutics Study

Section of the National Institutes of Health. Study sections review the grant applications that are submitted to the NIH, providing opinion on the scientific and translational merit of the work proposed.



Dr. Qi "Tony" Zhou joined the Department of Industrial and Physical Pharmacy as Assistant Professor. His research specialization includes inhaled formulation and

pulmonary drug delivery systems, nanotechnology for target and efficient drug delivery systems, novel particle engineering for inhaled and oral dosage forms, and intelligent inhaler device design. He received his BEng in Pharmaceutics (Shenyang Pharmaceutical University, China), MSc in Pharmacy (National University of Singapore, Singapore), and PhD in Pharmacy (Monash University, Australia). Prior to his Purdue appointment, Dr. Zhou was an Australian Biomedical Early Career Fellow at the National Health and Medical Research Council and the University of Sydney.

DR. G. MARC LOUDON **RETIRES**

Dr. G. Marc Loudon, Gustav E. Cwalina Distinguished Professor of Medicinal Chemistry, has retired after 38 years of service at the Purdue College of Pharmacy. A retirement celebration was held in his honor on August 26, 2015, in the East Faculty Lounge in the Purdue Memorial Union. Indiana State Representative Sheila Klinker presented Dr. Loudon with a certificate in recognition of his dedication and service to Purdue University. The College is pleased to share some highlights of Dr. Loudon's reflections throughout the course of his career here, and you may continue reading the rest of his interview, including details about how he first began researching and writing his *Organic Chemistry* textbook, at www.pharmacy.purdue.edu/loudon-retires.



How did you first become interested in an academic career?

I had some experience working as an intern in the chemical industry, and I had also done undergraduate research during my baccalaureate days at Louisiana State University. Of course, my PhD and post-doctoral experiences were at University of California-Berkeley, then and now one of the premier research institutions in the world. The independence associated with academic life appealed to me. Also, I had (and still have) a very serious professional involvement as a pianist and organist, and the flexibility of academic life allowed me to continue this interest. Finally, I think my mother's career as a dedicated classroom teacher and principal had some influence.

What was your path to Purdue? Why pharmacy?

I started my professorial career in the Department of Chemistry at Cornell in Fall 1970. I was promoted to Associate Professor there in 1977, but had met Heinz Floss (then Head of Medicinal Chemistry and Pharmacognosy at Purdue) at several Gordon Conferences, and he and I began discussions about my coming to Purdue. There were several attractions of Purdue: 1) the Department was medicinally focused, and this focus aligned with my research interests; 2) the Department needed someone to teach undergraduate organic chemistry, and I had been doing that at Cornell and had just started my textbook; 3) the Department was reasonably well

equipped for the kind of research I wanted to do; and 4) West Lafayette was much less isolated and had many more opportunities for my wife, Judy, who wanted to finish nursing school.

Doing my homework for the interview included checking the research papers of the Medicinal Chemistry faculty (no World Wide Web!) and, most importantly, looking up the meaning of the term "Pharmacognosy." I could see that there were several faculty, including Dean Tyler, who were "Pharmacognocists," and I figured I'd better know what I was getting into. As I was ushered into Jim Robbers' office, the first question out of his mouth was, "So, do you know what Pharmacognosy is?" I was ready! I'm pretty sure he was impressed that a chemist from the East Coast knew something about Pharmacognosy, and so, here I am.

What are your greatest joys in working with students over the years?

I enjoy class a lot, but the thing I really enjoy is when students come by the office for one-on-one help and I get to know them at a more personal level. Over the years, my impression of our Purdue students is that they are generally "salt-of-the-earth"—they are well-grounded, they work very hard, and they appreciate, even relish, the Purdue experience. I take great satisfaction in what our students have accomplished over the years, and all of the "educational assessment" tools in the world can't deny the big

assessment—that Purdue Pharmacy graduates are considered among the best in the world. It has been magnificent to have been associated with them as a teacher and mentor.

About 15 years ago, one of our successful Pharmacy alumni was interviewed about his Purdue experience by The Exponent. As it turned out, he had abandoned pharmacy and had started a commercial winery in Oregon. The Exponent asked him, "Winemaking is sort of far from Pharmacy—how were you able to make that transition?" He replied, "I took organic chemistry, and learning organic chemistry gives you the confidence that you can learn anything!" Teaching students how to learn is an important part of what we have tried to do, and this statement shows that sometimes we have succeeded.

How do you plan to enjoy your retirement?

Judy and I now have a home in New Orleans. Our youngest son, Chris, and his family live three blocks from us. Our other son, Kyle, lives with his family in San Jose, California, and runs a small but successful winery that we'll visit frequently. As I mentioned, I am a very serious pianist and organist, and I look forward to doing a lot of music. I already have plans to work with an organist in New Orleans, and I already have a commitment to return to West Lafayette for a Tippecanoe Chamber Music Concert in April 2016.

“One of the things that has always impressed me about our College is the immense collegiality of the faculty and staff. One doesn’t find this sort of atmosphere everywhere. But I have been fortunate at Berkeley, Cornell, and Purdue to have had wonderful, helpful, and collaboration-minded colleagues.

I will miss my active life at Purdue greatly; but, as the proverb goes, everything has its season, time marches on, and the time had come to take the step toward retirement.” – Dr. G. Marc Loudon



ORGANIC CHEMISTRY LABORATORY DEDICATED TO DR. LOUDON

In recognition of his innovative contributions to the teaching of Organic Chemistry, the newly renovated 416 Laboratory has been dedicated to Dr. G. Marc Loudon. Renovations began during the summer of 2015, and students were able to begin classes in the new space in September 2015. The renovations were made possible by the Discovery and Learning Laboratory Renovation funds, the University’s Repair and Rehabilitation funds, and the College of Pharmacy.

Many dramatic improvements were made in the laboratory, the most notable being the ventilation. There are now snorkel hoods (canopies) over the student work areas that vent chemical fumes, thus providing better air quality for our students and the ability to be more creative with experiments. Students each have individual access to vacuum lines which has vastly improved the time it takes to filter a sample and evaporate solvent. The layout was designed for better traffic flow with balances, melting point apparatus, and fume hoods. In addition, the new layout facilitates collaborative work. Our new wireless projection to two screens allows data to be projected to the class from four student laptops to display group data. Teaching assistants also are able to move freely around the room during discussions with their tablet computer, allowing students to write directly on the PowerPoint slides.



Andrew Karaki and Rachel Tarmidi (both 2nd year pre-pharmacy students) use the renovated laboratory

Nontraditional Doctor of Pharmacy Degree Program: **THE END OF AN ERA**

The Nontraditional Doctor of Pharmacy Degree Program (NTDPP) was started in 1981 by Professor Jerry Blank. Clinically oriented BS trained pharmacists practicing in Indiana requested an opportunity to take advanced therapeutics, clinical pharmacokinetics, and other PharmD course work offered in the on-campus post-BS Doctor of Pharmacy program. Their appetite for these courses was created

by increased confidence following participation in Purdue's Drug Therapy Monitoring, Self-Care, and Pharmaceutical Care Certificate Programs. Professor Blank recruited a clinical faculty member, Professor Robert Bennett (BS 1970), to help develop and teach the certificate programs and NTDPP discussions and labs.

The College of Pharmacy formed both a NTDPP admissions and advisory committee. These committees approved the 56 credit-hour curriculum (28 credit-hours each in both didactic coursework and advanced clinical experience), admitted qualified applicants into the program, and monitored student's progress toward graduation. The mission of the NTDPP in Indiana was to help establish a critical mass of PharmD graduates in key cities in the state including Indianapolis, Evansville, Fort Wayne, New Albany, Lafayette, and Northwest Indiana. An international program was later approved and launched in 2002 for instruction in the Middle East. The mission of the International NTDPP was to contribute leaders to the expansion of patient-oriented pharmacy



Hamid Abbaspour (BS1985) and Robert Bennett (back row, 2nd and 3rd from left) appear with International NTDPP students in Dubai. The two launched the International NTPDD in 2002, which resulted in a total of 71 graduates

services in Saudi Arabia, United Arab Emirates, Oman, Qatar, Kuwait, and other countries in the region.

Since its inception, the College has graduated a total of 220 NTDPP students, but the Class of 2015 marks the final year of the program with four graduates. Due to declining interest among domestic students and new requirements that

make it impractical, if not impossible, for international students, the NTDPP program has been discontinued. The ACPE Accreditation Standards for Doctor of Pharmacy Programs evolved to the point that so many critical educational components were incorporated at all levels of the PharmD curriculum, it was no longer possible for a BS trained pharmacist to have the required components for admission.

Pharmacists participating in the Indiana and International NTDPP completed as close as possible the same didactic course work, discussion periods, laboratories, quizzes, homework assignments, examinations, and advanced clerkship rotations as the students in the traditional on-campus program. "Each one of the 220 graduates totally disrupted their lives and their families' lives in order to complete the program. They are amazing people and extremely dedicated to the profession of pharmacy, and they have my utmost respect," reflects Bennett.

"The leadership and contributions of our NTDPP graduates will continue for decades. They are serving as pharmacy directors, clinical coordinators, faculty members, colleges of pharmacy administrators, and as officers in associations, as well as on the boards setting the standards of pharmacy practice for some of the countries involved."

Robert Bennett
Professor Emeritus of Pharmacy
Practice and Former Director of NTDPP

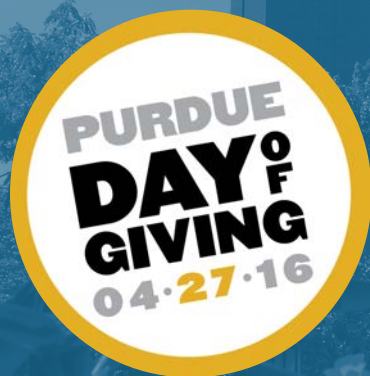


"I have enjoyed working with the students through the many years of the NTDPP and have developed many friendships in the process. Traveling to Dubai to work with their staff in 2008 was the chance of a lifetime and an experience I will never forget. I wish all of the graduates the best of luck as they pursue their careers."

Kathy Reynolds
NTDPP Project Coordinator, Continuing
Education & Professional Development



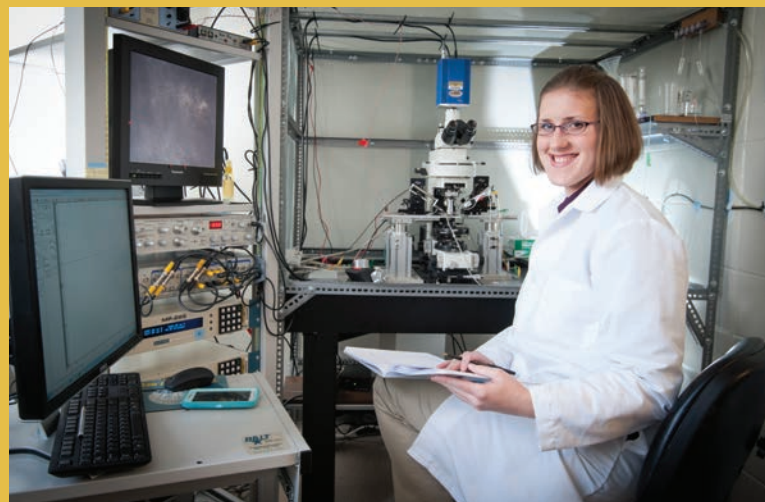
3rd Annual Purdue Day of Giving April 27, 2016



Join the entire Purdue University community on April 27, 2016, as we come together once again for Purdue Day of Giving, a 24-hour, online event that encourages students, faculty, staff, alumni, donors, and friends from all campuses to contribute to the University. You may learn more by visiting <https://purdue.dayofgiving.com>. It's amazing what we can accomplish when we work together toward a common goal!

SIXTY SECONDS

With a Graduate Student



Staci Engle

**Bachelor of Science,
Chemistry and Biochemistry/
Molecular Biology, 2011,
Illinois State University**

**Doctoral Student, Department
of Medicinal Chemistry and
Molecular Pharmacology**

Anticipated Graduation Date:
May 2016

Hometown:
Westville, Illinois

Major Professor:
Dr. Ryan Drenan

Research Interests:
Neuroscience research involving
how drugs of abuse alter the re-
ward pathway in the brain and lead
to addiction

Thesis Title:
α6-Containing Nicotinic
Acetylcholine Receptor
Involvement in Drug-induced
Synaptic Plasticity

Awards and Honors:

Frederick N. Andrews Fellowship,
Paget Travel Award, John Davisson
Endowment Research Award,
Bilsland Dissertation Fellowship,
Jenkins-Knevel Award for
Outstanding Graduate Research

Why did you choose Purdue?

I chose Purdue for the opportunity
to work with the outstanding
faculty here and because of the
diverse range of research I would
be exposed to by being a part of
the MCMP Department.

Post-graduation plans:

After graduating, I will start
as a post-doc at IUPUI in the
Postdoctoral Research and
Teaching Fellowship Program
with the long-term goal of finding
a tenure-track faculty position.

**“My experience as a
graduate student in
the College of Pharmacy
has provided me with
excellent training that
has helped me to grow
as a scientist and be
well prepared for my
future career.”**

20TH ANNIVERSARY

BOILERX

GOLF CLASSIC

Friday, June 3, 2016

Registration begins at 10:30 a.m.

Lunch will be served at 11:00 a.m.

Shotgun start at noon.

We will be playing 18 holes at the
Birck Boilermaker Golf Complex.

Registration forms can be found at
www.pharmacy.purdue.edu/boilerx,
and the deadline to register is May 1, 2016.
The cost is \$85/golfer, and the money
supports the Pharmacy Alumni Scholarships
fund. For more information, please contact
Dana Neary, Manager of Alumni Relations
and Special Events, at nearyd@purdue.edu
or (765) 494-2632.



**With your
support, our
mission is a
hole in one!**



20th Anniversary BoileRx Golf Classic · Friday, June 3, 2016

Registration includes:

- Practice Range Balls
- Prize Holes
- Soft Drinks & Beer
- Golf Cart
- Green Fees
- Lunch
- Door Prize

Sponsorship Opportunities

The BoileRx raises money annually to support Pharmacy Alumni Scholarships. These scholarships provide assistance to our students that enable them to attend Purdue and lower their financial burden of attending pharmacy school. One of the ways the College of Pharmacy does this is to offer sponsorships at the BoileRx.

The 2016 Sponsorship Levels are:

- \$125 Tee sponsorship
- \$200 Hole Sponsorship
- \$500 Registration Sponsorship
- \$750 Beverage Cart Sponsorship

Sponsorships can be made by contacting Katie Skeel, Manager of Development Operations and Donor Relations, at kjskeel@prf.org or (765) 494-1370.

PURDUE
COLLEGE OF PHARMACY

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

E-mail Address _____

Place me on a team

Sign me up for a four-person scramble. Other golfers on my team are:

_____, _____

_____, _____

Our fees only cover the cost to golf. Additional support is needed for our scholarships. Please make a donation that is meaningful to you.

Registration fee _____ x \$ 85 = \$ _____

Scholarship Donation (tax deductible) \$ _____

TOTAL REGISTRATION AMOUNT \$ _____

My check made payable to *Purdue Foundation* is enclosed.

Charge my credit card: MasterCard Visa Discover

Charge will appear as Purdue UDO Dept. Events on your credit card statement.

Name on Card _____

My credit card billing address is the same as the address listed above.

If different, please provide billing address: _____

Card number _____ - _____ - _____ - _____

Expiration date: _____ / _____ 3 Digit Security Code ____ _

Signature _____

Send Registration Form by May 1 to:

**BoileRx Golf Classic
Purdue University
Heine Pharmacy Building, Rm. 104
575 Stadium Mall Drive
West Lafayette, IN 47907-2091**

Or by FAX to (765) 494-9587

**Have questions?
Want to volunteer?**

**Please contact Dana Neary,
Manager of Alumni Relations
and Special Events, at
neary@purdue.edu or
(765) 494-2632.**

Forms can also be found at www.pharmacy.purdue.edu/boilerx.
Feel free to make copies of this form as needed.

College of Pharmacy

Pharmacy Alumni News



Greetings from Ole Purdue!

What a great fall season we had at Purdue! Thank you to all our alumni and donors who joined us on Halloween for our Annual Donor Brunch (see page 6), a great opportunity for our students to meet their scholarship donors.

Homecoming Weekend took place in November this year, and we had a great time (see page 27)! We welcomed the Class of 1965 back to campus to celebrate their 50th reunion, and we certainly enjoyed getting to visit with them.

Also this fall, the College hosted two Alumni and Friends Receptions at national meetings. We were in Orlando, Florida, for the AAPS meeting and in New Orleans, Louisiana, for the ASHP Mid-Year meeting. We will host an Alumni and Friends Reception at the APhA Annual Meeting in Baltimore, Maryland, coming up in March, so we hope to see you there.

If you weren't able to join us this past year, we hope that 2016 will have you coming back to campus.

Pride, Passion, Pharmacy, Purdue!



Dana Neary
Manager of Alumni
Relations & Special Events
nearyd@purdue.edu
(765) 494-2632

2016 Pharmacy Events Calendar

DATE	EVENT
February 27	Boilermaker Ball
March 5	Alumni and Friends Reception at the APhA Meetings in Baltimore, MD
March 30-31	13th Annual Garnet E. Peck Symposium – www.ipph.purdue.edu/peck
April 1	Distinguished Alumni Awards Program
April 14-15	Pharmacy Women for Purdue Spring Conference – www.pharmacy.purdue.edu/wfp
April 27	Purdue Day of Giving – www.purduedayofgiving.com
April 29	Senior Class Gift Luncheon
April 29	Pharmacy Graduation Banquet
April 30	BSPS Graduation Dinner
May 14	Purdue Commencement & Pharmacy Commencement Reception
June 3	20th Anniversary BoileRx Golf Classic – www.pharmacy.purdue.edu/boilerx
September 7	Pharmacy First Nighter
September 11	White Coat Ceremony
October 14	Student and Alumni Chili Supper
October 15	Pharmacy Homecoming Tailgate
October 29	Pharmacy Donor Recognition Brunch
November 13-16	Alumni and Friends Reception at the AAPS Meetings in Denver, CO

For more information about upcoming events, please visit
www.pharmacy.purdue.edu/events.

HAPPENINGS



(L to R) Steve Scott, Bailey Crockett, Linda Huang, Denise VanHyfte, and Jane Krause pose during the Council of Faculties and Department Chairs Welcome the AACP Walmart Scholars Reception

AACP Annual Meeting – Walmart Scholars

The AACP Annual Meeting was held in National Harbor, Maryland, during July 11-15, 2015. Dr. Steve Scott, Professor of Pharmacy Practice, served as Chair of the AACP Council of Faculties. During the meeting, three Purdue alumnae were selected as Walmart Scholars: Bailey Crockett (PharmD 2014), Linda Huang (PharmD 2014), and Denise VanHyfte (PharmD 2015). Professors Jane Krause and Monica Miller served as Walmart Scholar Mentors. The goal of the scholarship program is to strengthen the recipient's skills and commitment to a career in academic pharmacy through participation in programming and activities at the annual meeting and seminars.



Trevor Thain Receives EPIC Pharmacies Grant

Trevor Thain, 3rd Professional Year PharmD Student, is a 2015 recipient of the EPIC Pharmacies Student Grant Program. EPIC Pharmacies, Inc., is a national network of more than 1,400 independently owned pharmacies. Grants are awarded annually to

approximately 15 pharmacy students throughout the country who plan to practice in an independent pharmacy upon graduation. "The independent pharmacy I work at, Topeka Pharmacy, is the reason I won the award," comments Trevor. "However, I live over an hour away from there, and it costs quite a bit to pay for two hours of driving daily. I want to take advantage of this opportunity to use the grant money to aid in travel costs so I may further my pharmacy education in a unique learning environment."

Pharmacy at the Indiana State Fair

The Purdue College of Pharmacy partnered with Hook's Drug Store Museum to hold a blood pressure screening clinic on August 14, 2015, during the Indiana State Fair. Eleven students and two faculty performed 155 blood pressure checks and counseled visitors on life style modifications and risks of untreated hypertension as appropriate. All participants received a small card with their systolic and diastolic readings, pulse, and date. If the blood pressure was above 140 mmHg/90 mmHg, the subject (29 individuals) was counseled that he/she has hypertension and should take the card to his/her physician at the next visit. If the blood pressure was above 150 mmHg/100 mmHg, the subject (28 individuals) was counseled that he/she has significant hypertension and should contact his/her primary care physician and seek medical attention soon. The remaining 98 individuals had a blood pressure at or below 140 mmHg/90 mmHg.



Hailey Freeman (1st Professional Year PharmD Student) and her mother picked up a copy of the "Proud to be an Indiana Pharmacist", a history of pharmacy activity book geared for children/youth which is a collaboration of the three colleges of pharmacy in the state



Alan Farkas (back L) and Bruce Carlstedt (back R) joined Purdue Pharmacy students in the Hook's Drug Store Museum at the Indiana State Fairgrounds

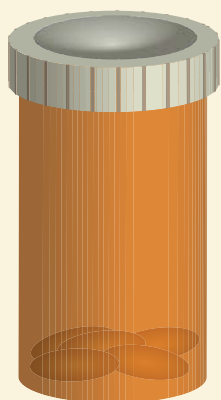
Yellow Jugs Old Drugs

The Purdue College of Pharmacy hosted a kickoff event on September 10, 2015, for the Yellow Jug Old Drugs unwanted medication collection service where patrons can safely dispose of unwanted medications at the Purdue University Pharmacy. Indiana Attorney General Greg Zoeller spoke at the event. Additionally, David and Lori Swan, whose son Curtis died last February, addressed the dangers of inappropriate use of prescription drugs.

Dr. Patricia Darbshire, Clinical Associate Professor of Pharmacy Practice and a member of the Indiana Attorney General's Medication Take-back Committee, leads the collection project along with the help of the Purdue Student National Pharmaceutical Association. "We now have a means

for accepting unused medications during normal business hours at the Purdue University Pharmacy," she says. "This should be much more convenient for patrons. We will continue to hold community collection events as well, since we are able to accept a wider variety of items at these events."

"The kick-off event was a great success, with about 30 people in attendance," adds Dr. Darbshire. "Several pharmacy patrons brought medications for disposal during the event and many more returned unwanted medications



Dr. Darbshire disposes of unwanted medications in the yellow jug as Attorney General Zoeller looks on

over the next few days. We anticipate this to be a highly desirable service that will increase foot traffic in the pharmacy."

You can read more about the Yellow Jugs Old Drugs program at www.purdue.edu/newsroom/releases/2015/Q3/purdue-pharmacy-to-accept,-dispose-of-old-or-unwanted-meds.html.

Graduate Student Awards Symposium

The annual College of Pharmacy Graduate Student Awards Symposium was held on November 5, 2015, in the Purdue Memorial Union North Ballroom. The 2015 recipients of the *Albert and Anna Kienly Awards for Outstanding Teaching by a Graduate Student* are: **Kourtney Goode**, Medicinal Chemistry and Molecular Pharmacology; **Joonyoung Park**, Industrial and Physical Pharmacy; and **Jaclyn Myers**, Pharmacy Practice. The 2015 recipients of the *Jenkins-Knevel Awards for Excellence in Research* are: **Staci Engle** and **Evan Pratt**, Medicinal Chemistry and Molecular Pharmacology; **Haichen Nie**, Industrial and Physical Pharmacy; and **Suyuan Zhang**, Pharmacy Practice. The Jenkins-Knevel Awards recipients presented their research during the symposium.

All Purdue College of Pharmacy graduate students and postdoctoral scholars were encouraged to present their research at a poster session held before and after the symposium.



Research poster session held during the Graduate Student Awards Symposium



2015 Homecoming Festivities

The Purdue College of Pharmacy welcomed hundreds of alumni back to campus for Homecoming during November 6-8, 2015. The annual Student and Alumni Chili Supper took place on Friday evening, which was followed by the Purdue Homecoming Parade and Pep Rally. Over 400 alumni and their families, students, and friends were welcomed at the Pharmacy Tailgate tent prior to the Purdue vs. Illinois football game. We were excited to have the Class of 1965 join us to celebrate their 50th Reunion, as well. This fun-filled weekend provides the opportunity for alumni to reconnect with friends, faculty, staff, and current students. Hail, Purdue!

The Class of 1965 celebrate their 50th Reunion, (L to R) Ann Hubbell Moore, Lynn (Prewett) Fellows, James Spanopoulos, Doug Slessman, Margaret Heintz-Smith, and Becky Knox



Pharmacy alumna Pepper (Reznik) Wakeland (BS 1971) was inducted into the Purdue Cheerleader Hall of Fame during Homecoming. She was the first from Purdue to be selected as an All-American Cheerleader.



Linda McElhiney (BS 1984) and her niece



Pharmacy student Melinda Anderson (back L) and family

CLASS NOTES

1950-1959

Donald Buck (BS 1958) shares that he retired from a great 52-year career in 2010, and in 2011 he married Mary Alice.

Wayne Gloyer (BS 1956) is pleased to share that Gloyer's Pharmacy, established in 1960, celebrated its 55th



anniversary. Since Wayne's retirement, his son, Pete Gloyer, now runs the company with the help of his children, Lance and Megan. Located in Tomball, TX, this family-run business prides itself in going the extra mile to meet customer needs. They began compounding 20 years ago, specializing in both human and pet medications. The company strives to improve customer satisfaction, and that involves direct pharmacist interaction and keeping current with new technologies. Gloyer's Pharmacy looks forward to bringing the community many more years of quality medicine and care. www.gloyers.com

Gilbert O. Terlicher (BS 1951) is the proud owner of Gil Drugs Pharmacy Services in Valparaiso, IN, which he opened in 1955. This second generation, family-owned and operated pharmacy recently celebrated its 60th anniversary. Gil Drugs provides exceptional services such as Med Synchronization, Medication Therapy Management, and compliance packaging systems to its customers. They also provide services to supported living and group home consumers. Gil's son, Gilbert J. Terlicher (BS 1977, Management; PharmD 1995, UIC), is the managing partner of the business. Gil's granddaughter is **Farrah Chinderle** (PharmD 2010), who decided to pursue



1990-1999

In July 2015, **Andy Hudson** (BS 1996), **Mike Barnes** (BS 1997), and **Dale Sharp** (BS 1996) met each other in Arizona to hike to the bottom of the Grand Canyon National Park and back up, staying at Phantom Ranch overnight.

her PharmD while helping out around the pharmacy and working side-by-side with her grandfather and uncle upon graduating. She is a current member of the Purdue Pharmacy Alumni Board. Isabella Boutique, an extension of Gil Drugs, opened its doors in 2011 to serve breast cancer survivors and other women with special needs. www.gildrugs.com



(L to R)
Gilbert O.
and Gilbert
J. Terlicher
pose in front
of the store
at the 60th
anniversary
celebration

1970-1979

In September 2015, **Heidi Anderson** (BS 1978, MS 1982, PhD 1986) began her appointment as Provost and Vice President for Academic Affairs at Texas A&M University-Kingsville.



Kyle Thomson Lewis (BS 1979) shares that she recently retired as the Informatics Specialist at the University of Tennessee Medical Center in Knoxville after 32 years but still enjoys part time work.

1980-1989

James Jones, MD (BS 1987, PharmD 1988) has been appointed as Senior Vice President and Chief Medical Officer with Pacira Pharmaceuticals. In this role, he will primarily oversee and guide the company's clinical research and development efforts for the expanded uses of EXPAREL® and the company's DepoFoam® pipeline of products.

2000-2009

Nicole (Pitello) Morgan (PharmD 2007) and Matthew (BA 2004, Liberal Arts) share the birth of their second



daughter, Zoe Lillian, on July 23, 2015. Zoe weighed 7 lbs 10 oz and was welcomed with love by her parents and big sister, Grace.

2010-Present

Julie Bolinger (PharmD 2012) received the 2015 *Distinguished Young Pharmacist Award* at the Indiana Pharmacists Alliance annual awards banquet on September 17, 2015, in French Lick, IN.

Erin Hollinden and **Kyle Kuczanski**



(both PharmD 2013) were married on June 20, 2015, in West Lafayette, IN, at St. Thomas Aquinas Catholic Church with the reception following at the Purdue

Memorial Union. The couple resides in Evansville, IN, with their two dogs, Vixen and Turbo. Erin is a staff pharmacist/oncology pharmacist at Memorial Hospital and Health Care Center in Jasper, IN, and Kyle is a nuclear pharmacist at Radiopharmacy, Inc. in Evansville.

Allyson (Rough) Howard (PharmD 2011) and her husband, Ross (BS 2009, MS 2010, and PhD 2013, Engineering), welcomed the arrival of their first child, Gwen Everly, on



May 30, 2015. She weighed 7 lbs 8 oz and measured 19 1/2" long.

IN MEMORIAM

Gwenivere M. Banker (BS 1956)
John E. Christian (BS 1939, PhD 1944)
Norman O. Fortress (BS 1960)
Peter J. Shakula (BS 1950)



Looking for a job? We can help!

OneStepHire is an easy online resource where Purdue College of Pharmacy alumni can view job postings of interest within the field. Visit <http://careers.pharmacy.purdue.edu> today to begin your search for employment.



Stay Connected!



Update your contact information and share your news for Class Notes at www.pharmacy.purdue.edu/forms/class-notes-update-form. To submit a photograph, please send the attachment to Amy Chandler, Editor, *The Purdue Pharmacist*, at chandler@purdue.edu.

Follow us online at www.pharmacy.purdue.edu

Receive our e-newsletter, *Mortar & Pestle*, by subscribing at mortarandpestle@purdue.edu



Join our Purdue Pharmacy Alumni Group on LinkedIn at www.linkedin.com



Like Purdue College of Pharmacy Alumni on Facebook at www.facebook.com



Follow us on Twitter @purduepharmacy at www.twitter.com

We invite your feedback on ways we can improve our programs at the College of Pharmacy. Please send your suggestions to pharm-alum@purdue.edu.

PURDUE
COLLEGE OF PHARMACY

Make a gift, and make a difference!

Through *Ever True: Campaign for Purdue University*, the College of Pharmacy seeks to attract outstanding prospective students and reduce their debt, recruit and retain the best faculty, and plan for the future to help further our mission. To learn how you can make gift and make a difference, please visit www.pharmacy.purdue.edu/alumni-friends/how-you-can-get-involved/give-pharmacy.



EVER
TRUE

THE PURDUE PHARMACIST

Non-Profit Org.
U.S. Postage
PAID
Permit #74
Lafayette, IN

College of Pharmacy
Purdue University
Heine Pharmacy Building, Room 104
575 Stadium Mall Drive
West Lafayette, IN 47907-2091



White Coat Ceremony

The College of Pharmacy welcomed the Class of 2019 to the pharmacy family on September 20, 2015. Over one thousand people gathered on campus to share in this special ceremony as faculty assisted the class with donning their white coats. We were honored to have Dr. Steven Leslie (BS 1969, MS 1972, PhD 1974) serve as the keynote speaker. He is Executive Vice Chancellor for Academic Affairs at The University of Texas System Administration and holder of the James E. Bauerle Centennial Professorship in Drug Dynamics, College of Pharmacy, The University of Texas at Austin. The College extends its appreciation to Kroger Company for sponsoring this memorable event.

