Greetings from the Dean

Greetings from West Lafayette!

As the leaves turn their colors across campus, we are reminded of the inevitability of change. Change is not always welcome, though sometimes it certainly is, but it comes nonetheless. Even unwelcome change can be a cause to celebrate as we are reminded of the impact of a passing reality. As you will note in this issue of Mortar and Pestle, we have experienced several recent changes of note within the Purdue Pharmacy Family. Recently, we faced the earthly passing of Dr. Garnet Peck, an emeritus faculty member who made decades of contributions to our program and the pharmaceutical sciences. We will provide a fitting tribute to his life in the next issue of The Purdue Pharmacist. We also celebrated the retirement of Dr. Richard Borch, our long serving Head of the Department of Medicinal Chemistry and Molecular Pharmacology. This issue describes the very generous gifts that we had the privilege to announce on the occasion of his retirement. In another change, we welcome Dr. Alan Zillich as our new Head of the Department of Pharmacy Practice. You can learn more about him in the story below.
hasn’t changed is the consistent impact of our outstanding students, faculty, and alumni. We highlight several examples of this impact in this issue. We hope you will find the stories below give you reason to celebrate the unchanging reality of the ongoing excellence of your College of Pharmacy!

Hail Purdue!
Craig K. Svensson, Dean

Dr. Rick Borch Retires and Announces Gift

Dr. Richard Borch, Lilly Distinguished Professor and Head of the Department of Medicinal Chemistry and Molecular Pharmacology, and his wife, Anne, have given nearly $1 million to create endowments to support graduate students and a chair in cancer therapeutics. A total of $920,000 was given anonymously in 2010 and 2012. The couple allowed the College of Pharmacy to reveal their identities upon Dr. Borch’s retirement from the University in September 2014 after 18 years of dedicated service.

You can read the full press release about the gift online. You will also have the opportunity to read more about Dr. Borch’s retirement in the upcoming Fall & Winter 2014 edition of The Purdue Pharmacist.
Dr. Alan Zillich Named Professor and Head of the Department of Pharmacy Practice

The College of Pharmacy is pleased to announce the appointment of Dr. Alan J. Zillich as Professor and Head of the Department of Pharmacy Practice effective September 1, 2014. “I am delighted that Dr. Zillich has accepted the offer to assume the role of Department Head and am confident that he will provide excellent leadership for the Department,” says Dean Craig Svensson.

After completing a postdoctoral fellowship in Outcomes Research at the University of Iowa, Dr. Zillich joined Purdue as an Assistant Professor in 2003 and was later promoted to Associate Professor in 2009. He also holds appointments at the Regenstrief Institute and the Rodebush VA Medical Center. He is a Fellow of the American College of Clinical Pharmacy and serves on their Research Institute Board of Trustees. He has received numerous awards for his scholarship and has also served as a grant reviewer for the NIH, AHRQ, VA, and other granting entities.

Dr. Sonak Pastakia Receives Prescott Award
Dr. Sonak Pastakia, Associate Professor of Pharmacy Practice, is the 2014 recipient of the Albert B. Prescott Leadership Award. The award, established by Phi Delta Chi in 1987 and now administered by the Pharmacy Leadership & Education Institute, honors young pharmacists who have demonstrated exemplary leadership qualities as students and young pharmacists with no more than ten years into their career.

Dr. Pastakia is a public health pharmacist based in Eldoret, Kenya, where he focuses his full-time efforts on addressing the needs of underserved populations residing throughout western Kenya. “As one of the first recipients of this prestigious award being recognized for work that is focused on populations outside the developed world, I take great pride in having our team’s efforts recognized by the Albert B. Prescott selection committee,” says Dr. Pastakia.


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**Spotlight on Dr. Greg Hockerman**

*Professor of Medicinal Chemistry and Molecular Pharmacology*
The College of Pharmacy is pleased to highlight Dr. Greg Hockerman, whose research focuses on the molecular pharmacology of voltage-gated Ca2+ channels, and the role of two specific channels, Cav1.2 and Cav1.3, in pancreatic beta cell function. Beta cells secrete insulin in response to glucose, so this work is relevant to diabetes. Dr. Hockerman joined the Department of Medicinal Chemistry and Molecular Pharmacology in 1998. He is a member of the American Society for Pharmacology and Experimental Therapeutics, Biophysical Society, and American Diabetes Association.

What first drew you to your chosen profession and research interests? I was a chemistry major from day one in college, but I always knew that I wanted to apply chemistry to biological systems. I had many remarkable teachers and mentors who greatly influenced my career path. My high school physiology teacher, James Watts, and college biochemistry professor, Dr. Larry Ferren, both stoked my interest in biological systems. My high school physics teacher, Don Casanova, really ignited my interest in science. I still remember some of the labs that we did in Mr. Casanova’s class! My undergraduate research advisor and organic chemistry professor, Dr. Stephen Taylor, introduced me to the world of laboratory research. It still amazes me to think of how Dr. Taylor entrusted his research program (not to mention his precious and irreplaceable laboratory equipment) to a group of students who had barely finished their sophomore year. The work that I did under Dr. Taylor’s direction led to my first publication.

The combination of chemistry and biology naturally drew me to graduate studies in pharmacology. In Dr. Arnold Ruoho’s lab at the University of Wisconsin, I was able to use my organic synthesis background in combination with techniques in protein chemistry to study the antagonist binding site of the beta2 adrenergic receptor. I wanted to continue studying small molecule drug interactions but with different targets, so I went to the lab of Dr. William Catterall at the University of Washington to study the molecular pharmacology of voltage-gated Ca2+ channels as a postdoctoral fellow. It’s ironic that in Dr. Catterall’s lab, I became first a molecular biologist and then an electrophysiologist, because these were two areas of study that I did not understand and had no interest in as a graduate student! Most of my research since then has studied the molecular pharmacology or cell biology of these channels.

What are you currently working on in your lab? My lab is trying to identify specific roles the Ca2+ channels Cav1.2 and Cav1.3 play in pancreatic beta cell response to glucose and the hormone GLP-1, including how they contribute to insulin secretion and cell proliferation. These channels are a double-edged sword. They are necessary for normal insulin secretion, and their signaling is aberrant in type 2 diabetes, but they also appear to contribute to the pathology of type 1 and type 2 diabetes.
What is it that interests you most about this research? I think that the mechanism for glucose-stimulated insulin secretion, as we understand it, is fascinating. I try to share this fascination with my pharmacy students. However, it’s clear that we only have a low-resolution picture of how it works. Being able to add a few details to the picture, which may have implication for drug design, is what motivates me. Currently, I’m very excited about some new tools that my graduate students, Yuchen Wang and Evan Pratt, are using that allow real time measurement of subcellular Ca2+ concentration changes and enzyme activities in living cells. This became possible with the establishment of the Pharmacy Live Cell Imaging Facility, which provided the instrumentation required for use of these cutting edge tools. These new experiments have led to growing collaborations with my colleagues, Drs. Changdeng Hu and Val Watts, and I’m excited to see how application of their expertise will benefit our studies.

What do you hope to discover or accomplish? A new project in the lab is developing novel ways to identify molecules that might selectively inhibit the closely related Ca2+ channels Cav1.2 and Cav1.3. It goes hand-in-hand with our work to understand the specific cellular roles of these channels in pancreatic beta cells. My hope is that our work will provide some of the rationale for the development and therapeutic use of selective inhibitors, and also provide some useful tools for identifying them.

What do you enjoy most about working with the students? In mentoring graduate students, I really enjoy watching them mature scientifically. They come in with a high level of enthusiasm and a little knowledge, and they leave as experts in their field. It’s very rewarding to see a student take over a project and make it his or her own. In teaching pharmacy students, I enjoy the fact that they’re highly motivated to learn and interested in what I have to teach them. I think those of us who do most of our teaching in the PharmD curriculum are a little spoiled by the high level of scholarship and professionalism that we’ve come to expect in our students. In general, I can’t imagine a better work environment than to be surrounded by so many bright and enthusiastic students. From this vantage point, the future looks to be in good hands. I hope that I’ve had a positive influence on their career paths, just as my mentors did on mine.

Keeping True to His School: Jeffrey Rudolph (MS 1969, PhD 1971)
Jeff and Gail Rudolph

Jeff Rudolph received his graduate degrees from the Department of Industrial and Physical Pharmacy and was named a Pharmacy Distinguished Alum in 1991. Upon graduation, he began his professional career as a senior scientist with the Pharmaceutical Research and Development Department of Ciba-Geigy where his responsibilities included product formulation and introduction of drugs into production. After two years, he joined McNeil Laboratories as a group leader in the Pharmaceutical Pilot Plant where he was responsible for the development of a large-scale continuous tablet granulation process for Tylenol Tablets. In 1977, he joined Stuart Pharmaceuticals which subsequently became ICI Americas, Zeneca Pharmaceuticals, and AstraZeneca. In 1987, Jeff was appointed Vice President of Pharmaceutical Research and Development with Zeneca Pharmaceuticals. His responsibilities included the Pharmaceutical Development Department, Analytical Development and Automation Department, Drug Disposition and Metabolism Department, and the Project Management Group.

After his retirement from AstraZeneca, Jeff formed the RUDOLPH Pharmaceutical Consulting Company in the early 2000s to serve the pharmaceutical industry with problem solving and optimization practices for pharmaceutical R&D and manufacturing disciplines. “I was fortunate to work for companies of all sizes who were involved with generic, branded, and nutraceutical products,” Jeff says. He also was an expert witness on a number of legal cases involving patent infringement. After nearly ten years as a consultant, in 2014 he gave up that endeavor to undertake a wide variety of volunteering activities in his community.

What was your experience at Purdue as a student? Any particularly fond memories? My experiences as a graduate student at Purdue in the Department of Industrial and Physical Pharmacy were truly memorable. The faculty provided the expertise and direction that has served as the solid foundation for my career in industrial pharmacy. My fellow graduate students in the basement of the old Pharmacy building shared many common interests and experiences. We were men and women from many geographic locations and ethnic backgrounds, all working to achieve our academic goals, but doing so as a family of friends and colleagues. I am very fortunate to say that 50 years later, I still have close friends from those early years.
There were many memorable experiences from those graduate school years, but the specific ones that I remember are the ones that occurred in the undergraduate manufacturing lab where I was a teaching assistant. Under Dr. Garnet Peck’s initiative and direction, we developed and manufactured products for the Pharmacology department’s animal research (banana flavored Monkey Feed Pellets) and “Boilerade” for the athletic department. We learned a lot of manufacturing technology and had a great time being involved with these challenging products.

In what ways do you stay connected with the College of Pharmacy? I stay connected in a number of ways. I have occasional communications with the Dean and IPPH department head. Since 2009, my wife, Gail, and I have financially supported student grants and have worked with the Director of Advancement to implement those programs. More recently, with the assistance of the Director of Advancement and the Department of Planned Giving for the University, Gail and I have established an IPPH endowment fellowship. This legacy is extremely important to provide financial and physical capabilities to future students as Purdue did for me in my early years in IPPH.

It was during a College of Pharmacy Donor Recognition Brunch when you and Gail decided to make a planned gift to Purdue. What happened during the event that moved you to make this decision? At a recent Donor Brunch, Dr. Steve Nail, a former graduate student in IPPH, gave the keynote address. He talked about the importance of supporting Purdue, and specifically IPPH, where he created an endowment. His speech reminded me of the 1980s song by The Beach Boys, “Keep True to Your School.” The message in that song is so true. The formative years for your adulthood and the career of your choice take place at school. We all owe a debt of gratitude for what we were given, and I believe that we owe that same commitment to future students. After Steve’s speech, Gail and I looked at each other and said, “We ought to do the same. It is our payback for what Purdue did for us, and we should do the same for future IPPH students.” And we did!

Alumni Profile: Gary Napier (BS 1972)

In a world that is ever changing, it is rare to find someone who spent their entire career with the same company. Gary Napier did just that, working as a pharmacist with Hooks/CVS since he graduated from Purdue’s College of Pharmacy in 1972. He retired in July 2014 after 41 years of service. Although his commitment to his job and employer was steadfast, Gary says that he has watched the profession change over the years. Change can be good, and sometimes it can be challenging, but one thing is for certain: commitment and dedication can be a wonderful thing.
Gary began working for Hook’s in Jasper, Indiana, as an assistant store manager in July 1973, and was promoted to manager after the first month. The following year, he transitioned to the Linton, Indiana, location closer to his childhood home near Sullivan County. He watched the company transition from Hook’s to Revco to the current day CVS, and he learned the inter-workings of the pharmacy along the way.

“Hook’s was a great company to work for, and they had it right by keeping in touch with the ‘front line’. The pharmacy is the core of the business, and the company took care of their staff,” he says. Throughout his career, Hook’s recognized Gary with 11 Gold Keys, five Merchandising Awards, and three Silver Night Awards for community involvement.

How well do you think your education at the College of Pharmacy prepared you for this profession? A degree from Purdue University is unlike any other and is known for its value around the world, and the return on investment is worth it. Purdue, being a research institution, prepared me to do research in Pharmacy, as well as Chemistry and Pharmacology. I continued my education by getting a consulting degree. I enjoy being able to aid in delivering medicine, but it is most rewarding to be able to take people off medicines rather than just adding another.

Gary and Sherry (seated) have two sons. The youngest, Doug (shown R), attended Purdue and studied Pharmacy until he was called to the ministry and now serves as a pastor in Florida. The oldest, Greg (shown L), graduated from Purdue with a degree in landscape architecture. He is employed with Purdue as Director of Purdue Research Parks and Physical Facilities at the Purdue Research Foundation.

What was your experience at Purdue as a student? My Purdue experience was a good one, but it was also difficult at times. I had to work hard and pay my own way, so I learned to lay bricks during the summers to pay for my education. My wife, Sherry, and I lived in married student housing, and money was hard to come by. There were two weeks that we lived on a loaf of bread and cheese. Sherry’s parents, who struggled themselves, drove to Purdue from Jasonville, Indiana, and surprised us with a car full of groceries. While visiting, my father-in-law, Lowell, asked me where he could find a shoe store in town, so I led the way. Upon arrival, Lowell told the clerk to get me some new shoes since he had obviously noticed the piece of duct tape covering a hole. Lowell tricked me again so that we could have a new set of tires for the car. Many days I would sit out on the curb and contemplate giving up, but the kindness and encouragement from my wife and family pushed me to finish school. I managed to finish without any debt.
In what ways have you witnessed the profession change throughout the course of your career? Back when I began my career, everything was hand ordered, I used an archaic machine known as a typewriter, and I had to wet each label so they would stick! At that time, the pace was much slower than today, and pharmacists were truly connected with the community.

I’ve watched the industry shift over the years. Today’s pharmacies are volume driven, making it much harder for pharmacist to engage with customers as in years past. The volume of prescriptions filled then compared to now is nearly four times than that of the 1970s-80s. Pharmacists need the time and resources to engage with customers. I fear that customers expect our “fast-food” society in the pharmacy, but we need to remember that these are drugs, and people need to understand what they are taking.

Any advice you’d like to share with current students in the pharmacy program? Consider your career path early. Understand if you are going to push into a career of retail or research; both have the positives and negatives.

Also, consider your time at Purdue to be like balancing a three-legged stool. One leg is your Purdue degree, which will open many doors in your life, well beyond pharmacy. The second leg is your civic involvement. I regret that I did not take as many advantages of the extra-curricular activities while a student, so get involved and see where Purdue can take you. The third leg is your faith. It is very easy to forget your heritage and roots while at a university. I was ready to give up several times, but it was the encouragement of my family and my faith that kept me going. Equally balancing these three legs of the stool will give you the advantage you need to not only succeed at Purdue, but to excel.

PharmD Student Spotlight: Kayla M. Riley

Kayla M. Riley  
2nd Professional Year PharmD Student, College of Pharmacy, Purdue University  
Anticipated Graduation Date: May 2017  
Hometown: Madison, Indiana  
Participation in Organizations: Purdue Pharmacy Ambassadors, Employer Relations Committee Member; SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis Task Force, Student
Representative; Teachers Assistant for PHRM 820, P1 Professional Lab; Phi Sigma Pi National Honor Fraternity, Vice President; Campus Crusade for Christ

**Hobbies/Pastimes:** Volleyball, music, and traveling

**Post-graduation plans:** I am still exploring the many opportunities in pharmacy. Currently, I am interested in completing a residency following graduation and potentially specializing in oncology. I am also contemplating working in a clinical pharmacy setting, such as an ambulatory clinic or a Coumadin clinic. There are still many fields of pharmacy I have yet to explore, and I look forward to learning more with my two remaining years in professional school.

Kayla poses in front of graffiti on the Berlin Wall during her trip to Germany

**Experience as a Pharmacy student:** My time within the College of Pharmacy thus far, though challenging, has been such an honor and privilege. The experience, knowledge, and confidence I have gained through this program have already prepared me for the many challenges within the pharmacy profession. I sincerely cannot wait to continue my educational career with this excellent university.

This past summer I had the opportunity to explore a new culture and travel abroad to Berlin, Germany. It was such an honor to travel to one of the most culturally diverse and politically influential cities in the world, and to be completely immersed in it for three weeks. With this being my first time leaving the country, I fully experienced how crucial it is to learn and adapt quickly to new situations and environments. While on this trip, I met several students on college campuses (Universität), including the Technischen Universität Berlin (Technical University). I had multiple conversations on topics of science, philosophy, and politics, each of which gave me new insight as to the vastly different mentality of European college students to American college students. In addition to learning about the various cultures within the city of Berlin, I had the opportunity to learn, see, and experience parts of German history including visiting remnants of the Berlin wall, the Sachsenhausen concentration camp, and the Holocaust Memorial.

The memories I claim from my trip to Germany certainly have positively impacted how I view my role as a potential health professional. Though not on a pharmaceutical stand-point, but on a patient-centered and sympathetic level, I have had my eyes opened to different viewpoints in the world. I am so grateful for the opportunity I received to learn about new cultures first-hand.”

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**Save the Date - 2nd Annual Purdue Day of Giving**

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Mark Your Calendar for the 2\textsuperscript{nd} Annual Purdue Day of Giving
April 29, 2015

For the first time in Purdue’s history, the entire University community came together last spring for a 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. Last year’s event was an overwhelming success, resulting in the University raising $7.5 million. The College of Pharmacy ranked 8\textsuperscript{th} out of 45 in total giving among other units at the University, bringing in $219,060 made possible by over 120 donors.

We hope you will join us on the next Purdue Day of Giving on April 29, 2015. You may learn more by visiting https://purduedayofgiving.com/. It’s amazing what we can accomplish when we work together toward a common goal!

Save The Date - 19\textsuperscript{th} Annual BoileRx Golf Classic

19\textsuperscript{th} Annual BoileRx Golf Classic
Friday, June 5, 2015
Kampen Course

For more information and to obtain a registration form, please visit http://www.pharmacy.purdue.edu/boilerx/ or contact Dana Neary, Manager of Alumni Relations and Special Events, at nearyd@purdue.edu or (765) 494-2632.