A NOTE FROM LINDA GARRELLTS MACLEAN

Dear Friends and Colleagues:

Welcome back to a new semester and a fresh start to the calendar year. In my recent visits with alumni, lawmakers and leaders in pharmacy, I see the importance of playing an active role to inspire change in our communities. During December’s American Society of Health-System Pharmacists (ASHP) Midyear conference in Las Vegas, former US Secretary of State Condoleezza Rice spoke about the importance of resiliency and rising up to challenges. Her discussion on serving others and how to set and achieve goals really resonated with me and the audience of pharmacists, students, and educators as they face new challenges in pharmacy.

I’m proud to say that leading the change in pharmacy are WSU student pharmacists who represented the college in record numbers for poster presentations—a total of 36 student pharmacists! The annual poster presentation at ASHP is an opportunity for students to discuss the latest in pharmacy practice and glean ideas from successful programs in other health care systems. Poster presentation topics ranged from the perception of naloxone in the opioid epidemic to the assessment of pharmacy education through service learning at a diabetes camp. This is just a taste of the many great ideas which our students presented at ASHP but is also a testament to the many challenges and opportunities that future pharmacists face in improving quality and access to health care. We were also pleased to see so many of our students, alumni, preceptors and friends who joined us at our networking reception during the conference. It is always a joy to see what our alumni and friends are doing in their careers and their experiences in the field.

As we continue to speak about leadership and embody the change we want to see in our communities, I would like to invite educators, thought leaders, and school administrators to submit proposals to showcase at our Transformation & Innovation in Pharmacy Education (TiPed) Institute which will take place in Spokane, Washington, June 23-25. We are seeking presenters with bold ideas, new ways of thinking and diverse perspectives. This is an open and collaborative forum for those championing change in pharmacy academia to develop action plans that help foster transformation. Visit our website to learn more, sign up, or submit a proposal. I look forward to having lively discussions on how we inspire the next generation of pharmacists to be the leaders of change.

With much respect,

Linda Garrelts MacLean, interim dean
WSU College of Pharmacy and Pharmaceutical Sciences
Intermittent Fasting is More Than a Fad
By Addy Hatch, WSU News

Intermittent fasting was the most-searched diet online last year and the second-most-popular choice of the 38% of Americans aged 18 to 80 who said they followed a specific eating plan.

There are now apps to guide you in intermittent fasting, plus books, blogs and articles touting its success. Unlike some other popular diets, however, there’s also a growing collection of scientific evidence behind it, especially in relation to diabetes and the collection of conditions known as metabolic syndrome.

“I’m starting to see more talk about intermittent fasting and even fasting at the American Diabetes Association meeting,” said John White, chair of the Department of Pharmacotherapy and R. Keith Campbell Distinguished Professor in Diabetes Care at the Washington State University College of Pharmacy and Pharmaceutical Sciences.

“I’m fascinated by it,” he added. “There’s a notion in clinical medicine that’s not often spoken of and it’s called de-prescribing. There are many studies and reports where people can dramatically reduce the medications they’re on just by altering their lifestyle, and intermittent fasting is one approach.”

Intermittent fasting can mean dramatically restricting calories a couple days a week, or consuming all daily calories within a 6-, 8- or 10-hour window each day.

A small study published last year by one of the leading researchers in intermittent fasting—Jason Fung, M.D., a kidney specialist in Canada—showed that three patients with diabetes were all able to discontinue insulin within a few weeks of following a medically monitored fasting regimen. On fasting days, the patients ate only dinner, while on non-fasting days they ate lunch and dinner, focusing on low-carbohydrate meals. All reported feeling good while on the regimen, and all lost weight. Two patients discontinued their diabetic medications entirely, while the third was able to discontinue three of four medications.

A separate, NIH-funded study published recently in Cell Metabolism found that 19 participants, all diagnosed with metabolic syndrome, lost weight, reduced their waist circumference and lowered their cholesterol and blood pressure over three months. Next up is a larger study involving 100 people with metabolic syndrome.

How does not eating improve your health?

The end result is that you’re consuming fewer calories, White said. But fasting also gives your pancreas a rest.

The food pyramid that many people still follow emphasizes complex carbohydrates, with smaller amounts of fat and protein. In addition, eating small, frequent meals is common nutritional advice, including for people with diabetes. But all that eating stresses the pancreas, which produces insulin and leads to insulin resistance and higher blood sugar. When you stop eating for periods of time, insulin secretion drops, promoting a reversal of insulin resistance, White said.

“You have a period of time where you don’t have a system that’s just awash in glucose,” he said.

White cautioned that anyone taking medication who’s considering following an intermittent fasting plan first check with their healthcare professional. And he said everyone has a different physiology, so what works for one person may not for another.

But he believes there’s room for “individual free thinkers” to consider alternatives to standard nutritional advice for people with diabetes.
“What happened when we moved from the diet we were consuming in the 1970s to this low-fat, high-carb diet, obesity skyrocketed,” White said. “There are other reasons for that too, but I think the food pyramid has been called into question.”

Study Suggests Biological Clock is Key to Reducing Heart Damage from Radiation Therapy

By Judith Van Dongen, WSU Health Sciences Spokane Office of Research

SPOKANE, Wash. – Treatment for breast cancer commonly includes radiation therapy, which offers good chances of success but comes with a serious long-term side effect: toxicity due to radiation that reaches the heart, causing DNA damage in healthy heart cells. Over time, this can lead to heart disease and eventually heart failure.

A new study conducted by researchers in the Washington State University College of Pharmacy and Pharmaceutical Sciences suggests that a preventive solution may lie in the biological clock, the built-in time-keeping mechanism that keeps us on a 24-hour cycle of rest and activity and regulates a wide variety of processes in our bodies.

Published in the FASEB Journal, their study used a rodent model to determine whether the biological clock is involved in heart toxicity from radiation therapy and could be used as part of a strategy to reduce this toxicity. Their findings showed that after receiving a dose of radiation to the heart, mice with disrupted biological clocks had significantly worse heart function than control mice.

In addition, the researchers demonstrated that a protein known as Bmal1—which drives 24-hour rhythms in the expression of many genes —plays an important role in protecting the heart from radiation-related damage.

“Our findings suggest that Bmal1 serves as a biomarker for the susceptibility to radiation-induced DNA damage to the heart,” said Shobhan Gaddameedhi, an assistant professor in the Department of Pharmaceutical Sciences and the study’s senior author.

Though more research is needed, the researchers are hopeful that their discovery could someday be used to improve treatment outcomes for breast cancer patients. Panshak Dakup—the study’s first author and a PhD in pharmaceutical sciences student—said their finding holds promise for personalized medicine. “For example, in breast cancer patients who have a long history of working night shifts, the expression of biological clock proteins such as Bmal1 may be compromised, and it could be that radiation therapy is not the best option for them.”

Gaddameedhi added that it could also be used to optimize the timing of radiation therapy so it is provided when a patient’s Bmal1 level offers the greatest level of protection from heart damage. That timing may vary depending on a person’s chronotype—whether they are early birds or night owls—as well as on other factors that influence the status of the master biological clock, such as shiftwork or frequent travel across time zones.

Dakup conducted the experiments for the study as part of a predoctoral fellowship supported by the American Heart Association. Additional major support for the study came from the National Institutes of Health.

In the study’s main experiment, Dakup looked at the heart function of two groups of mice with disrupted clocks, as compared to that of control mice. One group had a genetic mutation that eliminated Per1 and Per2—two genes that control the body’s master biological clock. The second group were wild-type mice that were put on a simulated rotating shift schedule in which light-dark cycles were reversed weekly, throwing off their clocks. The control group consisted of wild-type mice with healthy biological clocks that were on a simulated day shift schedule. All mice received radiation treatment to the chest that included all of the heart.

Collaborating with assistant professor of pharmaceutical sciences and cardiovascular biology expert Zhaokang Cheng, Dakup used ultrasound echocardiography technology to compare heart function among the three groups,
both prior to and up to six weeks after radiation treatment. In clock-disrupted mice, the heart’s ability to pump blood out and into circulation was compromised due to a loss of elasticity in the heart ventricle. Those mice also had more heart scar tissue than control mice.

Additional analyses focused on determining a potential relationship with the biological clock protein Bmal1. The researchers showed that Bmal1 levels across 24 hours were significantly lower in clock-disrupted mice versus control mice and peaked at a later time. They also found that higher levels of Bmal1 were associated with lower DNA damage levels, and vice versa.

Finally, the researchers found that Bmal1 interacts with the BRCA1, BRCA2, and ATM genes, three DNA damage response genes they said are important in fighting against radiation-induced DNA damage and cell death.

“When Bmal1 binds to these genes, it is potentially trying to elevate or activate their function against the collateral damage caused by radiation therapy,” Gaddameedhi said.

The researchers’ next step is to test their hypothesis in a cancer model. This will help them pin down the exact mechanism by which the biological clock protects the heart from radiation damage. They could then use this knowledge to develop new treatment strategies to minimize heart damage while maximizing the ability to kill tumor cells. Any such strategies would first need to be tested in clinical trials before they could be adopted.

In addition to Gaddameedhi, Dakup, and Cheng, study authors also included Kenneth Porter, Rajendra Gajula, and Peeyush Goel.

WSU Student Pharmacists Present at ASHP in Record Numbers

The ASHP (American Society of Health-System Pharmacists) Midyear Clinical Meeting is an opportunity for pharmacy professionals from around the world to network, learn and discuss. One student described the event as a “madhouse” of health care professionals looking to get noticed among the thousands of potential employers who set up booths there. In December 2019, ASHP held their Midyear Clinical Meeting in Las Vegas, where over 25,000 pharmacy professionals gathered at the Mandalay Bay Convention Center. WSU student pharmacists took part in the poster presentations in record numbers, with 36 students representing WSU College of Pharmacy and Pharmaceutical Sciences. ASHP Poster Presentations are informal discussions among meeting attendees where health care professionals can discuss ideas that have been successful in other health care systems. Presenting is a voluntary effort and students are required to submit their proposals for acceptance. Below are a few summaries of WSU student pharmacist’s presentations at the event.

Cody James Damman, class of 2020

Using educational-based videos to increase access to health-related information

My poster presentation was about a project I’ve been working on called the Carbidopa Sofa. The Carbidopa Sofa is a YouTube-based education platform that is aimed towards providing easier access to higher level health sciences information while being geared towards the general public. With the help of two other students, Linh Nguyen and Brandon Lujan, we have created a series of six videos discussing the stigma of drugs, scientific terminology, as well as the pathophysiology and therapeutics behind Parkinson’s and Alzheimer’s Disease. In the pathophysiology videos we explore the brain and what specifically goes wrong that leads to the conditions, and what systems as a whole are affected. Specifically, with Alzheimer’s we’ll be exploring a few of the many currently proposed hypotheses on what causes it. In the therapeutics videos we discuss some of the more common modes of treatment, what medications may be used, and some key details about those medications. In the future, I hope to grow the scope of the Carbidopa Sofa to include such topics as specific drug highlight videos, microbiology, rare and unique diseases, and the history of the relationship between humans and medicine.
Katherine Dier, class of 2021

Impact of education on perception of naloxone and the opioid epidemic

I presented research I had been working on with Angela Nguyen and Dr. Nicole Perea through APhA-ASP’s Generation Rx. Our committee was interested in increasing awareness for naloxone, a drug that works to reverse opioid overdoses by kicking the opioid off its receptor and nullifying its effects. Opioid overdoses can be fatal, so knowing what this drug is, how to get it, and how to use it are important.

We wanted to create an educational, interactive presentation for students in health care and local organizations that encounter at-risk populations for opioid overdose. Therefore, we adapted a PowerPoint from Dr. Perea, created some case studies and Kahoot questions and brought naloxone demonstration kits to each presentation. As part of the research, we had over 100 audience members take pre- and post- surveys with questions such as what were their perceptions of opioids, naloxone, and their ability to use naloxone, as well as a place for comments. We found that our presentation made a statistically significant positive impact and that we achieved our goal, showing that pharmacy driven education can have a positive impact in this area.

Connor James Capdeville, class of 2021 and Adriel Supnet, class of 2021

Exploring the relationship between extracurricular leadership and stress in student pharmacists

To set themselves apart from the field of applicants for residencies and staff positions, student pharmacists partake in extracurricular involvement in student organizations. We sought to analyze whether there was a cost associated with this involvement with respect to student performance in their coursework and their general well-being. A survey was developed based on the Perceived Stress Survey tailored to the course requirements for WSU College of Pharmacy and Pharmaceutical Sciences that was sent to students appointed or elected to organizational leadership.

Though we expected to see a positive relationship between degree of involvement and stress, no such correlation was discovered. A significant number of respondents said both that involvement in organizations was necessary to receive a residency, and that they were planning to apply to a post-graduate training position. This data led us to surmise that those students who seek out these leadership positions and responsibilities are those who are willing to put in the extra work required of them during a residency. People tend to bite off what they can chew.

Spotlight on Success

Investing in Our Leaders: Pharmacotherapy Professor Takes Part in Leadership Program

Pharmacotherapy Clinical Associate Professor Kimberly McKeirnan wants to become a better leader. By participating in the American Association of Colleges of Pharmacy (AACP) Academic Leadership Fellows Program she’s working towards that goal.

“I aspire to develop the skills necessary to positively influence the future of pharmacy practice,” said McKeirnan. “I’m hoping to learn some new leadership skills and ways to develop as a mentor.”

During the program she works in a group with six other faculty and administrative professionals who hail from pharmacy schools around the nation. A dean mentor serves as a role model and coach to guide the next generation of educational leadership. Participants expand relationships with peers and colleagues while learning more about effective team building and best practices. The program focuses on helping these individuals from pharmacy programs across the nation develop into outstanding leaders.
“Pharmacy is identifying and developing new roles,” explained McKeirnan. “I’m learning how to bring out the skills of the people I mentor to help them succeed in these future roles.”

The program consists of four sessions, the first two took place this past September and November with additional sessions coming up in February and July.

Pharmacy Students Making a Difference at WSU and in the Community
By the Office of Community Engagement & Service Learning

This year has been a year of giving thanks to the many community organizations that partner with our campus, our programs, and with our students. We also want to highlight the outstanding work of students who commit to serve the campus and their local community.

This year, the Office of Community Engagement & Service Learning has five shining stars from the College of Pharmacy and Pharmaceutical Sciences.

ERIKA BAUTISTA
Community Engagement Fellow for Women’s Health

As a Community Engagement Fellow, Erika Bautista has developed a partnership with Raiz and Planned Parenthood to develop education opportunities about women’s health on campus and in the Spokane community.

Erika believes that as a health sciences professional, she wants to continue to advocate for better awareness around women’s health. The resources for women’s health are not vast, but with awareness, education, and training, communities can better request and access resources.

Erika is a third year Doctor of Pharmacy student at the WSU College of Pharmacy and Pharmaceutical Sciences.

SANDRA KUANG
Community Engagement Fellow for Education Outreach

Sandra has developed and maintained partnerships with the lead facilitators of after school programs at Sheridan Elementary School and with the Spokane Eastside Reunion Association. She builds bridges between WSU Health Science students to provide mentoring and tutoring help to students in elementary school.

Sandra knows firsthand how hard it is for students in low-income and low-resource areas to consider aiming for a higher education and believes that everyone should have an equal chance of aiming higher than a high school diploma.

Sandra is a third year Doctor of Pharmacy student at the WSU College of Pharmacy and Pharmaceutical Sciences.

JACQUELINE AGUON
Community Engagement Fellow for Public Health

Jacqueline Aguon collaborates with the MLK Family Outreach Center in the East Central Neighborhood and faculty and students from Nursing and Medicine. Jackie’s focus is to provide health services, education, and advocacy for the general needs of the community.

Jacqueline believes that promoting public health awareness and education is vital to the success and sustenance of any community; especially for those who are most under-served and underrepresented in the community. Public health outreach ensures that the community is informed on how to maintain healthy lifestyles throughout their development.

Jacqueline is a second year student completing her Doctor of Pharmacy at the WSU College of Pharmacy and Pharmaceutical Sciences.
BRIANDA DE LA CRUZ
Community Engagement Fellow for Housing Insecurity

Brianda De La Cruz started volunteering last year in projects that help homeless community members. This led her to serve with our office as a Engagement Fellow for Housing Insecurity where she collaborates with the Spokane Alliance and Refugee Connections to develop campaigning opportunities and to support the growth of initiatives, such as health passports.

Brianda works toward developing learning opportunities for community members and students because she believes in engagement and dialogue for a better community.

This is Brianda's third year in her Doctor of Pharmacy at the WSU College of Pharmacy and Pharmaceutical Sciences.

JAGANDEEP SANDHU
Student Director of the Cougs in the Community Program

Jagan works with community partners and student organizations to build civically minded health care professionals by promoting student civic engagement.

Jagan believes in building a strong foundation for WSU Cougs in the Community program which will leave long lasting impacts on student community engagement. He understands that what affects your community affects you. Therefore, you must advance in conjunction with advancing your community by serving and advocating.

Jagan and his team have hosted opportunities, such as Hunger and Homelessness Awareness Week and the Spokane River Clean-up.

Jagan is a third year Doctor of Pharmacy student at the WSU College of Pharmacy and Pharmaceutical Sciences.

Standards of Medical Care in Diabetes

The American Diabetes Association has updated their guidelines with the focus of individualizing patient care. Heading the team of US experts in diabetes care is WSU Pharmacotherapy Professor Joshua Neumiller, the first pharmacist ever to chair the ADA’s Professional Practice Committee.

Learn more about the ADA's 2020 Standards of Medical Care in Diabetes through Neumiller’s webcast or the ADA’s press release.

PHILANTHROPY FOCUS

With Valentine’s Day just around the corner, we want to highlight a philanthropic couple who have been giving to the CPPS for over 25 years, Brady and Tammy Jens. Brady, class of 1992, met his wife while they were in high school in Spokane. Brady attended Lewis and Clark High School, while Tammy attended West Valley. They’ve been married for 29 years this August.

Brady was accepted at WSU and chose pharmacy, a decision he has never regretted. Tammy worked in the registrar’s office at WSU to help offset the cost of tuition. In 2009, Brady and Tammy moved to Gardnerville, Nevada, a suburb of Reno, where they enjoy the 300 days of sunshine and four seasons. They have two daughters—Abby, who is a freshman at Cal Poly San Luis Obispo in California majoring in biomedical engineering; and Ally, who is a sophomore in high school and thinking about pharmacy school.

Brady and Tammy own a successful nuclear pharmacy business called NuQuest Pharmacy, which is located in Grand Junction, Colorado. For the successful couple, giving back is a way to show their support to the college which helped to jumpstart their careers in pharmacy.
“A pharmacy degree is what helped set up our lives for future success,” said Brady. “We were fortunate to receive scholarships when I was in pharmacy school that really made a difference to us financially. Now, we’re happy to be able to pay that forward by contributing every year to the Marty Jinks LoChi Scholarship and the Larry Simonsmeier Scholarship, since they were my favorite professors.”

Scholarship support is one the most important ways you can give back to WSU and the CPPS. For more information, please visit foundation.wsu.edu/pharmacy/.

Alumni Updates

– Gabriel Arquinchona, class of 2019, and Lauren Wagner, class of 2018, are getting married! Congratulations, Gabe and Lauren!

– Brandon Arthur, class of 2011, is the new President of the Spokane Pharmacy Association. Brandon attended North Central High School in Spokane prior to attending the WSU CPPS. After graduation he completed a PGY1 pharmacy practice residency in Indiana. He currently works with MultiCare Health System where he started as a critical care pharmacist and preceptor to the PGY1 pharmacy practice residents for the past six years. He most recently accepted a regional clinical informatics position in Spokane. He is married to Krista Aspaas, class of 2011, and they recently had their first child.

– Jane Bugbee, class of 1968, and her husband Roger, WSU Engineering class of 1968, celebrated 50 years of marriage on December 27, 2019. The Bugbee’s are also close friends with John, class of 1968, and Claudia Swenson. The two couples were at one another’s weddings and 50 year celebrations.

– In our December newsletter, we announced a major gift from Rusty and Sheri Crawford. We have more details to share now and correct information about their pharmacy careers: The Russell and Sheri Crawford Legacy Scholarship in Pharmacy is being established with a major gift from Rusty, class of 1987, and Sheri, class of 1988, whose goals were to share a common career. Rusty spent his entire 30+ year career serving our nations Veterans at the VA Hospital in Tucson, where he found his passion as an oncology pharmacist and developed a PGY2 Oncology Pharmacy residency program. Sheri spent the majority of her career as the investigational research pharmacist, also at the VA and aided in the growth of the research programs. Both Rusty and Sheri have recently retired, and have always been proud Cougars. This new scholarship endowment will provide financial support to student pharmacists at WSU.

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

Other News

Native American Health Sciences Student Highlight

Recently, the Native American Health Sciences highlighted a few of the Native students studying at the WSU Health Sciences, Spokane campus, including Pharmaceutical Sciences student, Michael Pham.

Learn more

Celebrating the Life and Vision of Martin Luther King Jr. Day

Student leaders, faculty and staff joined the community for Martin Luther King Jr. Day events. Students also gave back as part of Cougs in the Community by volunteering at the Ronald McDonald House.

Check out the WSU Health Sciences’ Exposure story for more!
Kami Ryplewski Receives a 2019 Crimson Spirit Award

Kami Ryplewski, office assistant 3 for Pharmaceutical Sciences in the College of Pharmacy and Pharmaceutical Sciences, received the January 2020 Crimson Spirit Award. She is recognized for anticipating needs and taking appropriate action, providing superior service, and providing noteworthy extra efforts.

Read more

USP Updates

Pharmacotherapy Academic Fellow Emily Darst discusses United States Pharmacopeia (USP) updates on the WSPA Health Systems Academy Podcast.

Listen to the podcast

Healthy Biological Clock Helps Protect Heart, WSU Study Finds

The Spokesman-Review has additional coverage on the role of the biological clock in protecting the heart.

Read more from the Spokesman-Review

Events

Allen I. White Lecture
March 5
WSU Health Sciences
Spokane, Washington

Commencement 2020
May 7 | 1:00 p.m. Martin Woldson Theater at the FOX Spokane, WA

TIPed
June 23-25, 2020
Spokane, Washington

Faculty Scholarship

PUBLICATIONS

Pharmacotherapy Clinical Associate Professor Kimberly McKeirnan and one co-author published, “Implementing immunizing pharmacy technicians in a federal healthcare facility,” in the Pharmacy Journal for Multidisciplinary Digital Publishing Institute (MDPI). View abstract »

Allen I. White Distinguished Associate Professor Joshua Neumiller and ten co-authors published, “Clinical characteristics of and risk factors for chronic kidney disease among adults and children: an analysis of the CURE-CKD registry,” in the peer-reviewed medical journal, Journal of the American Medical Association (JAMA) online. View abstract »

Joshua Neumiller and one co-author published, “Liberalisation, deintensification, and simplification in diabetes management: words matter,” in the Lancet Diabetes & Endocrinology online journal. Read more »

Joshua Neumiller and one co-author published, “Oral semaglutide,” in Clinical Diabetes, a peer-reviewed journal by the American Diabetes Association, in January 2020. Read article »
J. Roberts and Marcia Fosberg Distinguished Professor in Pharmacotherapy Danial Baker, Pharmacotherapy Clinical Professor Terri Levien, and one co-author published, “Drug evaluation – pretomanid,” in Wolters Kluwer Health’s The Formulary Monograph Service (FMS) in December 2019. 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


AWARDS

Pharmaceutical Sciences Office Assistant Kami Ryplewski received the January 2020 Crimson Spirit award from Washington State University. The Crimson Spirit Award is a recognition for employees who provided exceptional service and exceeded expectations while representing WSU. Read more »

Pharmaceutical Sciences Professor Salah-uddin Ahmed was recognized as the 2019 Medical Honoree at the Arthritis Foundation Jingle Bell 5K Run/Walk on December 7, 2019, in Spokane, Washington. He was recognized for his years of research dedicated to improving treatments for various forms of arthritis.

Pharmaceutical Sciences Assistant Professor Shobhan Gaddameedhi received an Outstanding New Environmental Scientist (ONES) Award from the National Institutes of Health.

Pharmaceutical Sciences Associate Professor Bhagwat Prasad received a subaward to University of Washington, under an NIH UH3 cooperative agreement grant in the amount of $345,596 over four years for the project, “Prenatal and early childhood pathways to health (PATHWAYS).” This is a transfer of an ongoing project.

Pharmaceutical Sciences Professor Kathryn Meier has been awarded a renewal of the ASPET Summer Undergraduate Research Fellowship Program in the amount of $27,000 over three years.

GRANTS

Bhagwat Prasad received a $67,000 grant from Bristol-Myers Squibb over one year for the project, “Quantitation of mitochondrial amidoxime reducing complex (mARC) in human liver tissue bank.” This is a transfer from his previous university, UW.

Shobhan Gaddameedhi received a grant in the amount of $2,133,199 over five years from the National Institutes of Health for the project, “Circadian clock disruption: A risk factor for environmental carcinogenesis.”

SERVICE

Joshua Neumiller is now serving on the editorial board for BMJ Open Diabetes Research & Care, a journal managed in collaboration between BMJ and the American Diabetes Association (ADA).
Pharmacotherapy Academic Fellow Emily Darst discussed USP updates on the WSPA Health Systems Academy Podcast in December 2019. [Listen to the podcast »]

The 2019 WSU Spokane Research team participated in the Arthritis Foundation Jingle Bell 5K Run/Walk in Spokane, Washington on December 7, 2019. The team had a total of 29 run/walk participants, 11 volunteers, and 3 financial donors. They raised $855 to support arthritis research and patient services in the Northwest. Overall the event raised over $80,000 for the Arthritis Foundation. [View photos »]

Pharmacotherapy Clinical Associate Professor Julie Akers joined the interim provost, Bryan Slinker, in Martin Stadium during the Cougars’ victory over Oregon State on November 23. Akers reflected on her ongoing commitment to WSU stating, “To me, teaching is the ultimate way to give back to your profession,” Akers says. “My goal is to develop strong leaders who are passionate about patient care and are active participants in the profession. I focus on the legislative and regulatory process, patient care services, and supporting their development as change agents. I serve on several local, state, and national committees and boards focused on policy and advocacy as well as conduct research related to community pharmacists providing direct patient care services, ensuring access to quality care throughout Washington State.” [Read more »]

### Student Achievement

**PHARMACEUTICAL SCIENCES (PH.D.) STUDENTS**

Mahamudul Haque (pharmaceutical sciences, Ahmed lab) was awarded a Medical and Graduate Student Preceptorship from the Rheumatology Research Foundation for a minimum eight-week preceptorship in the amount of $1,000 to the grantee institution and $3,000 to the graduate student for the project, “Regulation of interleukin beta induced TNF alpha stimulated gene-6 (TSG6) expression in human osteoarthritis synovial fibroblasts by guanylate binding protein 5 (GBP5).”

Christopher Szlenk (pharmaceutical sciences, Natesan lab) and two co-authors published, “Engaging scientists in policy discourse,” in Current Protocols in November 2019.

Christopher Szlenk has been selected for the competitive ASPET Washington Fellows program for 2020. The mission of the ASPET Washington Fellows Program is to enable developing and early career scientists interested in science policy to learn about and become more engaged in public policy issues. Fellows will develop an understanding of how public policy decisions made in Washington, D.C. help shape and impact science policy, such as funding for the National Institutes of Health and other science agencies.