

# The Dean's Newsletter



From  
College of Pharmacy Dean  
Gary Pollack, Ph.D.

JUNE 2014

## In This Issue...

- Dr. Angela Stewart
- Dr. Joe Ashmore
- Pharm.D. leadership
- Other news

Dear Friends and Colleagues:

Of note this month is that our College is in the final stages of completing its most recent self-study. The self-study process, which together with strategic planning is integral to maintaining an accredited Doctor of Pharmacy program, has been a year-long activity bookended by the annual College retreat that occurs following commencement each spring.

Within the academy, self-study and strategic-planning activities have a somewhat unsavory reputation. This is, no doubt, because these efforts often are used to no end other than meeting the requirements of the parent university or accrediting body. To talented and busy people, this is an unsatisfying end to a lengthy and labor-intensive process.

We have chosen a different path, and are committed to using these introspective activities to map our future. We now have in place a strategic plan that will guide the continued development of our College through 2020. The plan calls for significant growth in all elements of our College:

- our professional education program (largely by placing a cohort of students on the Pacific Northwest University of Health Sciences campus in Yakima, Wash.);
- our graduate education program (including two new combined-degree options to be initiated this year: the PharmD/PhD and the PharmD/MBA);
- the number of faculty (an additional 20 hires are envisioned);
- and the extramural funding base that supports faculty-initiated scholarship (we have experienced a more than five-fold increase over the past two years, providing a solid foundation for future growth).

The plan articulates specific steps with expected and measurable milestones, timelines and advocates for each

activity. This is our “playbook” for the next several years.

The self-study process, when approached correctly, provides the framework for learning a great deal about one’s program and organization. Our experience has been no different. Our self-study was ratified by the faculty at the annual retreat only a couple of weeks ago. However, the knowledge that we have gained already is being used to prioritize and refine elements of the strategic plan, particularly as it relates to the professional degree program. This process also is our regular opportunity to engage formally with an important partner, the Accreditation Council for Pharmacy Education. We are looking forward to ACPE’s site visit to both Spokane and Yakima, which will occur in late September, and to the feedback we will receive from our accrediting body.

Best wishes,



Gary M. Pollack

Dean, Washington State University College of Pharmacy

## Yakima hospital, patients benefit from WSU residency program

*Pharmacy resident projects lead to better hospital practices, patient outcomes*



Dr. Angela Stewart

Whenever Angela Stewart is working – whether it is teaching in the classroom or taking care of patients at Yakima Valley Memorial Hospital – there are always pharmacy residents at her side.

Post-graduate pharmacists complete a research project as part of their year-long residency at the Yakima, Wash., hospital. Those projects have been the catalysts for changes in drug-related practices and protocols, and how pharmacists contribute to patient care. Stewart helped to start the residency program and served as its director for 13 years.

While student pharmacists were in classes learning about expanded opportunities for them after graduation, Stewart and her boss, Dennis Hoover, were participating in driving the progress outside of the classroom.

“When I came here in 1992, pharmacists were limited to drug distribution,”

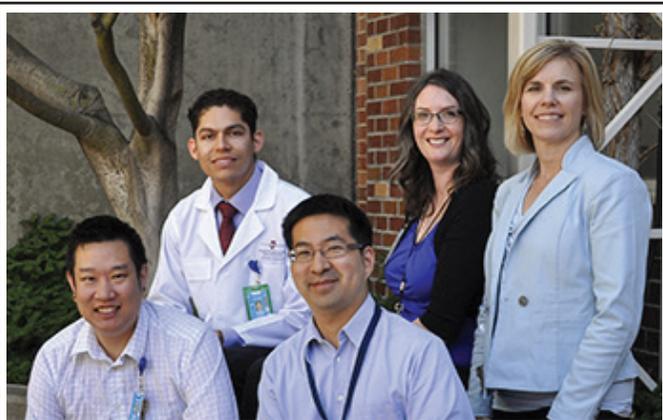
said Hoover, a 1980 WSU pharmacy grad.

“Pharmacists are now providing patient care services.” Stewart said, “The hospital has always been receptive to change.”

One of the first changes they made was the creation of a Coumadin® clinic about 12 years ago.

“I think it probably started with Dennis and I just thinking about how it could be done easier and then having a resident write the protocol,” she said. “There was some emerging evidence in the literature that having focused care for patients kept them safer than standard care; there were fewer bleeding complications, and it freed up the doctors’ time, too.” The clinic served about 100 patients at first, and now has nearly 2,000 patients.

“There was one physician who didn’t like it at first, but after enough time to prove good outcomes, she started sending patients to it,” Stewart said.



Clinical Associate Professor Angela Stewart, far right, is pictured here in a courtyard at Yakima Valley Memorial Hospital. From right: Shannon Rodriguez (back), current pharmacy resident and WSU class of 2013; Gregory Matsuura (front), WSU clinical assistant professor; Adan Camargo (back), a fourth-year student on rotation when this picture was taken in April; Clint Auttapibarn (front), current pharmacy resident.

A residency project two years ago has resulted in the hospital pharmacists being empowered to refill many prescriptions without contacting a physician.

“The physicians are very excited about it because they sometimes were doing this from home at night and on the weekends,” Stewart said. “There are doctors in the community who are asking for this service to be expanded to them.”

Not every residency project has turned out exactly as planned. About eight years ago a resident decided that the emergency room would be an exciting place for a pharmacist to work, and so he set out to demonstrate that pharmacists could improve patient care during management of emergencies, such as trauma and cardiac arrest. The results of his study were unexpected

and showed that the biggest need and value was actually in collecting accurate medication histories. Enough medication errors were prevented through his work to more than justify a pharmacist’s salary. The hospital has had a pharmacist working in the emergency department ever since.

Stewart limited her role at the hospital to residency director while raising three children, but with them now ages 20, 18, and 15 she gave up the part-time position in October and rejoined the faculty at the WSU College of Pharmacy where she is teaching and looking forward to new research opportunities, as well as working with the Doctor of Pharmacy program now available in Yakima.

Stewart doesn’t recall when she decided upon a career in pharmacy, but it may have had something to do with her mother being a pharmacist and spending some of her summers growing up working in the

pharmacy.

Both her parents are WSU graduates and the family lived in Pullman, Wash., when Stewart was in junior high while her dad completed his doctorate in horticulture. They moved to Yakima where she went to high school, and just to be different, she went to the University of Washington for a bachelor's degree in pharmacy. After a residency in Tacoma, Wash., she went to the University of Texas for a Doctor of Pharmacy and then was hired by Hoover in Yakima.

What does she like most about her job now? "The best thing is when I am sitting with a pharmacy student or resident and discussing a patient with them and I explain what's going on and can see the light bulb switch on in their eyes."

## Facilities at WSU Spokane help pharmacy researcher fight cancer

*Pharmacy postdoc fellow analyzes cancer DNA to study tobacco smoke carcinogens*



Since arriving at the WSU College of Pharmacy in Spokane, Wash., Joe Ashmore has been immersed in laboratory research involving tobacco smoke and lung cancer. His current project focuses on metabolites of nicotine (NNK), the main carcinogen in tobacco smoke. NNK is not easily eliminated from the body, but if the body converts it to another metabolite (NNAL), it can be expelled. Ashmore is looking for the genes that convert it. The work is traditional laboratory research, which he enjoys, but on the horizon is a much larger project that involves data analysis with a powerful piece of research equipment.

Ashmore will be analyzing a large collection of DNA samples with two new DNA sequencers being installed in the Genomics Research Core Facility on the WSU Health Sciences campus in Spokane. He will be using the machines to investigate cancers, in particular: lung, breast and colorectal. The "sequencer" spells out the DNA in a sequence of codes, and Ashmore will be isolating the two percent of each sample where the protein is coded.

"Eighty-five percent of disease-causing variants are within that two percent of the genomic sequence," Ashmore said, explaining the proteins are what the body uses to create and execute many body functions and forms.

"We are hoping to identify variants in some genes involved with smoking," Ashmore said.

About the time Ashmore finished his doctorate in nutrition at Pennsylvania State University, his major faculty advisor moved on. Born and raised in South Dakota, Ashmore completed his undergraduate degree there so his graduate work at Penn State was his first experience living in the East. He liked it, but was open to moving for a postdoctoral research position, but where?

The WSU College of Pharmacy looked appealing because he knew Dr. Philip Lazarus who also came to WSU from Penn State, and he was interested in focusing more on research in genetics, an expertise offered by Lazarus. Plus, Lazarus needed a data analyst in his lab, and Ashmore learned in graduate school that he enjoys analyzing data. He looked at other opportunities, but in addition to a good fit with Lazarus, Spokane is near a variety of outdoor adventures, and that weighed heavily in his decision. He packed up and moved to Spokane in July 2013.

He is not sure exactly where he wants to go after his postdoctoral work is finished, but he has known since he was in undergraduate school at Augustana in Sioux Falls, S.D., that some kind of science was right for him. His undergraduate degree is in biology, although chemistry was a subject he thought about, too.

“I love science. It’s an endless world of exploration,” said Ashmore.

## Doctor of Pharmacy student continues WSU legacy at NCPA

*WSU sends its seventh student pharmacist to serve on national student leadership council*



Doctor of Pharmacy student Patrick Stolz is joining an elite group of past WSU student pharmacists as he begins a two-year term of service on a national pharmacy student leadership council.

He is one of seven WSU student pharmacists to serve on the 16-member Student Leadership Council of the National Community Pharmacists Association in the past six years. The group includes two WSU students who served as president of the council.

“When I attended the 2013 NCPA legislative conference in Washington, D.C., I had the chance to meet many of the student leadership council members,” Stolz said. “They demonstrated leadership, passion and devotion for pharmacy – characteristics I greatly admire. By applying for the council

I wanted to follow in the footsteps of these leaders and help my pharmacist colleagues achieve their goals as well.”

Stolz is in the class of 2016. He is from Lynnwood, Wash., and started his undergraduate work at WSU in

Pullman in 2009.

Past presidents of the NCPA Student Leadership Council include Jason Doss, class of 2009, and Andrew Helm, class of 2011. Others who served on the council include Manpreet Chahal, class of 2010; Patrick Tabon, class of 2012; Erik Nelson, class of 2013; and Lisa Garza, class of 2014.

WSU also has a successful history with the NCPA Student Business Plan competition with teams that earned first place in 2006 and 2010.

## Other College News

### FACULTY SCHOLARSHIP

#### Publications

- Pharmacotherapy Associate Professor **Joshua J. Neumiller** with five co-authors published, “Postoperative Delirium in Parkinson’s Disease Patients Following Deep Brain Stimulation Surgery,” in the Journal of Clinical Neuroscience [2014;21(7):1192-1195].
- **Joshua Neumiller** with 10 co-authors published, “Response to Comments on Evert Et al. Nutrition Therapy Recommendations for the Management of Adults with Diabetes,” in Diabetes Care [2014;37(5):e102-e103].
- **Joshua Neumiller** participated in the American Diabetes Associations (ADA) conference on Chronic Kidney Disease and Diabetes in collaboration with the National Kidney Foundation, the American Society of Nephrology and the National Institute of Diabetes & Digestive Kidney Diseases (NIDDK) in Chicago, Ill., on March 21, 2014. As a follow up to participating at this conference, Neumiller’s presentation, “Glycemic Management – Use of Drug Therapies in CKD,” is currently posted as a webcast on the ADA website. [watch video](#)
- Pharmacotherapy Professor **Tracy Skaer**, and Pharmacotherapy Associate Professor and College of Pharmacy Ombudsman **Mark Garrison** with one co-author published, “Can Flush and Lock Solutions Used in Human Medicine be Applied to Large Animal IV Therapy: A Systematic Review, “ in the March issue of the Journal of Equine Veterinary Science. [read more](#)

#### Presentations

- Pharmaceutical Sciences Dorothy Otto Kennedy Distinguished Professor **Gary G. Meadows** and Pharmaceutical Sciences Associate Research Professor **Hui Zhang** presented their research, “Chronic Alcohol Consumption Decreases the Survival and Compromises the Antitumor Immune Response of Mice Bearing Estrogen Receptor Positive E0771 Breast Cancer,” at the The American Association of Immunologists (AAI) Annual Meeting in Pittsburgh, Pa., May 2-6, 2014.
- Allen I. White Endowed Professor and Experimental and Systems Pharmacology Chair **K. Michael Gibson** presented a talk to biology students at Eastern Washington University titled, “GABA and Mitophagy: Novel Pathomechanisms in Disorders of GABA Metabolism,” on May 9, 2014.
- Experimental and Systems Pharmacology Associate Professor **Mary Paine** presented, “Predicting Herb-drug Interactions via an Integrated In Vitro-In Silico-In Vivo Approach,” for the International Society for the

Study of Xenobiotics at the fifth Asia Pacific ISSX Meeting in Tianjin, China, on May 11, 2014.

- **Mary Paine** presented, “Quantitative Prediction of Dietary Substance-Drug Interactions: Challenges and Opportunities,” at the Shanghai Institute of Materia Medica, Shanghai, China, on May 13, 2014.
- **Mary Paine** presented the lecture, “Herb-Drug Interactions,” at GlaxoSmithKline Investment Co., Ltd., in Shanghai, China, on May 14, 2014.
- Experimental and Systems Pharmacology Associate Professor **Sue Marsh** presented a paper titled, “O-GlcNAc and Epigenetics in Cardiac Hypertrophy,” at the American College of Sports Medicine Annual Meeting in Orlando, Fla., on May 30, 2014.
- Pharmaceutical Sciences Research Technician **Jonah Hocum** presented a poster titled, “VISA - Vector Integration Site Analysis Server: A Web-Based Server To Rapidly Identify Retroviral Integration Sites From Next-Generation Sequencing,” at the 17th annual American Society of Gene and Cell Therapy meeting in Washington D.C. on May 21, 2014.

### **Service**

- Pharmaceutical Sciences Professor and Associate Dean for Graduate Education **Kay Meier** served on the editorial boards of the Journal of Pharmacology and Experimental Therapeutics, the American Society for Pharmacology and Experimental Therapeutics (ASPET), Molecular Pharmacology, American Journal of Physiology, and on the Science Policy Committee for the American Physiological Society during the Experimental Biology Conference in San Diego, Calif., in April.
- The College of Pharmacy has received funding for the next two years for a Summer Undergraduate Fellowship Program. Five SURF fellows have been selected for summer 2014, and will be led by Experimental and Systems Pharmacology Assistant Research Professor Vanessa Gonzalez-Perez and Pharmaceutical Sciences Clinical Assistant Professor Travis Denton.
- U.S. Transuranium and Uranium Registries Associate Research Professor **Sergei Tolmachev** was appointed to a second three-year term as an adjunct professor at Laval University, Department of Chemistry in Quebec, Canada.
- Pharmaceutical Sciences Assistant Professor **Zhenjia Wang** was elected to the editorial board of the Austin Journal of Analytical & Pharmaceutical Chemistry.

### **Grants**

- **K. Michael Gibson** received an R21 grant from the National Institutes of Health Division of National Institute of Neurological Disorders and Stroke in the amount of \$432,400 over two years for his research project titled, “Therapeutics of mTOR Signaling in Succinic Semialdehyde Dehydrogenase Deficiency.”
- Pharmacotherapy Professor and Chair **John White** received a grant from the American Beverage Association in the amount of \$263,000 for his one-year research project titled, “Pharmacokinetic Analysis of Caffeine (160 mg) Administered Rapidly via Chilled Coffee, Chilled Energy Drink or Slowly via Hot Coffee or Chilled Coffee or Energy Drink.”

### **Awards**

- **Josh Neumiller** received a Faculty Thesis Advisor Award from the WSU Honors College. He was nominated by Haleigh Miller who will be a Doctor of Pharmacy student in the class of 2018. [read more](#)

## STUDENT ACHIEVEMENT

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

- **Mandi Hopkins** presented a poster titled, “Effects of Eicosapentaenoic Acid and the GPR120 Agonist TUG-891 on Lysophosphatidic Acid Signaling in Prostate Cancer Cells,” by Hopkins and two WSU faculty co-authors, at the Experimental Biology Conference in San Diego, Calif., on April 29, 2014.
- **Diana Browning** presented a poster titled, “Development of Insulated Foamy Retroviral Vectors for Hematopoietic Stem Cell Gene Therapy,” at the American Society of Gene and Cell Therapy (ASGCT) annual meeting in Washington D.C. on May 21, 2014. She was also awarded the WSU School of Molecular Bioscience Dr. Bruce Gibbin Travel Award for her participation at the ASGCT event.
- **Mandi Hopkins** was awarded an Experimental Biology Graduate Student Travel Award for the 2014 American Society for Pharmacology and Experimental Therapeutics Annual Meeting.

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

- **James Leonard** with two faculty co-authors published, “Can Flush and Lock Solutions Used in Human Medicine be Applied to Large Animal IV Therapy: A Systematic Review, “ in the March issue of the Journal of Equine Veterinary Science. [read more](#)

## Coming Events

- July 12, 2014  
The National PKU Alliance (NPKUA) has invited **K. Michael Gibson** to present at the 2014 NPKUA Conference in Salt Lake City, Utah.
- September 21, 2014  
U.S. Transuranium and Uranium Registries Associate Research Professor **Sergei Tolmachev** has been invited to present research findings at the 2014 Radiation Research Society Meeting in Las Vegas, Nev.



College of Pharmacy

P.O. Box 1495, Spokane, WA 99210-1495 | [www.pharmacy.wsu.edu](http://www.pharmacy.wsu.edu)