

WSU | SPOKANE

Fall/Winter 2016/2017 • Volume 6

An inside look at WSU's health sciences campus

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WSU Spokane is distributed free of charge to alumni, donors, faculty, staff, students, community members and friends of Washington State University Spokane.

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WSU Spokane is published by Washington State University Spokane, 600 N. Riverpoint Blvd., PO Box 1495, Spokane, WA 99210.

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Cover photo (by Jacque Garza) from left: Pharmacy students Mark Nguyen and Lauren Pollock.



A Letter from the Chancellor

It is time to celebrate! Years of intense effort to bring a second public medical school to Washington state came to an end in October with preliminary accreditation of our Elson S. Floyd College of Medicine. This is certainly the biggest news in the 27-year history of this campus and a turning point for WSU, for Spokane and for our state.

Between now and August 2017 when we plan to welcome the charter class of 60 medical students to WSU and to Spokane, Dean John Tomkowiak and his team will be busy. Clinical partner agreements are being signed and faculty are being recruited here and at our sister campuses in Vancouver, Everett and Tri-Cities.

The medical school was a primary draw for WSU's new President Kirk Schulz. His "Drive to 25" goal to have WSU recognized as one of the nation's top 25 public research universities by 2030 relies in part on the health sciences research our medical school, nursing and pharmacy faculty are undertaking.

One of WSU's oldest colleges, the College of Pharmacy which is headquartered in Spokane, celebrated its 125th year just recently. Under the leadership of Dean Gary Pollack, the college has seen some important milestones lately, particularly in the area of transformative student experiences.

The College of Nursing, whose history of excellence is represented well in the article on simulation, is now being led by Dean Joyce Griffin-Sobel, new to campus in April. Griffin-Sobel is focused on enhancing simulation and interprofessional education opportunities for our students.

All of our efforts here are, of course, focused on the students. They are making their own efforts to learn together because they understand the importance of interprofessional education and research and its impact on their future careers as health sciences practitioners and researchers. I hope you enjoy the enthusiasm of the student leaders we feature here, as well as that of our new Vice Chancellor of Student Affairs James Mohr.

Finally, as always, we feature some of our latest research news. From nanoparticles to Alzheimer's disease, I always learn from our "Research Roundup."

WSU Health Sciences Spokane truly is part of the innovation revolution occurring within Spokane's University District. In fact, there are so many innovative projects that we don't have room to cover them all, but we do touch on the development of the Jensen-Byrd building and the increase in tech companies in our Innovation Center.

I hope you enjoy the latest news from our dynamic health sciences campus.

Sincerely,

Lisa J. Brown, Chancellor, Washington State University Health Sciences Spokane

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High fives and whoops and hollers could be heard around the state on Oct. 19 when the Elson S. Floyd College of Medicine achieved preliminary accreditation.



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Simulation Prepares the Health Care Workforce, Aids Researchers

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Dean John Tomkowiak is flanked by state Sen. Michael Baumgartner, left, and Rep. Marcus Riccelli, right, who joined in the celebration on the day the Elson S. Floyd College of Medicine learned of its preliminary accreditation. Riccelli and Baumgartner were instrumental in changing state law to allow WSU to create a new medical school.



Medical School Accreditation

A Great Day in WSU History By Doug Nadvornick

In the short history of Washington State University's Elson S. Floyd College of Medicine, there have been several momentous events.

The most important and the one that prompted high fives and whoops and hollers heard all the way across the state was the October 19th decision by the Liaison Committee on Medical Education, or LCME – the allopathic medical school accrediting agency in the U.S. and Canada – to grant preliminary accreditation to the college so that it may accept medical students.

“So many people in Spokane, Pullman and across the state had worked so hard on getting us to the point of accreditation that the pressure to ensure we were successful

was very high,” said the college’s Founding Dean **John Tomkowiak**, M.D. “The faculty and staff who spent the last year getting the college ready to operate a medical school were just so excited, and relieved.”

The long-awaited decision was what Tomkowiak and his accreditation team were hoping for as they submitted the required medical school supporting materials and application fee to the LCME last December. It was what team members were thinking about when they hosted an LCME survey team during a three-day site visit to the WSU Spokane campus in June.

And it was what administrators and faculty members turned their focus to after the accreditors left in June. “We created procedures for evaluating and admitting applicants,” noted Tomkowiak. “We wrote the policies that govern the college operations and how students will be supported. We worked on finalizing a 21st century curriculum to prepare students to be successful in the most challenging health care environments they might face. We hired support staff and built the technical infrastructure to run the day-to-day business of the college. We formed

relationships with health care partners and other stakeholders who will educate WSU medical students around the state.”

When an event of that importance is anticipated, sometimes it's hard to concentrate on other business while you wait for the phone call that tells you whether it's a 'go' or 'no go' for a fall 2017 class.

Fortunately – and coincidentally – Tomkowiak had something to keep his mind off of the impending vote. On October 20, just after the LCME vote, he and his team were hosting **Darrell Kirch**, M.D., on the WSU Spokane campus. Kirch is the president and CEO of the Association of American Medical Colleges (AAMC). The AAMC is one of the sponsoring partners of the LCME and an organization the WSU medical school would be eligible to join once it received its preliminary accreditation. Kirch's visit was a welcomed

opportunity for Tomkowiak's team to brief a national medical education leader about WSU's medical school. It was also a chance for WSU's health sciences campus and the Spokane community to ask Kirch about his views on the future of medical education and research in the U.S.

As he prepared for Kirch's visit, the welcome news of the preliminary accreditation came unexpectedly early the day before the visit: the Elson S. Floyd College of Medicine now had the right to begin accepting students and join the AAMC as members.

The college was now free to share specifics with inquiring potential applicants. Finishing touches were put on a new website catering to applicants. Admissions procedures were finalized.

And the hard work continues. November and December will be extraordinarily busy for the college's admissions office

as the admissions committee and trained stakeholders read the materials sent by applicants, arrange for and conduct interviews and make offers to students. A process that would normally take several months will be compressed into three to four months. The college plans to admit 60 students into its inaugural class.

The timing of the accreditation couldn't be better. Just as Darrell Kirch's visit to Spokane helped to elevate the WSU medical school profile, the AAMC's national conference in Seattle in mid-November should also help to shine the spotlight on the Elson S. Floyd College of Medicine.

Still, judging from the number of inquiries received over the last year, applicants from all over the state already know about WSU's new medical education plans and are eager to be part of that first class. Elson Floyd would be proud. ■



Celebrating the announcement about accreditation on Oct. 19, from left, are WSU staff and faculty James Dalton, Kim Mickey, First Lady Noel Schulz, Sherri Tomkowiak (wife of Dean Tomkowiak), and Jim Zimmerman.

New Administrators at the Elson S. Floyd College of Medicine

The Elson S. Floyd College of Medicine has hired several new administrators to develop and administer WSU's new medical school. Those who have come on board within the last few months include:



Dawn DeWitt

Dawn DeWitt, M.D., the college's vice dean of Student and Faculty Experience, who has experience as an innovative administrator and faculty member in the U.S., Canada and Australia. Her last

stop before WSU was as an associate dean at the University of British Columbia.



Ralitsa Akins

Ralitsa Akins, M.D., the college's new associate dean for Faculty, Talent Recognition and Enhancement. She comes to the college from the California Northstate College of Medicine in Elk Grove, where she

was senior associate dean for Medical Education.



Ann Poznanski

Ann Poznanski, M.D., who, like Dr. Akins, comes from California Northstate College of Medicine, where she was the assistant dean of Curriculum. She is ESFCOM's new associate dean for Curriculum.



Danny Teraguchi

Danny Teraguchi, Ed.D., who is the college's new associate dean for Student Affairs. He comes from the Johns Hopkins University School of Medicine, where he served as the assistant dean for

Student Affairs and the director of the Office for Student Diversity.

Dawn Cooper, M.D., the college's interim assistant dean for Medical Student Scholarship. She comes to WSU from the University of British Columbia. She's interested in evaluating the impact of scholarly concentration programs in medical education. She is also a research scientist specializing in cell death and disease.



Dawn Cooper



Luisita Francis

Luisita Francis, M.D., is the college's assistant dean for Community Engagement. She is a pediatrician by training, but in her WSU role, she works to develop the medical school's relationships with community

partners in the cities where it will have clinical campuses (Spokane, Tri-Cities, Vancouver, Everett).

John Roll, Ph.D., is the college's vice dean for Research. Roll has also been named as the university's associate vice president for Health Sciences Research.



John Roll

Professor **Marcos Frank, Ph.D.**, is the chairman of the Department of Biomedical Sciences after serving in an interim role for several months. Frank is one of the campus's senior researchers. He examines the role of sleep in the development of our central visual pathways. ■



Marcos Frank

Washington Governor Jay Inslee signs a bill that changes state law to allow WSU to offer medical education.

April 1, 2015

The state legislature passes an operating budget that gives WSU \$2.5 million to begin creating the medical school.

June 30, 2015

Founding Dean John Tomkowiak hired.

Oct. 1, 2015

May 4, 2015

WSU Spokane announces its plans to create a medical school and hire a founding dean.

Sept. 18, 2015

The WSU Board of Regents votes to change the name of the college to the Elson S. Floyd College of Medicine (ESFCOM) after WSU's late president who died in June, 2015.

Ken Roberts, Ph.D., vice dean for Academic and Community Partnerships, right, enjoys a light moment with Phil Boal, program specialist for the College of Medicine, on the day an update was sent to the LCME before their June visit. Roberts has been key to the college's success, leading a team of faculty and staff who worked toward medical school accreditation even before the college was formed.



Carmenta Floyd, wife of WSU's late President Elson S. Floyd who the College of Medicine is named after, visited Spokane last spring and met with Dean Tomkowiak. Here they look at documents from 2015 when WSU received permission to pursue a medical school.

Dec. 1, 2015

The college submits its application for accreditation to the Liaison Committee on Medical Education (LCME).

An LCME team makes a site visit to WSU Spokane to gauge the college's readiness to operate a medical school.

June 27-29, 2016

Oct. 19, 2016

The LCME votes to offer preliminary accreditation to ESFCOM and gives the college the go-ahead to recruit and admit students to start in fall 2017.

The ESFCOM will welcome its charter class of 60 WSU medical students.

August 2017



with President Kirk Schulz

Q: President Schulz, you've been to Spokane several times since starting at WSU in June. What is your perception of the community?

KS: Spokane is a tremendous, vibrant community. I totally understand why it's an All-America City. Washington State University has enjoyed a productive partnership with Spokane for decades, and we look forward to building on that relationship in the years ahead—contributing to the growth of the economy and the quality of life.

Q: What do you think of the campus?

KS: The University District as a whole is a community jewel—not just for Spokane but also for the entire Inland Northwest. With the creative thinkers from the district's colleges and universities, health care

entities, and local startups and existing companies working together, I think we're just beginning to tap into the possibilities for innovation success.

And, of course, the resources Washington State University has in place in Spokane are fantastic, well-equipped facilities and world-class faculty in the health sciences and other disciplines who are involved in exciting research and educating some really incredible students. And we're working hard to bring our expertise to the community in practical ways—ranging from health care and K-12 education to economic development and extension services.

Q: You've said that one of the reasons you came to WSU was its pursuit of medical school accreditation. Please elaborate on that.

KS: It's not often that an incoming president at a major university has the opportunity to get in on the ground floor of building a medical school. That really intrigued me. And because I'm a big believer in the land-grant mission of providing access to higher education, I was happy to learn that providing more seats to prospective medical students and improving access to health care were two of the primary reasons the medical school initiative was launched.

Q: How do you see the medical school affecting the Spokane campus? WSU as a whole?

KS: The medical school and the spinoff results in the community will be a boon to the Spokane and regional economies and enhance the area's livability in ways we can only begin to imagine. From an economic standpoint alone, I know there are projections indicating a fully established health sciences-focused enterprise in Spokane could create more than 9,000 new jobs and \$1.7 billion in annual economic impact for the region's health and life sciences industry.

From a university perspective, a medical school opens up a lot of doors. We'll see new research funding opportunities—many of them multidisciplinary in nature. A medical school really ramps up the possibilities in addressing our Grand Challenges research initiative focused on sustaining health. And there's no doubt that adding a medical school to Washington State University's portfolio enhances our overall reputation—which benefits student recruitment, fundraising, and our community partnership-building opportunities. Bottom line, a medical school benefits all the residents of our state.

Q: Your goal to have WSU recognized as one of the nation's top 25 public research universities by 2030 is impressive. What role do you see for research in Spokane?

KS: There's no doubt that the Spokane campus will play a leading role in the "Drive to 25." The cutting-edge health sciences research occurring in Spokane will be a key to the success of our initiative. But it's about more than research. As an example, our interprofessional education approach to the health professions—where students studying different health disciplines learn together—transforms the educational experience for these students, and it eventually transforms the health care experience for their patients.

Q: You've said university research needs to benefit the state's economy. Where is WSU particularly strong in turning research into commercialization? Do you have particular expectations for the Spokane campus?

KS: Washington State is just beginning to tap into our enormous potential for moving research from the lab into the marketplace. In the past five years, WSU's invention disclosures have almost doubled, and our royalty revenues have more than doubled to \$1.2 million in 2015. The Spokane campus has the potential to be a major contributor to our commercialization efforts in health-related fields.

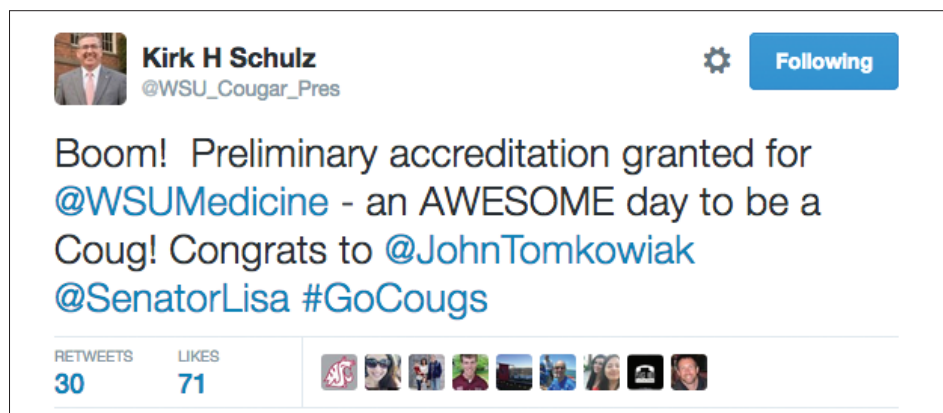
Q: Are there any areas of health sciences research that you would like to see the Spokane campus pursue?

KS: We have an amazing portfolio of research underway in the fields of nursing and pharmacy already, and our efforts in medicine are growing and will continue to grow as the medical college becomes established. My goal is to help those efforts continue to evolve, continue to become more multidisciplinary, and continue to link with the experts on our other campuses and with community partners across Washington as we build this statewide health sciences enterprise.

Q: Your tweets indicate you enjoy eating out and shopping in Spokane. Are there particular restaurants and stores you enjoy the most?

KS: The upside to being new is that you are always in discovery mode. Noel and I love exploring the variety of Pacific Northwest cuisine available in Spokane. The emphasis on locally sourced ingredients on restaurant menus and the great craft beer, wine, and spirits produced here will keep us in discovery mode for a good while. On the shopping side, I'm always on the lookout for opportunities to add to my collection of crimson and gray-colored neckties. ■

President Schulz' tweet (below) on the day the Elson S. Floyd College of Medicine was granted preliminary accreditation.





Students in the Simulation Club practice on Sim Man, the mannequin in the Nursing Simulation Lab.

Simulation

Prepares Health Care Workforce, Aids Researchers By Kevin Dudley

A nursing student talks to her patient.

The patient coughs and says he is having chest pains.

Soon, he'll stop breathing and the student will start CPR.

Pharmacy students are providing a patient with his medications at the pharmacy when he suddenly becomes agitated. After discovering he is experiencing low blood sugar levels, the students give him something to help.

A Spokane police officer lays his hand on the gun in his holster. He's commanding an individual to show his hands and to settle down. The individual then pulls out a gun of his own.

A truck driver is driving on just four hours of sleep. He's driving in a forested area at high speeds. His truck is deviating from its lane, creating a dangerous situation for him and others on the road.

These scenes are from various simulation programs on campus and are used for clinical instruction, research or both.

Simulation for Instruction

In the College of Nursing, students treat Sim Man, the high fidelity mannequin in the hospital bed in the simulation lab.

It's there where students get their first chance to experience a simulated hospital setting.

Sitting behind a tinted window is an instructor who can control what Sim Man says and does. The instructor can make Sim Man cough, stop breathing and much more. They can also talk on behalf of Sim Man.

Nursing students are introduced to Sim Man during their first semester on the Spokane campus.

"We run 33 groups through and I want all of them to have the same exact experience," said Nursing's **Kevin Stevens**, B.S.N., M.S., the director of the Program

of Excellence in Clinical Performance and Simulation.

Nursing instructors can simulate a number of situations. Sometimes, Sim Man slowly builds toward a health crisis and the students are tasked with realizing it on their own.

Stevens says she often hears from former students who share how valuable their experience with Sim Man was for their current job.

In the College of Pharmacy, similar scenes take place.

Pharmacy students begin using simulation during the spring semester of their first year. Students are trained with both mannequins and Standardized Patient Simulations, where paid actors play the role of the patient.

"It allows students to practice in a safe environment before they go out into patient care settings," said **Brenda Bray**, M.P.H., the assistant dean for assessment and accreditation in the College of Pharmacy.

Bray says the simulation prepares pharmacy students prior to their clinical rotations – especially acute care experiences like the emergency room or intensive care unit.

Like the College of Nursing, pharmacy students conduct a debriefing session after each simulation experience. Bray says those sessions allow the students to do the true learning that the simulation process is designed for.

"During the debriefing, it is common for students to reflect on the scenario and self-identify areas for improvement of clinical decision making or team behaviors," she said.

The simulation exercises show students the depth of what a pharmacist can do.

"We create scenarios to simulate the role of a pharmacist in a variety of practice settings," Bray said. "As they begin their clinical experiences in real patient care settings, they start to see the relevance of what we're having them do during simulation."

Simulation in Research

Lois James, Ph.D., and her team use video scenarios projected onto a big screen in their research into decision making by police. Officers are hooked up to monitors to measure the physiology of their brain and they have a modified pistol at their waist that shoots a laser. The pistol is also hooked up to monitors.

Studying how and when police officers decide to use deadly force is complex. In recent years, this research has been under the microscope given current events.

Some research studies on police and deadly force have involved a scenario on a screen and a police officer simply pushing a "shoot" or "don't shoot" button. In James' research, the video scenarios are much more realistic.

They feature custom made, evidence-based scenarios where a suspect is present on video. Police officers using the simulation literally shout commands at the suspect on the screen and must decide whether to fire or not, given the suspect's actions.

"In order to hold police officers accountable for the decisions they make in deadly encounters, we need to truly understand the dynamics of those encounters," James said. "Police use of

deadly force is challenging to study in the field, where inferences are drawn from reports of officer-involved shootings."

The police officers in James' research exhibited strong physiological responses.

"Using this method, we have advanced the field of research on how officer fatigue and bias influence decisions to shoot," she said.

Not far from where police officers participate in James' research sit driving simulators. The simulators have been used in various research studies.

The driving simulators are used to study police fatigue, distracted driving, truck driver sleep schedules and their impact, and more. **Hans Van Dongen**, Ph.D., a sleep scientist and director of the Sleep and Performance Research Center, has used the driving simulators for his research and has secured a patent for drowsy driver detection technology.

It's clear that simulation aids both students and researchers. Using the technology in place at WSU Spokane, health sciences students are better prepared for treating patients as they enter the workforce, and researchers can gather more precise data from real situations to help solve problems. ■

Steve James of the Elson S. Floyd College of Medicine uses a driving simulator on campus.





Research Roundup

By Judith Van Dongen

Zhenjia Wang (left) talks to postdoctoral research associate Zhang Canyang at Wang's research lab in the Pharmaceutical and Biomedical Sciences Building.

\$1.7M Grant Funds Nanoparticle Research to Improve Drug Delivery

Good things come in small packages, which in the case of one WSU researcher's work are measured in nanometers, or billionths of a meter. **Zhenjia Wang, Ph.D.**, an assistant professor of pharmaceutical sciences, designs new therapeutics—tiny nanoparticles capable of carrying drug molecules across the blood vessel barrier, directly to diseased tissue.



Zhenjia Wang

With a new five-year, \$1.7 million grant from the National Institutes of Health, Wang will be testing nanoparticles he created from albumin, a plasma protein that is already running through our veins in abundance. He will determine whether the albumin nanoparticles can successfully attach themselves to neutrophils, a type of white blood cell that is known to automatically travel through the blood vessel barrier to fight infection or inflammation at its source.

"In this study, we specifically look at infectious and inflammatory lung diseases, such as pneumonia and acute lung injury, but this same technology could be applied to any disease that involves infection or

inflammation, including cancer," Wang said. In a separate project, he is looking at neutrophils as potential carriers for chemotherapy drugs.

If his hypothesis holds up, Wang's study could lay the groundwork for more effective and efficient delivery of a wide variety of existing drugs. Since drugs would reach only the targeted site—rather than be released throughout the body—toxicity to healthy tissues would be minimized and drug doses could be lowered. Wang said targeted drug delivery is crucial to improving quality of life and increasing treatment options for patients, some of whom might not survive the side effects that come with the higher doses required by conventional drug delivery.

Research Identifies Sleep Deprivation Resilience Gene

Why do some people handle lack of sleep so much better than others? It's one question that researchers in the WSU Sleep and Performance Research Center have been trying to answer. Previous studies by WSU sleep scientists have found that differences in performance impairment in response to sleep deprivation are

rooted in our biology and vary depending on the type of task we are trying to tackle. Based on those findings and other WSU research, graduate neuroscience student **Brieann Satterfield, B.S.**, is working to find the genes that could help explain these differences.

One discovery Satterfield has made is that, during sleep deprivation, people who have a specific mutation in the gene that controls the brain protein TNF-alpha perform significantly better on a reaction time test that measures sustained attention than those who do not. Sustained attention, or the ability to stay focused on a task, is critical for driving a car, flying a plane, or monitoring systems in a power station. Satterfield's finding, which is based on data from 88 participants in sleep deprivation lab studies, was published in the journal *Brain, Behavior, and Immunity*.

Although the TNF-alpha gene explains just part of the study participants' performance differences, Satterfield said her discovery brings scientists one step closer to identifying the combination of genes or other biomarkers that could best predict how well sleep-deprived people will perform in different task environments. That knowledge could eventually lead to targeted interventions to help those less resilient to sleep deprivation. It could also be used as the basis for developing an objective, blood- or saliva-based drowsiness test for drivers.



Brieann Satterfield

New Center to Reduce Health Disparities in Native People



Dedra Buchwald

A WSU researcher has received a \$10 million grant to establish a new collaborative research center aimed at reducing health risks related to high blood pressure in U.S. Native populations.

Dedra Buchwald, M.D.—a professor in the Elson S. Floyd College of Medicine and the founder and director of the Initiative for Research and Education to Advance Community Health (IREACH)—will lead the effort with co-investigator Spero Manson of the University of Colorado Denver. Funding for the five-year grant comes from the National Institute on Minority Health Disparities, a component of the National Institutes of Health.

“Native populations suffer many health inequities related to hypertension, including elevated rates of heart disease, stroke, and chronic kidney disease,” said Buchwald. “Our center will forge new partnerships and leverage existing ones to conduct culturally informed studies to improve blood pressure control to prevent these diseases.”

Research taking place within the center will include three intervention studies to:

- Examine the impact of healthy food access on diet, blood pressure, and cardiovascular health in the Chickasaw Nation of Oklahoma
- Test the effectiveness of home blood pressure monitoring to reduce stroke and heart disease risk in Alaska Native people in urban and rural settings
- Develop and test a culturally tailored, community-based blood pressure self-management intervention for Native Hawaiians and Pacific Islanders in western Washington State

The center will draw from the input and expertise of community organizations, tribes, and researchers across the country, including 11 Native investigators who are graduates of a training program Buchwald established in 1998 with colleagues at the University of Colorado Denver. Their approach will use technologies such as electronic medical records, text messaging, wearable physical activity monitors, and home blood pressure monitors.

Discovery Aids Understanding of Alzheimer’s Disease

Researchers in the Elson S. Floyd College of Medicine are working to better understand brain processes that may be the key to curing neurodegenerative diseases. Assistant research professor



Jason Gerstner

Jason Gerstner, Ph.D., and his team use fruit flies to study Alzheimer’s disease—the nation’s sixth leading cause of death—and recently made a discovery that could one day help delay its onset and reduce symptoms.

Scientists have known that Alzheimer’s patients commonly experience disturbed sleep. “A major reason why Alzheimer’s patients are often institutionalized is that they’re getting up at crazy hours, which places a heavy burden on family caregivers,” Gerstner said.

In his study, which was published in the *Journal of Neuroscience Research*, Gerstner looked at the interaction between two brain proteins—fatty acid binding proteins (Fabp) and beta-amyloid—in relation to the duration and timing of sleep. In earlier work Gerstner had found that genetically manipulated fruit flies with higher Fabp levels showed improved sleep and long-term memory formation. In this study, he paired that finding with knowledge on beta-amyloid, which clumps together inside Alzheimer’s patients’ brains and plays a role in disease onset and progression. Previous studies had suggested a relationship between increased levels of beta-amyloid and fragmented sleep.

Gerstner’s study found significant sleep fragmentation in genetically manipulated flies with higher beta-amyloid levels, before any cognitive decline. However, improved sleep was seen in flies that had also been manipulated to express higher Fabp levels.

Gerstner said the finding suggests that sleep disturbance may be an early warning sign for Alzheimer’s disease. Pending further research, it could also lead to the development of targeted treatments to increase sleep and reduce other Alzheimer’s symptoms—such as neurodegeneration and memory loss—that may be impacted by Fabp.

Nursing Study Aims to Combat Fatigue in Disaster Response

When disaster strikes, the National Guard is sometimes called upon to assist with demanding missions that may involve emergency medical assistance, search and rescue, or decontamination.



Denise Smart

Inevitably, these missions also involve fatigue, which is the subject of a two-year study led by Associate Professor of Nursing **Denise Smart, Dr. P.H.** The project is funded by a \$365,000 grant from the Tri-Service Nursing Program, which facilitates nursing research aimed at optimizing the health of military members.

Smart’s study looks at the consequences of sleep deprivation and fatigue in National Guardsmen who are part of a medical response team. This past summer, she and her co-investigator, Assistant Professor Lois James, used wristband sleep/activity monitors, sleep surveys, and cognitive tasks to collect data from 29 members of a Texas-based medical response team, both prior to and during a planned weeklong disaster training exercise. More data will be collected during a second training planned for March 2017.

Smart—a former chief public health officer and chief nurse for the National Guard—is very familiar with the challenges these missions pose.

“Many medical response team members have civilian jobs that involve shiftwork,” she said. “Some will come out of a night shift and immediately go into disaster training, with days that can last as long as 18 or 24 hours.” When combined with the mentality that you should just keep pushing yourself, Smart said it leaves team members vulnerable to errors, injury, or worse.

Results from the study will be used to develop a fatigue risk management strategy to protect the health and safety of service members, civilian disaster response partners, and disaster victims. ■

2016

WASHINGTON STATE UNIVERSITY  HEALTH SCIENCES
SPOKANE

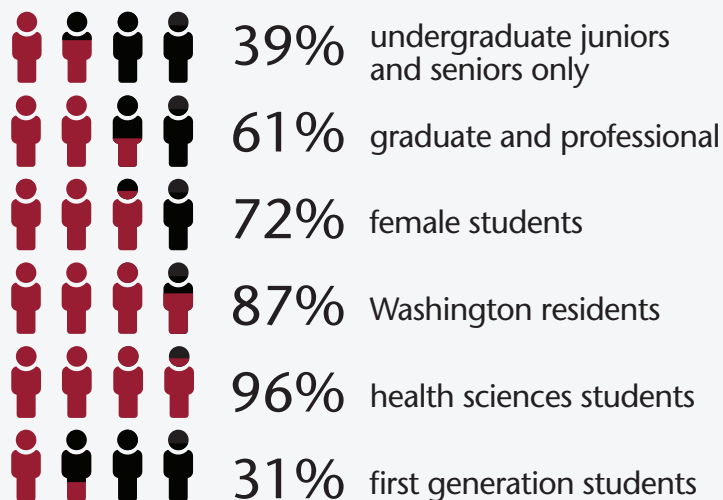
Degree Programs:

Nursing	Nutrition and Exercise Physiology
Pharmacy	Speech and Hearing
Medicine	Criminal Justice
Health Policy and Administration	Education

WSU has 11 colleges;
3 based in Spokane:

Elson S. Floyd College of Medicine
College of Nursing
College of Pharmacy

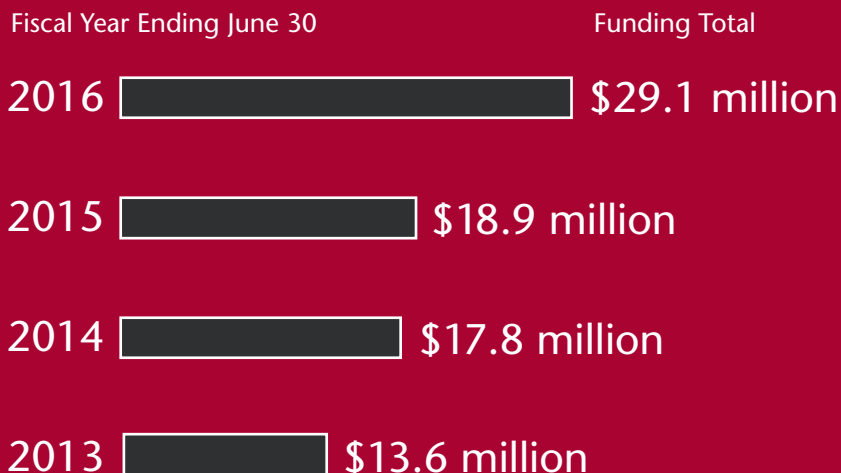
Students: 1,493



24

 registered student organizations

WSU Spokane Extramural Grant & Contract Awards



FACTS and FIGURES

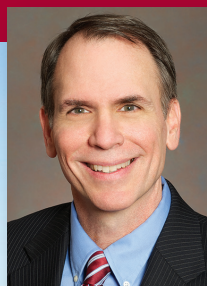
Leadership:

Chancellor
WSU Health Sciences
Spokane



Lisa J. Brown, Ph.D.

Dean
College of Pharmacy



Gary M. Pollack, Ph.D.

Dean
College of Nursing



*Joyce P. Griffin-Sobel,
Ph.D., R.N.*

Founding Dean
College of Medicine



*John M. Tomkowiak,
M.D., M.O.L.*

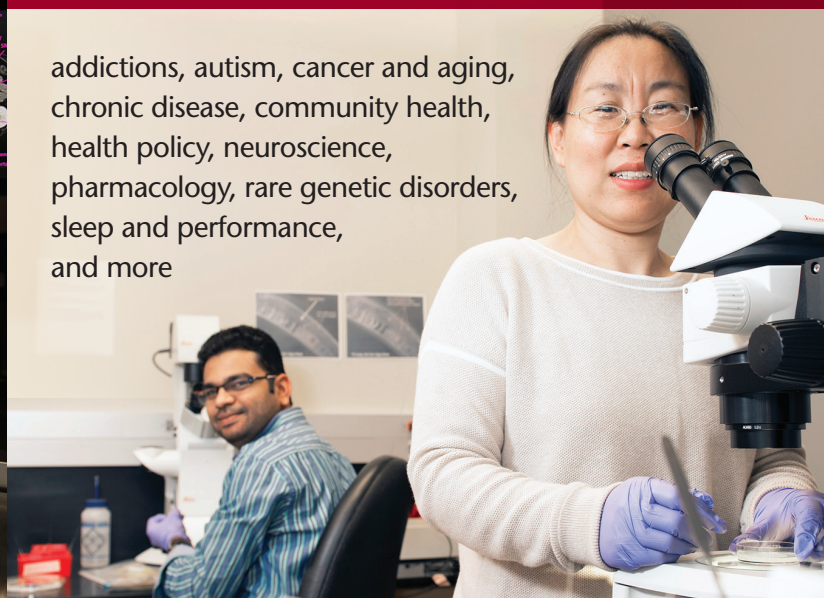
Campus: **48 acres**

- Health Sciences campus for WSU, designated in 2010 by Board of Regents
- Established 1989
- Multidisciplinary
- Multi-institutional

Faculty: **282**

Research:

addictions, autism, cancer and aging, chronic disease, community health, health policy, neuroscience, pharmacology, rare genetic disorders, sleep and performance, and more



Student Leaders

Focused on Interprofessional Activities

By Lorraine Nelson



ASWSUS executive team, back row, from l-r, President Karl Nacalaban, SEB Performances Coordinator Jessica Hagel, and Chief of Staff Thai Dang. Front row from l-r, SEB Public Relations Coordinator Janae Rame, Vice President Alec Sisneros, SEB Activities Coordinator Tiana Bennett, and SEB Director Megan Strom. Not pictured is Christopher Pedersen, chief legislative officer.

This year's student government president is all about bringing together students from the different health sciences disciplines.

Doing so allows them to get to know each other and ultimately understand each other's roles better when they all get out of school and start taking care of patients.

The primary way this will happen, figures student President **Karl Nacalaban**, is through events planned and implemented by the Associated Students of Washington State University Spokane (ASWSUS), which suits Nacalaban's outgoing personality just fine.

"Spending time at events working with and talking to other students and bringing people together is the most fulfilling part of this job for me," Nacalaban said. His signature green and blue glasses are indicative of both his sociable demeanor and his passion for the Seattle Seahawks, where he previously worked in marketing.

Nacalaban was busy at the beginning of the semester recruiting other students to serve on various committees and get involved.



Karl Nacalaban



Alec Sisneros

"I try to inspire the leadership qualities in others. I want to leave this place better than I found it and I want to pass along my knowledge to the next generation of leaders who are already involved," said Nacalaban. "There are students out there who don't know they are leaders yet, and I want to recognize their potential, bring out the best in them and let them know that they can be leaders on campus and in their profession."

Nacalaban served as the ASWSUS vice president last year and inspired his running

mate and the now-vice president, **Alec Sisneros**, to become involved. Sisneros worked as a student photographer last year while in his first year of pharmacy school and as a result he attended a lot of different campus events. After meeting and talking with Nacalaban, Sisneros decided he liked the idea of helping to create more interprofessional events this year.

"The best part of the job is seeing people at events make friends with someone they wouldn't otherwise meet," Sisneros said. "I would like to help create more interprofessional events this year so we have more bonding because we will be working a lot more with each other than the different professions did in the past and the more we can understand each other the more we can help patients."

Sisneros is from the Denver suburb of Littleton, Colo., and had never been to Washington state until February 2015 when he came to interview at the WSU College of Pharmacy in Spokane and loved it.

Sisneros got his undergraduate degree in biology with a minor in chemistry at the University of Colorado at Boulder. He had excelled at both those subjects in high

school and became interested in pharmacy because an addiction in his family inspired him to learn more about drugs.

Nacalaban is a third-year pharmacy student and will be off campus next year for the clinical rotations that make up his fourth and final year in pharmacy. After getting a bachelor's degree in chemistry from the University of Washington he found himself working in marketing for the Seattle Seahawks. While that was fun, he started looking around after about four years at how he might combine his interest in sciences with his love of working with people. Pharmacy is the perfect combination for him.

Nacalaban is from Seattle and showed an interest in student body politics in high school but lost his one and only bid for student body president. He didn't seek an office during his undergraduate years at the UW but when he arrived at the WSU campus in Spokane he saw an opportunity to contribute.

"I've always been the kind of person who takes charge and leads," he said. "I enjoy having that chance to make a difference in someone's academic career or social life."

Nacalaban and Sisneros said they spend about 20 hours a week at their ASWSUS jobs. The other ASWSUS officers are:

- **Thai Dang**, hometown Bellevue, Wash., studying pharmacy, serving as chief of staff.
- **Christopher Pedersen**, hometown Medford, Ore., studying Health Policy & Administration, serving as director of Legislative Affairs & Outreach.
- **Megan Strom**, hometown Clatskanie, Ore., studying nursing, serving as Student Entertainment Board (SEB) director.
- **Tiana Bennett**, hometown Spanaway, Wash., studying speech-language pathology, serving as SEB activities coordinator.
- **Jessica Hagel**, hometown Lakewood, Wash., studying pharmacy, serving as SEB performances coordinator.
- **Janae Rame**, hometown Sammamish, Wash., studying pharmacy, serving as SEB PR/marketing coordinator. ■



Busy Student Services Office Gets New Leader

When more than 2,000 high school and community college students visited the Washington State University campus in Spokane last year, a staff member from Admissions was there to show them around.

A division of Student Affairs, Admissions is fittingly located in a popular area for student traffic on campus – next to the café, close to comfortable study spaces and one floor below the library.

In addition to acting as tour guides, Admissions has two people dedicated to supporting registered student organizations as well as student involvement in other campus extracurricular activities.

Others in Student Affairs lend financial aid assistance, including monthly instruction on various topics like budgeting, tuition payments, enrollment, schedule classes, issue Cougar identification cards and arrange for students, faculty and staff to have access to buildings with those cards.

Support services also include a student mental health counselor, study and testing skills instruction, assistance with writing, a peer tutoring program, disability testing and accommodation, and a place to report concerns about student conduct.

All this has recently come under the direction of **James Mohr**, Ph.D., (pictured above) an experienced

professional in student services in higher education. Mohr returned to Spokane in July after three years as the dean of Student Development at Olympic College in Bremerton, Wash.

"I have found the people here to be very welcoming, experienced and knowledgeable and willing to share their expertise and insight with me," Mohr said. "It is exciting to be a part of this campus at this time in its history and to have an opportunity to have a positive impact."

Mohr was in Spokane for 10 years before taking the job in Bremerton. He is glad to be back and reconnecting with the community.

Mohr obtained a Ph.D. in leadership studies at Gonzaga University in 2010 and served in a leadership role at Gonzaga's Institute for Hate Studies during his time there. He also worked in student services at Eastern Washington University and at Community Colleges of Spokane. While in Spokane the first time Mohr served on the Spokane City Human Rights Commission, was on the board of the Blue Door Theatre and was a volunteer for Unity in the Community.

Mohr's professional experience in education dates back to 1995 when, after receiving a bachelor's degree in special education from William Paterson University in Wayne, N.J., he spent three years as a special education teacher in middle school and high school. Mohr replaces Judy Zeiger, who relocated for a student services position in Minnesota. ■

Researchers Evaluate

New Psychosis Treatment for Young People

By Terren Roloff

New research indicates that the earlier healthcare providers can identify and treat people with psychosis, the more likely they can help them be more successful in life.

Michael McDonell, Ph.D., says those with psychosis often hear or see things that aren't real or have strongly held beliefs that aren't based in reality.

He and a team of WSU researchers are evaluating a promising first episode psychosis intervention called New Journeys. "About 1-3 percent of people struggle with psychosis, like schizophrenia, throughout their lives. It used to be that many people, including professionals, thought this lifelong problem always led to lifelong disability."

McDonell is the associate director of the Initiative for Research and Education to Advance Community Health (IREACH), a WSU program based in Spokane and Seattle aimed at improving community



Michael McDonell

health in underserved populations and geographic regions. Since moving to Spokane from Seattle, IREACH has contributed significantly to the 53 percent increase in extramural grant and contract awards to the campus between 2015 and 2016.

Led by **Dedra Buchwald**, M.D., (see article on page 10), IREACH focuses in large part on American Indian and Alaska Native health, though research on mental health, twins and chronic fatigue and pain are also part of their group's repertoire.


Of his psychosis evaluation, McDonell says that currently most young people experience psychosis for two years or more before receiving treatment. This long period of time places these youth at increased risk of hospitalization and lifelong vocational and social struggles.

McDonell's funding from the Washington Behavioral Health Administration (BHA) will allow his team to evaluate a

pilot program to determine if providing 15- to 25-year-olds with the New Journeys intensive intervention immediately after they experience psychosis improves their mental health and helps them achieve their vocational and social goals.

New Journeys is a multidisciplinary intervention that provides up to two years of medication management, psychotherapy, family therapy, and vocational services to youth experiencing psychosis. It is based on a program that in research studies was associated with reduction in psychosis symptoms and higher rates of enrollment in school or work, compared to the more standard mental health treatment.

"Nationally, the system right now is set up to serve people only after they have really struggled, lost their jobs, lost their relationships," McDonell said. "Often it's just a safety net system."



Noting that psychosis often becomes evident between the ages of 15 and 29, McDonell says this program offers a way to invest in effective treatment as soon as possible to facilitate a quick recovery and give young people the skills and support they need to succeed.

Roseann Martinez, the parent of a 17-year-old who was diagnosed with psychosis, sought treatment for him after several months of witnessing concerning behavior. The Olympia resident said though her son is now in college and doing well, she encourages people to get help early. Martinez is featured in an educational video on a Department of Social and Health Services website (see end of article).

Working with schools, higher education and hospitals, the Washington BHA has funded three demonstration sites where the New Journeys program model is used. McDonell is leading the evaluation of the model in collaboration with colleagues at the University of Washington who are overseeing training for these three clinics.

“In other states early intervention for psychosis has led to a revolution in the way we think about and treat psychosis,” he said. “With early treatment young people learn how to manage their symptoms so they can get back on track to happy and successful lives. We are hoping to demonstrate that a similar early intervention program can have the same impact on the lives of young people here in Washington state.” ■

For more information, visit www.dshs.wa.gov/bha/division-behavioral-health-and-recovery/signs-early-psychosis.

Iasis Molecular Sciences employees Dana Walters (background) and Scott Nordahl work in the WSU Innovation Center.



WSU INNOVATION CENTER

Serves as a Startup Incubator

By Kevin Dudley

On the southwest side of the WSU Spokane campus sits the WSU Innovation Center

in a building owned by Ignite Northwest, a local business accelerator.

WSU Spokane is the primary tenant and has been sub-leasing space to local startups since the beginning of the year in an effort to grow the entrepreneurship community.

Currently, the Innovation Center is at capacity with five startups leasing space. It offers both wet lab and non-wet lab space and office space.

Michael Ebinger, Ph.D., the director of the center, says startups there enjoy opportunities to grow in a nice facility.

"A benefit of being here is that you have the only wet lab space available in town,"

he said. "Another advantage is that we can work with startups on rental rates."

Those opportunities, Ebinger said, depend on what stage the startup is in. However, there is no list of qualifications set in stone just yet because the Innovation Center wants to be flexible for businesses just starting.

Being an incubator provides an early boost for startups before they can work with Ignite, the business accelerator that helps more established businesses grow.

"We're interested in taking companies that are starting out and need space to grow," Ebinger said.

WSU Spokane has only been in the incubator business for a short time, but Ebinger and WSU Spokane Chancellor **Lisa Brown**, Ph.D., are working together to come up with a long-term plan.

They appreciate the work being done by Startup Spokane and the Health Sciences and Services Authority of Spokane to help innovators. "Spokane is creating an eco-system of commercialization and WSU is proud to be a part of that," Brown said.

Iasis Molecular Sciences is an example of a tenant in the Innovation Center. It develops materials to address the transmission of infectious diseases. Iasis had space in the old SIRT building (now the Health Education Research Building on the WSU Spokane campus).

Jensen-Byrd Redevelopment Creating Great Opportunities

“The Innovation Center is a bit more modern and there are others in the facility that share some common interests,” said **David Vachon**, Ph.D., Iasis’ CEO. “This may lead to collaboration down the road.”

Being near a research university gives companies like Iasis more resources to use. Vachon said his company has collaborated with the College of Pharmacy.

He said having access to a university’s research space means his company could be present for research results and feedback, as opposed to working with a lab far away.

The WSU Innovation Center is another part of Spokane’s entrepreneur efforts. Pairing research and entrepreneurship in close proximity helps create ideas, jobs and commerce.

In between the time businesses begin as an idea and the time they grow to full-blown, profitable companies, there are stages those businesses go through. The Innovation Center and Ignite Northwest work closely to ensure their efforts don’t overlap and that the betterment of the startups is the top priority.

“We want to make sure that we aren’t stepping on each other’s toes and that we’re interfacing with each other so that when my clients got to the point where they could use an accelerator, we’d have a nice handoff,” Ebinger said.

Innovation Center Tenants:

Allele Diagnostics, Inc. provides rapid and high quality genetic testing services.

Biobit, LLC develops antibodies for various assays in food and water products using enzyme-linked immunosorbent assay (ELISA) as a biosensor.

ChalkLabs, LLC specializes in Knowledge Discovery and Data Visualization solutions.

H-Source is a private marketplace for hospitals and surgery centers to buy and sell medical products and equipment with each other.

Novion Technologies/Iasis Molecular develops antimicrobial surface technologies for protecting patients in the clinic from health care-related infections. ■



At long last, it’s happening.

The redevelopment of the Jensen-Byrd property on the WSU Spokane campus is moving along. In January, WSU Spokane selected Jensen-Byrd LLC (JB LLC) as the lead developer. **Dean Allen** of McKinstry and **Wally Trace** of Trace Real Estate Services are the principals of JB LLC.

The five-acre property includes the empty six-story main structure and the surrounding land. JB LLC’s plans call for the perimeter walls of the Jensen-Byrd structure to remain while repurposing the inside. The development site plans also feature a proposed restaurant, a fitness center, and a “class-A” mixed-use office space for medical and technical companies.

The ideal tenants for the property are those in the tech, health sciences, health care IT, biotechnology and pharmaceutical industries.

The redevelopment of the Jensen-Byrd property comes at a time when Spokane’s University District goes through its latest transformation.

The growing medical school presence and the expansion of WSU Spokane’s health sciences research portfolio will create commercialized opportunities. In addition, the U-District Gateway Pedestrian Bridge will soon connect the campus to Spokane’s Sprague Business District.

Additionally Urbanova, a smart city initiative, is bringing together the public and private sector to create a smarter living and working environment.

Jensen-Byrd’s location in the University District on the edge of Spokane’s downtown makes it an ideal location for future growth and opportunities. For more information visit jensenbyrd.com. ■



Chancellor Lisa Brown participates in campus blood drive. The Inland Northwest Blood Center visits the WSU Spokane campus quarterly.

WSU Spokane Supports Off-Campus Partners

By Heather Byrd

WSU Health Sciences Spokane believes community involvement is an integral part of how we give back to the community that surrounds and supports us.

As a result, WSU Spokane partners with a variety of non-profit and community-based organizations that are providing resources that benefit everyone in our region, including our students.

“Bringing together University faculty, staff, students and community members to raise awareness, support local activities and help people connect on a variety of levels, is something we enjoy doing,” said **Lisa Brown**, Chancellor, WSU Spokane. “It builds collaboration and inspiration.”

The following are just some of the partnerships that WSU Health Sciences Spokane has recently supported.

National Congress of American Indians Conference

The NCAI held its 2016 Mid-Year Conference and Marketplace in Spokane. The conference theme, “Changing Climates, Inspiring Hope,” brought more than 1,000 tribal leaders and officials to

Spokane. WSU works to increase Native American student recruitment and retention and also coordinates with and promotes initiatives on campus that benefit Native students and encourage responsible research and interaction with tribes.

Mobius Science Center

WSU Spokane supports the engaging learning environment and hands-on science exhibits of this new facility in downtown Spokane. This community-backed facility makes learning fun for all ages.

GleasonFest

Inspired by Spokane native and WSU alumnus **Steve Gleason**, this annual festival in Spokane’s Riverfront Park raises money for the Gleason Initiative Foundation which provides life improving technology and services to those afflicted with ALS, while creating global awareness for the disease.

Unity in the Community

Unity in the Community is the largest multi-cultural event in the Inland Northwest. As a career and education event partner, WSU Spokane believes in showcasing Spokane’s diversity and bringing the community together through respect, trust and collaboration.

State of Reform Conference

Bridging the gap between health care and health policy is the focus of State of Reform, a West Coast initiative that held its annual Inland Northwest conference in Spokane in September. It is also a focus for WSU Spokane as it takes on leading roles in health education and research.

Inland Northwest Blood Center

WSU Spokane hosts quarterly blood drives involving students, staff, faculty and community members. Every day, 200 donors are needed to ensure a safe supply of blood in Spokane. It is a great way to support our community. ■



Connect with Local Alumni

Alumni chapters give you the opportunity to network with fellow Cougs and reconnect with Washington State University.

The Spokane WSU alumni chapter, known as the Greater Inland Empire Chapter, hosts many events throughout the year. From football viewing parties to tours of the WSU Spokane campus, there is something for everyone to enjoy. Check out some of the recent events in which Spokane area alumni connected with WSU Health Sciences Spokane.

Spokane Alumni Events

Networking With the Chancellor

Dozens of WSU alumni enjoyed networking while getting the opportunity to hear Chancellor **Lisa Brown** speak at downtown Spokane's Steam Plant Grill. Brown updated local alumni on many of the exciting changes happening on the health sciences campus, including the latest information on the Elson S. Floyd College of Medicine, the Spokane Teaching Health Clinic, and the world-class research occurring.

College of Nursing Simulation Lab Tour

Alumni visited the WSU Health Sciences Spokane campus for a tour of the College of Nursing's Center for Clinical Performance and Simulation. The simulation lab is a high-tech facility that provides realistic patient care scenarios. In delivering educationally sound, simulated learning experiences to students and partners, the simulation clinic is advancing the clinical competence of the healthcare workforce within WSU and our communities. Alumni enjoyed a WSU-themed social after the tour.

Want to attend Spokane area alumni events?

Check out the WSU Alumni Greater Inland Empire Facebook page at facebook.com/inlandnwcougs for upcoming events and information. Visit alumni.wsu.edu for the latest information on the WSU Alumni Association. ■



College of Pharmacy

Celebrates 125 Years as one of WSU's Original Areas of Study

By Lori Maricle

In the fall of 1932, WSU transitioned to a four-year course of study for pharmacy, from a two-year program.

One hundred-year-old **Geraldine (Jeri) Kerr**, B. Pharm., of Newport was part of the first graduating class of the Bachelor of Science in Pharmacy degree four years later.



Geraldine (Jeri) Kerr

Kerr, one of three women in the program, was fascinated by the experiments in her pharmacy labs. She especially liked the hands-on aspects of pharmaceutical compounding.

"We filled prescriptions for powders folded in paper, filled capsules and made emulsions," she said. "That was a lot of fun. I enjoyed that sort of thing."

Along with lessons in quantitative analysis, Kerr studied materia medica (which is learning the source of drugs), identification of plants, and dosages of drugs.

"I also took English. It was an underrated subject sometimes; it goes with proper communication," Kerr said. "Communication was always very important because accuracy was important."

Due to the rigorous course of study, students interested in the pharmacy program had to declare their major the day they enrolled.

"With all the lab hours you didn't have time for anything else," she said. "It was a pretty concentrated program. I never had a free period."

This gives merit to a statement published in *The Daily Evergreen*, WSU's student newspaper, during that period that stated pharmacy students would need to be "capable of doing a great deal of hard work."

According to a history compiled by WSU Dean Emeritus **Allen I. White**, the first semester of the pharmacy program

required student pharmacists to spend 16 hours a week in "lectures and recitations," with an additional eight hours a week in labs. He further noted, "That was the least demanding of the four semesters required to complete the course of studies."

Pharmacy had its start at WSU much earlier than Kerr's arrival, being one of the first four areas of study approved by the WSU Board of Regents in 1891. In 1892 the first pharmacy course was offered as part of the chemistry department at the fledgling Washington State Agricultural College.

Both the college and the profession of pharmacy have come a long way since those early days. Washington's first Pharmacy Act passed in 1890 formalizing registration requirements for those wishing to "retail, compound or dispense drugs, medicines or poisons." Now pharmacists obtain a doctoral degree focused on drug knowledge and expertise, and complete minimum requirements for practice experience before sitting for their North American Pharmacist Licensure Examination to become a licensed health care practitioner.

The College Today

The College of Pharmacy is a graduate and professional education college. Its degree programs include the Doctor of Pharmacy (Pharm.D.) and Doctorate in Pharmaceutical Sciences (Ph.D.). The college has been accredited since 1912.

The Ph.D. program prepares pharmaceutical scientists dedicated to the promotion of human health and wellness for careers such as academia, industry, health care, or private institutions. Training new pharmaceutical scientists contributes to the college's position as a leader in collaborative research and scholarship, and educator of outstanding health care professionals and scientists. Research areas of emphasis include cancer biology, drug discovery and translational pharmacology (taking the science of drug research and incorporating it into innovations in medical practice to improve human health).

The Accreditation Council for Pharmacy Education-accredited Pharm.D. program prepares pharmacists to provide patient care in multiple health care settings. The program emphasizes patient-centered care, drug therapy and disease state management, and interprofessional team collaboration.

The Pharm.D. program is offered at the WSU Health Sciences campus in Spokane, and at an extension location in Yakima on the Pacific Northwest University of Health Sciences campus, which opened in August 2013. The College of Pharmacy established a presence in Yakima in the 1990s. It has long been a practice site for WSU student pharmacists completing their fourth-year Advanced Pharmacy Practice Experience rotations. The last year of pharmacy school is dedicated to six rotations, much like the way medical students complete clerkships in their third and fourth years of medical school.

The college relocated from Pullman to Spokane in December 2013, but has been heavily involved in the Spokane health care community since the 1970s through internships, experiential rotations, and pharmacy residency programs. It currently has more than 500 student pharmacists and graduate students, and nearly 3,000 alumni.

The college has a legacy for developing health care professionals who go on to become leaders in the profession. In the 1970s, White wrote that the future of pharmacy lay in the hands of those with the entrepreneurial spirit and vision of innovation to bring the practice of pharmacy into alignment with the needs of an evolving health care practice environment. These words still ring true today.

Since 1979, pharmacists in Washington state have enjoyed the ability, if he or she chose, to partner with a physician to prescribe under collaborative drug therapy agreements, which allows pharmacists to provide services that are much needed in the rural and underserved areas of our state. Within these local communities is where the pharmacist, as a care provider, has the greatest impact on population health. Today, every WSU pharmacy graduate carries the expertise, skills and potential to be a decision maker and leader within their health care community.

Under the leadership of Dean **Gary Pollack, Ph.D.**, the college has seen some important milestones including the consolidation of its headquarters in Spokane, the transition to comprehensive competency-based assessment of student performance with the honors-satisfactory-fail grading system, and its current transition to an active- and collaborative-learning approach for delivering its Pharm.D. curriculum. ■



125 Years and Counting

The college officially celebrated its 125th birthday with an anniversary gala on November 4. The main goal of these anniversary activities was to reinforce and elevate the college as a leader in collaborative research and scholarship, and educator of outstanding health care professionals and scientists.

In addition to this effort, the college established a special endowment that will “live on” to help influence the next 125 years of the college's history: the Dean's Endowed Professorship. This fund acknowledges the excellence of past, present and future deans of the college and will be used by the dean to advance strategic initiatives supporting the practice of pharmacy and help position the college for the future as a top-tier pharmacy school.

The successful history the College of Pharmacy celebrates this year would not have been possible without its many alumni, community partners and donors. Thanks to these many collaborators, the college continues toward its vision to be a leader in protecting, promoting and improving human health, and contributing to the health care solutions of the future.

For more information go to pharmacy.wsu.edu/125.

Congratulations

to These Outstanding Faculty



Clinical Assistant Professor April Davis with students in the Nutrition and Exercise Physiology program.

WSU Health Sciences Spokane faculty were recognized with many university, community, state and national awards in the second part of 2016.



John Roll

John Roll, Ph.D., vice dean for research in the Elson S. Floyd College of Medicine and associate vice president for health sciences research for the University, was one of four

WSU faculty named to the Washington State Academy of Sciences in 2016 for outstanding scientific achievement and willingness to work on behalf of the academy in bringing the best available science to bear on issues within the state of Washington. Roll was also awarded one of the four Sahlin Faculty Excellence awards

from WSU for 2016. The Sahlin awards are named after WSU benefactors Lee and Jody Sahlin. Roll's award was for leadership.

Roll researches human behavioral pharmacology and the development of behavioral interventions for addiction and other psychiatric disorders. He is the founding director for WSU's Program of Excellence in Addictions Research (PEAR).

Robbie Paul, Ph.D., the director of WSU Spokane's Native American Health Sciences Institute, was honored in October with the YWCA's



Robbie Paul

Women of Achievement award. Paul, an enrolled member of the Nez Perce Tribe of Idaho, is one of seven honorees. Paul has been instrumental in showcasing the health sciences programs offered through WSU to Native American populations.

The program began in 1995 with a focus on increasing the number of Native Americans pursuing a nursing degree. It has expanded to include all health sciences programs. The annual Na-ha-shnee Health Sciences Institute also began in 1995 and brings Native American high school students to campus each summer and introduces them to health sciences programs and careers. In the 21 years, more than 450 Native American high school students have attended.



Josh Neumiller

Joshua Neumiller, Pharm. D., has won the national Albert B. Prescott Leadership Award from the Pharmacy Leadership and Education Institute. It is given annually to a pharmacist less

than 10 years into his or her career who has demonstrated the potential to become an influential force in pharmacy.

Neumiller is a WSU alumnus and associate professor and vice-chair for the Department of Pharmacotherapy. He is a certified diabetes educator and a fellow of the American Society of Consultant Pharmacists. He is editor-in-chief of *Diabetes Spectrum*, a journal of the American Diabetes Association.

Prescott was an advocate for an academic basis for pharmaceutical education in the late 1800s.



Cindy Corbett

The American Academy of Nursing recently inducted **Cindy Corbett**, Ph.D., R.N., as a fellow. Corbett is an associate dean for research and professor in the College of Nursing.

Her research activities focus on strategies to improve chronic illness self-management and patient safety.

Corbett has had a vast array of research, teaching, administrative and service roles at WSU over the last 19 years. Her research to improve the safe use of medications has been funded by the American Society of Health-System Pharmacists' Research and Education Foundation, the Robert Wood Johnson Foundation, the Agency for Healthcare Research and Quality, the National Institutes of Health, and the Patient Centered Outcomes Research Institute. Corbett currently serves on several health care-related advisory boards and research committees.



Linda Garrelts MacLean

The American College of Apothecaries recently inducted **Linda Garrelts MacLean**, B. Pharm., as a fellow. MacLean is a clinical professor at the College of Pharmacy

and teaches courses focused on business management, leadership and entrepreneurial pharmacy. She also serves as the vice dean for External Relations.

Prior to her work in higher education, MacLean worked as a pharmacist and co-owner of Jones Pharmacy in Spokane. She continues to be involved with new and evolving practice models for community pharmacy. She currently serves on the board of trustees for the American Pharmacists Association.



Kathryn Meier

INSIGHT Into Diversity magazine selected **Kathryn Meier**, Ph.D., as one of 65 scientists from across the country to receive the 2016 Inspiring Women in STEM Award. She was featured in the September issue.

Meier was selected for work and achievement that encourage others and inspire a new generation of young women to consider careers in STEM (science, technology, engineering and math). She is associate dean for graduate education at the College of Pharmacy. The Ph.D. in pharmaceutical sciences program provides graduate training in cancer biology, drug discovery and translational pharmacology.

A leader in research and academia, Meier has received international acclaim for her recent work on omega-3 fatty acids.

April Davis, M.S., clinical assistant professor in the Nutrition and Exercise Physiology program, has been selected as the 2016 Emerging Dietetic Leader of the Year by the Washington State Academy of Nutrition and Dietetics.

The award recognizes Davis for significantly supporting the promotion of optimal health and nutritional status of the public through demonstrated leadership in legislation, research, education, management and other areas related to the profession.

She is a registered dietitian/nutritionist, a certified dietitian and a clinical exercise physiologist certified by the American College of Sports Medicine.



April Davis



Kenn Daratha

Kenn Daratha, Ph.D., associate professor in the College of Nursing, was honored with the WSU Spokane Faculty Excellence Award during the May 6 commencement

ceremony. He teaches doctoral statistics, evidence-based practice, and clinical epidemiology. Daratha's research interests include improving health outcomes for hospitalized patients.

Amy Meredith, Ph.D., received the Students' Choice Award for Outstanding Faculty at this spring's commencement breakfast. Meredith is a clinical associate professor and director of graduate studies in the College of Medicine. Her primary clinical and research interest is in children with motor speech disorders.

Congratulations all! ■



Amy Meredith

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