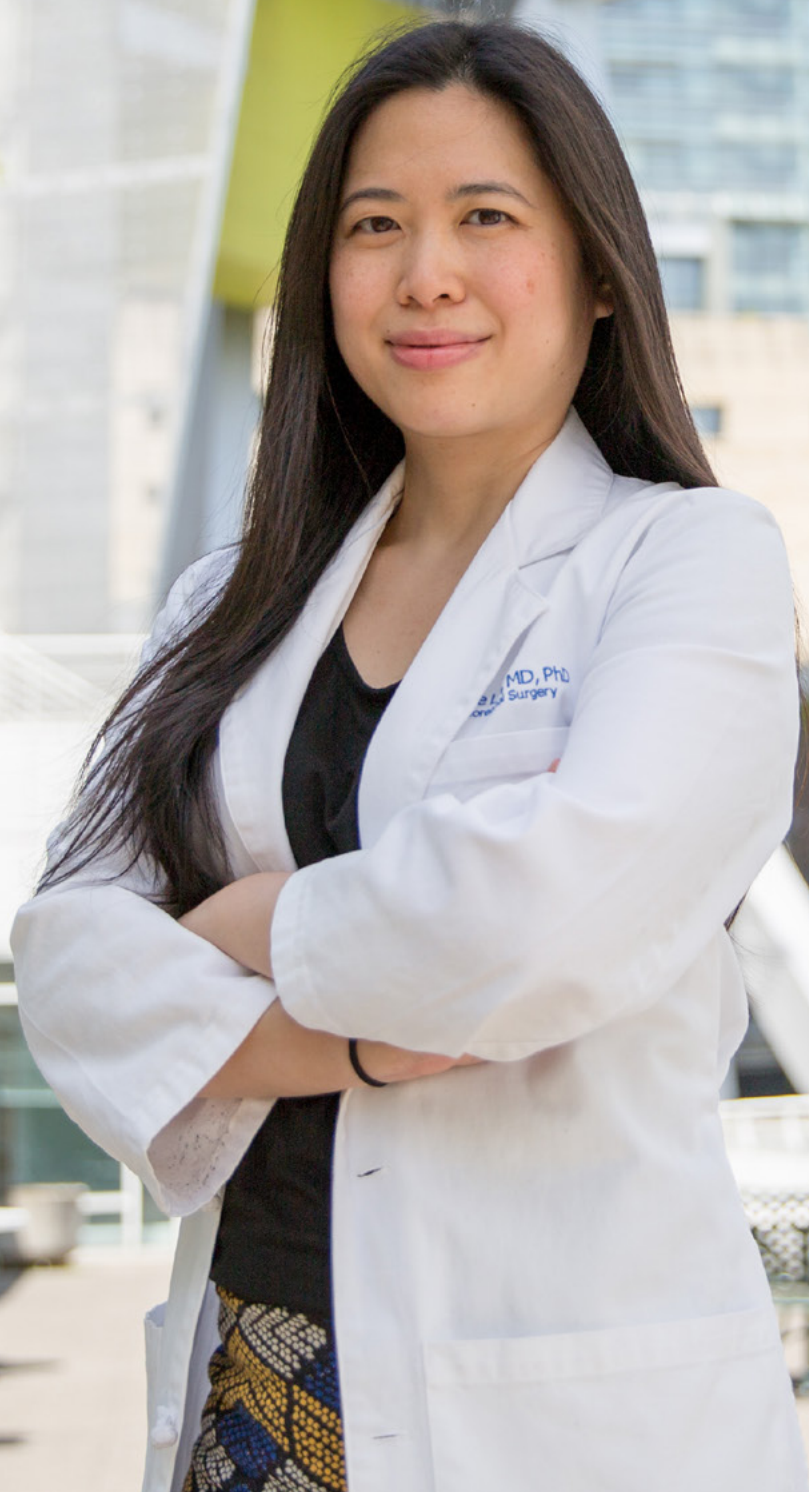


ONWARD



SUMMER 2018 /// A publication for friends and supporters of Oregon Health & Science University

**GREAT MINDS
CHOOSE OHSU**



On the cover: Phoebe Lin, M.D., Ph.D., associate professor of ophthalmology and a research scientist at the OHSU Casey Eye Institute.

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ONWARD

THE OHSU FOUNDATION MAGAZINE
SUMMER 2018

Editor: Susie Frank
Designer: Erin Putnam
Contributor: Todd Murphy
Photos: Aaron Bieleck, EdCOMM (page 3)
Steve Hambuchen (pages 4, 6, 12, 22)
Sarah Jenks (cover, pages 4, 16, 18)
John Valls (pages 4, 9, 11, 15, 21, 25, 27)

Send questions and comments to:
Susie Frank
franksu@ohsu.edu
OHSU Foundation
1121 SW Salmon Street, Suite 100
Portland, OR 97205

Welcome to **ONWARD**

If you are reading this magazine, there is a good chance you have had a memorable — maybe even life-changing — encounter with someone at OHSU. An astute physician. An inspiring professor. A brilliant scientist. OHSU is filled with exceptional people whose work is transforming lives.

As OHSU has grown in both size and stature, donors like you have made it possible for us to recruit even more truly exceptional people to our institution, and to set them free to achieve great things. In this edition of *ONWARD*, we put the spotlight on 11 people who could have gone anywhere, but chose to pursue their dreams at OHSU.





This “could have gone anywhere” theme also applies to our leadership. For nearly 40 years, OHSU President Joe Robertson, M.D., M.B.A., has devoted his professional life to OHSU. A prominent retinal surgeon, he could have left OHSU at many stages of his career, yet he stayed, and led the Casey Eye Institute, the School of Medicine and — for nearly 12 years — the entire university.

On July 31, Dr. Robertson will transition out of his role as president and we will welcome a new leader, Danny Jacobs, M.D., M.P.H., F.A.C.S.

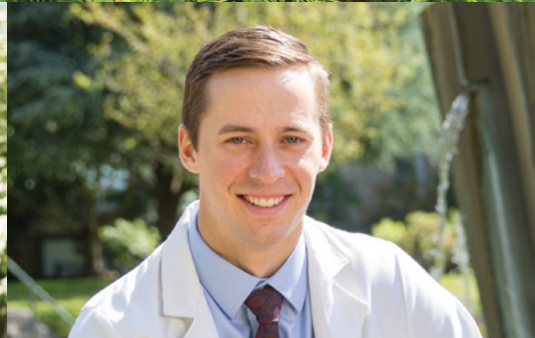
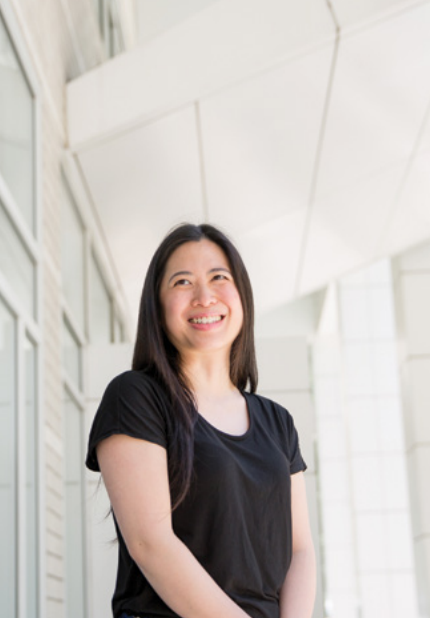
Dr. Jacobs is an accomplished surgeon and executive with a distinguished resume. An Arkansas native, he comes to OHSU from Texas, where he is executive vice president, provost and dean of the School of Medicine at

the University of Texas Medical Branch. He previously has held faculty appointments at prominent universities such as Harvard and Duke. He, too, is a prized leader elsewhere, yet chose to come to OHSU. We look forward to introducing you to Dr. Jacobs more fully in our next issue of *ONWARD* magazine this fall.

Thank you for all you do to help make OHSU such a remarkable, dynamic place.

Rebecca Auman
Interim President, OHSU Foundation





COULD HAVE GONE ANYWHERE, CHOSE OHSU

They arrived here from as far as Saudi Arabia and Sydney, Australia, each driven by a desire to achieve something important. These are the accomplished scientists, promising students and leading clinicians who left behind the comforts of home or more prestigious institutions because they were convinced that they could do their best work at OHSU. Here, according to each of them, is why.

SHARE THEIR STORIES AT:

OnwardOHSU.org/GreatMinds



Bertassoni outside
the Joseph E.
Robertson, Jr
Collaborative Life
Sciences Building
on the South
Waterfront.

“I’ve been interested in tissue regeneration ever since dental school. And then I got excited about the idea of generating complex tissue and organs in the lab. Right now, one of my lab’s biggest goals is to be able to engineer a fully functional organ that can be implanted in a patient and save their life.

“We are getting closer every day. We can print virtually every type of cell with 3D bioprinters in my lab. To bioprint a beating heart is much harder, obviously, but we have cleared a big obstacle. My team at University of Sydney and Harvard was one of the first to bioprint fully functioning blood vessels, which are necessary for any organ to survive.

“My lab is also working with the Cancer Early Detection Advanced Research Center at the Knight Cancer Institute to make living models that will help find the cure for cancers, such as

leukemia and prostate.

“Why did I come to OHSU? Many of the other places I considered — brand name places — they had a sense of stagnation. OHSU was the only place where they were clearly expanding. They had a brand new campus. They had just raised a billion dollars for cancer research. It was refreshing. OHSU was the only place where I got that sense of forward movement.

“One of the big draws, too, was Jack Ferracane at the School of Dentistry. He recruited me to expand the research program here. He has pioneered a number of great things in our field. It was the place to get the right mentorship.”

“Here at OHSU we love the big challenges. We are here to do the hard work, ask the biggest questions. We aren’t just doing this because it’s cool technology. We want to save lives.”



Here at OHSU we love the big challenges. We are here to do the hard work, ask the biggest questions. We aren’t just doing this because it’s cool technology. We want to save lives.



Luiz Bertassoni, D.D.S., Ph.D., is an international pioneer in bioprinting, where scientists use 3D printers to create or “print” human tissue. He earned a D.D.S. from Pontifical Catholic University of Parana in Brazil, a Ph.D. in biomaterials and bioengineering from the University of Sydney, and two postdoctoral degrees from the University of California San Francisco and the Harvard-MIT Division of Health Sciences and Technology. Bertassoni is an assistant professor in the OHSU School of Dentistry, and holds appointments at the OHSU Center for Regenerative Medicine and the Department of Biomedical Engineering in the OHSU School of Medicine.

“What I teach students is: reality is not reality. Reality is what your brain makes of the inputs it receives. The world we know is actually a novel integration and inference of the incoming information.

“Humans are different from many animals in that our vision dominates our attention and how we think about the world. For other animals it may be smell or the touch of a whisker. For us, when we see a flashing light or something of interest, we immediately move our eyes in that direction. That’s not true of all animals.

“My research is focused on understanding visual processing within the brain. I am working toward the day when it may be possible to selectively activate different modules of the brain so that people who have lost their vision may see.

“One of the things that brought me to OHSU is the large colony of macaque monkeys at the

Oregon National Primate Research Center. Using advanced imaging techniques, we are mapping their brains and learning how the brain processes senses, including vision and touch, to guide motor skills and even influence emotions. They make good models for human behavior and disease.

“My team is also interested in understanding how the structure of the brain influences and even dictates behavior. Not just in perception and movement, but also in cognition. These are captivating questions.

“Philanthropic support is enormously important. The NIH (National Institutes of Health) system is where I get most of my funding, but it’s not enough to explore novel directions. Private foundation support freed me up to do something that was more risky, but offered high pay-off. It’s taken a combination of NIH support and private funding for me to really blossom.”



I am working toward the day when it may be possible to selectively activate different modules of the brain so that people who have lost their vision may see.



Anna Wang Roe, Ph.D., is a professor in the Division of Neuroscience at the Oregon National Primate Research Center and in the Department of Behavioral Neuroscience in the OHSU School of Medicine. Her cutting-edge research explores how the brain processes visual and other sensory information. Roe splits her time between her OHSU lab and Zhejiang University in Hangzhou, China, where she directs the Interdisciplinary Institute of Neuroscience and Technology. She arrived at OHSU in 2015 after 12 years at Vanderbilt University and seven years at Yale University. She is an awardee of the Sloan, Whitehall and Packard foundation fellowships and is a Fellow of the American Association for the Advancement of Science.

Roe at the Oregon
National Primate
Research Center in
Beaverton.



“As I was considering OHSU, I thought: I have one big challenge left in me. And I would love to find a place that matches my high expectations for what pediatric palliative care can be. The Cambia Health Foundation Endowed Chair of Pediatric Palliative Care at OHSU made it very clear that OHSU took this discipline seriously, and I’m honored to be the first recipient.

“Pediatric palliative care was already well established and deeply respected at OHSU — so it was not a question of having to build something from scratch.

“A lot of fine hospitals don’t recognize what is unique and imperative about pediatric palliative care, but OHSU and the Bridges Pediatric Palliative Care team definitely do.

“Pediatric palliative care for children is unique. When someone dies at age 90, you have a chance of saying, ‘This is a life well-lived.’ When you are talking about someone dying at nine days old, or nine months old or nine years old ... you have to sit with the injustice of that.

“A lot of physicians — their metric for success is cure. My metric for success is to try to support a family through an impossible situation.

“I want my patients to know that they’re not alone. We always hope for a cure. But if that’s not going to happen, our task is to figure out what else can we hope for.

“Sometimes the hope is as simple as staying at home. Other times a child will want to have one great last life experience. We listen to those hopes and do what we can to help fulfill them.”

“When someone dies at age 90, you have a chance of saying, ‘This is a life well-lived.’ When you are talking about someone dying at nine days old, or nine months old or nine years old...you have to sit with the injustice of that.

Bob Macauley, M.D., FAAP, FAAHPM, is the medical director of the Doernbecher Bridges Pediatric Palliative Care Program. He is also the Cambia Health Foundation Endowed Chair in Pediatric Palliative Care at OHSU. Macauley earned his medical degree from the Yale University School of Medicine and completed a pediatric residency at Johns Hopkins University. He spent several years in pediatrics in hospitals in Connecticut and Uganda, then spent 15 years at the University of Vermont, where he directed the Department of Clinical Ethics and the Pediatric Advanced Care Team until he came to OHSU in 2017.

Macauley is chair of the American Academy of Pediatrics Committee on Bioethics and is a past member of the Board of Directors of the American Academy of Hospice and Palliative Medicine. He also is an Episcopal priest, holding master's degrees in theology from Oxford and Yale.

Macauley in the
Kohler Pavilion.



Bin Ali outside the
OHSU School of Nursing.



“ chose the Ph.D. program at the OHSU School of Nursing because the faculty was very engaged in research.

“I became interested in research early in my career, working as a nurse in Saudi Arabia. I completed my bachelor’s degree in Saudi Arabia and then worked for four years as a bedside nurse in an intensive care unit there.

“While working as a nurse, I became interested in how things were done, and why. I was intrigued by the complexity of CRRT (continuous renal replacement therapy) and the controversy surrounding it.

“Patients with acute kidney injury often need CRRT, and it can be life-saving. I led some trainings that produced good results. And that led me to want to formalize that with a research study. My long-term goal is that my research can help ICUs around the world improve CRRT.

“My mom didn’t finish elementary school, but she made sure that my siblings and I received

a good education. She was very enthusiastic about education as a way to be independent. I come from a traditional Saudi Arabian family — a woman does not generally travel without being accompanied by a male relative. When it was time for me to consider graduate school in the U.S., my father was very supportive of me, but he was too old to accompany me. So he gave me permission to travel with my mother. She doesn’t speak English, but having her with me was very encouraging.

“At first, she was not happy with nursing. She wanted me to get married and work as a teacher. But eventually she said, ‘This is your plan, this is your life. I don’t want to block it.’ I will always be grateful to her, how she believed in me.

“I will return to Saudi Arabia after I complete my degree. I look forward to serving my people and advancing nursing care and education guided by research. There are so many challenges — so much to be done!”



I look forward to serving my people and advancing nursing care and education guided by research.
There are so many challenges — so much to be done!



Wafaa Bin Ali, M.S.N., R.N., entered the OHSU School of Nursing’s Ph.D. program in 2012. She received her master’s degree in nursing at George Mason University in Fairfax, Va., in 2004. She is continuing her research on CRRT at the OHSU School of Nursing and her committee chair is Dr. Dena Hassounah. She is scheduled to complete her Ph.D. requirements in December. Bin Ali, a native of Saudi Arabia, earned a scholarship to pursue her Ph.D. from King Saud bin Abdulaziz University for Health Science in Jeddah, Saudi Arabia, where she remains on the faculty.

“When I began talking to leaders at CEDAR [the OHSU Knight Cancer Institute Cancer Early Detection Advanced Research center], I noticed they had a very different and refreshing mentality. Some universities I was considering, the notion was that junior researchers had to fit into existing systems, ones that haven’t changed for decades. In contrast, OHSU’s attitude was, ‘We need to build a new system and we want everybody to be a part of it. And we will take the best ideas no matter who it’s from.’ That was very attractive.

“Traditionally, researchers must spend a lot of time writing grants. And if you don’t get grants,

you don’t get research funding and you can’t get published in scientific journals. And if you don’t get published, you don’t receive grant funding. CEDAR was designed to change that. When they were recruiting me, they said: ‘You come up with the research ideas. We have the funding covered.’

“As part of CEDAR, I can come up with new ideas and technologies, get the research up and running quickly and produce groundbreaking results.

“Coming here was a no-brainer — even though I wasn’t too keen on the long flights from India!”



As part of CEDAR, I can come up with new ideas and technologies, get the research up and running quickly and produce groundbreaking results.



Hisham Mohammed, Ph.D., is an associate scientist at the OHSU Knight Cancer Institute Cancer Early Detection Advanced Research (CEDAR) center, one of the largest initiatives in the world focused on research to enable the detection of cancers at an earlier, more treatable stage. At the University of Cambridge, UK, while working as a Ph.D. student, Mohammed invented a method to analyze and understand protein complexes more efficiently — a method now being used in labs across the world. Importantly, this method allowed him to discover a pivotal role for the hormone progesterone in regulating breast cancer. Before arriving at OHSU in 2018, Mohammed was a postdoctoral research associate at the Babraham Institute in Cambridge. He received his Ph.D. from the University of Cambridge in 2013. He was born in India and earned his undergraduate degree there.



Mohammed outside
of the new Knight
Cancer Research
Building, scheduled
to open in
September 2018.



Hollander-Rodriguez, in her office in Klamath Falls, Ore. — home of the OHSU Campus of Rural Health.

“I grew up in rural Oregon, not far from Eugene. Pleasant Hill has a Dairy Queen and a school, and that’s about it. When I was growing up, most of the community worked for the timber companies, before the bottom fell out.

“When I left Oregon to get my undergraduate degree at Stanford, I thought I wanted to do international work. But I realized I could make the most impact in rural Oregon, caring for people in small communities like the one in which I grew up. The OHSU School of Medicine was a natural choice because of its excellence in primary care. This led to a residency at the Cascades East Family Medicine Residency Program in Klamath Falls. My husband and I loved Klamath Falls so much we decided to stay put, and I became faculty.

“Through OHSU’s Campus for Rural Health,

students from multiple professions are learning crucial skills for working in rural communities. They learn about the creativity that it takes to make do with scarce resources. They see providers who adapt their scope of practice to meet the needs of the community. Our residency graduates come away prepared for anything. Training in rural areas is very unique.

“I love teaching and practicing in a small community. A rural family physician learns how to take care of the whole person, the whole family, across the course of a lifetime.

“You feel the ripple effects of your work when in a small community. No one is anonymous. Your children go to school with your patients’ children. You run into your patients at the grocery store. It keeps everyone accountable and connected.”




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Joyce Hollander-Rodriguez, M.D., manages a family medicine practice and is the regional associate dean of the OHSU Campus for Rural Health and residency program director of the OHSU-Cascades East Family Medicine Residency Program in Klamath Falls. She works with her local coordinated care organization and is medical director of a local hospice and an active member of the hospital ethics committee. Hollander-Rodriguez and her husband live on a ranch with 40 sheep, five dogs, four cattle, three cats and two kids.





Lin at the OHSU Casey
Eye Institute, with the
Kohler Pavilion and tram
behind her.

“What attracted me to OHSU was the strong research portfolio in combination with the collegial nature at the Casey Eye Institute. It was clear that David Wilson, Casey’s director and chair, was trying to expand Casey’s research program — and I wanted to join a growing research division.

“As I was entering medical school I was driven by wanting to help people through health care. Then it struck me that the life-saving and vision-saving treatments that we utilized in the field of medicine all came from the research lab.

“So I decided I wanted to be a medical doctor in this more traditional sense, with the basis of scientific discovery at the core. I think clinician-scientists are uniquely suited to formulate and test hypotheses most relevant to a medical condition. My patients remind me on a regular basis that we don’t have everything figured out; that we don’t understand certain diseases as well as we should.

“The questions we ask in my lab’s research are very much driven by my patients.”



My ultimate goal is for one of our lab findings — and I think we’ve made several significant ones — to be transformed into a treatment that eventually benefits my patients.



Phoebe Lin, M.D., Ph.D., is an associate professor of ophthalmology and a research scientist at the OHSU Casey Eye Institute. Her research focuses on the mechanics of ocular inflammation that can cause blindness and finding therapeutic agents that might prevent those conditions.

Lin earned her M.D. and Ph.D. in a combined program at the University of Illinois. She completed a fellowship in vitreoretinal surgery and diseases at Duke University. She is the first recipient of the OHSU School of Medicine’s \$100,000 Physician-Scientist Support award.

“ was drawn to OHSU because it had a well-established clinical group studying Parkinson’s disease. Joseph Quinn and Jay Nutt (current and former directors of OHSU’s Parkinson Center, respectively) have really built the group into a world-class Parkinson’s center, and there was a lot of opportunity for someone like me, who was interested in basic science research in Parkinson’s.

“As part of my recruitment to OHSU, through a joint effort between the neurology department, the School of Medicine, the anesthesia department and money from the Benaroya Foundation, they were able to buy a sophisticated two-photon microscope that I needed for my research. It allows you to look more deeply into the brain of a living animal in a way that no other technology allows.

“I contacted several places when I was looking for jobs and the fact that OHSU was so willing to purchase this expensive piece of equipment

told me volumes. Not very many places have the vision and the resources to do that.

“One of the great things about OHSU is that they support scientists, and that translates into intellectual freedom — especially as a younger faculty member getting started. You get to do what you think is important.

“My research focuses on a specific protein in the brain that forms something called Lewy bodies, which are associated with cell death in Parkinson’s patients. But we don’t know much about what Lewy bodies actually do. Do they cause cells to die, or are they a defensive reaction that protects them? Or is it neutral — just a biomarker that the cell is sick? That’s a big, overarching question in the field. If we could learn more about that, it may be possible to find people who are going to develop Parkinson’s, even before they have problems. If we had a drug that could stop Parkinson’s disease at that time point, or very early on in the disease, it would be revolutionary.”



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Vivek Unni, M.D., Ph.D., joined the Department of Neurology and the OHSU Parkinson Center and Movement Disorders Program in 2011. An associate professor, Unni also has an appointment and laboratory space in OHSU’s Jungers Center. Before coming to OHSU, Unni was an instructor in neurology and a research fellow in the laboratory of noted Alzheimer’s researcher Bradley Hyman at Harvard Medical School and Massachusetts General Hospital.

Unni earned bachelor’s and master’s degrees from Stanford and an M.D. and a Ph.D. in neuroscience at Columbia University. He completed a neurology residency and movement disorders fellowship at Brigham & Women’s Hospital/ Massachusetts General Hospital in Boston.

Unni outside the
Vollum Institute.



“My father is a vascular surgeon and so my whole childhood was steeped in medicine. He was on call every other night for 10 years — he would be paged away from home at all hours. At first I thought ‘There’s no way I want to go into medicine. This is hard work.’

“But later on, when I spent time with him and other physicians, I was able to see why people are willing to get up in the middle of the night and go to the hospital and take care of sick people.

“Being the person who gets to walk through the door and inspire confidence in people who are suffering from the worst disease they’ve ever had — and show them that you are there to shepherd them through this process, and that you’ll take

on this problem with them ... there’s nothing like that. That’s the capital W in the Why.

“What brought me to OHSU? First and foremost, the leadership we have here in the M.D./Ph.D. program under Drs. David Jacoby and Daniel Marks is absolutely incredible. OHSU also has a unique environment — it’s well-funded and the scientific investigators here are very bright, motivated and collaborative. And that collaborative spirit is not something you see at every institution.

“My goal while I’m here at OHSU is to unravel some of the secrets of neurological disease. We still have a profound lack of understanding about how the brain works. I hope to remain in neuroscience research and help answer some of these big questions.”



The scientific investigators here are very bright, motivated and collaborative. And that collaborative spirit is not something you see at every institution.



Jim Goodman is in his fifth year of the combined M.D./Ph.D. program at the OHSU School of Medicine, and conducts research on the physiology of cerebrospinal fluid in the context of Alzheimer’s disease. He is a student representative on OHSU’s undergraduate medical education curriculum committee and serves as a member of the Organization of Student Representatives of the Association of American Medical Colleges.

He earned his undergraduate degree from Westminster College in his home town of Salt Lake City, Utah. After college, he worked for a year as a research assistant at the Huntsman Cancer Institute at the University of Utah in Salt Lake City.



Goodman at the fountain
outside of Mackenzie Hall.

“**M**y parents fled the Vietnam War as Hmong refugees and settled in Fresno, California — one of the largest Hmong communities in the U.S. My personal background and passion for health equity help me bring a unique point of view to my work in public health.

“Epidemiology is an exciting area of public health research, where we can help disadvantaged and ethnic minority communities more effectively. I’m excited to contribute to that.

“I know that if I continue to use the core concepts I learned from this program, and let data guide the way, I can find meaningful solutions to public health problems.

“I considered global health programs at George Washington University and the University of Maryland, but decided I could achieve my goals just as well by keeping my focus local. I looked at the faculty at the OHSU-PSU School of Public Health and I was impressed by their research. These were people I wanted to work with.”



Thanks to the generosity of the Dean’s Scholarship Fund, my education is more affordable. I can focus on reducing health disparities in underserved populations like my own.



Darla Vang, M.P.H., earned her master’s degree in public health, specializing in epidemiology, this year from the OHSU-PSU School of Public Health. Vang received her undergraduate degree from California State University, Fresno and spent several years in the San Francisco Bay area working in habitat restoration and health workforce development. Vang intends to apply her new skills in epidemiology and biostatistics to address maternal and child health, HIV/AIDS and environmental health.



Vang standing in the skybridge that
connects OHSU Hospital to the
Veteran's Affairs Medical Center.





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