Dear Friends and Colleagues:

In June our college hosted the second annual Transformation and Innovation in Pharmacy Education (TIPEd) conference. Participants included representatives of several pharmacy programs around the country, as well as the American Association of Colleges of Pharmacy, the Accreditation Council for Pharmacy Education, the WSU College of Nursing, and the WSU Elson S. Floyd College of Medicine.

This conference has allowed our program to showcase several of its recent innovative initiatives, and to receive feedback from national experts that has informed our path. The timing of this conference has dovetailed with our annual faculty retreat, essentially allowing our faculty to compare notes between our internal deliberations and the viewpoint from outside our program. This is a powerful combination, and a significant strategic advantage as we continue to pursue “big ideas” in the educational arena.

Of course, there often is more value in looking forward (“You’ve got to be very careful if you don’t know where you are going, because you might not get there” – Yogi Berra) than looking backward (“Something might be gaining on you” – Satchel Paige). Two of the more forward-thinking topics discussed included self-paced curricular delivery (which would require the type of content delivery that we already use for our active-learning approach and might provide some intriguing opportunities for students who wish to pursue a Pharm.D./Ph.D. track as an example) and “precision education” (based on phenotyping a student’s learning preferences, analogous to “precision medicine”). A common thread throughout the meeting was the critical need for taking an evidence-based approach to education, and the rich opportunities for educational scholarship that are inherent in health professions academic programming.

As academic pharmacy (as well as other professions) continues to engage an increasingly diverse applicant pool, with a concomitant diversity in educational background, learning approaches, and lifestyles, approaches such as these may present significant advantages. I look forward to continuing discussions on these topics with our colleagues and peers as we all strive for solutions to better prepare outstanding health care professionals and scientists.

Best Wishes,

Gary M. Pollack
Dean, College of Pharmacy
Washington State University
Student achievement at national competition brings home prize that will benefit others

SPOKANE, Wash.—Three student pharmacists from the Washington State University College of Pharmacy competed in the national Student Pharmacist Compounding Competition (SPCC) March 18-19 in Aventura, Florida.

“We decided to participate in the SPCC regional competition because all three of us work at Sixth Avenue Pharmacy and have not only a strong background in compounding, but also a desire to develop these skills for our future practice as pharmacists,” said Shauna Legget.

WSU student pharmacists Kimberly Paulson, class of 2017, Shauna Leggett, class of 2018, and Megan Baker, class of 2020, made up one of 18 teams from pharmacy programs across the country.

In addition to placing fourth overall in the competition, the team participated in a separate research project proposal contest and won. As a prize, the WSU College of Pharmacy will receive a piece of compounding lab equipment from Medisca known as a Mazerustar, a type of specialized electronic mixer valued at $17,000.

“The Mazerusta allows for great mixing that no other hand tools in the school compounding lab allows. It uses planetary motion to completely mix without adding air or bubbles to your final product,” said Kimberly Paulson. “There are no other pharmacies in the Spokane area that have this type of equipment that I’m aware of.”

Drug companies produce medicine in standard doses. Compounding is when pharmacists customize prescriptions to better fit the individual. This can involve converting a medicine from a tablet to a liquid form, or adjusting the dosage or dosage form. For example, many drugs are not produced in dosages appropriate for children. Pediatric medicine is something that is often compounded by a pharmacist.

Not all pharmacies provide compounding services, which makes it an ideal niche for pharmacy entrepreneurs interested in owning their own stores.

To enter the contest, they had to submit a video about how they would use the equipment to complete a research project. They proposed collaborating with Sixth Avenue Pharmacy in Spokane to complete studies regarding time and cost savings. The Mazerustar will be housed at Sixth Avenue Pharmacy where the compounding team will have the opportunity to complete the research they proposed in the contest.

This is one example of how the WSU Doctor of Pharmacy program provides a transformative student experience. In this case, the achievement of the compounding team will allow other students to gain experience working with a piece of...
Transitioning pharmacy practice to meet the needs of the gender revolution

SPOKANE, Wash.—Health care has seen an incredible amount of growth, innovation and evolution in recent years with the advancement of medical knowledge and integration of technology. This increased quality of care coupled with increased access to care through insurance exchanges has translated into a higher demand for health care services in a wide range of fields. However, much of the time this means patients are experiencing a growing problem: a lack of highly trained health care providers to deliver these specialized services.

One such area that has seen exponential growth in the demand for clinical services is within the population of transgender and gender-nonconforming (TGNC) people.

“Care for transgender and gender non-binary patients must be tailored to each individual focusing on their individual gender identity and goals for transition.” says Cheyenne Newsome, a clinical assistant professor at the Washington State University College of Pharmacy. “It is definitely not a one size fits all treatment.”

According to Newsome, there is a great mismatch between the growing number of patients seeking care for gender dysphoria and the limited number of health care providers who are able to provide care to these patients.

“Because of this lack of education and clinical exposure, relatively few providers have the knowledge and experience to provide quality care to patients, yet we have over a million individuals in the United States who identify as transgender or gender non-binary,” said Newsome.

In 2015 the University of New Mexico Hospitals opened a clinic solely dedicated to providing interprofessional medical and behavioral health services to TGNC patients, which was the first clinic of its kind in the entire state. Before the clinic opened, very few options were available and there were no options where all needs of a transgender patient could be found in one place.

THE ROLE OF THE PHARMACIST IN PROVISION OF CARE

Newsome has been studying the pharmacist’s role in providing care to TGNC patients within a “medical home” model of care, a topic on which she recently published with three co-authors in the American Journal of Health-System Pharmacy.

The medical home model of care is designed to be patient-centered and provide comprehensive care. For example, the team at the New Mexico clinic that Newsome writes about includes a clinical pharmacist, a psychiatrist, a nurse practitioner, an endocrinologist, a diabetes educator, a massage therapist, a nurse, a nutritionist, and medical assistants.

“We had many providers in one building who could take care of most of the patients’ physical and mental health needs. Having all their providers in one place and sharing one medical record allows for collaborative care between health professions. It’s also easier to navigate for patients, everything is in one place,” said Newsome.

The team also approached patient consent differently with an “informed consent” model, which follows the traditional patient consent process but emphasizes the importance of the health care provider to also serve as patient advocate.

“The informed consent model of care eliminates gate-keeping. The goal is to prevent unnecessary screenings which delay patients from getting the care they need. Access and availability to care are of great importance for TGNC patients because gender dysphoria can lead to self-harm if untreated,” said Newsome.
Newsome received her Doctor of Pharmacy degree from Southern Illinois University and is a licensed pharmacist in Illinois, New Mexico and Washington. She is also a licensed pharmacist clinician in New Mexico, which means she can write prescriptions, make medication changes and order laboratory tests as outlined in the state’s governing collaborative practice protocol.

According to her AJHP article, this advanced scope of practice allows pharmacists who have the expertise and desire to expand access to care for TGNC people.

“As the drug experts and as clinicians, pharmacists are the ideal health care professional to discuss hormone therapy with patients,” said Newsome. “Pharmacists can be medication problem solvers and creatively aid patients through medication—and other chronic disease state—management.”

Newsome discovered her interest in this area of pharmacy during her post-graduate residency at the gender clinic in Albuquerque. Prior to that, she had not heard of or been involved in this type of specialty care.

“During my second year of residency I worked with a pharmacist in her gender dysphoria clinic. Hearing stories of the patients with gender dysphoria and providing them gender-affirming care was an extremely rewarding experience,” she said.

Now, Newsome is bringing this knowledge to Washington.

“There is definitely a need here in Washington. In Washington state, insurance health care plans are required to cover medical expenses for gender dysphoria. So the payer is there, we just need to get trained providers,” says Newsome.

**LOCAL EXPERT, NATIONAL LEADER**

“Before I started working in the New Mexico clinic I had received no education on medical care for transgender or gender non-conforming patients,” said Newsome. “And I know this is true for the vast majority of health care providers out there.”

This marked the beginning of her journey to increase pharmacists’ and other health professionals’ knowledge about TGNC people and their health care needs. The next step for Newsome includes pursuing a new project at WSU that will increase the amount of education the College of Pharmacy offers around caring for LGBTQ people.

Newsome has given several lectures to professional organizations on the subject of TGNC care, including the Washington State Psychological Association and the Spokane Pharmacists Association. She will take the national stage in August when she presents for the American Society of Health-System Pharmacists, and then again in December at the organization’s Midyear Clinical Meeting in Orlando, Florida.

“My favorite part about working in the gender clinic was getting to advocate for people, ensure that patients have access to the health care they need, and providing them the tools to be their true self and their best self,” said Newsome.

Newsome joined the faculty at the WSU College of Pharmacy in 2016. In addition to teaching pharmacotherapy, she maintains a practice site at the Mann-Grandstaff Veterans Affairs Medical Center in north Spokane. Here, she runs a metabolic clinic where she sees patients with diabetes and other cardiovascular risk factors. As a pharmacist provider, Newsome operates under a protocol which allows her to initiate, adjust and discontinue medications.
from the University of Washington. Bray has been affiliated with the College of Pharmacy since 1990 and joined the faculty as a clinical assistant professor in 2005. She has served as chair of the Pharmacy Assessment Committee and has directed the college’s assessment program since 2007. In 2016, Bray was appointed as the assistant dean for assessment and accreditation. In this role she coordinates and supports the college’s competency-based assessment program including computer-based testing, assessment support for all college units to ensure Accreditation Council for Pharmacy Education (ACPE) standards are met, and evaluation of the WSU College of Pharmacy strategic plan.

“She is a very effective teacher and mentor, a very well respected scholar in the areas of pedagogy and assessment, and a nationally recognized expert via her leadership role in educational assessment. We are very fortunate to have her in our ranks,” said John R. White, chair of the pharmacotherapy department.

Bray teaches Pharmacy 559: Quality Assurance and Patient Safety, and supports teaching and learning with simulation (manikin-based and standardized patients) in all of the applied patient care labs. She also precepts first-year and fourth-year student pharmacists on rotations and in other clinical settings.

In addition to this, Bray is active in the interprofessional education efforts at WSU in Spokane. She is a member of the Interprofessional Education taskforce, and helps teach the Error Disclosure Workshop and the Interprofessional Collaborative Practice (IPCP) Common Course.

Bray’s scholarly interests include human patient simulation, the pharmacist’s role in public health—particularly with interprofessionalism and emergency preparedness—and assessment of teaching and student learning.

Bray has received several pharmacy service awards including Pharmacist of the Year from the Spokane Area Society of Hospital Pharmacists in 1990 and Community Pharmacist of the Year from the Spokane Pharmacy Association in 2005. She served as the faculty advisor for the College of Pharmacy Professional Student Organization (PPSO) from 2003-2011, during this time she received the WSU Spokane Advisor of the Year Award in 2010.

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Dear Alums, Colleagues and Friends of Pharmacy,

I wanted to provide you with an update about the WSU College of Pharmacy’s Crimson Gala on October 20, 2017, where we will honor WSU Professor Emeritus R. Keith Campbell with a Lifetime Achievement Award.

This event marks the return of Pharmacy Weekend, which will be returning to the college’s annual calendar as Pharmacy Weekend...
Homecoming Weekend. We will be honoring the career and lifetime achievements of the WSU College of Pharmacy alumni who have done outstanding work within their communities, contributed to the profession of pharmacy in profound ways, and have made a significant impact on the face of health care. There is not a more appropriate recipient for our inaugural Crimson Gala than Keith Campbell.

I suspect that many of you are grateful to Keith for being a mentor, counselor and/or friend. I remember that he advised me to (read “told me to”) learn everything I could about diabetes, get to know the diabetes provider experts in Spokane, learn to ask for referrals, network on a national basis, and become a certified diabetes educator if I was truly interested in expanding my community pharmacy’s niche into diabetes. Guess what – I followed his advice and it worked!

To further honor his contributions to our college, proceeds from this event will contribute to name the R. Keith Campbell Applied Patient Care Lab in the Pharmaceutical and Biomedical Sciences Building on the WSU Health Sciences campus in Spokane. Funds will then provide support for our student pharmacists.

I hope you will be able to join us for this special night and then the WSU versus Colorado Homecoming tailgate and football game in Pullman the following day. Details will be posted to our website as they are finalized and the online registration will open very soon!

In the meantime, if you are interested in being a bigger part of making the R. Keith Campbell Applied Patient Care Lab a reality, please consider being an event sponsor.

To sign up as a sponsor or for more information, please email Kelly Sylvester at gocougs@pharmacy.wsu.edu or call 509-368-6675.

With Cougar Pride,

Linda Garrelts MacLean, BPharm, RPh
Vice Dean of External Relations
Clinical Professor

ALUMNI NEWS

Nick Bruck, class of 2004, was selected as our 2016 Outstanding Alumnus of the Year! He was chosen for his many contributions to the college and the pharmacy profession. Read more »

Leon Alzola, class of 1991, and Steve Riddle, class of 1984, received our Mentor of the Year award! Thank you both for your amazing guidance and the continual support you offer our students.

The college just got a new electronic donor board installed! Come and visit us on the WSU Spokane campus to take a look and tour around our building. Email us to schedule a tour.
ALUMNI UPDATES

• **Patrick Tabon**, class of 2012, has accepted a position with USC as an assistant clinical professor. Congrats Patrick!
• **Josh Akers**, class of 2007, and the Kelley-Ross Pharmacy Group resident tied for first place in the resident category at the 2017 Northwest Pharmacy Convention Association annual poster competition for the poster titled, “Quantifying the impact of pharmacist guided in-home medication coaching on housing stability of low-income older adults.”

Want to be listed in our alumni updates? Send us your career information or let us know what you’ve been up to!
gocougs@pharmacy.wsu.edu
FACULTY SCHOLARSHIP

Publications

• Pharmacotherapy Clinical Assistant Professor Kimberly McKeirnan published with one co-author, “Training student pharmacists to administer emergency pediatric influenza vaccine: a comparison of traditional vs. just-in-time training,” in the peer-reviewed journal Currents in Pharmacy Teaching and Learning. Read article »

• United States Transuranium and Uranium Registries (USTUR) Research Associate Maia M. Avtandilashvili, Pharmaceutical Sciences Associate Research Professor and USTUR Director and Sergei Tolumachev and one co-author published, “USTUR whole-body case 0212: 17-year follow-up of plutonium contaminated wound,” in Radiation Protection Dosimetry.

• Sergei Tolumachev published, “U.S. Transuranium and Uranium Registries: 50 years of research relevant to new biomarker,” in the journal Health Physics.

• USTUR Research Associate George Tabatadze, Maia Avtandilashvili and Sergei Tolumachev published, “Plutonium in tissues of occupationally exposed individuals,” in Health Physics.

• Pharmaceutical Sciences Assistant Professor Travis T. Denton and seven co-authors published, “Mild metabolic perturbations alter succinylation of mitochondrial proteins,” in The Journal of Neuroscience Research, a peer-reviewed journal from Wiley Periodicals, Inc.

• Pharmacotherapy Associate Professor Joshua J. Neumiller published, “Type 2 diabetes – pathophysiology and pharmacology review,” as a webinar for Postgraduate Healthcare Education, LLC on May 5, 2017. Available online »

• Pharmacotherapy Professor and Associate Dean for Professional and Continuing Education Danial E. Baker published, “Bezlotoxumab,” in the independent, peer-reviewed journal Hospital Pharmacy.

• Danial Baker published, “Eteplirsen,” in the journal Hospital Pharmacy. Read abstract »

• Pharmacotherapy Clinical Professor Terri L. Levien, Danial Baker and one co-author published, “Drug evaluation – Plecanatide (Trulance): updated evaluation,” in Wolters Kluwer Health’s The Formulary Monograph Service (FMS) in April 2017. Wolters Kluwer Health is a drug and health information publisher, the FMS is a resource used in the formulary decision making process for hospitals and managed care systems on recently released and investigational drugs.


Presentations

• Joshua Neumiller presented, “Injectables for Type 2 diabetes,” at the 2017 American Diabetes Association (ADA)


- Pharmacotherapy Professor and Chair **John R. White, Jr.** presented the poster, “Improved glycemic control and lower hypoglycemia risk with reduced prior oral antidiabetes drug therapy in patients with Type 2 diabetes treated with insulin Glargine 300 units/ml,” at the American Association of Nurse Practitioners national meeting on June 20-25, 2017, in Philadelphia, Pennsylvania.


**Service**

- Pharmaceutical Sciences Assistant Professor **Zhenjia Wang** served on the NIH study section of Developmental Therapeutics on June 15-16, 2017.

- **Joshua Neumiller** has been appointed to the Medicine Matters Diabetes Advisory Board. Medicine Matters Diabetes is an online resource produced by Springer Nature for health care providers working with patients with diabetes.

- **Joshua Neumiller** was recently interviewed by Diabetes Core Update, a monthly audio podcast produced by the American Diabetes Association (ADA). The podcast titled, “Standards of medical care in diabetes 2017 – Part 1: general diagnosis and management recommendations,” was posted on June 13, 2017. [Listen to the podcast here »](#)

- Pharmaceutical Sciences Associate Professor **Salah-uddin Ahmed** will mentor 2017 Summer Undergraduate Research Fellowships (SURF) undergraduate student Dorothy Wang from Whitworth University.

- **Grant Trobridge** will mentor 2017 SURF undergraduate student Emily Fields from Pacific Lutheran University.

- **Travis Denton** will mentor 2017 SURF undergraduate student Joshua Nay from Whitworth University.

- Pharmaceutical Sciences Assistant Professor **John D. Clarke** will mentor 2017 SURF undergraduate student Yusheng Wu from Wheaton College.

- Pharmaceutical Sciences Assistant Professor **Zhaokang Cheng** will mentor 2017 SURF undergraduate student Stephanie Dong from University of North Carolina at Chapel Hill.

- Boeing Distinguished Professor and Pharmaceutical Sciences Chair **Philip Lazarus** will mentor 2017 SURF student Vanessa Gamboa who received a Master of Science degree from Heritage University in 2017.

- Pharmaceutical Sciences Associate Professor **David X. Liu** will mentor 2017 SURF student James Nguyen, a student pharmacist at the WSU College of Pharmacy.

- **Travis Denton** was interviewed by KREM 2 News for the segment, “Verify: what is the true cost of new ALS drug?” by Jane McCarthy on May 25, 2017. [Watch the interview »](#)

**Awards**

- Pharmacotherapy Clinical Assistant Professor **Cheyenne Newsome** won first place in the pharmacist category at the 2017 Northwest Pharmacy Convention annual poster competition for the poster titled, “Between health literacy and diabetes control in a pharmacist-run disease state management clinic.”

- Pharmacotherapy Clinical Assistant Professor **Julie Akers** and Fred Meyer/WSU Resident **Ada Chang** tied for first place in the resident category at the 2017 Northwest Pharmacy Convention annual poster competition for the poster titled, “Assessing the impact of marketing strategies on utilization of CDTA services in a community pharmacy setting.”

**STUDENT ACHIEVEMENT**

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

- **Sara Dumit**, pharmaceutical sciences (Tolmachev lab), with faculty co-authors Maia Avtandilashvili and Sergei Tolmachev published, “USTUR whole-body case 0212: 17-year follow-up of plutonium contaminated wound,” in Radiation Protection Dosimetry.

- **Sara Dumit** with faculty co-authors Maia Avtandilashvili and Sergei Tolmachev published, “Enhancement of plutonium excretion following late Ca-EDTA/DTPA treatment,” in Health Physics.