Dear Friends and Colleagues:

I have varied interests, ranging from the politics of the Supreme Court to the prospects of the Chicago Cubs, and would enjoy writing about these. However, I have been counseled by people who I respect and admire to confine my comments in this newsletter to issues that are directly related to pharmacy, the pharmaceutical sciences, and our program. With apologies to my advisers, I am about to go off script.

On June 20, Washington State University lost a gifted leader and passionate advocate for educational access with the death of Dr. Elson Floyd. My association with Elson spanned 20 years and the breadth of the continental United States, as I first met him when we both were employed by the University of North Carolina. Although I did not know him well back east, it was Elson’s presence at WSU that persuaded me to make the cross-country move and try to replicate in Spokane the success that we experienced in Chapel Hill. Elson’s leadership, charisma, and absolute commitment to his institution made me believe that virtually anything would be possible here.

As it turns out, that belief was well founded. Elson transformed his university in very fundamental ways, and inspired those of us who were fortunate enough to work with him to do the same in our areas of responsibility. On several occasions within the last year, Elson commented (in a very complimentary, Elson-like way, of course), that WSU’s College of Pharmacy is “unrecognizable” from the one that was in place a very short five years ago. Although that assessment may be true, such rapid and profound change has not been limited to our college. Similar comments can be made about virtually every part of this university because Elson challenged us to make it so and supported us along the way.

While our leader has passed into the clearing at the end of the path, we are not rudderless. Elson’s vision not only survives, but thrives. He left us with a road map for achieving that vision, and taught us that the barely-possible was in fact achievable as long as we believe in ourselves. He has passed the baton to Dan Bernardo,
Faculty promotions

Two WSU pharmacy faculty take the step to associate professor

Jennifer D. Robinson and Megan N. Willson, both faculty members in the Department of Pharmacotherapy at the Washington State University College of Pharmacy, have been promoted to the rank of clinical associate professor, effective July 1, 2015.

“Both make invaluable contributions to our college and we—as well as our students—are very fortunate to have them as members of our faculty,” wrote the dean, Gary M. Pollack, in an announcement to college faculty and staff.

Robinson has a Doctor of Pharmacy degree from WSU and professional certifications in immunization, emergency contraception and tobacco cessation. Robinson joined the WSU faculty in 2008, and has served as the director of student services for the Doctor of Pharmacy program since 2011.

“Dr. Robinson is an innovator,” said John R. White, chair of the pharmacotherapy department. “She was perhaps the first of our faculty to embrace active learning and has been very successful incorporating these novel methods of teaching into her classroom.”

Robinson teaches Introduction to Therapeutic Agents (Top 200 Drugs) to first-year student pharmacists, and she also teaches a leadership and professional development elective for third-year student pharmacists. She was selected as a WSU College of Pharmacy Teacher of the Year in 2012, and was recognized by the students in the pharmacy leadership society Phi Lambda Sigma in 2014 as an honorary member for her contributions as a faculty mentor.

Robinson also serves as the chair of the admission committee and the experiential advisory board for the college. Her research interests include leadership, innovative teaching methods, and clinical community practice.
Robinson has been an “agent of change” in the student services office for the improvements she has made in how the college recruits new students and how prospective students apply for admission, said White. “The process she fashioned is remarkable and memorable for the applicants. It provides the successful applicant with long-lasting personal connections to current students, alumni, and faculty. We are very pleased that she is going to be promoted to clinical associate professor,” he said.

Willson has a Doctor of Pharmacy degree from the St. Louis College of Pharmacy. She completed a pharmacy practice residency at St. Luke’s Hospital in Chesterfield, Missouri, where she also worked as a staff pharmacist before joining the WSU faculty in 2007. She holds dual appointments with WSU and Providence Sacred Heart Medical Center where she serves as the pharmacist on the internal medicine residency team.

“Dr. Willson is a very respected clinician on the Spokane Internal Medicine service at Sacred Heart Medical Center. She uses her practice to provide a cutting edge rotation experience for our students. In addition to her work at the hospital she teaches here on the WSU Spokane campus and is involved with her colleagues in a multitude of scholarly endeavors,” said White.

At WSU she teaches first-year student pharmacists in professional communications, teaches in the Applied Patient Care Lab to third-year student pharmacists, and serves as a preceptor in acute care and internal medicine for fourth-year student pharmacists.

Willson also conducts research related to patient safety, including medication complexity, health literacy and patient communication, and she is involved in the college’s human patient simulation team.

“Dr. Willson is involved in essentially every aspect of our college and her work in all areas is impeccable,” said White. “She is always reliable and always willing to help with any situation. We applaud her promotion to clinical associate professor,” said White.
Melanoma risk tied to circadian clock

By: Judith Van Dongen, WSU Health Sciences Spokane

Avoiding sunburn is important, as too much exposure to the ultraviolet (UV) radiation in sunlight can increase your risk of developing melanoma and other skin cancers. Newly published research by a WSU pharmacy scientist suggests that the circadian clock—the molecular mechanism that keeps our bodies on a 24-hour cycle—plays a role in how well the skin can defend itself from the sun’s harmful effects.

Shobhan Gaddameedhi, Ph.D., an assistant professor in the College of Pharmacy, studied mice that were exposed to the same dose of UV radiation at different times of the day. He found that early-morning UV exposure—between 4 a.m. and 9 a.m.—caused the most cell death and skin inflammation. Gaddameedhi said that this is because the repair function of their skin cells is at its lowest during that time frame, while DNA replication is at its highest. He noted that since mice are nocturnal, the opposite should be true for us humans, suggesting that late afternoon sun exposure may put us at the greatest risk of skin cancer.

Gaddameedhi said that although further studies are needed to confirm the validity of his findings in humans, his work helps to fill a considerable gap in the science of melanoma.

“Once we know the mechanism by which the circadian clock influences tumor development and we can identify the biomarkers, we can use that knowledge to improve diagnosis and prevention efforts,” he said.

His paper was published in the April 2015 issue of the Journal of Investigative Dermatology.

New critical care elective offered

By: Lorraine Nelson, WSU Health Sciences Spokane

April Cowgill was well into a first-year pharmacy residency at Tufts Medical Center in Boston when she realized a strong interest in critical care. She found a second-year residency in critical care, and followed that with a job in the field for a few years.

Now, she is the instructor of record for a new elective course, “Critical Care Medicine,” for the WSU College of Pharmacy, offered this past spring for the first time. The course meets this curriculum outcome: “Understand the pathophysiology of various disease states amenable to pharmaceutical intervention relative to drug treatment protocols for patient care decisions.”

“One of the highlights for me was collaborating with a lot of other critical care pharmacists to have them teach..."
sections of the course,” Cowgill said. Some were pharmacists she met during her critical care residency and worked with in the field and others were classmates in the WSU pharmacy class of 2009.

The two-credit course is for third-year students and teaches the role of a pharmacist in the intensive care unit. Special lecture and discussion topics include pain, analgesia, delirium, alcohol withdrawal, GI bleed, infectious disease considerations, perioperative pharmacological considerations in surgical ICU, septic shock, vasopressor review, status asthmaticus, neuromuscular blockers, cardiac arrest, therapeutic hypothermia, toxicology, and burns.

Pharmacotherapy Department Chair John White said critical care is an important but complicated niche area of medicine where the stakes are always very high.

“We are very fortunate to have Dr. Cowgill provide us and our students with her knowledge and expertise in this complex discipline,” White said. “We look forward to continuing to offer this important elective.”

The first and last lectures are delivered in a classroom in Spokane and the rest are pre-recorded by working critical care pharmacists in Seattle, San Diego and Arizona. Mandatory class discussions are done online and are focused on challenging students to think systematically through the complexities of a critically ill patient as well as learn about the ethical dilemmas that often arise in critical care units.

“Pharmacists serve as resources to the patient care team at every step of the medication use process from deciding on a therapeutic plan, deciding what drug to use, what dose is appropriate, IV compatibility, antibiotic stewardship, achievement of therapeutic goals, and facilitating rapid drug delivery to bedside if necessary,” Cowgill said.

“Outside of clinical practice they can have a variety of responsibilities from sitting on committees to teaching,” she said.

It was marriage that led Cowgill from her job in critical care at Harborview Medical Center in Seattle back to Pullman to join her husband in working for Campus Crusade for Christ. She approached the College of Pharmacy with the idea for the class because she wanted to be involved with the college and pharmacy. Cowgill met with Associate Deans Linda Garrelts MacLean and Brian Gates and Department Chair John White to create the class. Associate Professor Mark Garrison helped her develop the course syllabus and gain the approval of the University’s catalog subcommittee.
Other College News

FACULTY SCHOLARSHIP

Publications
• Experimental and Systems Pharmacology Assistant Professor Shobhan Gaddameedhi and four co-authors published, “Oncogenic BRAF(V600E) induces clastogenesis and UVB hypersensitivity,” in the June 7, 2015, issue of Cancers, a peer-reviewed open access journal from the Multidisciplinary Digital Publishing Institute (MDPI AG). read more
• Pharmaceutical Sciences Dorothy Otto Kennedy Distinguished Professor Gary Meadows and Pharmaceutical Sciences Associate Research Professor Hui Zhang published, “Alcohol, tumor growth, metastasis, immune response, and cancer survival,” in the peer-reviewed journal Alcohol Research: Current Reviews (37(2), 2015). read article
• Pharmacotherapy Research Professor Carol Wysham contributed to a clinical trial as investigator for an enrollment site at WSU Health Sciences Spokane. The study, “Effect of Sitagliptin on cardiovascular outcomes in type 2 diabetes,” was published in The New England Journal of Medicine in June 2015. read article
• Carol Wysham, Pharmacotherapy Clinical Trials Research Associate Debra Weeks and Pharmacotherapy Clinical Trials Research Study Assistant Megan Johnson contributed to a clinical trial as coordinators of a clinical center at WSU Health Sciences Spokane. The study, “Design of FLAT-SUGAR: Randomized trial of prandial insulin versus prandial GLP-1 receptor agonist together with basal insulin and Metformin for high-risk Type 2 diabetes,” was published in the journal Diabetes Care (DOI: 10.2337/dc14-2689).

Presentations
• Shobhan Gaddameedhi presented the poster, “Emerging roles of the circadian clock in DNA-damage signaling and carcinogenesis,” for the first Biennial Smerdon/Reeves Chromatin DNA-Repair Lecture at WSU in Pullman, Washington, on May 22, 2015.
• Shobhan Gaddameedhi presented, “Shift work and susceptibility to carcinogenesis,” for the Symposium

- Pharmaceutical Sciences Clinical Assistant Professor and Director for Advancement of Teaching and Learning Excellence Connie Remsberg and Assessment Office Program Coordinator Danielle Birch presented, “Practical innovations with rubrics: If you build it, they will grade,” during the Examsoft Assessment Conference in Lexington, Kentucky, on June 4, 2015.


Service

- Shobhan Gaddameedhi has been named a steering committee member for the American Association of Pharmaceutical Scientists (AAPS) Rocky Mountain Discussion Group.

- Pharmacotherapy Clinical Assistant Professor Kimberly McKeirnan has been selected for the NACDS Foundation Faculty Scholars Program.

Grants

- Connie Remsberg received $7,000 from Washington State University Samuel H. and Patricia W. Smith Teaching and Learning Endowment for the grant proposal, “Flipping the pharmacy classroom: Evaluating best practices for faculty development.”

- Shobhan Gaddameedhi received additional funding in the amount of $87,098.51 from the National Institutes of Health for the research project titled, “Role of the circadian clock in melanocyte biology and UV-induced melanomagenesis,” for the period of June 2015-December 2015.

STUDENT ACHIEVEMENT

Doctor of Philosophy (Ph.D.) students


Doctor of Pharmacy (Pharm.D.) students


- Jeff Nye received a $5,000 scholarship from Cardinal Health.

- Patrick Stolz received a $5,000 scholarship from Cardinal Health.

- Kim Paulsen was selected to serve a two-year term on the NCPA Student Leadership Council.
Coming Events

• August 21, 2015
  The College of Pharmacy will host a white coat ceremony for the incoming class of 2019 at the Martin Woldson Theater at the Fox in Spokane, Washington.

• August 27, 2015
  The College of Pharmacy will host a white coat ceremony for the incoming class of 2019 at Butler-Haney Hall on the Pacific Northwest University of Health Sciences campus in Yakima, Washington.