Dear Friends and Colleagues:

An interesting and important paper was published recently in the journal Demography, and has begun to generate additional analysis and commentary. The focus of this work is the relationship between student success and family wealth; the story it tells is concerning.

Not surprisingly, there is a positive relationship between family wealth (distinct from family income) and college participation. With the exception of the highest wealth category, which has consistently high college participation rates, the percentage of high school graduates electing to pursue further education has increased over time. This generally would be viewed as a positive change, especially in the academy: we aspire for diversity in all characteristics, including economic status. For programs in land-grant universities, addressing disparities in access to educational opportunity is especially mission-relevant. However, although college participation rates have increased recently among students from the lowest family wealth category, the percentage of those students actually earning a college degree has barely budged. The failure to graduate has a variety of negative outcomes, ranging from debt associated with an uncompleted degree program to perpetuation of stereotypes (“those” students simply are not good enough).

There are a number of factors that might contribute to students from low-wealth groups failing to complete a college degree. The obvious ones (attending challenged public schools in a wealth-segregated district; being the first member of a family to attend college) are mentioned frequently. Other factors, such as food insecurity and the difficulties associated with attaining academic achievement on a chronically-empty stomach, are beginning to receive more attention.

What does this have to do with post-baccalaureate degree programs such as we have in our college? Here’s the thing: the issues facing students from economically-challenged backgrounds do not magically disappear once they have completed their undergraduate work. To some extent, the pressures on these students to help support aging parents, or to begin supporting their own families, might intensify as they transition from undergraduates to professional or graduate students. The days of an “immersive” experience in a post-baccalaureate program are in the past, if indeed they ever
existed as a general concept. Given the projections for high-school graduation rates, the challenges associated with student retention and progression will become more substantial at all levels of higher education.

What can those of us aligned with professional and graduate education do to support student success across the range of students we enroll in our programs? Some of the changes we have adopted in our college have positioned us well to engage and assist students who may otherwise find the challenges associated with pursuing a professional or graduate degree to be insurmountable. Delivering our professional curriculum in a competency-based manner, and appropriately aligning educational philosophy with expectations for student performance, has resulted in a significant improvement in student retention. Our curricular delivery approach provides some measure of flexibility for those students who need to work while pursuing their degree. Utilizing an active- and collaborative-learning approach, as opposed to traditional lecture, has supported the “deep learning” that is required for long-term success, and is particularly well-suited to engaging students who may struggle with traditional lecture-based approaches.

Student support and culture will be one of the topics at our upcoming TiPed Institute June 12–14 in Spokane. We are looking forward to discussing these and other topics addressing the innovation of pharmacy and health sciences education. There is still space if you would like to send a team from your institution, you may register online here: https://pharmacy.wsu.edu/tiped/registration/.

Best wishes,

Gary M. Pollack
Dean, College of Pharmacy
Washington State University

UPCOMING EVENTS

- **April 6**: Tribute to Excellence
  Yakima, Wash.
  [RSVP](#)

- **April 19**: CougsFirst
  Davenport Grand Hotel
  Spokane, Wash.
  [Learn more](#)

- **April 21**: R. Keith Campbell Celebration of Life
  Spokane, Wash.
  [RSVP](#)

- **May 11**: Celebrating Generosity
  Columbia Tower Club
  Seattle, Wash.
  [RSVP](#)
WSU pharmacy faculty joins national scholars program
Julie Akers, Pharm.D., has been selected for the National Association of Chain Drug Stores (NACDS) Foundation Faculty Scholars program. Read more »

Retired Washington legislator to speak at pharmacy commencement May 3
Linda Evans Parlette, a former Washington state senator and WSU pharmacy alumna, will be the keynote speaker at the commencement ceremony of the Washington State University College of Pharmacy at 1:00 p.m. Thursday, May 3, at the Martin Woldson Theater. Read more »

WSU leads in expanding scientific knowledge on natural products
Dietary supplements. Natural remedies. Botanicals. Energy drinks. Wellness boosts. Health foods. Vitamins. There’s a lot out there when choosing whether or not to use dietary supplements or other natural products. Read more »

Dear Alums, Colleagues and Friends of Pharmacy,

I am pleased to report that the Allen I. White Lectureship on March 13 featuring Dr. Richard Okita, a program director with the National Institutes of Health National Institute of General Medical Sciences and a former pharmaceutical sciences professor at WSU, was a tremendous success. Dr. Okita’s
presentation described his work in pharmacology and toxicology over his many decades in academia and at NIH. Our students and faculty appreciated the time that was spent with this national leader in biomedical sciences research and policy. Pharmaceutical Sciences Associate Professor Mary Paine also expressed her appreciation: "Dr. Okita is the epitome of NIH program directors, and I will be eternally grateful to him for his never-ending encouragement, advocacy, and sage advice."

Many students and faculty have just returned from the annual APhA meeting held in Nashville. It was great to see many of you there, especially those of you who came to our CougaRx Nation Alumni and Friends reception on Sunday. We appreciate all of the networking and student mentoring that occurred at that event! Other highlights:

- Check out the podium and poster presentations that our faculty, residents, and fellows conducted under the Faculty Scholarship section.
- Natalie Tucker, a fourth-year student pharmacist, represented us well! As a member of the APhA – Academy of Student Pharmacists standing committee for communications, she was thanked for her work at the student general session. Her exceptional writing skills were acknowledged and it was noted that southern roots could be detected in her work!
- The Community Pharmacy Foundation was awarded the H.A.B. Dunning Award at the first general session. This organization has funded research for many of our pharmacotherapy faculty.
- Congratulations to our community partner Albertsons Companies! It has been great collaborating with them on immunization training. They received an APhA Immunization Champion Award in the corporation/institution category.
- Finally, a huge thank you to Executive Vice President & CEO Donnie Calhoun and Vice President of Operations Dana Easton with the American College of Apothecaries (ACA). Their sponsorship for the Sunday evening reception is so appreciated. Our students, alumni and friends of the WSU College of Pharmacy value the time spent with the ACA members.

In addition to great faculty like Dean Allen White and Professor Emeritus Keith Campbell who have made a profound impact on our college, there are also dedicated staff who not only support faculty in their scholarship but also keep the business of running a college going daily with seemingly effortless grace. In that regard, many of our alumni got to know and love Vicki Burnham, who served as the dean’s assistant from 2005–2014. We are saddened to hear of Vicki’s passing on March 11, 2018, after a long battle with cancer. Our deepest condolences go out to her family. You can read more about Vicki here.

I wish each of you the best as you enjoy the sunshine and everything associated with spring!

With Cougar Pride,

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

ALUMNI NEWS
CONTINUING EDUCATION
The college now has an Online Continuing Education Center hosted by The World Continuing Education Alliance (WCEA). Read more »

COMPOUNDING
The College of Pharmacy compounding team won the national Student Pharmacist Compounding Competition in Aventura, Florida! Read more »

COUNCIL MEMBERS
Sunil Wadhwani and Leon Alzola recently became members of the advisory council for Dean Gary M. Pollack. Read more »

ALUMNI UPDATES
• Will Quinby, class of 2010, from Centralia Pharmacy, won an NCPA Innovation Center Excellence Award for best external remodel! View photos » Will is married to fellow pharmacy alum Courtney Quinby, who also graduated in 2010.

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 Associate Professor Kimberly McKeirnan with five co-authors published, “Assessing pneumococcal vaccination availability in under-vaccinated rural counties: a pharmacy perspective,” in the journal The Consultant Pharmacist in March 2018.
• Kimberly McKeirnan, Pharmacotherapy Research Resident in Medication Optimization Kyle Frazier, Vice Dean for External Relations and Pharmacotherapy Clinical Professor Linda Garrelts MacLean, and one co-author published, “Training pharmacy technicians to administer immunizations,” in the Journal of the American Pharmacists Association. Read abstract »
• Pharmaceutical Sciences Assistant Professor Travis T. Denton and two co-authors published, "Multiple-step, one-pot synthesis of 2-substituted-3-phosphono-1-thia-4-aza-2-cyclohexene-5-carboxylates and their corresponding ethyl esters," in Bioorganic and Medicinal Chemistry Letters on February 15, 2018. Read abstract »
• Pharmaceutical Sciences Research Technologist Kenneth Porter, Pharmaceutical Sciences Assistant Professor Hui Zhang, Pharmaceutical Sciences Assistant Professor Shobhan
Gaddameedhi, and six co-authors published, "The circadian clock regulates cisplatin-induced toxicity and tumor regression in melanoma mouse and human models," in Oncotarget, a peer-reviewed open access journal, on March 6, 2018. Read article »

- Pharmaceutical Sciences Associate Professor Grant Trobridge and three co-authors published, "Replication-incompetent gammaretroviral and lentiviral vector-based insertional mutagenesis screens identify prostate cancer progression genes," in Oncotarget, a peer-reviewed open-access journal, on March 20, 2018. Read abstract »

- Pharmacotherapy Clinical Assistant Professor Cheyenne Newsome and three co-authors published, "Breadth of statistical training among pharmacy residency programs across the United States," in Hospital Pharmacy in April 2018. Read abstract »

Presentations

- **Travis Denton** presented, "Development of lanthionine ketimine analogues and their potential role as therapies for ALS, Alzheimer’s Disease and other neurological disorders and research opportunities at WSU Spokane," for the Whitworth University Department of Chemistry Seminar Course on February 7, 2018, in Spokane, Wash.

- **Kimberly McKeirnan** and two co-authors presented, “PharmTalk innovations in interprofessional education: improving rural pneumococcal immunization acceptance through interprofessional academic detailing," at the American Pharmacists Association (APhA) Annual Meeting in Nashville, Tenn. in March 2018.

- **Kimberly McKeirnan, Kyle Frazier**, and Pharmacotherapy Academic Fellow **Taylor Bertsch** presented, "PharmTalk innovations in technician opportunities: training pharmacy technicians to administer immunizations," at the APhA Annual Meeting in Nashville, Tenn. in March 2018.

- **Kimberly McKeirnan, Kyle Frazier, Taylor Bertsch**, and three co-authors presented the poster, “Pharmacists’ perspectives on working with immunizing technicians,” at the APhA Annual Meeting in Nashville, Tenn. in March 2018.

- **Kimberly McKeirnan, Taylor Bertsch** and one co-author presented the poster, “Implementing student pharmacist tuberculin skin test training using team-based learning (encore presentation),” at the APhA Annual Meeting in Nashville, Tenn. in March 2018.

- **Kimberly McKeirnan** and **Kyle Frazier** presented the poster, “Identifying drug-related problems through patient home visits,” at the APhA Annual Meeting in Nashville, Tenn. in March 2018.

Service

- Boeing Distinguished Professor **Philip Lazarus** has been reappointed to a four-year term as the chair of the Department of Pharmaceutical Sciences.

- R. Keith Campbell Distinguished Professor in Diabetes Care **John R. White, Jr.** has been reappointed to a four-year term as the chair of the Department of Pharmacotherapy.

- **Rustin Crutchley** was interviewed for the article, "Simplified regimen approved for patients with virologically suppressed HIV-1," published in PharmacyToday in February 2018.

- **Sue Marsh** served as a grant reviewer for the NIH/CSR ZRG1 F10A Physiology and Pathobiology of Cardiovascular and Respiratory Systems (F31 pre-doctoral fellowships) Panel in Washington D.C., on March 9, 2018.

- Pharmacotherapy Professor and Associate Dean for Professional and Continuing Education **Danial Baker** had his biography accepted into the Marquis Who’s Who.

- Professor and Dean **Gary Pollack** and Pharmacotherapy Clinical Associate Professor and Associate Dean for Professional Education **Jennifer Robinson** were appointed as the administration delegate and alternate, respectively, for the American Association of Colleges of Pharmacy (AACP) House of Delegates.
Pharmacotherapy Clinical Associate Professor Megan Willson and Kimberly McKeirnan were elected as the faculty delegate and alternate, respectively, for the AACP House of Delegates.

STUDENT ACHIEVEMENT

Doctor of Philosophy (Ph.D.) students

- **Mahamudul Haque**, pharmaceutical sciences (Ahmed Lab), won the college’s Three Minute Thesis contest. Haque represented the college at the university-wide contest in Pullman on March 28, 2018, and received third place.
- **Panshak Dakup**, pharmaceutical sciences (Gaddameedhi Lab) presented, “Understanding the roles of the circadian clock and sex-related mechanisms in melanoma genesis,” as part of the WSU College of Pharmacy Graduate Research Seminar Series on February 9, 2018, in Spokane, Wash.
- **Yadira Pérez–Páramo**, pharmaceutical sciences (Lazarus Lab) presented, “Identification of the enzymes responsible for N–Oxide detoxification of nicotine and the tobacco–specific nitrosamines (TSNAs),” as part of the WSU College of Pharmacy Graduate Research Seminar Series on February 16, 2018, in Spokane, Wash.
- **Shannon Kozlovich**, pharmaceutical sciences (Lazarus Lab) presented, “The impact of genotype and tobacco additives on the detoxification pathway of NNAL, a potent tobacco carcinogen,” as part of the WSU College of Pharmacy Graduate Research Seminar Series on February 23, 2018, in Spokane, Wash.
- **Phillip Wibisono**, pharmaceutical sciences (Sun Lab, College of Medicine) presented, “Single neuron RNA sequencing to study neural–immune communication in C. elegans,” as part of the WSU College of Pharmacy Graduate Research Seminar Series on March 9, 2018, in Spokane, Wash.
- **Ana Vergara**, pharmaceutical sciences (Lazarus Lab) was elected Ph.D. at large senator for the 2018–19 Associated Students of WSU Spokane leadership team.
- **Panshak Dakup, Alexander Little**, pharmaceutical sciences (Zhang Lab), with faculty co-authors Kenneth Porter, Hui Zhang, Shobhan Gaddameedhi, and six additional co-authors published, "The circadian clock regulates cisplatin–induced toxicity and tumor regression in melanoma mouse and human models," in Oncotarget, a peer-reviewed open access resource, on March 6, 2018. Read article »
- **Panshak Dakup** received a $300 travel award from Burroughs Wellcome Fund and NASA Astrobiology to attend the Science Talk conference in Portland, Ore.
- **Chris Szlenk**, pharmaceutical sciences (Natesan lab) presented, "In silico identification of GHB
ligands,” as part of the WSU College of Pharmacy Graduate Research Seminar Series on March 30, 2018, in Spokane, Wash.

Doctor of Pharmacy (Pharm.D.) students

- On March 21 student pharmacists from American Pharmacists Association– Academy of Student Pharmacists (APhA–ASP), Student National Pharmaceutical Association (SNPhA) CKD and Washington State Pharmacy Association (WSPA) participated in the Hillyard Senior Center Patient Care Collaboration. This event was a collaboration between APhA–ASP Operation Diabetes, Operation Heart, SNPhA CKD, and WSPA Project Airway. Students provided Hillyard Senior Center patients with blood glucose and cholesterol screenings, diabetes and heart–healthy education, as well as chronic kidney disease and asthma/COPD education.
- On March 21 student pharmacists in SNPhA volunteered with Blessings Under the Bridge to help provide food and necessities to those in need. Blessings Under the Bridge is a weekly feed that occurs on Wednesday nights, and as volunteers, they provide meals, snacks, drinks, and clothing to community members.
- On March 31 student pharmacists from APhA, SNPhA, ASCP, and WSPA organized and participated in a health fair at Shaw Middle School in Spokane that served the Marshallese community and any individuals who do not have access to health care.
- **Peter Tang** received a summer internship with the National Community Pharmacists Association (NCPA) in Alexandria, Virginia.
- The following students were elected to the Professional Pharmacy Student Organization (PPSO) executive board: **Pari Iverson**, president–elect; **Lee Roy Esposo**, director–elect of public relations; **Shaham Dowlatshahi**, treasurer–elect; **Megan Rice**, fundraising chair–elect.
- The following students were elected to the following PPSO positions: **Jonathan Chen**, American College of Clinical Pharmacy (ACCP) president–elect; **Vanessa Tuy**, American College of Veterinary Pharmacists (ACVP) president–elect; **Julia Kim**, APhA–ASP president–elect; **Janelle Schweitzer**, American Society of Consultant Pharmacists (ASCP) president–elect; **Christina Tran**, American Society of Health–System Pharmacists (ASHP) president–elect; **Hena Seo**, College of Psychiatric and Neurologic Pharmacists (CPNP) president–elect; **Amber Olsen**, NCPA president–elect; **Audrian Santos**, SNPhA president–elect; **Connor Capdeville**, WSPA junior liaison.
- Student pharmacists participated in Longfellow Elementary School’s Science Night educating the elementary students on the role of a pharmacist and that compounding is a part of what a pharmacist does.
- **Johanna Pantig** and **Arliegh Cayanan** were elected president and vice president, respectively, for the 2018–19 Associated Students of WSU Spokane leadership team.
- **Majid Nazir** and **Kortney Dietz** were elected Spokane pharmacy senators for the 2018–19 Associated Students of WSU Spokane leadership team.
- **Debbie Li** was elected Yakima pharmacy senator for the 2018–19 Associated Students of WSU Spokane leadership team.
- The APhA–ASP chapter met their divisional fundraising goal during the annual Back the PAC Campaign.

**JOBS**

- **Clinical Assistant Professor**: Kootenai Health
- **Clinical Assistant Professor**: Pharmacotherapy, Providence St. Peter Hospital Olympia
- **Clinical Assistant Professor**: Pharmacotherapy, Virginia Mason Memorial Hospital
- **Clinical Assistant Professor**: Pharmacotherapy, WSU Spokane