Our Brain, Ourselves

Clinical changes

MedEd @ PeaceHealth

Dr. SreyRam Kuy
Respect for all

As our country wrestles anew with the direction of national health care, education and social policy, I have found strength in the core values of our institution.

Soon after the November election, OHSU experienced an uptick in hospitalized patients refusing care from providers because of the provider’s race, ethnicity or creed. OHSU President Joe Robertson shared his convictions and those of his leadership team in a university-wide message: “I want to be very clear: we will not honor such patient requests,” Dr. Robertson wrote, in part. “Our job is to care and cure and not to judge. We will treat all regardless of bias or bigotry, but we will not let them impose their values upon us. We must rise above.”

OHSU amplified these anti-discrimination values with the Respect for All campaign, placing posters across campus featuring a sunrise-framed Mt. Hood with a simple, powerful statement of the institution’s commitment to being a safe, respectful and welcoming place for all.

That spirit has continued in the school as we support our students and colleagues threatened by federal anti-immigrant policies and rhetoric and host such speakers as Brian Williams, M.D., F.A.C.S., the African American trauma doctor who was moved to speak out about racism after treating police shot following a peaceful Black Lives Matter protest in Dallas last year. And, in March, when a proposed 18 percent cut to the National Institutes of Health loomed, OHSU Vice President for Research Dan Dorsa and I spoke out on the potential impact to lifesaving biomedical research in an opinion piece picked up by the Portland Business Journal, while faculty and staff organized a letter-writing campaign and joined in the April 22 March for Science.

Equally grounding has been the leadership role in health care reform that OHSU is continuing to play as we thoughtfully engage with our congressional delegation, state lawmakers and national professional organizations around potential changes to the Affordable Care Act. From our Cascades East Family Medicine Residency Program in Klamath Falls to our primary care clinics across Portland, our faculty, trainees and alumni know firsthand the improved access to preventive health care that the ACA has brought.

As we navigate this new era, OHSU and the school are guided by a powerful commitment to improve the health of all Oregonians. It is not a slogan developed for political positioning. It is a statement that defines us and ensures our essential future.

John Hunter, M.D., F.A.C.S.
Interim Dean
Integrating for an Oregon-built health care solution

By Jennifer Smith

Change is the new constant in the world of health care. For OHSU’s clinical mission, big changes are underway to help shape the institution’s academic footprint within a new marketplace. With payment models emphasizing value over volume, a renewed focus on provider wellness (the triple aim “plus one”), and patients wanting better access and cost transparency, OHSU aims to create an Oregon-built solution to serve Oregonians and patients from around the nation.

OHSU is adapting in a number of ways, including nontraditional hiring models and affiliations with other health care organizations. The OHSU Faculty Practice Plan is now the OHSU Practice Plan, for example. The name change reflects an expanding roster of providers employed through the Schools of Medicine and Nursing, including clinical associates—clinicians who focus on patient care and do not engage in the research or education missions. OHSU Partners is the mechanism for managing an affiliated network of clinically-integrated hospitals and clinics. Established in 2015 through a partnership between OHSU and Salem Health, it now includes Tuality Healthcare. OHSU and OHSU Partners signed a non-binding letter of intent to pursue affiliation with Adventist Health, which could further enhance patient access.

Three new buildings on OHSU’s South Waterfront Campus in Portland are coming to life and will help meet OHSU’s goals for expanded access and patient-centered care. The Center for Health & Healing Building 2 (above, left) will offer complex surgery and interventional procedures and will include clinical space for the Knight Cancer Institute.

To the east of CHH Building 2 will be the Gary and Christine Roof Family Pavilion (above, right), where both pediatric and adult traveling patients and their families will find lodging. This will help meet a significant demand for housing close to OHSU for those patients residing in rural Oregon and neighboring states. It is the first guest home ever where Ronald McDonald House Charities will operate both pediatric and adult guest housing.

Just north on S.W. Moody Avenue, past the OHSU/OU Health & Healing Building 2 (above, left) will offer complex surgery and interventional procedures and will include clinical space for the Knight Cancer Institute.

Research, rain or shine

STRIDES

Interim Dean John Hunter (left) and National Institutes of Health Director Francis Collins walk across campus October 24, 2016. Dr. Collins met with OHSU leaders, learned about key research and toured facilities prior to delivering the Mark O. Hatfield Lecture in the evening. A day later, research leaders in the school and beyond gathered at a retreat to begin shaping a vision for the future of science at OHSU. In March, Dr. Hunter joined Dr. Dan Dorsa, OHSU’s senior vice president for research, in opposing proposed federal budget cuts to the National Institutes of Health, which fund much of OHSU’s research and training of next-generation scientists.

OHSU is one of a select group of 21 research institutions participating in SPARK, the largest autism study ever undertaken in the United States. Eric Fombonne, M.D., professor of psychiatry, and Brian O’Roak, Ph.D., assistant professor of molecular and medical genetics, are leading the effort.

Based on results from an international Phase III clinical trial led by OHSU, the drug dupilumab shows promise in reducing symptoms caused by atopic eczema, reports lead author Eric Simpson, M.D., M.C.R., professor of dermatology, in the New England Journal of Medicine.

A study led by Susan Ingram, Ph.D., associate professor of neurosurgery, suggests the development of drugs targeting the endocannabinoid system could effectively treat chronic pain with fewer side effects compared with opioids—in effect, harnessing the medicinal properties of cannabis while minimizing the threat of addiction.
Six NSF fellows! A record

OHSU School of Medicine graduate students received a record six National Science Foundation Graduate Research Fellowships and two honorable mentions, the largest number of awards for OHSU in the last 10 years. Each award provides a $34,000 stipend along with a $12,000 cost of education allowance for tuition and fees for three years. The fellows are Brittany Cummings, Samantha Friedrich, Sally Landefeld, Kylie McPherson, Sydney Weber and Douglas Zeppenfeld.

Spotlight on Klamath Falls

Gov. Kate Brown visited the OHSU Cascades East Family Medicine Residency Program in Klamath Falls Jan. 24 to learn about the impact of Medicaid in rural communities and to help drive home the importance of the Oregon Health Plan given state and federal budget challenges. The governor toured the clinic and met with residents, alumni and staff.

She's a P.A. poet

Onja Halvorson, P.A. student, says she's fascinated by the uniquely vulnerable human environment of the hospital. She published recently on that theme in the literary journal Plume Poetry. Here is an excerpt of her poem, “It’s 4 p.m. in the E.R. and I’m rearranged with a small sadness.”

School unveils new framework for Ph.D. education

T he OHSU School of Medicine is revising its Ph.D. education programs to better prepare aspiring scientists for a changing career landscape.

A committee of graduate faculty, students and postdocs has proposed a new approach that features a number of enhancements: a flexible, individualized curriculum, teams of mentors to better meet student needs and “just-in-time” courses to fulfill evolving student research and skill requirements.

A tailored education plan for each student will include a range of opportunities for acquiring knowledge in a specific research field while also developing core skills in communications, critical thinking, management and more.

The new framework will build on current research strengths at OHSU yet flex to encompass new and emerging areas of study. It will move away from 16 independent Ph.D. programs toward fewer programs, interdisciplinary in nature. Committees will work out additional details over the summer and begin the accreditation process this fall with hopes of welcoming entering students as soon as fall 2019. "Alumni and colleagues tell us the new framework is the first cohort to experience the new curriculum – continue to track with the national mean on the first Step of the United States Medical Licensing Examination,” said Tracy Bumsted, M.D., M.P.H., associate dean for undergraduate medical education, OHSU School of Medicine. “Additionally, the pass rate for first time test-takers is higher than past cohorts, indicating students have gained a solid knowledge base before heading into YOUR M.D.’s clinical experiences.”

Another hallmark of the curriculum is a required scholarly project, where students dive deep into a particular question. Results of these mentored projects are beginning to bear fruit with notable publications in JAMA Oncology and the Journal of Palliative Medicine.

YOUR M.D. curriculum measures up

By Erin Hoover Barnett and Rachel Shafer

The OHSU YOUR M.D. curriculum is now in its third year of implementation. The new curriculum – competency-based and learner-centered – utilizes bold approaches to better prepare physician-leaders for practice in a rapidly changing health care delivery and discovery environment.

The curriculum integrates foundational scientific knowledge and clinical sciences across all years, emphasizing what students accomplish, not the time they log in school. This creates the option for earlier graduation.

“Already, that time independence is paying dividends,” said George Mejicano, M.D., M.S., senior associate dean for education, OHSU School of Medicine. “M.D. student debt levels are decreasing.”

The new curriculum deploys innovative hands-on, team-based learning methods to foster understanding and application of knowledge, while also helping students develop skills in self-assessment, critical thinking and lifelong learning.

Clinical experiences begin midway through the second year in YOUR M.D., rather than at the start of the third year as in most M.D. programs. As a result, students participate in a greater number and variety of clinical experiences by the time they graduate. The additional clinical competency gives students a leg up on residency readiness assessments.

Then there is the built-in flexibility, where required and elective clinical rotations are taken in order of individual interest, rather than group prescription.

“Because of the flexibility, I’ve completed all the shelf exams at this point in my third year,” said M.D. student Amir Abdelli. “This frees up my schedule to do more electives and research for the rest of my clinical years, a major perk.”

Already YOUR M.D. is producing strong outcomes, with students demonstrating the same or higher levels of medical knowledge even though they’re in the classroom less.

For example, third-year M.D. students – the first cohort to experience the new curriculum – continue to track with the national mean on the first Step of the United States Medical Licensing Examination,” said Tracy Bumsted, M.D., M.P.H., associate dean for undergraduate medical education, OHSU School of Medicine. “Additionally, the pass rate for first time test-takers is higher than past cohorts, indicating students have gained a solid knowledge base before heading into YOUR M.D.’s clinical experiences.”

APPLIED KNOWLEDGE

The scholarly project of third-year medical student Sophia Hayes investigated the role of nurse practitioners in administering advance-care planning forms called POLST, Physician Orders for Life-Sustaining Treatment. Her project went on to become an OHSU study she co-authored and published in Journal of Palliative Medicine.
Corridors to community care
Celebrating a decade of medical education in Springfield and Eugene, Oregon.

If you get M.D. students out there, you have a good chance of recruiting them back into the community.

Dr. Tracy Bumsted

“...it’s so different,” Warn said, “because you’re directly with the attending, and that’s just fantastic.”

That direct interaction is something that CMER Director Christine Traver and Medical Director Gary Halvorson, M.D., value as well. They say that students who come through the PeaceHealth system get far more time with an attending than they would in other clinical settings, where medical students are learning next to interns and residents.

CMER began “with a handshake deal” between PeaceHealth and OHSU leaders in 2007. The School of Medicine wanted to expand the size of its medical classes to help address the physician shortage, but that was partly limited by Portland-area hospitals’ ability to precept M.D. students.

The school has another important motivation. “The vast majority of physicians practice not in the tertiary and quaternary environment of an academic health center but in a community, so it’s vital that students experience those outpatient settings,” said Tracy Bumsted, M.D., M.P.H., associate dean for undergraduate medical education, OHSU School of Medicine.

More than 40 physicians at Sacred Heart volunteered their time after the initial call, and now the program has placed students with more than 200 providers affiliated with Sacred Heart Medical Center.

Dr. Halvorson has seen firsthand how influential the Springfield and Eugene clerkships can be, helping students pinpoint their passion and where they want to practice.

“If you get students out there, you have a good chance of recruiting them back into the community,” added Dr. Bumsted. That was true for Katelyn Clark, M.D. ’11 R ’16, who came to RiverBend for several clerkships as a student. She was dead-set against surgery before she experienced it at RiverBend and discovered that – actually – she loved it. Dr. Clark completed her surgical residency at OHSU, all the while staying in touch with her PeaceHealth preceptor, David DeHaas, M.D., F.A.C.S. Now she’s back in the Eugene/Springfield area, working with Dr. DeHaas and other surgeons at Northwest Surgical Specialists and teaching OHSU students.

In fact, seven M.D. and eight P.A. graduates have begun practice in the Eugene area in the last few years, largely due to CMER.

Even Lane County’s medical examiner wants in on training and working with students. Traver gets calls at 7:30 a.m. when the office has a particularly interesting death. “The students report back to us that assisting in an autopsy was an excellent educational experience,” she said.

“Without question, our collaboration with PeaceHealth is a success,” said Dr. Bumsted. “It’s a model for how we create educational affiliations around the state.”

Suzi Steffen

Written by Suzi Steffen, photos by Amiran White
Through nonprofit outreach, Dr. Bill Griesar helps others discover the pleasures of neuroscience.

At 8 a.m. in an eastern Washington elementary school gymnasium, Bill Griesar, Ph.D. ’01, is in a situation that would make anyone else sweat.

Dr. Griesar has brought his group of neuroscience outreach volunteers—undergraduate and graduate students hailing from OHSU, Portland State University and Washington State University Vancouver—to Davenport, Wash., to teach schoolchildren about brains and neuroscience. But he has just discovered that the pipe cleaners used to construct neuron models were nearly used up the day before.

Unfazed, Dr. Griesar immediately concocts a new activity and somehow procures rolls of colored butcher paper from the school. Volunteers from NW Noggin rush to arrange paper on the floor to represent different lobes of the brain. Scott Jones, a fourth-year Ph.D. student in the OHSU School of Medicine’s Behavioral Neuroscience Graduate Program, tapes out an outline of a brain around the paper just as the first classes come into the gym. Dr. Griesar, simultaneously snapping photos, directing students and showing off a model brain, hasn’t stopped grinning.

This isn’t the scene most people picture when thinking of the career of a traditional Ph.D. scientist, but, as Dr. Griesar asked, “What is the traditional career for a Ph.D.?” With the number of Ph.D. graduates who move on to a tenure-track faculty position dropping, graduates are branching out and exploring other career options, some of which offer more flexibility for working parents than traditional academia.

 Called to teach

Dr. Griesar and his husband adopted their oldest son, Dominic, at 14 months old when Dr. Griesar was in the middle of writing his dissertation. Somehow, Dr. Griesar found time to write, working during Dominic’s naps.

“I’d write a little more while my friends held him and showed him around the lab,” he said. The day after Dr. Griesar defended, their second son, a 4-month-old named Jack, joined their family.

“Suddenly I had a doctoral degree and two young boys, so I was not about to take the so-called traditional route,” he said. Instead, he started teaching science as an adjunct at Portland State University and Washington State University Vancouver and fell in love with the classroom – or, in some cases – the gymnasium.

In the gym at Davenport Elementary, students filter in and cluster around different pieces of paper. Dr. Griesar and NW Noggin volunteers explain that the kids are sitting on a brain. (Some take it literally and wrinkle their noses, looking under their feet.) After NW Noggin volunteers explain how brain functions are localized to specific lobes, students draw depictions of what their brain region does on the paper lobes in front of them. Other groups rotate through activity stations in the back of the room.

NW Noggin targets groups of kids who might not otherwise get exposure to hands-on neuroscience. Davenport, population 1,700, is nestled in Washington’s wheat fields, far from the biomedical hubs of Seattle and Portland. More than half its students qualify for free or reduced meals.
Through its outreach, NW Noggin is making sure that students from all demographics are exposed to this field and these sorts of careers at an early age.

Brains + art

NW Noggin began as a conversation between Dr. Griesar and Jeff Leake. Leake, a Portland artist who also works at PSU and WSU Vancouver, and Dr. Griesar were trying to figure out what their children could do for the summer. So they decided to start a volunteer-driven, art-infused neuroscience summer course for middle school students through Multnomah County’s Schools Uniting Neighborhoods program, or SUN.

After planning lessons with students from their PSU and WSU Vancouver classes and using their own children as guinea pigs, Dr. Griesar and Leake found a successful combination.

“No one in that summer SUN program had to attend, and yet we had middle school students back day after day to make art and dissect sheep brains and learn about college and graduate research directly from our volunteers,” said Dr. Griesar.

After seeing how popular art-influenced neuroscience outreach could be, Dr. Griesar and Leake formalized their effort and created the nonprofit Northwest Neuroscience Outreach Group: Growing in Networks, or NW Noggin.

Marrying art and science is part of NW Noggin’s secret sauce. “Arts integration makes learning science personally relevant,” said Dr. Griesar.

“It allows open-ended exploration of scientific concepts, and offers science teachers a broader palette from which they can differentiate their lessons,” added Leake. That successful combination exemplifies the national movement toward STEAM (science, technology, engineering, art and math) education, in which art and design are integrated into traditional STEM curricula.

Now, five years later and thanks in large part to his seemingly limitless enthusiasm, Dr. Griesar estimates that NW Noggin has reached over 12,000 K-12 students. The pipe-cleaner neurons that volunteers build with students have become a hallmark of NW Noggin’s events. These models offer a way for students to conceptualize neuronal structure and understand how neurons function to communicate within the brain. (Plus, they’re an easy way to identify Dr. Griesar in a crowd as he usually has at least one or two in his hands.)

But models aren’t the only thing kids get to handle: NW Noggin events usually feature a real brain for students (and their teachers and parents) to handle. While the squeamish ones shy away, most kids don gloves, hold their noses and wonder at the folds and inner structures of the brains before allowing the next kids in line their turn.

“We’ve definitely tested the longevity of our formalin-fixed specimens!” exclaimed Dr. Griesar.

Presidents, pipe cleaners

On a broader scale, NW Noggin has grown active in science policy. Last October, it was invited to participate in the White House Frontiers Conference in Pittsburgh, Pa., where President Barack Obama encouraged attendees to further U.S. innovation. A highlight of the trip, said Dr. Griesar, was a brief interaction with the president, who spotted the pipe-cleaner neurons and remarked, “I love those!”

Earlier in 2016, Dr. Griesar, Leake and a group of 26 volunteers traveled to Washington, D.C., to meet with the White House Office of Science & Technology Policy, and congressional committees and caucuses. The group discussed why K-12 outreach efforts are important not only to encourage future scientists but also to stoke public appreciation for neuroscience and the value of federal research funding. This fall, NW Noggin hopes to take a larger volunteer group to D.C. to meet with legislators and visit local public schools.

Back in Davenport, volunteers are explaining brain function, answering questions, leading art projects and passing human brains from student to student. “The most rewarding thing about NW Noggin is hearing all the kids’ questions,” said Ph.D. student Scott Jones. “It’s fun to hear what they already know and are excited to learn about.”

After two full days leading sessions that included most of the students in town, the volunteers swap stories over a late lunch. As they compile a list of the questions they received from students, a favorite emerges: “Can you come back next year?”

For more information about NW Noggin, including volunteer accounts and photos of previous outreach events, visit nwogg.org. Rebecca Hood runs experiments as a fourth-year behavioral neuroscience Ph.D. student at OHSU, volunteers for NW Noggin and considers any weekend that includes a campfire a weekend well spent.

Busting brain myths

Five common myths about the brain — and the truth behind them

You only use 10 percent of your brain.

False! Techniques that allow scientists to see brain activity like positron emission tomography (PET) or functional magnetic resonance imaging (fMRI) show that we use every part of our brains throughout the day.

People can be right-brained or left-brained.

While certain specific tasks, like understanding syllables in words, do involve one side of the brain more than the other, both hemispheres are active during complex tasks. People who are creative or logical don’t favor one hemisphere over the other.

After a certain age, you never produce more brain cells.

Until recently, it was believed that neurons, the cells the brain uses to send signals, stopped being made in adult brains. However, scientists have discovered that adult brains can create new cells, in certain brain regions, like those associated with making memories.

In rats, exercise seems to help stimulate the production of new neurons.

The bigger the brain, the smarter you are.

If this were true, elephants probably would have taken over the world by now. A better measure is comparing brain size to body size: human brains take up a lot more of our body than a whale’s.

Learning something new creates a new wrinkle in your brain.

The folds and wrinkles in your brain, called gyri and sulci, do help with intelligence, but they’re formed before you’re even born. If the brain’s surface was spread out, it would be the size of a pillowcase.

After learning some new skill, though, the folds in that region grow, so the folds are needed to help fit our brain into our skulls. When you learn something new, neurons make new connections and form new pathways, but those changes are so small you’d need a very powerful microscope to see them.

- R.H.
A strong neuroscience program is about to get stronger. Meet leaders and researchers at the forefront.

By Rachel Shafer

Since hiring its first neuroanatomist in 1916, OHSU has steadily grown its neuroscience and clinical care programs, putting Oregon on the neuro map. One shining example: the renowned, 30-year-old Vollum Institute, which continues to make worldwide discoveries on the fundamental biology of the brain.

Today, neuroscience at OHSU is poised for dramatic growth, driven by emerging areas of research strength in the fields of neurodevelopment and neurodegeneration and a planned investment of at least $100 million.

Led by long-time campus leaders and new luminaries, the university is doubling down on its quest: contribute in a major way to understanding the mystery between our ears and, above all, improve brain health.

Leadership

On the faculty since 1982, Dennis Bourdette, M.D., F.A.A.N., chairs neurology in the OHSU School of Medicine. He is nationally recognized for important discoveries in multiple sclerosis, directing a team dedicated to curing and treating MS.

Last year, OHSU selected neurobiologist Marc Freeman, Ph.D., to serve as the latest director of the Vollum Institute. A former Howard Hughes Medical Institute investigator, Dr. Freeman’s lab first described the gene responsible for driving the degeneration of axons after brain injury.

On the faculty since 1981, George Keepers, M.D., chairs psychiatry in the OHSU School of Medicine. He was instrumental in establishing Oregon’s first dedicated emergency psychiatric facility, the Unity Center for Behavioral Health.

The school recruited Bita Moghaddam, Ph.D., from the University of Pittsburgh last year to chair behavioral neuroscience. Dr. Moghaddam has made significant contributions to the study of the cellular basis of cognitive constructs critical to psychiatric disorders, such as schizophrenia.

On the faculty since 2000, Nathan Selden, M.D., Ph.D., chairs neurological surgery in the OHSU School of Medicine. He performed the first transplantation of neuronal stem cells in a human patient and built neurosurgery’s graduate medical education program into a national model.

This group of five will guide OHSU’s growth and investment in neuroscience. First up, an example of promising research in neurodevelopment.

Adolescent ABCs

Can you understand the mind of a teenager?

That rhetorical question posed by exasperated adults across the ages may actually get answered, thanks to a large, groundbreaking study dubbed ABCD or Adolescent Brain Cognitive Development. Established in 2015, it’s an NIH-led examination of more than 10,000 adolescents across the U.S. The unprecedented 10-year effort is tracking the biological and behavioral development of youth ages 9 through young adulthood.

Hundreds of scientists applied to run the study. NIH tapped OHSU to be one of 21 research sites nationally. The OHSU site is co-led by Bonnie Nagel, Ph.D., associate professor of psychiatry and behavioral neuroscience, OHSU School of Medicine.

Teenagers, science tells us, are prone to depression and high-risk, sensation-seeking behaviors. Why do some develop poor outcomes while others don’t? What is a normal teenage brain?

Since her earliest days in science, Dr. Nagel has studied adolescent brain development. “It’s stunning how little we know about this time of extraordinary growth,” she said. “It’s difficult to understand pathology if we don’t know a baseline for normal development. The size and scope of this study will change that.”

Dr. Nagel’s own 8-year-old daughter will be well into her teens by the time the study concludes. By then, Dr. Nagel hopes answers about risk and resilience can transform treatments, helping adolescents chart a positive path to adulthood. It’s just one example of OHSU researchers pushing the frontier of neurodevelopment knowledge.

“A very open question”

On the other side of the spectrum is neurodegeneration. Here, too, a growing body of OHSU research is making its mark.

In the Jungers Center for Neurosciences Research, scientists pursue translational research with a laser focus on disease.

Over the last decade, the center has hired promising new faculty like clinician-scientist Vivek Unni, M.D., Ph.D., assistant professor of neurology, OHSU School of Medicine.

Since his medical school days at Columbia University, Dr. Unni has enjoyed caring for older people. When he’s not in clinic seeing patients with Parkinson’s disease and other movement disorders, he’s studying neurons in his Jungers lab.

Dr. Unni and his team have already made a name for themselves developing a one-of-a-kind method that allows scientists to longitudinally study individual neurons in a Parkinson’s disease mouse model, greatly condensing the time it takes to observe the disease.

Dr. Nagel hopes answers about risk and resilience can transform treatments, helping adolescents chart a positive path to adulthood.

Now, he and his team are boring into a key question: Why does a certain protein called alpha-synuclein clump or aggregate during the onset of Parkinson’s or other neurodegenerative disorders?

“Is it damaging or protecting the cell? Is it neutral?” asked Dr. Unni. “It might be critical to the disease, but we don’t know. It’s still a very open question.”

Any new treatment strategy, he says, could easily make people worse rather than better if the basic biology isn’t understood. So although he wishes for a quickie drug to help his patients, Dr. Unni devotes the time it takes to test emerging knowledge at the bench, in order to maximize the chances of a new drug actually working.

“I love thinking about the brain,” said Dr. Unni. “And I love the opportunity to use that knowledge to make things better for people.”

Dr. Bonnie Nagel in the control room at OHSU’s Advanced Imaging Research Center. Not only is Dr. Nagel a neuroscientist, but she’s a pediatric neuropsychologist who sees teens for diagnostic evaluations at OHSU Doernbecher Children’s Hospital. That, she says, “keeps my research very grounded.”
2017 Alumni Award winners

By Amanda Waldroupe

SREYRAM KUY, M.D. ’05, M.H.S.

When Dr. SreyRam Kuy was two years old, rocket-propelled grenades struck the refugee camp she and her family were living in after fleeing Cambodia’s “killing fields” in 1980. Her head was lacerated by shrapnel; her left ear was nearly torn off. Her mother suffered abdominal injuries so severe that doctors did not expect her to survive. A Red Cross doctor attended to the young girl first, stitching her ear back to her head and removing shrapnel. Then they turned to her mother and saved her life, too.

Dr. Kuy was too young to remember the event, but her mother regularly told her stories about their family’s survival during the Cambodian Genocide, which Dr. Kuy later compiled into a book, The Heart of a Tiger. “I would not be alive today if it were not for that surgeon who operated on me,” Dr. Kuy said. “My mother would say that you have every reason to be grateful, so make sure your life serves some purpose and helps others.”

After earning her medical degree from the OHSU School of Medicine in 2005, Dr. Kuy completed a general surgery residency at the University of Texas Health Sciences Center and the Medical College of Wisconsin. But it was earning a master’s degree in health policy, public health and outcomes research as a Robert Wood Johnson clinical scholar at Yale University’s School of Medicine that set the tone for her career, she said.

In addition to writing The Heart of a Tiger, Dr. Kuy is widely published and, in 2016, received the Ford Family Foundation’s Gerald E. Bruce Community Service Award, and, in 2017, was named a Presidential Leadership Scholar.

Today, Dr. Kuy is chief medical officer for the state of Louisiana. She oversees a Medicaid program that serves 1.6 million patients and administers health programs and medical benefits – from preventive care to surgical services – on behalf of pregnant women, children, the disabled and indigent in a $10.7 billion health system.

Louisiana chose to expand Medicaid, which led to more than 400,000 residents gaining health insurance since July 2016. Dr. Kuy developed a set of performance metrics to understand how health care access directly impacted the lives of its newest members.

The metrics she developed found that, within seven months of Medicaid expansion, 57,000 adults received preventive care or new patient services; 5,700 women underwent breast cancer screenings; and 3,600 adults were diagnosed with, and started receiving treatment for, hypertension. Another 6,300 adults received colon cancer screenings, and polyps were removed from 1,800 of those patients.

“Those are 1,800 people who aren’t going to be showing up in my operating room down the road with colon cancer,” she said. “That is a huge impact on people’s lives.”

Dr. Kuy also oversaw the first state-led Zika prevention strategy in the United States for pregnant women, which involved creating a robust public outreach campaign. So far, there have been no local transmissions of the Zika virus in Louisiana.

Her experiences overseeing Louisiana’s Medicaid program have shown her that “there is a huge population of people who are starving for health care access,” she said, which motivates her to continually work to improve quality and access to health care.

My mother would say that you have every reason to be grateful, so make sure your life serves some purpose and helps others.

Dr. SreyRam Kuy

OHSU EFFECT

As a medical student at OHSU, SreyRam Kuy, M.D. ’05, M.H.S., says she found inspiration in many mentors and teachers. She credits Kevin Billingsley, M.D. R ’96, and John Hunter, M.D., with igniting her passion for surgery, and David Cutsforth, M.D. ’73, and David Grube, M.D. ’73, for instilling a deep sense of service with compassion.
Drs. John and Betty Thompson speak with effusive fondness about the five mission trips they made to the Kijabe Medical Center in Kenya between 1998 and 2002.

Both had retired by then – John from 22 years of orthopedic surgery and Betty from 26 years of teaching in the OHSU School of Medicine, had a similar experience six years earlier. In 2005, she began prescribing hormones for a transgender patient who had been buying hormones and silicone injections off the street. It was a safer alternative, she knew, applying knowledge she'd gained while working as a volunteer medical student at a free clinic run by the University of California, San Francisco.

“...thinking of Dr. Koler’s words, I could see the promise in shifting my clinical practice to support transgender patients.”

The program, among the first of its kind in Oregon, recruited a plastic surgeon who specializes in transgender surgery and expanded the number of specialists and primary care providers who see transgender patients. Amy Penkin, the program’s director, has given over a hundred educational trainings to over 2,000 OHSU staff. Transgender health care is now part of the curricula for medical and nursing students.

By Amanda Waldroupe

In 2011, a transgender man came to the office of Juliana Hansen, M.D. R ‘99, seeking a surgeon to perform “top surgery” – removing his breasts. Dr. Hansen never considered refusing him.

The professor of surgery, OHSU School of Medicine, and chief of OHSU’s Division of Plastic and Reconstructive Surgery, reviewed the literature on top surgery and found that it was not very different from reconstructive surgeries she’d performed for breast cancer survivors.

“I wasn’t doing anything I had never done before – I just had to think about it a little bit differently,” Dr. Hansen said.

Christina Milano, M.D. R ‘08, associate professor of family medicine, OHSU School of Medicine, had a similar experience six years earlier. In 2005, she began prescribing hormones for a transgender patient who had been buying hormones and silicone injections off the street. It was a safer alternative, she knew, applying knowledge she’d gained while working as a volunteer medical student at a free clinic run by the University of California, San Francisco.

Both physicians are motivated by the expanding need for medical services among Oregon’s transgender and gender-nonconforming community, as well as the knowledge that the services they provide profoundly transform their patients’ lives.

“When you hear from people that you’ve helped change their life in a positive way, that makes for a really, really good day.”

Dr. Hansen said.

A dozen OHSU physicians and staff, including Dr. Milano, began meeting regularly in 2012 to discuss how to better serve transgender patients. Eventually, the group proposed creating the Transgender Health Program, which launched in 2015 to provide well-coordinated, patient-centered care to transgender patients, as well as train OHSU staff, students and providers.

The program, among the first of its kind in Oregon, recruited a plastic surgeon who specializes in transgender surgery and expanded the number of specialists and primary care providers who see transgender patients. Amy Penkin, the program’s director, has given over a hundred educational trainings to over 2,000 OHSU staff. Transgender health care is now part of the curricula for medical and nursing students.

Dr. Milano coaches providers on providing hormone therapy and supervises residents and medical students in clinical and hospital settings.

Over 100 patients now receive surgery every year, and Dr. Hansen helps train 12 surgery residents each year in performing top surgeries and other procedures.

“One every one of our residents is getting trained extensively on how to do these operations,” Dr. Hansen said. “There aren’t that many training programs as comprehensive as ours. Their experience is unique and exceptional.”

Ultimately, Dr. Milano wants to demystify transgender care. “Unfortunately, this realm of care has historically been exoticized and fetishized. The care of transgender individuals is no different from the care we provide to any patient – tailored to the individual, grounded in best practices and aimed toward great outcomes.”
Where do Ph.D. graduates go after school?

By Rachel Shafter

The school’s Graduate Studies Office undertook a rigorous review of 424 Ph.D. graduates from the last 10 years, compiling its first-ever database of graduate information.

Earlier this spring, the office released outcomes. Within 10 years, all graduates have transitioned out of postdoctoral positions. (See figure below.) While there are no clear trends in professional choice at the one-year mark – academic versus industry versus other careers – it’s notable that 10 years after graduation, 40 percent of Class of 2007 graduates have accepted tenure-track faculty positions.

“We’re pleasantly surprised to see this, and it demonstrates the strength of our Ph.D. programs in preparing students for a spectrum of professional careers, including highly-competitive faculty positions,” said Allison Fryer, Ph.D., associate dean for graduate studies, OHSU School of Medicine.

The study found that 22 percent of graduates take postdoctoral positions within OHSU. Another 40 percent accept postdoctoral positions around the world – including at prestigious universities – underscoring the global reach of the school’s Ph.D. graduates. (See figure above.)

Five years after graduation, 35 percent of Ph.D. graduates are employed in science positions outside of academia. Graduates are employed by 121 unique industry employers; of those, seven have been started by OHSU Ph.D. graduates, including the Tel Aviv-based smartphone diagnostics company, MobileDTY. Contact somgrad@ohsu.edu for questions and full report.

The Big Picture

Within 10 years, all graduates transition out of postdoctoral positions, and 40 percent become tenure-track faculty. Each horizontal bar equals 100 percent.

Postdoctoral Employers of Ph.D. Graduates

This figure doesn’t represent the 22 percent of graduates who took a postdoctoral position at OHSU.

Helping graduate students soar

This spring, the School of Medicine Alumni Association increased support to the school’s graduate students in the form of monetary travel awards through the Graduate Student Organization. The new program reimburses some or all student travel costs for attending scholarly events.

“The opportunity to present at a conference is a vital experience to developing academic scientists,” said graduate student Lilly King. “SMAA-sponsord travel grants allow students to attend conferences that otherwise might have been out of reach.”

Scoping out a mystery

Earlier this year, Bridges staff came across this photo in the OHSU Digital Archives. The only archival clue about this studious group was also rather academic: “Black and white photograph of two medical students operating a microscope while one observes, date: 1960?”

We wondered, “Who are these students? What are they doing now?” Help us improve the historical record. OHSU Historical Collections and Archives grows through the generous donations of artifacts by faculty, current and former staff and alumni. If you have information about this photo or have materials that may be of historical significance, please contact archives staff at bhcare@ohsu.edu or 503-494-5587.

Ph.D.s represent on Alumni Council

To better serve the school’s graduate alumni, the School of Medicine Alumni Council has increased its own Ph.D. representation. Four graduates of the school’s Ph.D. and postdoctoral programs – including one member who travels from Eugene to Portland-based council meetings – now help the council define and implement outreach programs to graduate students and Ph.D. alumni.

Norah Verhout, Ph.D. ’08 (at left), Jackie Wizs, Ph.D. ’10 (at right), Annie Powell, Ph.D. ’10, and Abby Dotson, Ph.D. F ’16 (at center), are joined by two Ph.D. candidates in the school and a representative of OHSU’s postdoctoral program.

OHSU CME on the Oregon Coast

To better serve 15 providers in the North Bend/Coes Bay area, the school’s Division of Continuing Professional Development recently piloted a remote CME session. Participants at Bay Area Hospital viewed a live-stream of the Mental Health for Primary Care Conference held March 17 in Portland, saving coastal providers significant time and travel costs.

Pay it forward

Dr. Grossenbacher, M.D. ’64, remembers his medical school days as some of the hardest but also the most enjoyable of his life. In order to support his studies, he lived wherever he could, he says, even if that meant sleeping in his car for a period of time. In 2014, Dr. Grossenbacher purchased property on Marguam Hill and now provides free housing to grateful M.D. students. “It’s an incredible investment in our future,” said fourth-year M.D. student Ishan Patel.
**In memoriam**

John Belknap, Ph.D., died February 22, 2017. Dr. Belknap was a professor of behavioral neuroscience and a senior research career scientist at the VA Portland Health Care System.

Cynthia Ferrell, M.D. R ’96, of Newberg, Ore., died February 24, 2017, at age 50. Dr. Ferrell was a professor of pediatrics and director of the pediatrics residency program.

George Barton, M.D. ’56, of Vancouver, Wash., died October 15, 2016, at age 86.

John Blanchard, M.D. ’50, of Lake Oswego, Ore., died October 24, 2016, at age 97.

Cathleen Caton, M.D. ’74, of Los Altos, Calif., died November 4, 2016, at age 68.

Clyde Culp, M.D. ’43, of Rochester, Minn., died February 1, 2017, at age 97.

Jerry Fox, M.D. ’68, of Bakersfield, Calif., died December 19, 2016, at age 75.

Kevin Gander, M.D. ’96, of Palos Hills, Ill., died November 24, 2016, at age 51.

Daniel Gehhardt, M.D. ’70, of Bozeman, Mont., died November 8, 2016, at age 73.

Crittenden Huston, M.D. ’53, of Bend, Ore., died January 14, 2017, at age 91.

Stuart Leafstedt, M.D. R ’68, of San Antonio, Texas, died December 7, 2016, at age 79.

Jaroslav Nemec, M.D. R ’78, of Clackamas, Ore., died December 13, 2016, at age 90.

David Pokorny, M.D. R ’82, of Portland, Ore., died January 31, 2017, at age 70.


Leonard Silvers, M.D. ’53, of Newberg, Ore., died December 22, 2016, at age 90.


In memoriam is also online at www.ohsu.edu/alumni.

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**Class notes**

**1970s**

- In January, Valerie Clappison, M.D. ’77 R ’81, gave remarks at the opening of the Unity Center for Behavioral Health, Portland's first comprehensive care center for people facing a mental health crisis.

  Science writer Thomas Hager, M.S. ’78, wrote, “I received the American Chemical Society's highest writing honor, the James T. Grady–James H. Stack Award for Interpreting Chemistry for the Public, at the group's national meeting in San Francisco.”

**1980s**

- Mark Crislip, M.D. ’83, is a practicing infectious disease specialist and former chief of infectious diseases at Legacy Health in Portland, Ore. Dr. Crislip produces four podcasts, including the award-winning QuackCast. He is a co-founder and the current president of the Society for Science-Based Medicine.

- Joanna (Helm) Cummings, M.S. ’14, R.D., wrote, “I am working in Vietnam, Lao PDR, as the country coordinator and instructor for the Lao-American Nutrition Institute. These students will be the first dietitians in Lao, a low-income country with childhood malnutrition affecting more than 35 percent of the population.”

**1990s**

- Leanne Chrisman-Khawam, M.D. ’93, M.Ed., wrote, “I recently became director of transformational care curriculum at Ohio University Heritage College of Osteopathic Medicine. Thanks to the wonderful Department of Family Medicine and my well-rounded education at OHSU for preparing me for such exciting challenges in medical education.”

- W. William Lensch, Ph.D. ’92, wrote, “At the beginning of the year, I was delighted to take on a new professional role as chief of staff of Harvard Medical School. I am putting the lessons that I learned on Marquam Hill to good use here in Boston. Sending very best wishes to my OHSU friends and colleagues!”

**2000s**

- Peter Embi, M.D. R ’02, M.S. ’02, was named president and chief executive officer of Regenstrief Institute, in Indianapolis, Ind.

- M. William Lensch, Ph.D. ’02, wrote, “At the beginning of the year, I was delighted to take on a new professional role as chief of staff of Harvard Medical School. I am putting the lessons that I learned on Marquam Hill to good use here in Boston. Sending very best wishes to my OHSU friends and colleagues!”

- J. Stone Doggett, M.D. F ’09, wrote, “This past year, our team at the Portland VA Research Foundation Experimental Chemotherapy Lab, along with our colleagues from Yale, published a paper in The Journal of Experimental Medicine showing that a combination of one of our drugs, combined with atovaquone, cures babesiosis in immunocompromised mice.”

  The lab of Jarrad Scarlett, M.D. ’99, Ph.D. ’99 R ’12, at the University of Washington, described in Nature Medicine a novel therapeutic pathway involving the brain that increases glucose clearance from the bloodstream.

**2010s**

- Jennifer Brewer, M.D. ’10 completed an integrated obstetrics and gynecology residency in Phoenix, Ariz., and now practices in Stayton, Ore. “We have a beautiful birth center, and we can provide a personal touch because we are a smaller place,” she said. “I have two children, ages three and one.”

- Shoshana Ungerleider, M.D. ’10, practices internal medicine at California Pacific Medical Center in San Francisco. Dr. Ungerleider was on the team that created “Extremis,” a documentary film on end-of-life care in the intensive care unit, which received a 2017 Oscar nomination for “Best Documentary Short Subject.”

  Following a postdoc in neurology at OHSU, Kateri Spinelli, Ph.D. ’12, took a position last year as a scientific publications writer at Providence Health & Services in Portland, Ore.
HELP US TAKE ON THE IMPOSSIBLE

OHSU has a long history of tackling the toughest questions and the biggest challenges—and delivering. Putting the power of philanthropy behind bold ideas, we can transform human health by matching passionate individuals with an inspiring vision.

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