

# WSU | SPOKANE

Fall/Winter 2017-2018 • Volume 8

An inside look at WSU's health sciences campus



## Medical School Opens

60 Students Begin Studies

pg. 1

## New Chancellor

Brings Life Sciences Background

pg. 5

## Building Changes

Befit a Growing Campus

pg. 17



CHANCELLOR  
Daryll DeWald, Ph.D.

EDITOR  
Terren Roloff

CONTRIBUTORS  
Heather Byrd  
Kevin Dudley  
Addy Hatch  
Lori Maricle  
Lorraine Nelson  
Terren Roloff  
Joanna Steward  
Judith Van Dongen

PHOTOGRAPHERS  
Cori Kogan  
Megan Comito  
Lori Maricle  
Holly McKenna  
Judith Van Dongen  
WSU Photo Services

DESIGNER  
Denise Echelbarger

PRINTER  
National Color Graphics

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For more information, please email [spok.comm@wsu.edu](mailto:spok.comm@wsu.edu).

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Cover photo (by Cori Kogan) of Elson S. Floyd College of Medicine students and Chancellor Daryll DeWald.

## A Letter from the Chancellor

I am extremely honored to be the new chancellor of the Washington State University Health Sciences Spokane campus and to have this opportunity to share some thoughts about my new role.

Like many of you reading this magazine, I attended a land grant university similar to WSU. In my case it was the University of Wyoming which, though smaller than WSU, had a huge impact on me. In fact, going to college at the same time as my mother in a family where no one had previously graduated was the most transformative thing either of us had ever done.

The University of Wyoming was good to me. I was able to work in a lab and publish research papers as an undergraduate—something that doesn't normally happen at that stage of education. It led to doing research at a pharmaceutical company followed by positions at three universities in the West and South before landing at WSU. Those university experiences have given me the opportunity to research cancer and plant stress physiology—things I never dreamed I'd do when I first started.

Also like many of you, I love Spokane. Prior to being appointed chancellor I was hired to be the dean of the College of Sciences in Pullman and was soon asked to lead its merger with the College of Liberal Arts. Through those hectic years of creating the college with the largest academic responsibility in the University, I made a point to watch closely what was occurring in Spokane. I saw how you worked together to raise money to expand medical education, how you joined together with legislators to accredit a medical school, and most importantly, how you saw the big picture—the picture of a community understanding that a health sciences research university can benefit all of its citizens.

And now I'm one of Spokane's citizens. I see myself as a facilitator for further developing the vision for how to build out the health sciences mission of the Spokane campus, figuring out what health initiatives we focus on and what our opportunities for public-private partnerships in research might be, and on bringing real economic growth to Spokane.

My perception is that the growth potential here is greater than in any other sector in the WSU system. But more importantly, I think the impact is potentially greater here than anywhere else within WSU. I'd like to see more integrated research and education that leads to the type of regional and national impact that we would all like to see. The sky is the limit for our research portfolio. Where there are people who really want to partner with us from across the state—whether they be in industry or individuals—research will be a critical part of what we do.

Over the summer I had the opportunity to get to know Spokane better. I found that this community is hungry to build together. In fact, I've never been in a community with so much positive energy.

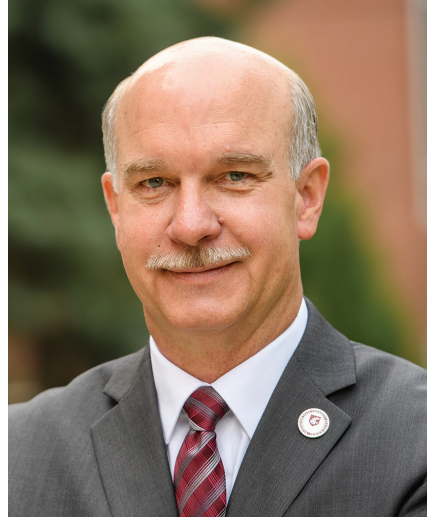
I'm committed to helping define our combined vision so that the community's expectations become reality.

Sincerely,



Daryll B. DeWald, Ph.D.

Chancellor, Washington State University Health Sciences Spokane



# Contents

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## We Did It!

The first class of the Elson S. Floyd College of Medicine started on the WSU Spokane campus in August. And the rest is history.



## Life Sciences Researcher Leads Spokane's Health Sciences Campus

Daryll DeWald became WSU Spokane's fourth chancellor in September, bringing a strong scientific background to campus.



## Outgoing Chancellor Lisa Brown's Impact on WSU Started Years Ago

Before she became chancellor of the Spokane campus, Brown was a passionate advocate for health sciences education and research in Spokane.



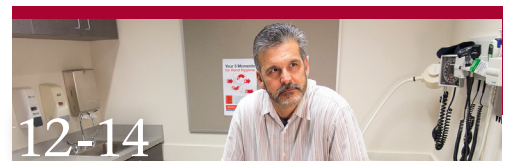
## Grad Student Recognized for Skin Cancer Research

Learn how a College of Pharmacy student won national recognition related to the circadian clock, how a drug information teaching lab impacts trial drugs, and more.



## Actors Help Educate Nursing Students

As acting jobs go, the role of "standardized patient" is not typical. That's just one of the updates on the College of Nursing, which recently was named a Center of Excellence.



pg. 15 Student Government Leaders Focus on Bringing People Together

pg. 21 Congratulations!

pg. 17 New Fitness Center for Students One of Several Changes to Campus

pg. 22 Steve Gleason Receives Highest Alumni Honor

pg. 19 Research Roundup

pg. 23 Retired Dietitian Pays Forward



## Connect

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412 E Spokane Falls Blvd., Spokane, WA 99202  
(509) 358-7500

email: [spok.comm@wsu.edu](mailto:spok.comm@wsu.edu)

website: [spokane.wsu.edu](http://spokane.wsu.edu)

blog: [extra.spokane.wsu.edu](http://extra.spokane.wsu.edu)



FALL/WINTER 2017–2018 | III



# High Fives

## for Medical School

By Kevin Dudley



*Medical students celebrate after the inaugural White Coat Ceremony on August 18.*

**Nearly four years ago,** Washington State University set out to create its own independent, public medical school.

The late President **Elson S. Floyd** set the University on a course that included gaining approval from the state to operate a medical school, securing funding from various sources, hiring a dean and the appropriate staff and faculty, and obtaining preliminary accreditation from the Association of American Medical Colleges which allowed the college to recruit students.

After checking off those boxes, the college worked feverishly to attract students in a one-month window.

All the hard work culminated in the college's inaugural White Coat Ceremony on August 18 at the Fox Theater in downtown Spokane.

Students lined up to be "cloaked" in their white coats in their four learning community groups: Everett, Spokane, Tri-Cities, and Vancouver.

The learning communities reflect the college's community-based model that sends students to all parts of the state to complete their third and fourth years of study.

"This is the beginning of your journey of being inducted into the profession," Founding Dean **John Tomkowiak** told the 60 students and more than 600 attendees. "It took so many people to bring us to this moment so that you could be sitting in those seats today."

One of those who contributed was Floyd's widow, **Carmento Floyd**.

### **A President's Legacy Lives On**

Floyd's passing in 2015 came just after the University gained approval from the legislature to operate a medical school. His vision for the medical school was to offer more opportunities for the state's aspiring doctors, and send more doctors to underserved areas.

Fifty-seven of the college's first 60 students are legal residents of Washington, with the other three having strong ties to the state. Fifty-eight students come from a medically underserved county.

The WSU Board of Regents named the college the Elson S. Floyd College of Medicine in Floyd's honor. And at the White Coat Ceremony, Tomkowiak presented



Carmento Floyd with an honorary white coat.

"You have chosen the noblest profession," she told the 60 students. "You will affect the lives of generations to come. You will influence the quality of life for individuals and communities. You will provide medical care and you will prolong life. We expect greatness from you, and you must expect greatness from yourselves."

The crowd gave Mrs. Floyd a standing ovation at the conclusion of her emotional message, which resonated with students.

"To be part of the first class is symbolic, and I know that I must do my best to be my best because the actions I take now will set a precedent for all future physicians to come," said **David Choi**, a member of the first class and a graduate of WSU's Vancouver campus. "We have a chance to build strong, lasting relationships within the community and, to me, it is exhilarating to know we are part of such a strong and supportive Coug family."

## Students Relish the Opportunity

Even with just a month to accept applications, there was great interest in WSU's medical school. Prospective students prepared for the college to open its application and, in just one month, the college received 711 total applications. Faculty interviewed 332 applicants in the spring of 2017.

With just 60 spots available, getting accepted was a prestigious honor. Tomkowiak personally called all admitted students to let them know they had been accepted.

"To have a dream you've had for over a decade come to realization was so surreal," said **Kyle Geiger**, a student in the first class and a WSU alum. "I had envisioned getting that phone call for a long time and when it happened, I could hear my heartbeat in my head and I was at a loss for words. It was a moment I will never forget."

Students hit the ground running as soon as classes began. In just their third week, they spent time in their learning

communities to be familiarized with the place they'll be full-time during their third and fourth years of medical school.

## Medical School Keeps Evolving

WSU got a lot of attention as it worked to create and open its medical school. The work continues and the college is already interviewing for the second class of medical students, this time on a typical medical school admissions timeline.

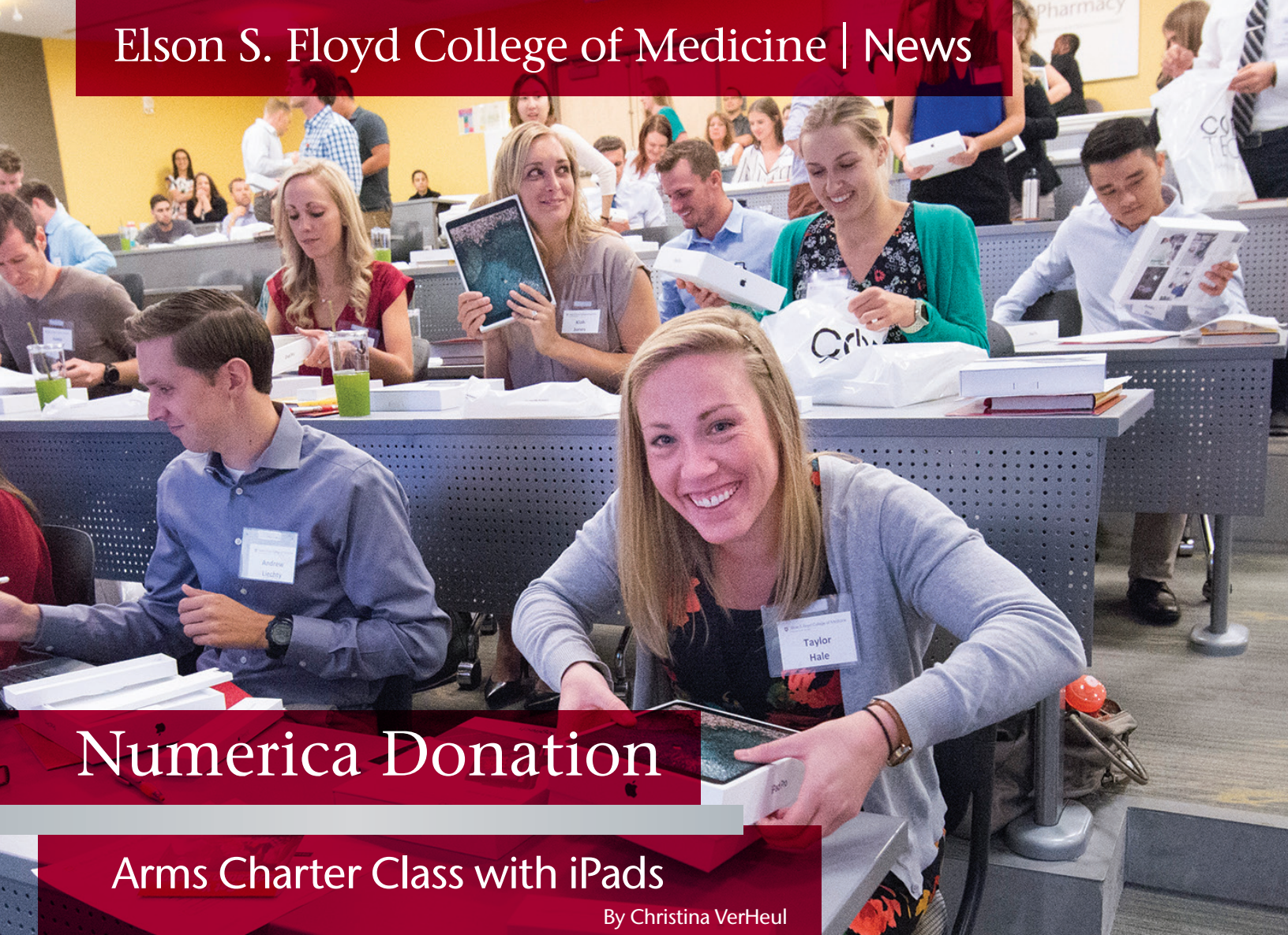
As the Elson S. Floyd College of Medicine grows and evolves, its mission to impact the lives of future doctors, patients and all citizens of Washington will remain the same.

"We are now part of an organization that was built facing adversity and even some criticism," first-year student Geiger said. "Even though we have only just begun and still have everything to prove, I have been consistently amazed at what the college's faculty and staff have already accomplished."



*Orientation week helped introduce students to the Elson S. Floyd College of Medicine.*





## Numerica Donation

### Arms Charter Class with iPads

By Christina VerHeul

Students attending the Elson S. Floyd College of Medicine kicked off their medical education with a technology head start thanks to the generous donation of iPads from Numerica Credit Union.

The Spokane Valley-based credit union gifted the iPads to all 60 members of the medical school's charter class during orientation week, all to ensure the next generation of Washington state's physicians are empowered to learn and treat patients with the technology being rapidly adopted in healthcare.

"WSU's Elson S. Floyd College of Medicine is integral to the growth and vitality of our community. Not only will it contribute to a healthy commerce and U-District, but the school will

produce quality healthcare providers for all of Washington state," said Kelli Hawkins, communications director for Numerica Credit Union. "We know that innovative technology reduces the stress of managing finances, so we are proud to help improve the well-being of these dedicated medical students in their endeavors to fulfill their dreams."

As the healthcare environment becomes increasingly digital and mobile, medical students must be engaged in technologies and devices to prepare for medical practice. The iPads will foster interactive learning, provide numerous medical applications, and deliver case-based learning materials in support of a digital-first, textbook-free learning experience.

### Medicine Incorporates Nutrition, Exercise Physiology Training



Glen Duncan

The Nutrition and Exercise Physiology program at WSU Spokane has been named an academic department within WSU's Elson S. Floyd College of Medicine (ESFCOM).

The move reflects the ESFCOM's goal to be one of the first medical schools in the nation to make scientific wellness—where critical health indicators, including DNA and lifestyle, are accessed and followed by nutritional coaching—part of its curriculum. Inclusion of the Nutrition and Exercise Physiology (NEP) department is an important step in that direction.



"I look forward to seeing our NEP students and medical students learning together as part of the interprofessional education," said ESFCOM Founding Dean John Tomkowiak, M.D.

"As the College of Medicine welcomes our first class of medical students, we seek to provide innovative programs that contribute to our mission of being a unique resource for the state of Washington. The teaching, research and service missions of the NEP department sit at the intersection of clinical and population-level approaches to combatting obesity and chronic disease, a key aim of the college," Tomkowiak said.

**Glen Duncan**, Ph.D. and registered clinical exercise physiologist, is the chair of NEP. "Regular physical activity and proper nutrition are the cornerstones of health promotion and disease prevention, so it makes sense to house these disciplines in the College of Medicine," Duncan said.

NEP focuses on the effects of nutrition and physical activity on human health. The interdisciplinary program combines study in exercise science, human nutrition, biological sciences, and social and psychological sciences, with hands-on clinical experience.

Both the bachelor and master of science degrees are offered. The master of science degree is a coordinated program in dietetics, nutrition and exercise physiology. However, the department will offer a thesis track master of science degree as well as a Ph.D. beginning fall 2018.

## College of Medicine Announces Recent Hires



*Christina VerHeul*

**Christina VerHeul** is the college's director of communications and marketing. VerHeul, a WSU graduate, comes to the college from ReviveHealth, a Nashville-based

integrated marketing agency focusing exclusively on health care, where she served as vice president. Prior to that role, she led communications in the hospitality and restaurant industries with major national brands, including Loews Hotels & Resorts, Hunt Brothers Pizza and Cracker Barrel.



*Dawn DeWitt*

**Dawn DeWitt** is the associate dean of clinical education at WSU Spokane. Before coming to WSU, DeWitt served as the associate dean for undergraduate medical education at the University of British Columbia.

She was also a professor of medicine and regional associate dean for Vancouver and Fraser and held a variety of positions at the University of Melbourne in Australia.



*Larry Schecter*

**Larry Schecter** is the associate dean of clinical education at WSU Everett. Schecter practiced general surgery in Santa Monica, Calif., for 30 years during which he took on multiple

leadership positions including chairman of surgery at both St. John's and Santa Monica hospitals, and chief medical officer of Santa Monica/UCLA Medical Center and associate professor of surgery at the UCLA School of Medicine.



*Kevin Murray*

**Kevin Murray** is the associate dean of clinical education at WSU Vancouver. Murray is a family medicine physician who has most recently been a clinical professor at the

University of Wyoming, serving as the director of medical education, as the designated institutional official for the university as sponsor of Wyoming's two family medicine residencies, and as the CEO of the Educational Health Center of Wyoming, a federally-qualified health center look-alike organizational framework for the two residencies.



*Farion Williams*

**Farion Williams** is the associate dean of clinical education at WSU Tri-Cities. Williams comes from the University of Illinois College of Medicine at Rockford where he was the assistant

dean for graduate medical education, the accreditation council for graduate medical education-designated institutional official, and professor of clinical family medicine and medical education. ■





# Life Sciences Researcher

## Leads Spokane's Health Sciences Campus

By Terren Roloff

**Even before Daryll DeWald** officially took over as the fourth chancellor of WSU Spokane, he was gathering information like the scientist he is.

The experienced academic leader and successful life sciences researcher started in his new role as head of WSU's health sciences campus on September 1. Nine days before that, DeWald sat down at the regular meeting of the campus' advisory group of community leaders to share his plans for his first three months in the position.

The future chancellor said he would start by gathering information, as a scientist would, to assess what the campus is and what its future might be. But one thing he planned, even without the research, was to deliberately connect all academic units on campus with the goal of "collaborating for impact."

Impact is why the former dean of WSU's College of Arts and Sciences is now the chancellor of WSU Spokane. Hired in 2011 to be the dean of the former College of Sciences, DeWald's abilities were soon recognized by then-President

**Elson S. Floyd**, who tapped him within months of his hiring to lead a merger of the former College of Liberal Arts and the College of Sciences. That merger, which formed the College of Arts and Sciences, was not an easy task.

The combined college is the University's largest academic unit, providing more than half of WSU's undergraduate instruction and more than three-quarters of the freshman curriculum. It spans all five of WSU's statewide campuses and the online Global Campus. With annual research expenditures of approximately \$30 million across two dozen disciplines, it is also one of the largest research enterprises at WSU.

President Floyd's recognition of DeWald's abilities and unexpected request to lead the merger of the colleges so early in DeWald's career at WSU was a precursor to current President

**Kirk Schulz'** high opinion of DeWald.

"Daryll's management skills, expertise in the life sciences, and dedicated outreach efforts to students underrepresented in the sciences are qualities that make him ideal to lead the next chapter in our initiative to expand access to health care across the state," Schulz said in announcing DeWald as the replacement for Chancellor **Lisa Brown**.

DeWald's experiences certainly do seem ideal. A first-generation college graduate, he is passionate about higher education and providing avenues for students to succeed. "It may sound cliché, but it's rewarding to be able to invest in people and programs and help build an organization that enables student success—and to be part of something bigger than any of us could make on our own," DeWald said.

Over the past five years, in addition to overseeing a budget of approximately \$100 million, facilitating disciplinary excellence across 20 academic programs, serving colleagues that inhabit 18 different buildings in Pullman alone, and supporting a robust research portfolio, DeWald has served as a leading



member of the WSU team responsible for implementing University-wide student retention initiatives. Among them are an online advising tool that helps advisors connect with students and use predictive analytics to alert them if a student is veering off path for graduation in the desired major, and professional advising for students in pre-law and pre-health programs.

About his new role, DeWald said he is impressed by the commitment of the community, the state and the University to develop WSU Spokane. “The potential we have to truly make an impact on health care across the region is phenomenal.”

With three of WSU’s 11 colleges headquartered in Spokane—all of them health-related—DeWald believes his experience as a dean in the sciences will allow him to work well with the deans of the colleges of Pharmacy, Nursing and Medicine.

And he is looking forward to contributing to organizations outside of the University. “I want to help Spokane refine its health sciences vision, while at the same time not missing out on any opportunities for our professional and graduate programs here on campus.”

Members of the advisory group DeWald talked to back in August shared their advice as he was preparing for his new role. **Tom Reese** of HDG Architecture summed up the group’s counsel: “Lean in and be bold.”

For the next few months, until a new dean is hired for the College of Arts and Sciences based out of Pullman, Chancellor DeWald will be busy fulfilling both roles. “The gravitational pull to Spokane is so strong, I am excited to invest with colleagues here,” he said.

DeWald’s wife **Rebecca**, a cardiac nurse at Providence Spokane Heart Institute, has worked there for several years. The two have moved to Spokane where the youngest of their three children, **Diana**, attends Whitworth University. The DeWalds’ son **Derek** is a captain in the Air Force and their daughter **Laura** is a biochemist.



## Education Started in Wyoming

As an undergrad at the University of Wyoming, Daryll DeWald had the fortune of getting a job assisting faculty in a biochemistry lab—which led to the opportunity to design his own research and, in turn, to publish several scientific papers at a young age. After earning his bachelor’s degree, DeWald spent five years as a research scientist with the pharmaceutical company Upjohn. He flourished in the private research environment, but found it lacked the inspiration and creativity of an educational environment. DeWald left industry in 1988 to pursue a Ph.D. in biochemistry at Texas A&M.

He earned a postdoctoral appointment with the University of California San Diego School of Medicine where DeWald was fortunate to work and learn alongside a stellar cohort of scientists in biochemistry, including several National Academy of Science members. His mentor was a Howard Hughes Medical Institute investigator.

“The experience of working with renowned academics reinforced my

desire for a career in which I could blend scientific inquiry with teaching and mentoring students,” DeWald said.

DeWald then went to Utah State University where his research explored how lipids regulate cancer cell metastasis and control cellular communication during plant stress acclimation. He served as biology department head, mentored more than 10 graduate and 40 undergraduate students, and served in a number of interdisciplinary administrative roles while also managing an active research lab with more than \$3 million in funding from the National Science Foundation, National Institutes of Health, U.S. Department of Agriculture, and other agencies.

DeWald is an elected fellow of the American Association for the Advancement of Science, chosen by his peers to be recognized for meritorious efforts to advance science or its applications. He has authored or co-authored nearly 60 publications in a wide variety of journals.

*Joanna Steward contributed to this article.* ■



# Lisa Brown's Impact on WSU

## Started Years Before She Became Chancellor

By Terren Roloff



*Brown spoke at the WSU Spokane commencement in 2004, nine years before becoming chancellor.*

### At the time of Lisa Brown's appointment as chancellor of WSU Spokane,

then-WSU President Elson S. Floyd called the energy and momentum surrounding development of the WSU Spokane campus “palpable” throughout the community, state and region. He added, “Lisa Brown is well positioned to maintain that momentum and take the program to the next level. We are proud and happy to welcome her to Washington State University.”

Actually, Brown was instrumental to WSU's legacy long before she arrived on the WSU Spokane campus as the chancellor.

While a member of the state legislature, Brown was a passionate advocate for health sciences education and research at WSU Spokane, gaining state support for medical education and advanced education in nursing. She also ensured the campus received critical capital funding for two buildings here—the Nursing building, which opened in 2009, and the

Pharmaceutical and Biomedical Sciences building, which opened in 2013—eleven months after Brown started as chancellor. The latter allowed the University to relocate its College of Pharmacy from Pullman to Spokane.

One organization—the Health Sciences and Services Authority (HSSA) of Spokane County that was funded by the legislature when Brown was still there—became instrumental in allowing WSU Spokane to hire highly respected faculty. “Grants from the HSSA gave WSU money to recruit researchers from upper-tier research universities into all three of the campus’ colleges,” Brown said. “HSSA's impact is very much still felt.”

The same will be said for the impact of Lisa Brown years after she's gone. If Floyd were alive, he'd no doubt be as proud of her accomplishments now as he was when he hired her 4½ years ago. Many people agree that founding the Elson S.

Floyd College of Medicine (ESFCOM) was a pretty audacious thing to attempt, but so were many other accomplishments that have happened at WSU Spokane during the last 4½ years, like doubling the dollars in externally-funded research and building a teaching health clinic on campus.

The latter occurred after Brown joined with **Elaine Couture** of Providence Health and Services and **Antony Chiang** of Empire Health Foundation and the three organizations applied for federal funding to expand the number of medical residents in Spokane. The group took a leap of faith that the federal funding would be maintained, and that a financial model to pay the residents could be agreed to over time. The result has been a 40 percent increase in the number of medical residents in Spokane, which is significant because where a physician trains generally is where he or she will practice.

WSU then stepped up to build a clinic where the medical residents now work alongside Spokane's other health sciences students and provide medical services to the community. “Our medical school is unique and wonderful in that we don't



have a teaching hospital because we train our students in the community settings in which they'll work, but having a teaching clinic gives not only medical students, but pharmacy, nursing and others, the chance to work together in a clinical setting early in their schooling," Brown said.

The addition of the clinic is but one of the physical transformations that occurred during Brown's tenure. She supported the building of an iconic gateway bridge currently under construction to help move pedestrians and bikers between campus and the neighborhood across the railroad tracks to spur private investment in the East Sprague area.

She also expanded the branding signage on campus and agreed to take on the programming of one of Spokane's educational television channels. The result is a 24-hour channel publicizing the great things happening at WSU Spokane. "People identify very strongly with their university experience so branding our campus with signage and taking advantage of television to show our work was a very positive way to build pride," Brown said.

Despite those accomplishments, Brown believes it's actually her ability to capitalize on relationships she developed across the state during 20 years in the legislature that has helped WSU and Spokane the most.

## Mentors and Collaborators

Having key relationships during the time WSU and the Spokane community were attempting to get authorization for a medical school was critical. Brown gives credit to two community leaders in particular. **Marty Dickinson**, executive vice president of Cultural Enhancement for Umpqua Bank, not only led the Chancellor's Advisory Council but also co-chaired a group called Leaders for a WSU Medical School with the former president of Greater Spokane Incorporated **Rich Hadley**.

"Marty and Rich stepped up to help navigate a very difficult situation. Not everyone was happy about WSU's intention to start a medical school, but Rich and Marty brought people together to understand what it could do for Spokane and what it could do to alleviate the state's

physician shortage. The community could have potentially gotten a lot more divided without their advocacy work."

And then there were University leaders like **Ken Roberts**, vice dean for Academic and Community Partnerships in the ESFCOM, who spent nearly every minute educating legislators and clinicians from across the state about the need. "Ken patiently taught me the ins and outs of medical education and why the state's offerings at the time were not sufficient," Brown said. "Much of the work around developing a distributed education framework was done early on under Ken's leadership."

A key turning point for the University was when Brown, Roberts and **Colleen Kerr**, vice president for Government Relations and External Affairs, went to Florida State University together to see the community-based medical school offered there. "We came away knowing that the citizens of Washington deserved a second public medical school, and began working with people like **Chris Mulick** to make that happen."

Mulick, director of State Relations, went

around the state and met with every legislator. "In the last days of Elson's life, Chris was able to give Elson and the rest of us the confidence that there would be statewide support," Brown said.

For his part, in announcing Brown's departure, WSU's current President **Kirk Schulz** said she was "unflagging" in her efforts to advance the vision of a second public medical school.

Brown is excited that President Schulz and her successor Chancellor **Daryll DeWald** share her passion for what the WSU Health Sciences campus can become. "I believe we are early on the journey to really realizing the potential of a health sciences education and research campus," Brown said. "In the framework of all the collaboration and leveraging of opportunities, I would say we're in our toddler phase with respect to what a health sciences campus can be."

"I look forward to seeing Spokane become a health sciences education center and a place people go to get care and look to for innovation. It will become part of the identity of the Spokane region," Brown predicted. ■



*Brown, second from left, is flanked on left by Elaine Couture of Providence, and Antony Chiang of Empire Health Foundation to the right at the groundbreaking for the Spokane Teaching Health Clinic. Mayor David Conley is at far right.*





## Graduate Student Recognized for Skin Cancer Research

By Lori Maricle

*From left are Kenneth Porter, Shobhan Gaddameedhi, Panshak Dakup, and Soumyadeep "Sam" Sarkar.*

**Soumayadeep "Sam" Sarkar**, a student in the pharmaceutical sciences Ph.D. program, is already earning national attention.

Sarkar works in the research lab of **Shobhan Gaddameedhi** at the WSU College of Pharmacy where they study circadian regulation, which is the influence of the 24 hour cycle (circadian clock) on the physiological processes of living things. Sarkar is looking at the biology of cells called melanocytes that produce melanin, which gives skin, hair and eyes their color. He is trying to understand how disruption of the clock can influence the development of melanoma, the most dangerous form of skin cancer.

According to Gaddameedhi, who is the principle investigator on the project, understanding the mechanics of the clock's influence on these types of cells will advance our ability to prevent DNA damage from solar UV-B light, premature aging caused by sun exposure, and cancer formation.

"At this point I am at the initial stages of my research and already it has been so fascinating. I plan to work on this topic for my Ph.D. thesis," Sarkar said. His research

is funded through the National Institute of Environmental Health Sciences, a division of the National Institutes of Health.

Sarkar presented his research to the Environmental Mutagenesis and Genomics Society (EMGS) thanks to an EMGS Student and New Investigator Travel Award. He received a certificate and a check for \$760 at an awards ceremony on September 12, at the 48th Annual Meeting of the EMGS in Raleigh, N.C.

"This is a merit-based award in recognition of the excellence of your research, your research progress, and your promise as a long-term contributor to research in topics related to the mission of EMGS," wrote the EMGS awards and honors committee chair in a letter to Sarkar. EMGS supports and promotes the advancement of knowledge surrounding DNA damage and repair and how it relates to disease.

"I was truly excited to know about the EMGS mission and goals, and how closely my project is related to it. I had amazing

networking sessions with some of the most established and esteemed research scientists like Aziz Sancar (2015, noble laureate) and many more, which definitely motivated me," Sarkar said.

Sarkar is from Indore, a city in west-central India. He completed a bachelor's degree in pharmacy in India and worked as a medical representative for Johnson & Johnson and then as a high school teacher. Sarkar attended Campbell University in North Carolina for a master's degree in pharmacology, and he is currently in his second year in the pharmaceutical sciences Ph.D. program at WSU.

Sarkar's research recognition is an example of how the WSU College of Pharmacy is providing a transformative student experience for its graduates while fulfilling our land-grant commitment to public service through addressing some of society's critical problems, including the onset and progression of disease.





*From left are Danial Baker, director of the Drug Information Center, postgraduate resident Calvin Stoker, fourth-year students Jared Cavanaugh and Kiranjot Brar, and Terri Levien, assistant director of the Drug Information Center.*

## Pharmacy Drug Information Teaching Lab

### Unusual in the Country

By Lorraine Nelson

**The Drug Information Center** on the second floor of the Health Sciences Building looks like a typical windowless office with cubicles and computers,

but what happens inside is rather extraordinary and benefits medical practitioners throughout the country.

Physicians and even some members of the general public know they can phone or email questions to the Drug Information Center (DIC) and get answers, but they probably are unaware that a good amount of the information available nationally about recently released drugs or drugs in late-stage clinical trials starts right here on this campus with a critical review written at the DIC.

The two College of Pharmacy faculty in charge of the center—**Danial Baker** and **Terri Levien**—operate it as a teaching laboratory for final-year pharmacy students and for newly graduated pharmacists who want more training in drug information

review and who sign on after graduation for a year-long residency there. The resident(s) receive a stipend and assist in the creation of the drug reviews and oversee the daily activities of the students.

#### Teaching Lab For Students

“Most of our requests for information come from healthcare providers based in Washington, but a few come from the public and outside the state,” said Baker, DIC director. “The students have to decide ‘what is the real question’ that is being asked, then use various resources and literature to locate pertinent information, and finally synthesize the information for a potential answer. Those answers are reviewed with a member of our staff for completeness and additional educational

opportunities before we provide an answer back.”

Some of the more common questions that come into the center are:

- Someone found a capsule that looks like this. What is it?
- What kind of drug therapy would be best for a patient diagnosed with this medical condition?
- Do these three drugs interact with each other and how?
- There is a new drug out for this condition. Do you know anything about it?
- I heard about a new product for diabetes on TV, does it really work?

The students are also responsible for the initial draft of the DIC’s monthly electronic newsletter “Highlights of FDA Activities” that is then edited by Levien, assistant director of the DIC. They also must attend a weekly critical review of literature discussion.

The lab also provides detailed studies each month on five new drugs or late-stage clinical trial drugs to The Formulary



Monograph Service—a national subscription-based service—that then sends those papers through various teams of people before providing the new drug reviews to hospitals, insurance companies and other subscribers. The DIC has provided all the drug monographs used by The Formulary Monograph Service since 1989 and celebrated a milestone in September when it exceeded the completion of 2,100 drug monographs.

The questions posed directly from the public to the DIC are generally answered as a free service and learning opportunity for the students, Baker said, while the new drug reviews for The Formulary Monograph Service and related work for its parent company, Wolters Kluwer, and the international nonprofit Ascension Health Alliance are supported in part by contracts.

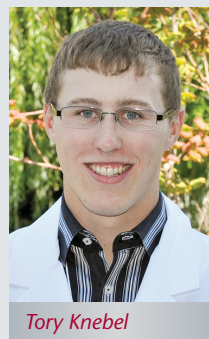
Baker and Terri Leven also oversee the College's Continuing Education program for pharmacists and are peer-reviewers for a number of professional journals and publications.

Recently, Baker was appointed to three national committees and is now serving on the U.S. Pharmacopeia's 25-member experts committee responsible for reviewing, among other things, the health care quality standards used for drug formularies as part of the Affordable Care Act. He also serves on subcommittees of the USP expert panel that establishes which drugs are included in the model guidelines used by the Centers for Medicare & Medicaid to evaluate the drug formularies offered to Medicare and Medicaid beneficiaries; development of the new USP Drug Classification System that may become the model guideline for all outpatient drug formularies in the near future; and drug safety-related issues. In addition, he is a consultant to the U.S. Food and Drug Administration's advisory committee on arthritis.

The DIC was established by the College of Pharmacy in Pullman in 1973 and transferred to Spokane in 1988. Baker has been with the DIC since 1983 and Leven joined in 1990.

## Ninth Student in Nine Years on National Council

By Lori Maricle



Tory Knebel

**Tory Knebel**, a student pharmacist, was recently appointed to a two-year term on the Student Leadership Council for the National Community Pharmacists Association (NCPA).

The College of Pharmacy has sent nine students to serve in this national leadership role in the last nine years.

"I was drawn to NCPA because of my professional goal to own and operate an independent community pharmacy," Knebel said. "After becoming the president of our student chapter, I decided I wanted to become more active at the national level. Pursuing the Student Leadership Council was the best way to achieve this goal."

Over the next two years Knebel will be representing NCPA student chapters in Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington. His role includes reviewing chapter midyear and end-of-year reports and providing feedback to the chapters. He will also participate in determining Chapter of the Year Awards to be announced at the NCPA Annual Convention.

Knebel joins an elite group of WSU pharmacy student leaders, including two WSU students who served as president of the council.

WSU College of Pharmacy has a longstanding reputation of developing outstanding health care professionals and leaders in pharmacy. This is just one example of how the college is preparing the pharmacists of the future who will lead tomorrow's health care solutions through innovation and collaboration.

Knebel is from Pomeroy, Wash., and completed his undergraduate coursework at WSU in Pullman. After graduation he plans to remain in the Pacific Northwest to pursue running his own community pharmacy. ■







*Mike Munoz is one of the standardized patients who help WSU Health Sciences students learn communication and critical-thinking skills.*

## The Role of a Lifetime: Standardized Patients Help Educate Students

By Addy Hatch

**As acting jobs go,** this one's not typical.

Rather than being handed the role of “ingenue” or “nosy neighbor,” people who are hired by the WSU College of Nursing might be asked to play “chest pain” or “depression,” or “degenerative joint disease.” They’re called standardized patients, or SPs, and they help teach nurses and other health-science students skills in communication and clinical treatment.

The College of Nursing has had a standardized patient program as part of its Simulation Lab for three years, said **Kevin Stevens**, director of the Center for Clinical Performance and Simulation.

“Most schools will use standardized patients for things they can’t do with a mannequin,” Stevens said, referring to the high-tech mannequins used in the Simulation Lab. For instance, unlike a mannequin, a standardized patient might pace the room, jump out of bed or interact

aggressively—all scenarios that nursing students could face in their careers.

Standardized patients also give students feedback.

“Sometimes students don’t use good eye contact, or they’re looking down at a paper the whole time,” said **Stacey Munoz**, a standardized patient at the WSU College of Nursing and before that, in Arizona. “Sometimes they’ll tell a joke that doesn’t translate well.”

That’s the exception, however, said **Mike Munoz**, Stacey’s husband and a fellow standardized patient in Spokane. “I would say 99.9 percent of the time the good outweighs the bad. These students are being trained very well.”

The WSU College of Nursing launched its standardized patient program using actors hired through a Spokane talent agency. The pool of SPs has expanded to include

non-actors like Mike and Stacey Munoz—people who have some interest in health sciences and want to help train the next generation of care providers. Mike Munoz had 35 years of experience with emergency medical services as a firefighter in Arizona, while Stacey Munoz worked at a health-sciences university there.

### **Actors are Paid, but Hours Vary**

The standardized patients are WSU employees and are paid an hourly rate. The amount they work varies widely—sometimes it’ll be a couple of weeks in a semester, sometimes just a couple of days.

When a simulation calls for an SP, a coordinator emails everyone meeting the criteria—a woman in her 60s, for example—and sends a description of the scenario. Sometimes SPs are asked to come in and rehearse. Other times they can watch a



video at home, or they're sent a script and asked to memorize certain aspects of it and ad lib the rest. It depends on the point of the simulation: If students are being tested, for example, the standardized patient's responses need to be just that—standardized. Experience in a medical field isn't necessary.

## SP Program Newer to Nursing Education

Standardized patients have been used in medical education for decades, but their use in nursing education is more recent. Research has shown that using SPs can decrease students' anxiety, and enhance their critical-thinking and communications skills.

Kathy Bray is the College of Nursing's only SP who's located in the Tri-Cities, working with students at the campus there. "I would say that I'm pretty passionate about it," she said of being a standardized patient. "It adds an element to education that you just can't get in the classroom, you don't get in the lab, and I don't think you can get with students role-playing with each other. My role is a stranger, which is essentially what a patient is to a nurse."

## Sim Lab Used by Inaugural Medical Class Also

Stevens, the director of the Center for Clinical Performance and Simulation, said the standardized patient program will continue to grow. SPs are being used in undergraduate and graduate nursing programs, and the Simulation Lab is helping the WSU Elson S. Floyd College of Medicine with its inaugural class, in addition to serving community partners like the Washington Air National Guard. The College of Nursing is expanding the Sim Lab to include a space set up to look like an apartment, and another where multiple patient simulations can take place.

Said Stevens, "We have dedicated, expert simulation facilitators and preceptors who are invested in making our simulation program the best in this region across all our WSU campuses."

For more information on the Standardized Patient program, visit [nursing.wsu.edu](http://nursing.wsu.edu).

*Betty Anderson was an early proponent of an intercollegiate nursing program for Eastern Washington.*



## Trailblazer's Legacy Lives On

One of the visionary nurses who founded what's now the WSU College of Nursing died in August at age 99.

Betty Anderson was director of Nursing Service & Education at St. Luke's Hospital in Spokane when she began talking with other nurse leaders about the need for a baccalaureate nursing program in the region. At the time, there were no four-year nursing programs in Eastern Washington.

Anderson was an early proponent of an intercollegiate program involving Washington State University, Fort Wright College, and what were then called Eastern Washington State College and Whitworth College.

She went personally to WSU in Pullman with Betty Harrington to enlist the support of then-President Glenn Terrell for a baccalaureate nursing program.

"We got as far as Colfax, and Betty said, 'You know, this is quite an experience we're going into,'" Anderson later recalled. "I said, 'I

know it, what should we do?' She said, 'There's a church up there on the hill, we could maybe pray.'" So they did.

After a successful meeting with Terrell, who approved their plan, they again stopped in Colfax—this time for a cocktail.

After several years of planning, the Intercollegiate Center for Nursing Education was established in 1968, with Anderson as its first assistant director. She was the truest definition of "nurse leader," say people who worked with her—kind, caring, strong and principled.

Her legacy is the WSU College of Nursing, which today graduates more nurses with bachelor's degrees than any other university in the state and this year was named a Center of Excellence in Nursing Education by the National League for Nursing.

Anderson once said of the College of Nursing, "We were all pioneers back then. And they're still pioneering today."

If you'd like to make a gift in honor of Betty Anderson's legacy, contact Nursing Development Director Brooke Ledebouer at [brooke.ledeboer@wsu.edu](mailto:brooke.ledeboer@wsu.edu) or call (509) 324-7202.





WSU Nursing One of Elite

## Centers of Excellence

By Addy Hatch

**The WSU College of Nursing** has been named a Center of Excellence by the National League for Nursing,

an honor given to only 15 schools and health care facilities nationwide in 2017.

The award recognizes the College of Nursing's statewide programs, innovation, research, community outreach, and its commitment to diversity.

The National League for Nursing is a professional organization with 40,000 individual members and 1,200 institutional members.

"Expert faculty create expert nurses. The WSU College of Nursing has been producing the finest nurses in Washington for close to 50 years," said Dean **Joyce Griffin-Sobel**. "Being named a Center of Excellence, the only college in the Northwest to be honored in this manner, recognizes our innovative, learner-centered teaching, enhanced by a sophisticated simulation program for hands-on, experiential learning."

The WSU College of Nursing graduates more nurses with bachelor's degrees than

any other university in the state, is a leader in education using simulation, and had research and grant funding of more than \$7 million last year. By bringing a diverse student body into health care and serving disadvantaged communities, the College of Nursing helps WSU continue to fulfill its land-grant mission in a modern world, Griffin-Sobel said.

The WSU College of Nursing was named a Center of Excellence for "Enhancing Student Learning and Professional Development," one of four categories for which honors are awarded. Other nursing schools recognized in the same category include Rush University, Purdue University, Ball State University, and the University of Kansas.

Among the achievements highlighted in the College's Center of Excellence application were:

- The College has statewide reach, offering degrees on WSU campuses in Spokane,

the Tri-Cities and Vancouver, Washington, and at sites in Yakima and Walla Walla.

- Since 2005, the College has increased its research capacity by 400 percent.
- The student body is both ethnically and demographically diverse. Over the past decade, the College tripled the number of under-represented minority students, rural, and first-generation students who received bachelor's degrees in nursing.
- The Program of Excellence in Clinical Performance and Simulation operates a state-of-the-art Simulation Lab that serves students from many WSU health-sciences programs.

Dean Griffin-Sobel said, "Our faculty ensure that our graduates, at the entry and advanced levels, are prepared to meet the health care needs of our citizens, to reduce the significant access problems that exist in our state, and to increase primary care practice. As a land-grant institution, there is no higher calling." ■





*From left are Shannon Kozlovich, Johanna Pantig, Alec Sisneros and Thai Dang.*

# Student Leaders

Focus on Bringing People Together

By Lorraine Nelson

## Student government President Alec Sisneros

was last year’s vice president and was focused then, like now, on creating opportunities for students to get to know each other.

“I hope that I am able to create a stronger Cougar family with everyone here in Spokane and in Yakima,” Sisneros said, in outlining his goals at the beginning of this school year. “I want to make sure the nursing and pharmacy classes in Yakima feel that they have a voice and are included in decisions that can affect them.” Sisneros also said he wants to bring additional food options to campus such as food trucks.

Sisneros is in his third year of the Doctor of Pharmacy (Pharm.D.) degree program and had never been to the state of Washington until he came to Spokane to interview for a seat in the pharmacy program in February 2015.

Now he loves it here.

Sisneros is from the Denver suburb of Littleton, Colo., and has an undergraduate degree in biology, with a minor in

chemistry, from the University of Colorado at Boulder.

Two other key members of the ASWSUS team are experienced in student government because they, too, served last year.

**Janae Rame** handled public relations and marketing last year for the Student Entertainment Board (SEB), which puts on a number of events throughout the year, and this year is the director of the SEB. She is in the same pharmacy class as Sisneros.

Rame’s goal for this year is to continue the traditional events of last year but add more.

“Student input is very important to me, and I want us to try to come up with a variety of activities that reach out to people who may not come to our other events,” Rame said. “I’m excited that we

can create events that will allow people to get involved and know one another on this amazing campus! One day we may be working with each other, so why not get to know each other outside of the school atmosphere,” she added.

Rame is from Sammamish, Wash., and got her bachelor’s degree in general biosciences from WSU.

**Thai Dang** is back this year in the same position, as the chief of staff. Dang is from Bellevue, Wash., and has a B.S. in biology from the University of Washington. He also is in his third year of the four-year pharmacy program.

Rounding out the executive board are Vice President **Johanna Pantig** and Director of Legislative Affairs and Outreach **Shannon Kozlovich**. Both are new to ASWSUS this year. Pantig is from Silverdale, Wash., has a B.S. in biology with a minor in chemistry from WSU, and is a second-year pharmacy student.

Kozlovich is from Alta Loma, Calif., and is in her third year of the Ph.D. program in pharmaceutical sciences. She has a B.S. in chemistry from Whitworth University and an associate’s degree from Spokane Community College.



The ASWSUS is the representative body of undergraduate, graduate and professional students at WSU Spokane. ASWSUS initiates and coordinates student activities, represents student interests, needs and welfare, as well as acts as a liaison between students and university faculty, staff and administration.

There are four other officers; all of them on the Student Entertainment Board:

**Jessica Hagel** of Lakewood, Wash., third-year pharmacy student, bachelor's degree in science from University of Portland with minors in chemistry and neuroscience.

**Kimberly Pendilla** of Bellingham, second-semester nursing student, BSN class of 2019, associate's degree in arts and sciences from Whatcom Community College.

**Taylor Trevino** of Longview, Wash., second-year pharmacy students, bachelor's of science with minor in psychology from WSU.

**Hannah Herzog Mason** of Tumwater, Wash., third-year pharmacy students, bachelor's degree in chemistry from Saint Martins University in Lacey, Wash. ■



*From left, Janae Rame, director of Student Entertainment Board, and board members Kimberly Pendilla, Taylor Trevino, Hannah Herzog and Jessica Hagel.*



*At campus orientation student leaders Johanna Pantig and Alec Sisneros shared how to get involved with student events and sign up for student organizations.*





## Building Changes

# Befit a Growing Campus

By Lorraine Nelson

**The arrival of medical students on campus** heralded in the establishment of the first-ever designated fitness center for students.

The fitness facilities are required by the accreditation agency for medicine, which also encouraged expanded hours for the campus library to allow access to students 24 hours a day, seven days a week.

Bigger changes have occurred, too, as part of the continued evolution of the campus. Walls were knocked down and constructed to create a large space for students to interact while working for a greater cause, and the city's construction of a new pedestrian bridge over the railroad tracks connecting campus with the East Sprague Avenue made substantial progress.

### Student Fitness Center Opens

Lockers, showers and 13 pieces of exercise equipment were moved into a room with a wall of windows, granting the

students using the cardio machines a nice view out onto a terrace with tables and chairs, adjacent to the Spokane River.

Key cards are needed to access the new fitness room, which is conveniently located across the lobby from Campus Safety and Security and open 24 hours a day.

"Students have been asking for a fitness center for a decade," said **Jon Schad**, director of Facilities Operations. "The medical school accreditation requirement to have one was the catalyst for making it happen by the start of class this year."

Funds for the project came from WSU and EWU student fees, the College of Medicine, and a \$15,000 grant for Americans with Disabilities Act-compliant showers from WSU Pullman. Nutrition and Exercise Physiology students are responsible for managing the center.

### New Student Centers for Diversity, Leadership and Community Engagement

The most extensive renovation on campus was designed to locate all the student extracurricular and co-curricular activities groups together on the first floor of the Academic Center, which is a campus hub. The new space has the student body elected government now in the same office as the newly named Student Leadership and Community Engagement Center – and next door to an expanded Student Diversity Center.

"The centers are planned to become a focal point for creating leadership programs, connecting students with opportunities to be engaged on and off campus, and to support student learning outside the classroom," said **James Mohr**,



vice chancellor for Student Affairs.

“Through the Leadership and Engagement Center and the expanded Student Diversity Center, students have the opportunity to learn more about themselves, develop and try out new skills, and implement theories and ideas they are learning in the classroom.”

Health sciences students studying to become clinical health professionals are required to complete a certain number of practice hours and while many of those hours may be arranged by their academic program, the engagement center is available to be a liaison for matching student needs for service learning with community groups that can provide those opportunities.

“The center supports faculty or a group of students from a specific class or program to choose a project for their service-learning from any agency that fits the learning objectives,” said **Veronica Puente**, the center’s coordinator.

Creation of the Student Diversity Center was initiated by students. Now in its second year of existence, the center sponsored numerous programs last year, including a veterans’ breakfast, monthly Bias Busters discussions, programs for a week of celebrating Martin Luther King Jr., and training for support of the LGBTQ community. It also commemorated a number of the months throughout the country set aside for special remembrances, including Native-American History Month, African-American History Month, Women’s History Month, Asian-Pacific Islander Month, and Hispanic Heritage Month.

Having the engagement and diversity centers with the ASWSUS student body government gives everyone additional opportunities to learn and grow from each other, said **Dion Crommarty**, director of the Student Diversity Center.



### Library Accessible 24 Hours

While the change to 24-hour access to the library was strongly encouraged by the medical school accrediting agency, it was also the trend among a majority of libraries that library Director **Jonathan Potter** surveyed.

With so much information accessible on the internet, the library these days is more valued for its “Book a Librarian” one-on-one consultation service, access to older articles, and the appealing study environment plus collaborative spaces set up for small groups. In fact, the size of the library collection was just reduced and the space freed up for eventual remodeling into study rooms for small group meetings.

Thanks to a \$3,000 grant from student government, the library also agreed to a proposal from the Nutrition and Exercise students to rent a walk desk treadmill to try out in the library, as well as stability ball seating.

### Bridge to East Central

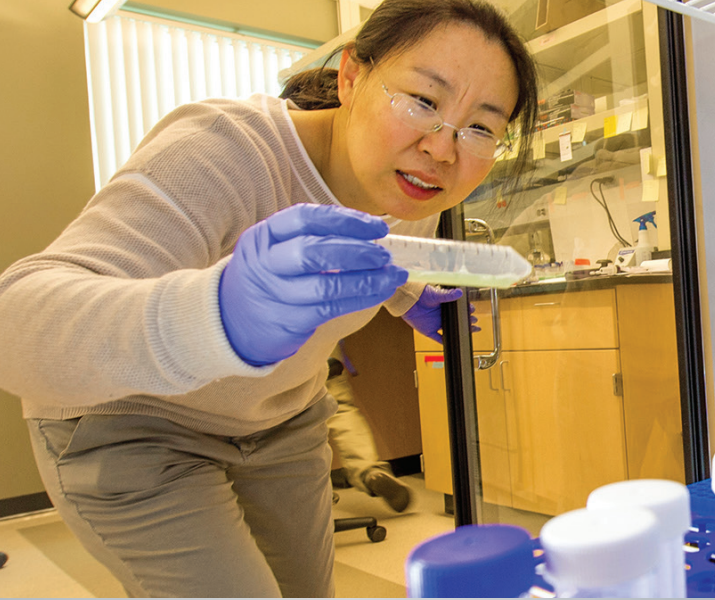
Construction of a pedestrian bridge from campus over the railroad tracks to East Sprague is set for completion during the summer of 2018. The campus has temporarily lost parking spaces this year because of the construction, but may end up with a net gain because the city has agreed to lease to the campus the city-owned parking spaces along Front Avenue near the Bookie.

The new bridge is expected to spur economic development in the East Sprague area. Combined with the city’s construction of the second phase of Martin Luther King, Jr., Way, which runs along the southside of campus, the two projects will give commuters more options when traveling to and from campus. ■



# Research Roundup

By Judith Van Dongen



Microbiologist Jingru Sun checks on a sample in her research lab on the WSU Health Sciences Spokane campus.



## New \$1.9M NIH Grant to Study Nervous, Immune System Link

The key to finding a cure for autoimmune diseases may just lie in a tiny, transparent roundworm that lives in the soil, according to **Jingru Sun**, an assistant professor



Jingru Sun

in the Elson S. Floyd College of Medicine.

Sun uses *Caenorhabditis elegans* (*C. elegans*) as a model animal for studying the interactions between the nervous system and the innate immune system, the body's native defenses against infection. The strength of *C. elegans* is in its simplicity—its nervous system has only 302 well-identified neurons, whereas human brains have more than 86 billion neurons.

Supported by a new five-year, \$1.9 million grant funded by the National Institutes of Health (NIH), Sun and her research team are working to better understand how neurons and immune cells communicate with each other in response to pathogen infection. Their research in *C. elegans* has already identified specific proteins and neurons that work together to suppress immunity during an infection. Though more work is needed to identify additional neurons

involved in this process and delve into other unanswered questions, their findings have brought scientists one step closer to understanding the mechanisms that keep the immune system in balance.

"Excessive immune responses have been linked to human health conditions such as Crohn's disease, rheumatoid arthritis, diabetes, and Alzheimer's disease," Sun said. "If we can identify the cellular and molecular pathways involved in neural regulation of immunity, this could one day be used as the basis for developing a drug to target those pathways so we can cure or better treat those diseases."

## Smart Home Research to Help Older Adults Manage Health

With funding from a \$1.77 million NIH grant provided through the National Institute of Nursing Research, a new, multidisciplinary WSU project will help older adults with chronic conditions age in place by combining smart home technology with a nurse's clinical insight. Assistant Professor of Nursing **Roschelle Fritz '15** has joined forces with smart home technology

expert Diane Cook and clinical psychologist Maureen Schmitter-Edgecombe to design and test their "clinician-in-the-loop" smart home concept.

The five-year project will use smart watches and sensors placed in the homes of 30 older adults with two or more chronic conditions at Touchmark on South Hill, a retirement community in Spokane. Throughout a one-year period, the technology will detect each individual's motion and behavior patterns while Fritz monitors their health, both remotely using telehealth and through in-home visits.

Sensor data captured during adverse health events—such as fall injuries or low blood sugar—will be fed into intelligent software, which would learn to recognize and predict changes in an individual's health status and alert a family member or health care provider.

For example, absence of motion at a time when a person is normally up and about could be an indication that the person has fallen, while an increase in nightly bathroom visits could point to a urinary tract infection.

"There aren't enough nurses to care for our growing population of older adults," said Fritz. "The new model we're developing could extend nurses' reach, help prolong older adults' independence, improve quality of life, and reduce caregiver burden."



Roschelle Fritz



## Pilot Study Supports Idaho Rule Change on Immunization

Idaho residents may get their next flu shot from a pharmacy technician, thanks to a rule change that took effect in March. The change, which made Idaho the first U.S. state to allow pharmacy technicians to administer immunizations, was supported by a pilot study conducted by WSU in collaboration with Albertson's Companies.

"I'm excited about the potential positive public health impact this has," said Clinical Assistant Professor **Kimberly McKeirnan**, who led the College of Pharmacy team that took on the project. "We've seen diseases like whooping cough and measles make a comeback because people aren't getting immunized." She said the change improves patient access to immunizations, empowers good pharmacy technicians to do more, and helps free up pharmacists' time.

With special permission from the Idaho State Board of Pharmacy, the WSU team developed a four-hour immunization training course, got it accredited, and used it to train 25 Albertson's and Safeway pharmacy technicians from northern and southern Idaho in December 2016. Technicians completed a post-training survey and tracked the number of immunizations they provided from training completion through May 2017, which added up to 953 shots.

McKeirnan said the pilot study results showed that pharmacy technicians were competent and comfortable providing immunizations after completing the training.

The team has now trained more than 100 Idaho pharmacy technicians and will be rolling out a train-the-trainer program to expand their reach. They expect to see other states follow suit and will be at the ready when that happens.



Kimberly McKeirnan

## Research Ensures Safety of Long-Haul Pilots, Flying Public

The long-time work of a WSU scientist is helping to keep the skies safe for travelers to faraway destinations and the multi-pilot crews that fly them there.

For the past ten years, **Gregory Belenky**—a research professor in the Elson S. Floyd College of Medicine—has studied the effects of ultra-long range flights on the sleep and performance of pilots flying for United Airlines and the former Continental Airlines. He was part of a group of scientists that helped the Federal Aviation Authority (FAA) draft a new rule for pilot duty and rest regulations that addressed these 16-plus-hour flights, which he said weren't covered by FAA regulations at the time.

The rule, which was finalized in 2012, puts the burden on airlines to prove that ultra-long range flight routes are at least as safe as standard flight operations.

To help United Airlines gain preliminary FAA approval to test new ultra-long range routes, Belenky used a mathematical model to predict pilots' performance throughout the proposed flight route and comparable long-range (8- to 16-hour) flight routes, based on their sleep-wake history. Subsequently, he and his research team provided pilots with tools to measure in-flight sleep and performance and record fatigue and sleepiness levels during the ultra-long and long-range flight routes. Comparing the results, they found that pilots got more sleep during ultra-long range flights while maintaining an equivalent level of performance.

Belenky estimates that they have collected data from more than 250 pilots so far. Ultra-long range routes studied include those from San Francisco to Sydney and Melbourne; Newark to Hong Kong; and the Island Hopper route from Honolulu to Guam. They are currently studying a new proposed route from Newark to Singapore.



Gregory Belenky

## Study Finds Mechanism Behind Spread of Prostate Cancer

A discovery made by Assistant Professor of Pharmaceutical Sciences **Jason Wu** could be the key to expanding treatment options for late-stage prostate cancer, the third leading cause of cancer death in U.S. men.

Working with scientists at Cedars-Sinai Medical Center and elsewhere, Wu found that an enzyme known as monoamine oxidase A (MAOA) helps prostate cancer cells metastasize, or spread, to bone. In their paper published in the journal *Cancer Cell* earlier this year, they identified a network of proteins activated by MAOA that interact with bone cells in a way that creates a favorable environment for tumor growth. What's more, their findings suggest that clorgyline, a chemical compound that inhibits MAOA, can be used to reduce the spread of prostate cancer cells. Drugs similar to clorgyline are commonly used as antidepressants.

Using several human prostate cancer cell lines in mice, the researchers found that mice showed increased prostate cancer metastasis when they increased the expression of MAOA in the cancer cells. On the other hand, when they used clorgyline to suppress the activity of the MAOA enzyme, mice had fewer bone metastases and lived longer.

"Our findings provide a rationale to pursue the new use of MAOA inhibitor drugs to benefit late-stage prostate cancer patients with signs and symptoms of metastasis," said Wu.

The next step, he said, would be to investigate whether the findings from their study also hold up in other types of cancers. He said a clinical study to test the use of MAOA inhibitors in prostate cancer patients is already underway. ■



Jason Wu



# Congratulations!

By Heather Byrd

**WSU Health Sciences Spokane** faculty and staff were recognized with many community, state, university and national awards in the last few months.

Assistant Dean for Clinical Affairs **Debbie Brinker** was named one of two recipients of WSU President's Distinguished Teaching Awards for Instructors and Clinical Faculty – the first College of Nursing faculty member to receive the honor. Brinker teaches professional development and senior practicum courses.



Debbie Brinker



Dedra Buchwald

**Dedra Buchwald**, director of the Initiative for Research and Education to Advance Community Health (IREACH) in the Elson S. Floyd College of Medicine, was one

of three researchers in the country who received the CURE Champion award from the National Cancer Institute (NCI). CURE, which stands for Continuing Umbrella of Research Experiences, is a program of NCI's Center to Reduce Cancer Health Disparities. Buchwald has spent more than 30 years researching and advancing Native health.

Pharmacotherapy Clinical Assistant Professor **Alyson Blum** received the 2016-17 Faculty Preceptor of the Year Award for the College of Pharmacy. Pharmacy's network of faculty preceptors are located in pharmacy settings all around the country and are responsible for teaching



Alyson Blum

final-year doctor of pharmacy students as they rotate through various clinical settings.

Pharmacotherapy Clinical Assistant Professor **Kimberly McKeirnan** received a Laboratory Innovation and Teaching Excellence Award honorable mention by the



Kimberly McKeirnan

American Association of Colleges of Pharmacy's Lab SIG. The award is based on her implementation of Tuberculin Skin Test training into the WSU College of Pharmacy Applied Patient Care Skills Lab.



Phyllis Eide

**Phyllis Eide**, associate professor of nursing, is a recipient of the WSU Graduate School Mentor Academy Award for Excellence. She has been a faculty member in the College of Nursing since 2002 and a member of the academy since 2009. Graduate Mentor Academy volunteers provide an unbiased and supportive presence for graduate students during the most challenging aspects of their programs, including preliminary examinations and defenses.



Ella Inglebret

**Ella Inglebret**, associate professor with the College of Medicine's Speech and Hearing Sciences, received the WSU Spokane Faculty Excellence Award at commencement.

She teaches clinical phonetics, speech sound disorders, language and literacy, and assessment of speech and language. Inglebret's research interests include cultural factors impacting the learning and communications process.



Janet Katz

**Janet Katz**, professor in the College of Nursing, was named a Fellow of the American Academy of Nursing. She is one of 173 nurse leaders worldwide selected for induction as an

Academy fellow. Selection criteria includes evidence of significant contributions to nursing and health care, and sponsorship by two current Academy fellows. Applicants are judged based in part on how their nursing career has influenced health policies and public health. Katz has worked extensively to increase the diversity of the nursing workforce.



Barb Richardson

**Barbara Richardson**, director of inter-professional education and research in the College of Nursing, was honored by Leadership Spokane for founding

Youth Leadership Spokane. More than 600 area teenagers have learned civic responsibility, leadership, communications and team-building in the last 20 years through Youth Leadership Spokane. ■





# Steve Gleason

## Receives Distinguished Honor

By Kevin Dudley

**As he took the microphone** prior to receiving Washington State University's 2017 Regents' Distinguished Alumnus Award,

*Steve Gleason visited research labs at WSU Spokane in August. He is seen here with former Chancellor Lisa Brown, current Chancellor Daryll DeWald, researchers Jason Gerstner and Marcos Frank, and members of their research teams.*

**Steve Gleason** addressed the crowd the only way he knows how: with humor and gratitude.

"I have to admit, before a few weeks ago, I thought Regents was just a cafeteria where all the athletes used to eat lunch and dinner on campus," he said to laughter, referring to the on-campus dining hall.

It's that kind of positive, up-beat attitude that has inspired others to follow Gleason and his mission so closely.

His mission is to help others with ALS and raise awareness about the disease. He does that through the Gleason Initiative Foundation, which he formed after being diagnosed with ALS in 2011.

"Life has lead me to New Orleans, which is many thousands of miles from Pullman," Gleason said. "But my roots are still here in the Palouse. Naturally, part of the reason for receiving this award is because of how I've handled ALS. Part of why I've been able to handle ALS is because of my experience here at WSU."

Gleason has inspired many others, including his former WSU teammate and friend **Grady Emmerson**.

"We just dream about things," Emmerson said at the award ceremony. "Steve does it."

"It" includes skydiving on the one-year anniversary of his diagnosis, trekking up mountains in Peru and much more.

The Spokane native, who became a two-sport athlete at WSU and an NFL player for the New Orleans Saints, joined fellow alums **Sherman Alexie**, **Paul Allen**, 'Far Side' cartoonist **Gary Larsen** and many others in receiving the Distinguished Alumnus Award.

Gleason is also known for his punt block in the Saints' first home game in 2006 after Hurricane Katrina that led to a touchdown and ignited a sold-out crowd. That play is now immortalized as a statue in New Orleans.

Gleason grew up in Spokane and attended Gonzaga Prep High School. He returns home each summer for Gleason Fest, the music festival that raises funds for the Gleason Initiative Foundation. WSU Spokane is a sponsor at Gleason Fest, which this year featured College of Pharmacy researcher **Travis Denton** sharing his work on neurological diseases like ALS and Alzheimer's.

Gleason visited WSU Spokane in August to learn about the campus' research on neurological diseases, visiting with Denton, as well as stopping at the labs of researchers **Marcos Frank** and **Jason Gerstner**, both with the Elson S. Floyd College of Medicine.

The visit allowed Gleason to be in front of researchers looking into his disease and others like it, as well as administrators who are actively working to establish future partnerships with Team Gleason. ■





# Retired Dietitian

## Pays Forward

By Lorraine Nelson

*Longtime dietitian Mildred Jean Chambers set up an endowed scholarship for graduate students in the dietetics program here.*

**Mildred Jean Chambers knows exactly** how she wants her donations to Washington State University to be used.

She wants to benefit the students who will become registered dietitian nutritionists and carry on the profession she discovered as an undergraduate at WSU.

“Becoming a credentialed dietitian requires academic courses beyond the undergraduate level as well as a certain number of hours of supervised practice in the field,” Chambers said. “It is difficult for the student to work while in the program.”

She should know. She not only went through it herself years ago, but she supervised such a program while in the U.S. Air Force, evaluated similar programs for the American Dietetic Association, and also taught those students while a professor at Oregon State University.

Chambers is passionate about the field of dietetics and now that she’s through directly mentoring students in that course of study, she has endowed a fund at WSU to assist those students with costs related to off-campus clinical rotations, preparing for the credentialing exam, or with other needs to successfully complete their program.

“Most of the articles about donations to universities I have seen in publications have focused on the large donations to major programs or athletics, and this led me to think that a named fund could only be set up with a major donation of funds,” Chambers said. “I did not know that I could establish an endowment and get my

donations directly to the area of interest to me.”

The Mildred Jean Chambers MS CPD Endowment Fund exists to help students in the Master of Science Coordinated Program in Dietetics, Nutrition and Exercise Physiology offered at the University’s health sciences campus in Spokane.

### Passion Had Early Roots

Chambers arrived at WSU in Pullman in the late 1950s from Sunnyside, Wash., with an interest in mathematics and science but no predetermined major. Being female, she was assigned to a home economics advisor. Because of her experience working in her parent’s grocery store she was guided



toward the dietetics major in home economics.

"It turned out to be a good fit preparing me for a very successful career in the food management aspects of dietetics," Chambers said. She credits the sacrifice, support and encouragement of her parents, Joel and Dorothy Chambers, for her opportunity to be one of the first in her family to obtain a college degree.

And then not only did she get a bachelor's degree from WSU, she continued her education and achieved an M.S. from Michigan State in 1969 and a Ph.D. from Ohio State University in 1975.

She was a dietitian in the U.S. Air Force for more than 27 years and reached the rank of colonel before retiring. She then spent six years as an assistant professor of dietetics at Oregon State University.

Chambers said the best thing about her dietetics career was the opportunity to advance to higher levels of responsibility supervising very bright, talented young people, many of whom have become life-long friends.

In retirement, Chambers teamed up with another Air Force retiree to write a book titled, "50 Years of Air Force Dietetics: 1949-1999." Among the changes she has seen in the field are the expanded roles for dietitians beyond the traditional hospitals, schools and other institutions, and the value of nutritional knowledge beyond treating those with medical issues to evidence-based preventative service.

Also in retirement, Chambers and her husband Eugene Robertson have enjoyed small ship cruises in Europe and participated in numerous Road Scholar learning adventures. They have spent time with family and friends in Washington and Arizona because visits had been limited while in the Air Force away from the Northwest.

The couple lives in Corvallis, Ore., where she is an active member of the local military officers club which provides support for OSU ROTC students and local veterans. She also cares for her mother and sister. ■



## Scholarship endowments last forever. You decide where your money goes.

Ask Mildred Jean Chambers. Jean was a registered dietitian her entire working life, and she is passionate about the field. Jean wants to help future dietitians, like those pictured above, make it through school so she set up an endowment that will do just that with scholarships—forever.

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### What is an endowment?

A gift of \$25,000 or more is invested and scholarships awarded from the interest. Typically they are started with cash, IRA rollovers, estate gifts or transfer of stock.

### It's easy. We have people who can help.

Contact Dennis Reed, Development Director

509-358-7864, [dennis.reed@wsu.edu](mailto:dennis.reed@wsu.edu)



## Meet a WSU Spokane Scientist

Dr. Travis Denton says antioxidants found in many fruits and vegetables are superheroes when it comes to protecting your brain from neurological disorders like Alzheimer's, Parkinson's and ALS.

He is investigating an antioxidant-like compound that could repair and activate the brain's natural house-cleaning function, which is dysfunctional in patients with neurological disorders.

Learn more at  
[spokane.wsu.edu](http://spokane.wsu.edu)



Travis Denton, PhD