Dear Friends and Colleagues:

Late October is an interesting time during which to compose a newsletter commentary. It presents so many potential themes: Halloween...what scares us? The upcoming election cycle...also, perhaps, what scares us? Homemade eggnog...the virtues of following a time-honored recipe and delayed gratification (for the uninitiated, the latter bit is to ensure that the rum or other spirit of choice completely kills egg-borne bacteria, which actually works). Thanksgiving...the totally obvious choice, of course, which means we steer clear of that at all costs.

Earlier in the month, our Preparing for Your Career in Pharmacy Seminar Series hosted our district’s representative to the United States Congress, Cathy McMorris Rodgers, together with the president of the National Association of Chain Drug Stores, Steven Anderson. Although at first glance this session may appear to have been somewhat random, or even outside the scope of academic pharmacy, it actually is in good alignment with our college’s vision: To be a leader in advancing, promoting, and protecting human health. The concept of “leader” is perhaps the singular thread in our career seminar series. It challenges our students to accept the mantle of “leader”, and provides them with opportunities, connections, and tools to begin the process of developing leadership skills.

We aspire many things for our students. We want them to have a strong foundation in the scientific underpinnings of pharmacy. We want them to think independently and critically. We want them to be effective communicators. We want them to be competent and caring practitioners. In short, we want them to be professionals, in the truest sense of the word.

What we lose sight of, at times, is that we, as members of a society, need certain things from our graduates that are not necessarily reflected in the curriculum they pursue. We need them to be advocates for pharmacy as part of the solution to health care delivery, especially in communities with a relative lack of health care options. We
need them, individually and collectively, to “move the needle” in continually improving quality, accessibility, and affordability of care. To address this need, they must be committed to (and capable of) working effectively within the “system” (political, professional, corporate). As is true of all our career seminar series speakers, Congresswoman McMorris Rodgers and President Anderson provided clear guidance for how our students can become -and remain- engaged. Not at all surprisingly, our students, of whom I am enormously proud, made it clear that they are anxious to “get on with it”. I am certain that they will be successful, and I am enormously grateful to serve them.

Best wishes for the upcoming spooky-electoral-holiday season.

Gary M. Pollack
Dean

Dr. Pramod Srivastava
Drug industry expert joins WSU drug discovery team

Pramod Srivastava is a pharmaceutical drug development expert. He joined the Department of Pharmaceutical Sciences at the WSU College of Pharmacy this year, where he is working on a drug discovery research team led by the department chair Philip Lazarus.

“Dr. Srivastava is an expert in drug screening and toxicology,” said Lazarus. “His main research focus at the College of Pharmacy has been to screen for novel compounds important in cancer prevention, and his work has led to several major soon-to-be-published discoveries.”

The team is hoping to develop novel compounds they can patent and then partner with others to help with the drug development process, which includes FDA approvals.

“Drug development is a very long process,” said Srivastava. “Right now we are at the very first step, which is selecting the best compounds.”

Srivastava grew up in India and received a Ph.D. in biochemistry from the University of Delhi. He came to the U.S. to study drug metabolism as a postdoctoral fellow at the Vanderbilt University Medical Center in Tennessee. Srivastava also completed a postdoctoral fellowship in drug metabolism and cancer biology at the University of California, Berkeley before going into a nine-year career as a research scientist in the drug industry.
“Studying drug metabolism gave me an interest in development, so I went to work in industry doing pre-clinical drug development,” said Srivastava.

Drug development involves taking new or known compounds through the process of becoming new drugs, which includes laboratory and clinical testing and multiple approvals through the FDA.

Prior to coming to the WSU Health Sciences campus in Spokane, Srivastava was a senior scientist at Cerep, Inc. in Redmond, Wash.

“The WSU campus in Spokane, especially the Pharmaceutical Sciences Department, is well equipped for conducting this specific project,” said Srivastava. “I am impressed with the talented faculty, staff and students, and the work environment.”

A conversation regarding pharmacy, health care

*Student pharmacists connect with national leaders, discuss health care advocacy*

Student pharmacists engaged with their federal representative in early October about how pharmacists can do more, and how expanding their services is key to addressing the nation’s need for accessible, quality health care.

“You have one of the true champions for pharmacy in Congress sitting right here on this stage,” said pharmacy advocate Steven Anderson, who joined Washington State University student pharmacists in a round table discussion with Washington’s Fifth District U.S. Representative Cathy McMorris Rodgers.

The gathering was part of the WSU College of Pharmacy’s efforts to offer innovative solutions to address the evolving needs of health care across the country. They brought McMorris Rodgers and Anderson together to expose student pharmacists in Spokane to the importance of building relationships with their government representatives and professional associations.

Students in the WSU Doctor of Pharmacy program had the opportunity to ask questions about what they can do to help break down barriers to changing policy, and how pharmacy can play a larger role in the health care delivery system.

Gary Pollack, dean of the College and moderator for the event, urged students to be involved with public policy when they become pharmacists.

“It is important for me to have relationships with those people that I represent,” said McMorris Rodgers. She
emphasized to student pharmacists that the decisions made at all levels of government can be impacted by their involvement.

“More than 80 percent of Americans live within five miles of a pharmacy, and pharmacists are the second most-trusted profession, nursing being the first,” Anderson said. As CEO of the National Association of Chain Drug Stores, Anderson echoed the comments of McMorris Rodgers and Pollack encouraging student pharmacists to get active in advocating for how pharmacists practicing at the top of their license can contribute to the nation’s health care solutions.

According to McMorris Rodgers, with the hundreds of initiatives on the list the biggest challenge to addressing these health care policy problems is getting it to be “the priority”.

“If pharmacy is playing a larger role, they need to be recognized in the health care delivery system,” said McMorris Rodgers, and the best way to achieve that recognition is to meet people and build relationships.

The conversation regarding pharmacy, health care, the Affordable Care Act, and policy was part of the WSU College of Pharmacy’s “Preparing for Your Career in Pharmacy Seminar Series”, which exposes student pharmacists to leaders and entrepreneurs who provide students with their vision of how the profession is evolving and the opportunities that exist for future pharmacists to change and advance the practice of pharmacy.

The table for the medication reviews by pharmacy students was situated right next to a similar table for the physical therapy students, who were there to do gait assessments of senior citizens and talk to them about preventing falls.

Senior Smile Day

*Faculty play key role in interprofessional learning*

By: Lorraine Nelson, WSU Health Sciences Spokane

This recent free care clinic on campus for seniors was an ideal opportunity for some interprofessional learning, but the students started the day huddled in their separate groups.

“They need to be nudged,” said Barbara A. Richardson, director of interprofessional education and research at WSU Health Sciences Spokane. “The students are still learning their own disciplines and so it’s up to the faculty to help them see the positions that the other students fill on the health care team.”

Pharmacists are often the most accessible health care professionals for people. As front line providers, there are many things they can learn from the other disciplines that can help them in their practice as well as help the patients, Richardson said.
The speech and hearing students were conducting swallowing tests, dental hygiene students were conducting oral screenings for cancer, and occupational therapy students were doing sleep assessments and discussing how a patient could get better sleep. This is all helpful information to pharmacists who get asked about these things all the time, said Richardson.

A swallow test could help a pharmacist detect whether a patient would have difficulty taking a particular medicine and if so, search for an alternative drug delivery method, Richardson said.

“There are times when a customer at a pharmacy shows the pharmacist a sore in their mouth and asks about it,” Richardson said.

The care stations were situated closely together on the first floor of the Health Sciences Building for the convenience of the patients, who were greeted first by the dental hygiene students and then moved through the others. The stations also included flu shots by the nursing students, a diet discussion with nutrition and exercise physiology students and, if needed, information about diabetes and other chronic disease management from a group of student pharmacists who were separate from those doing the medication reviews.

That type of close proximity to the other disciplines is unique among the health care institutions and is what makes interprofessional education more achievable on this campus than at some of the larger institutions, Richardson said.

The recent event was not only multidisciplinary but multi-institutional and shared with Eastern Washington University’s health sciences disciplines also located on the campus, such as the dental hygiene students and their clinic.

Interprofessional education is now a national requirement for educational institutions involved in the health care fields, Richardson said.

“We are very fortunate on this campus to have many disciplines who are natural partners on health care teams,” Richardson said. “We are also fortunate that within each discipline are faculty very willing to embrace interprofessional education.”
Other College News

FACULTY SCHOLARSHIP

Publications
• Pharmacotherapy Professor and Chair John R. White published, “Sodium glucose cotransporter 2 inhibitors,” in the journal Medical Clinics of North America.
• Experimental and Systems Pharmacology Assistant Professor Shobhan Gaddameedhi was featured in the Health Section of the Spokane Journal of Business on Thursday, October 23, 2014, in an article titled, “Research probes sleep, cancer link,” by Katie Ross.
• Pharmaceutical Sciences Assistant Professor Zhenjia Wang published the invited editorial, “Caveolae-mediated delivery of therapeutic nanoparticles across blood-endothelial barrier,” in the October 2014 Austin Journal of Analytical and Pharmaceutical Chemistry.

Presentations
• Experimental and Systems Pharmacology Associate Professor Susan A. Marsh presented, “Post-translational signaling and transcriptional regulation of cardiac hypertrophy,” as part of the College of Pharmacy Research Seminar Series, October 1, 2014, at the WSU Health Sciences campus in Spokane, Wash.
• Experimental and Systems Pharmacology Assistant Research Professor Vanessa González-Pérez presented, “The building blocks to become a successful leader: Identifying motivation and strengths, approaches to time management, increasing productivity, and application of transferable skills,” at the Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS) National Conference on October 17, 2014, in Los Angeles, Calif.

Service
• Joshua Neumiller will serve on a grant review panel for the American Diabetes Association and Boehringer Ingelheim Research Award: Chronic Kidney Disease and Renal Insufficiency in the Setting of Diabetes.
• Allen I. White Professor in Pharmacy and Experimental and Systems Pharmacology Chair K. Michael Gibson has been appointed as an adjunct professor for the Department of Chemistry at Eastern Washington University in Cheney, Wash.
• Pharmaceutical Sciences Professor and Associate Dean for Graduate Education Kathryn E. Meier
participated in the annual retreat for the leadership of the American Society for Pharmacology and Experimental Therapeutics (ASPET) in Virginia in mid-October.

- **Kathryn Meier** and **John White** hosted guest speaker Dr. Katherine R. Tuttle, who presented, “From hopes to dreams to reality: Novel therapies for Diabetic Kidney Disease,” for the 2014 College of Pharmacy Allen I. White Lectureship on October 15, 2014. Tuttle is the executive director for research at Providence Health Care in Spokane, Wash., and a professor of basic medical sciences for the WWAMI medical education program at WSU Health Sciences Spokane.

### STUDENT ACHIEVEMENT

**Doctor of Philosophy (Ph.D.) students**

- **Emily Johnson** will present, “A systematic review of fetal genes as biomarkers of cardiac hypertrophy in rodent models of diabetes,” at 4:10 p.m. on Thursday, November 6, 2014, as part of the Graduate Research Seminar Series in Spokane, Wash.

- **Victor Bii** will present, “A novel approach to identify breast cancer metastasis genes,” at 4:10 p.m. on Thursday, November 13, 2014, as part of the Graduate Research Seminar Series in Spokane, Wash.

- **Faya Zhang** will present, “Chronic alcohol consumption induces the dysfunction of invariant natural killer T cells in melanoma-bearing mice,” at 4:10 p.m. on Thursday, November 20, 2014, as part of the Graduate Research Seminar Series in Spokane, Wash.

- **Brandon Gufford** has been selected as a recipient of the American Society for Clinical Pharmacology and Therapeutics (ASCPT) 2015 Presidential Trainee Award in recognition of his abstract titled, “A novel human model to assess reversal of opioid effects.” This is the second year he has received this award. Gufford will be presented with a plaque during the Showcase of Top Trainee Abstracts on March 4, 2015, at the ASCPT 2015 Annual Meeting in New Orleans, La.

**Doctor of Pharmacy (Pharm.D.) students**

- **Mike Wyant** and faculty co-author **Josh Neumiller** published, “CKD, Type 2 diabetes, and drug interactions,” as part of an online U.S. Pharmacist Case Study Challenge.

- Approximately six student pharmacists received job offers from attending the 2nd Annual Health Sciences Career Fair on October 15-16, 2014, at the WSU Health Sciences campus in Spokane.

### Coming Events

- November 14, 2014

  Experimental and Systems Pharmacology Professor **Mary Paine** will give a talk at the American Society of Nephrology Kidney Week titled, “Drug and nutrient interactions in kidney disease therapeutics,” in Philadelphia, Pa.