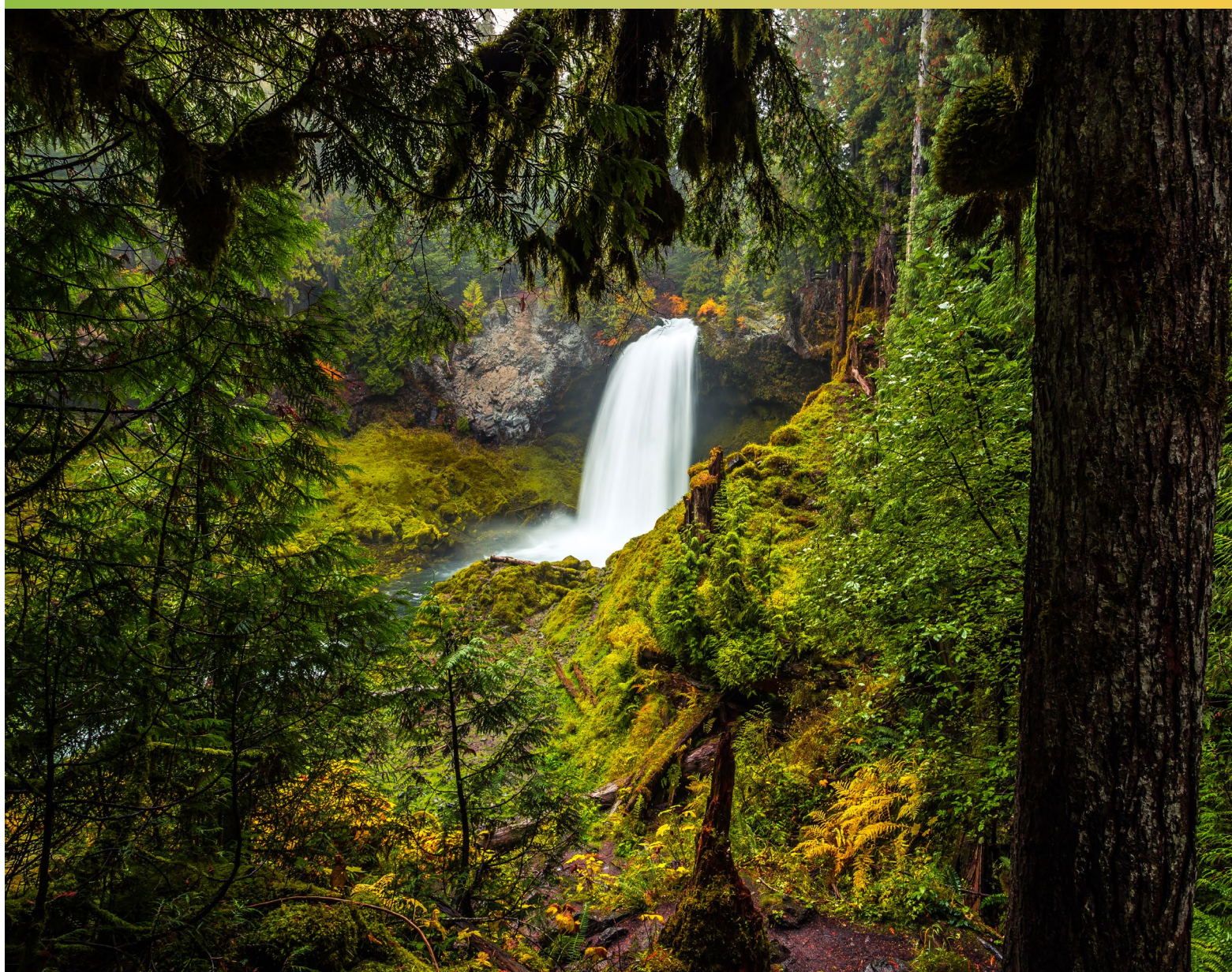


FALL  
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# Emeritus

A NEWSLETTER FOR OHSU EMERITUS FACULTY







*Emeritus Faculty News* is published every spring and fall. Its purpose is to keep emeritus faculty informed about growth and other changes at OHSU. Items of interest should be sent to OHSU Faculty Affairs by email at [facaffairs@ohsu.edu](mailto:facaffairs@ohsu.edu).

Sources for the material in *Emeritus* are many, including OHSU news releases, electronic newsletters and blogs, printed material and local media reports.





# NEWS BRIEFS



A new generation of health care professionals, educators and researchers graduated from OHSU this year. A total of 1,162 degrees were awarded. For the first time in two years, all ceremonies were held in person again. Graduates assembled on Sunday, June 5, at the Oregon Convention Center, 777 N.E. Marin Luther King Jr. Boulevard, Portland. The keynote speaker was **Donn Spight, M.D.**, professor of surgery in the OHSU School of Medicine and a staff physician in the Portland VA Medical Center's Operative Care Division. "Our world needs health and science professionals like never before, and the class of 2022 is prepared and ready to rise to the occasion," says OHSU President **Danny Jacobs, M.D., M.P.H.** "These graduates studied and practiced while contending with and learning from a global health crisis happening in parallel. They are uniquely prepared to face and address the evolving needs of human health and well-being, and I look forward to seeing the expanding impact OHSU alumni have on communities around the globe."

- The School of Dentistry awarded 85 degrees this year.
- The School of Medicine awarded 450 degrees and certificates.
- The School of Nursing awarded 446 degrees.
- The OHSU-PSU School of Public Health awarded 88 degrees.
- The OSU/OHSU College of Pharmacy awarded 93 degrees.



Each year at the end of the first week of medical school, M.D. students slip on their white coats for the first time, symbolizing the beginning of their journey in medicine. The annual ceremony resumed this year after it was paused in 2020 for safety during the pandemic. Led by **Robert Cloutier, M.D., M.C.R.**, professor of emergency medicine, School of Medicine, and assistant dean for undergraduate medical education admissions in the School of Medicine, 150 medical students walked into the event at the Oregon Convention Center, amid family, friends and faculty members, in person and via live stream. Their white coats hung neatly folded from their arms, while family members waved and cheered. The ceremony emphasizes the physician's responsibility to take care of patients. It impresses upon them the primacy of the doctor-patient relationship.

Of the 150 medical students who are starting this fall:

- **88%** are **Oregonians** or of Oregon heritage
- **69%** identify as **female**
- **36%** come from a **disadvantaged background**
- **33%** come from **racial or ethnic backgrounds** other than white
- **25%** come from a **rural background**
- **23%** come from a racial or ethnic group **underrepresented in medicine**
- **Two** have completed **military service**

College employees and students from around Oregon met up with Rep. Suzanne Bonamici, D-Oregon, on August 12 to talk about changes to Title IX, the federal law concerning sex discrimination in schools, and how



Jonah Sacha, Ph.D., outside the Vaccine & Gene Therapy Institute and Oregon National Primate Research Center at the Oregon Health & Science University. The Sacha lab is a dedicated team of scientists working toward ameliorating human suffering by solving the AIDS epidemic and improving clinical care. (OHSU/Christine Torres Hicks)

the recent Supreme Court decision regarding abortion could affect campuses. “There’s a lot of uncertainty right now because of the Supreme Court opinion and laws varying across states, and our colleges and universities and students need clarity,” Bonamici said. Roughly a dozen people, including university and college Title IX coordinators, joined Bonamici at the roundtable which took place at Portland State University’s downtown campus. College administrators said certain types of students may face issues more directly than others. Some examples that came up were students at Oregon Health and Science University studying obstetrics and gynecology who may go on to work in different states, or students at Oregon Institute of Technology doing externships who might go to states with abortion bans. Bonamici said she’s hopeful the U.S. Department of Education will address some of those concerns when it responds to the letter from her and other members of Congress. “Everyone who’s living in the United States is going to be affected in some way,” Bonamici said. “The lack of access to adequate reproductive care affects

educational opportunities. It affects career outcomes. It affects earning potential, and there are disparate effects on Black, brown and low-income students. That’s pretty clear.” Bonamici encouraged the roundtable participants to send their concerns directly to the Department of Education, as the department is taking public comment on its proposed changes to Title IX.

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A new pre-clinical study in nonhuman primates will evaluate an experimental drug’s potential use as a gene therapy that could prevent people who have HIV from having to take daily antiviral drugs for the rest of their lives. The research will be led by OHSU researcher **Jonah Sacha, Ph.D.**, professor at OHSU’s Vaccine and Gene Therapy Institute, who also serves as a scientific adviser to CytoDyn, the biotechnology company developing the drug, called Ieronlimab. The study is funded by a five-year grant of up to \$5 million that was recently awarded to OHSU by the National Institute of Allergy and Infectious Disease, which is part of the National Institutes





Eric McCann, an undergraduate nursing student at the OHSU School of Nursing's Ashland campus, prepares a foot bath for a client on Aug. 31, 2022, at the Medford Library in Medford, Oregon. Since 2015, OHSU School of Nursing faculty and students have offered foot soak clinics, which offer a judgment-free space for local residents experiencing homelessness to address the foot issues that are more common among the unhoused and also engage in face-to-face conversations with others. (OHSU/Tiffany Allen)

of Health. "This grant will fund the development and early study of leronlimab as a potential single-injection gene therapy," said Sacha. "If this approach works as hoped, it could provide a functional cure for HIV, meaning it could suppress HIV enough that patients would no longer need to take daily antiviral pills for the rest of their lives."

OHSU nursing faculty and students are taking health services to the streets to support the growing number of Southern Oregonians who are experiencing homelessness—and to improve how health care serves this community. After a successful pilot project, the OHSU School of Nursing's Street Nursing Team is now expanding the homeless health services it currently offers in Jackson County and plans to bring their efforts to Klamath County by the end of next year. "The rising cost of living, the COVID-19 pandemic and the 2020 wildfires have sadly all contributed to increasing homelessness in Southern Oregon," said the project director, **Heather C. Voss, Ph.D.**, associate professor of clinical nursing, School of Nursing. "Not having a place to call your own home can lead to new health concerns and worsen

pre-existing ones," Voss continued. "At the same time, people who are unsheltered don't often feel comfortable seeking help from traditional health institutions. The OHSU Street Nursing Team seeks to build trust over time by meeting people wherever they are, week after week. If someone wants help, we offer basic health services and can connect them with other providers for more advanced care." To further enhance nursing education, various classes at the OHSU School of Nursing's campuses in Ashland and Klamath Falls will teach about people without housing and related topics. Expected lessons include the traumatic experiences that are common among unhoused people; how some health care approaches can inadvertently be harmful; best practices for providing care outside of a traditional clinical setting; and, how mobile health options can better meet certain patients' needs. By encouraging students to understand the nuanced complexities of people without housing early on, OHSU hopes its future graduates will become nurses who provide care from a more patient-centered mindset.

Clinicians, researchers, students and staff at OHSU have stepped up valiantly to deliver care to the sickest

Oregonians while carrying out OHSU's education and research missions in the midst of the first pandemic in a century. As if COVID-19 isn't challenging enough, the cost of services, supplies and workforce needed to provide critical health care services increased far beyond our projections and revenue has not kept pace, placing additional stress on frontline workers who never imagined having to struggle to secure basic supplies like baby formula for newborns at OHSU Doernbecher Children's Hospital, as one example. In light of these challenges, OHSU's board of directors adopted an operating budget for the fiscal year starting July 1 that exactly matches expenses against expected revenues. The \$4.3 billion budget is a contrast to previous years, when operating margins were reinvested into the university's health care, research and education missions, and includes spending down a significant portion of OHSU's reserves, or cash on hand, and redeploying executive incentive funds. OHSU will face this challenge as we have faced others: United, as one university, in our mission to improve the health and well-being of Oregonians who depend on the state's only public academic health center. Supporting people and our missions will remain our priority as we manage through an exceptionally challenging health care environment nationwide. A national and local shortage of health care workers has left OHSU without enough staff, beds and appointment slots to care for everyone who needs us. Because delays in care often exacerbate health conditions, patients are arriving at OHSU with more complex and acute health care needs because of delays in care during the pandemic. This is especially challenging at OHSU, which is a high-acuity trauma facility and regional referral center drawing patients from throughout the state and beyond—including Oregon's most vulnerable, underserved residents. The zero-margin operating budget will balance the immediate and essential needs of our people and missions with our obligation to provide long-term financial stability. By balancing operating revenues and expenses, the budget maintains OHSU's long-term capacity as a public research university and health system that serves all of Oregon.

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Scientists at OHSU have received significant philanthropic support to advance a first-of-its-kind method to turn an individual's skin cell into an egg, with the potential to produce viable embryos. The technique, initially

demonstrated in mice, could eventually provide a new avenue for child-bearing among couples unable to produce viable eggs of their own. Even though the proof of concept in mice shows promise, significant challenges remain to be resolved before the technique could be ready for clinical trials under strict ethical and scientific oversight. Even then, Congress currently precludes the Food and Drug Administration from providing oversight for clinical trials involving genetic modification of human embryos. "It will take probably a decade before we can say we're ready," said **Shoukhrat Mitalipov, Ph.D.**, professor at the Oregon National Primate Research Center and director of the OHSU Center for Embryonic Cell and Gene Therapy. "The science behind it is complex, but we think we're on the right path." This type of research is not funded by the National Institutes of Health, so it depends on philanthropic support. For this project, Open Philanthropy awarded \$4 million over three years through the OHSU Foundation. **Paula Amato, M.D.**, professor of obstetrics and gynecology, School of Medicine, sees the potential for an enormous benefit to families struggling to have children if the technique proves successful. "Age-related decline in fertility remains an intractable problem in our field, especially as women are delaying childbearing," said Amato, who is the principal investigator for the grant award. The technique holds promise for helping families to have genetically related children, a cohort that includes women unable to produce viable eggs because of age or other causes, including previous treatment for cancer. It also raises the possibility of men in same-sex relationships having children genetically related to both partners.

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The OHSU Knight Cancer Institute's Community Partnership Program has awarded funding to community-led projects designed to address cancer-related needs across the state. This round of funding supports six new projects and continues funding for three others. Since 2014, the Community Partnership Program has invested more than \$4.6 million in 179 projects around the state. A new project, designed by Good Shepherd Health Care System in Hermiston, aims to increase colorectal cancer screening rates by distributing fecal occult blood test kits for adults ages 50 to 75 to use at home. Because more than a quarter of the Hermiston community comprises individuals of Hispanic or Latino descent, Good Shepherd's screening efforts will include a strong focus on engaging the





The Northwest Native American Center of Excellence at OHSU is receiving \$3.4 million over five years from the Health Resources & Services Administration, an agency within the U.S. Department of Health and Human Services. The funds will help expand professional school-career options for American Indians and Alaska Natives. (OHSU)

Spanish-speaking community. **Jackie Shannon, Ph.D., M.P.H.**, professor of oncological sciences, School of Medicine, is co-director of the Community Partnership Program and associate director of community outreach and engagement at the OHSU Knight Cancer Institute. She says she is proud that Community Partnership Program grantees are prioritizing efforts to reach non-English speakers. “The Community Partnership Program has always been centered on the idea that communities know their needs best,” she says. “I’m particularly pleased to see so many projects center non-English speaking communities in their outreach efforts. We want people across Oregon to have equitable access to important cancer-related resources and educational materials.” Organizations receiving funding in this grant cycle include:

- **Samaritan Health Services, Inc.** — Disparities in Colorectal Cancer Screening Among Intercommunity Health Network (IHN)-CCO Members.
- **Best Health Consult LLC** — Know Your Prostate (Knowledge and burden of Prostate Cancer) in Klamath Falls.
- **Adventist Health Portland Foundation** — Slavic Community Cancer Needs Assessment and Solutions.
- **Southern Oregon Friends of Hospice** — Active Cancer Patient Inquiry for Interest, Need and for End-of-Life

Education and Counseling.

- **Komak** — Measuring Impacts and Outcomes of Komak’s Process of Financial Support During Cancer Treatment.
- **Good Shepherd Health Care System** — Colorectal Cancer Screening & Prevention.
- **Oregon School-Based Health Alliance** — Latinx Youth Peer Education for Human Papillomavirus (HPV) Prevention.
- **St. Paul Missionary Baptist Church** — Community Cancer Awareness and Healthy Living Symposium - Implement Body & Soul Program.
- **Thadd’s Place** — Thadd’s Place Cancer Group.

A federal spending bill, signed into law by President Joe Biden, includes funding for OHSU’s effort to increase the number of American Indian and Alaska Native people working in health care professions. The Future Leaders in Indigenous Health, or FLIGHT, project received \$800,000 in the federal budget. Through OHSU’s Northwest Native American Center of Excellence (NNACoE), the FLIGHT project will both grow the health care workforce and expand quality service to American Indian and Alaska Native patients—building on the center’s successful programming. “NNACoE already is nurturing the next generation of Indigenous health leaders,” says **Erik Brodt**,

**M.D.**, associate professor of family medicine, School of Medicine, and assistant dean of Native American health at OHSU. “We inspire, equip and support future healers as they ascend through medical school and beyond, and the FLIGHT project will accelerate this important work. We thank Senator Merkley, Senator Wyden, Congressman Blumenauer and their respective teams for advocating for this funding, and for their support of Indigenous communities.” All 43 federally recognized tribes of the Pacific Northwest supported the funding request. The Northwest Native American Center of Excellence at OHSU also received a total of \$3.4 million over five years from the Health Resources & Services Administration, an agency within the U.S. Department of Health and Human Services. The funding is a competitive renewal of the initial federal grant that enabled the center’s founding in 2017, and complements other support the program has received in recent years. “We’re determined to break down the many barriers that prevent Native Americans like me from becoming doctors, dentists, pharmacists, nurses and more,” said Brodt. “Supporting more American Indians and Alaska Natives in their efforts to become health professionals will help provide high-quality, compassionate and culturally appropriate health care for every American,” Brodt added. With this new funding, the center will expand beyond its initial focus on encouraging American Indian and Alaska Natives to become physicians. The center’s cornerstone initiative, the Wy’east Post-Baccalaureate Pathway — a rigorous 10-month program that prepares Natives for medical school—will grow to also include a similar pathway for the OHSU School of Dentistry. The new dental pathway is expected to host its first class of five aspiring dentists in fall 2025. “This bold initiative addresses major health disparities,” said **Ronald Sakaguchi, Ph.D., D.D.S., M.B.A.**, dean of the OHSU School of Dentistry. “We are excited to partner with the Northwest Native American Center of Excellence, and are proud to help create a critical new pathway to dentistry that will benefit American Indians and Alaska Natives in our region and beyond.”

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OHSU is now the first in Oregon to offer a cutting-edge type of brain surgery that doesn’t involve cutting at all. The procedure, known as focused ultrasound, directs more than 1,000 sonic beams through the skull to create a small lesion in the focal point of the brain that causes

a condition known as essential tremor. Approved by the Food and Drug Administration for clinical use in 2016, the procedure also treats a related condition known as tremor-dominant Parkinson’s disease. The OHSU neurosurgeon leading the new program expects a surge of interest among patients with tremors across the Pacific Northwest. “Patients love it, and the results are instantaneous,” said **Ahmad M. Raslan, M.D.**, associate professor of neurological surgery, School of Medicine. The procedure involves the use of high-frequency sound waves directed with pinpoint precision by magnetic resonance imaging to ablate, or burn, the focal point deep within the brain that is causing tremors. Patients are fitted with a stereotactic frame affixed to a specialized helmet that combines the focused energy of more than 1,000 high-frequency sonic beams directed through the skull. The procedure involves no need for direct access to the brain by cutting through the skull. Nor does it involve radiation, such as with previously developed gamma knife technology, which combines beams of radiation to ablate tumors. Candidates must first undergo a CT scan to ensure a skull density sufficiently thick to accommodate the procedure; an estimated 10% to 15% of people have skulls that aren’t dense enough for the treatment.

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OHSU and Adventist Health Tillamook are working together to bring health care services directly to underserved residents of Northwest Oregon’s Tillamook and Columbia counties—and may help other U.S. communities do the same. The collaboration aims to make the community-based nursing services program, which Adventist Health offers through its Tillamook and Vernonia primary care clinics, financially sustainable by making the case for Medicaid and other health insurance payors to cover the care the program delivers. Adventist Health currently funds the program on its own. The effort is supported by a \$1.3 million, three-year grant from the American Nurses Foundation. It’s among 10 projects nationwide that are collectively being awarded more than \$14 million through the Reimagining Nursing Initiative, which supports bold, nurse-led ideas to help nurses meet the health care needs of the future. “Our vision of care isn’t boxed in by the walls of a medical facility,” said the project’s lead, **Seiko Izumi, Ph.D., R.N.**, associate professor of nursing, School of Nursing. “Instead of replicating the





Bradley Buchheit, M.D., talks during the fentanyl awareness discussion at OHSU on Wednesday, June 29, 2022. (OHSU/Christine Torres Hicks)

current delivery model where people come to clinics to receive care, we see nurses go out into the community where people live to deliver the care they need, and their services are covered by insurance. We're envisioning a new world—for nurses and their communities—that embodies truly person-centered, accessible care.”

In the fall of 2019, OHSU opened a clinic to provide same-day, walk-in access to proven medications to treat opioid use disorder. Within a few months, the COVID-19 pandemic forced the clinic to switch to virtual care. Now, with the pandemic receding, the clinic intends to stick with its virtual care model to provide buprenorphine for patients with opioid addiction. The reason: The remote model enables the clinic to extend services to patients in every corner of Oregon. In addition, a newly published study in the journal *Substance Abuse* suggests that many patients prefer it. The clinic, which prescribes

buprenorphine, remains focused on maintaining ease of access, said senior author **Bradley Buchheit, M.D., M.S.**, assistant professor of medicine, School of Medicine, medical director of OHSU’s Harm Reduction and Bridges to Care (HRBR) clinic. Pronounced “harbor,” OHSU opened the clinic as a way of reducing barriers and getting people into treatment quickly and easily. “When they say they’re ready to stop using and get treatment, sometimes you have a very, very narrow window to get them into care,” Buchheit said. The virtual model means that the clinic can tend to patients well beyond OHSU’s Marquam Hill campus. Since the pandemic forced the clinic into a remote-only care model in March 2020, it has served patients in 32 of Oregon’s 36 counties, averaging between 200 and 250 patient visits per month. “In an ideal world, HRBR would be a hybrid model,” Buchheit said. “Our goal is to get people with opioid use disorder on medication, stabilize them, and then transfer them to community partners for ongoing care.”



# RESEARCH

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OHSU has been awarded a two-year, \$2.5-million grant from the National Institutes of Health to conduct a nonhuman primate study that will evaluate how the body may change the way it processes fat and sugar after being sick with COVID-19. “There’s a reciprocal relationship between COVID-19 and metabolic diseases such as obesity and diabetes,” said one of the study’s lead researchers, **Charles T. Roberts, Ph.D.**, a professor in the Oregon National Primate Research Center. “Better understanding that relationship could help identify treatment options or even reduce health risks to begin with.” In addition to kidney disease, heart failure, stroke, hair loss and even impotence, research suggests that COVID-19 also increases the risk of developing obesity and diabetes. For example, a March 2022 study of patients who survived COVID-19 found that they were about 40% more likely to develop diabetes for up to a year later. And an April 2021 study concluded that people often develop numerous conditions after recovering from COVID-19—including obesity and diabetes.

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Patients with metastatic castration-resistant prostate cancer—the most aggressive and deadly type of the disease—now have a new Food and Drug Administration-approved form of treatment. The FDA recently approved a new therapy, called Pluvicto™ (lutetium Lu 177 vipivotide tetraxetan), formerly referred to as Lu-PSMA-617, based on the results of the Phase III VISION clinical trial. The treatment is an option for men with prostate cancer that has spread and become resistant to hormone therapy and chemotherapy. The infused treatment combines a targeting compound with a radioactive isotope to irradiate and kill cancer cells. According to the American Cancer Society, prostate cancer is the second leading cause of cancer death in American males, and kills 34,000 people in the U.S. every year. OHSU’s **Tom Beer, M.D.**, professor of medicine, School of Medicine, led the VISION trial at OHSU, and co-authored the VISION study presentation at the American Society of Clinical Oncology Annual Meeting

in June 2021, as well as the resulting *The New England Journal of Medicine* publication. “This is a significant new treatment for patients with prostate cancer who previously had few options,” says Beer, the deputy director of the OHSU Knight Cancer Institute. “FDA approval of this therapy could be a lifeline for many patients, and I am proud that OHSU helped bring this treatment to patients who desperately need it.”

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U.S. hospitals have a key role to play in addressing a national drug epidemic that claimed more than 100,000 lives last year, a physician from OHSU writes in a perspective published by the *New England Journal of Medicine*. Too often hospitals are missing a prime opportunity to treat addiction, said **Honora Englander, M.D.**, professor of medicine, School of Medicine. “One in nine hospitalized adults has a substance use disorder, yet most U.S. hospitals do not offer evidence-based addictions care,” she said. “Hospitalized adults with opioid use disorder die at rates similar to acute myocardial infarction. Yet unlike cardiac care, which has widely adopted quality and financial incentives to deliver high-quality care, hospitals lack systems and standards for addictions care.” In the perspective, Englander calls for bold action among hospitals, state and federal policymakers, and federal agencies to improve addiction care in hospitals. She recommended changes in hospital policies and formularies; financing and regulatory standards that incentivize hospital-based treatment; clinician education and support; and regulatory changes, including certifying that hospitals adopt evidence-based clinical guidelines. For example, the U.S. Centers for Medicare and Medicaid Services could require hospitals to offer medications such as buprenorphine or methadone for patients with opioid use disorder.

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Replacing or supplementing in-person maternal care with telehealth generally results in similar, and sometimes better, outcomes compared with in-person care, OHSU researchers found. The study, published in the *Annals of Internal Medicine*, follows the widespread, rapid implementation of telehealth during the coronavirus pandemic, when physicians suddenly relied on video or phone calls for many types of routine appointments. “The COVID-19 pandemic and the



heightened demand for telehealth services we have seen over the past several years puts us in a unique position as clinicians, where we are now able to reevaluate and reimagine how we deliver care,” said lead author **Amy Cantor, M.D., M.P.H.**, associate professor of medical informatics and clinical epidemiology, School of Medicine. “The results of this study are encouraging because they indicate that telehealth could improve and expand health care options, especially for underserved communities and those who may face barriers to accessing traditional care.” Researchers found that when telehealth-delivered care was used to supplement or replace in-person maternal care services, clinical outcomes and patient satisfaction were similar to in-person care—and sometimes better. In particular, the study found telehealth strategies were especially promising for certain health services, such as the treatment of postpartum depression and remote monitoring of conditions like diabetes and hypertension during pregnancy. And for low-risk pregnancies, telehealth could replace some general in-person maternity care. Despite the study’s promising findings, Cantor said the effect of telehealth on mothers’ access to care remains unclear, highlighting an ongoing need to evaluate and improve health equity. Looking ahead, Cantor said future research should focus on larger studies that examine effects of telehealth on vulnerable populations, such as those living in rural areas, and evaluate outcomes based on population characteristics in order to better understand the effect of telehealth on health disparities.

Amid a surge in demand for mental health care, a new report from researchers at OHSU finds almost six out of 10 in-network providers listed under Oregon Medicaid provider directories are not actually available to see patients. These “phantom” networks undermine access to care for patients most in need, according to the study published today in the July issue of the journal *Health Affairs*. “If this represents the state of provider directories more broadly, that’s a huge concern for patients,” said lead author **Jane M. Zhu, M.D.**, assistant professor of medicine, school of Medicine. “If the majority of providers are not actually accessible, it leads to delays and interruptions in care and treatment that people need.” Zhu said the first-of-its-kind finding

underscores an overburdened system that too often fails to provide treatment for people with mental health conditions. “Medicaid is a major payer for mental health care in the U.S., with enrollees disproportionately likely to have severe and persistent mental disorders, as well as complex social and medical needs that exacerbate barriers to care,” the authors write. The findings in Oregon may be relevant throughout the country. “At least on paper, an insurance plan can point to provider directories and say, ‘See, we have all these providers who are part of our contracted network,’” Zhu said. “But if these directories don’t reflect the providers who are truly seeing patients, then what good are they?”

A new study supported by OHSU researchers has identified a group of genes that contribute to autism primarily through inherited variants, allowing for a better understanding of a broader range of conditions across the autism spectrum. The findings, published this month in *Nature Genetics*, advance knowledge of the complex genetics of autism. Researchers used data from the SPARK (Simons Powering Autism Research) research cohort, which includes genetic data from nearly 43,000 people with autism—the largest cohort to date. “Expanding our understanding of the genetic influences of autism is crucial, and we’re now beginning to look at things from a gene-first perspective, as opposed to only considering behavioral components,” said **Brian O’Roak, Ph.D.**, associate professor of molecular and medical genetics, School of Medicine, whose team supported data analysis efforts for the study. “If we can identify on a cellular level how these risk genes operate and alter development, we can learn how brains work differently and provide better treatment and support for individuals on the spectrum.” Although it is generally known that autism has a strong genetic risk, previous studies have mostly identified autism risk genes disrupted by sporadic mutations, known as *de novo* variants. These types of genetic variants have profound effects on the brain, but only 20% to 30% of individuals with autism have them, leaving a large gap in knowledge about other genetic factors associated with autism. Until now, research studies were too small to be able to systematically detect moderate-risk genes, which often include risk from inherited variants that run in families. The discoveries made in this study



Kathleen Carlson, Ph.D., director of the new center and an associate professor in the OHSU-Portland State University School of Public Health, will discuss gun violence as a public health issue in free public event. (OHSU/Christine Torres Hicks)

can begin to explain conditions all across the autism spectrum. While these findings provide groundbreaking information on the genetics of autism, O’Roak noted that researchers still have much to learn. Research must continue to identify a complete set of autism risk factors that represent all the possible sub-types of autism, in order to provide the best clinical knowledge and treatment options to individuals with autism, no matter where they are on the spectrum.

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Growing up in rural Oregon, **Kathleen Carlson, Ph.D.**, associate professor of public health, OHSU-PSU School of Public Health, was never uncomfortable with guns. “I was told to not touch my family’s guns, and I didn’t,” she said. Later, Carlson was told not to touch gun violence research. She didn’t, more or less. “Federal funding for gun violence prevention research was effectively frozen by the Dickey Amendment in 1996,” Carlson said. “Until very recently, in public health, we lowered our voices when saying ‘firearm’ or ‘gun’—researchers with federal funding were threatened with the loss of their entire research programs.” But after witnessing both national and personal tragedy caused by gun violence, Carlson turned her attention to the forbidden topic and has been at the leading edge of addressing gun violence

as a public health issue. A core investigator with the Health Services Research Center of Excellence at the VA Portland Health Care System, Carlson’s research has examined the range of injury prevention and injury control—intentional and unintentional. She leads research on opioid and other medication-related injuries, short- and long-term functional outcomes of veterans’ traumatic brain injuries, and firearm-related injuries. Then, in 2022, Carlson received an OHSU Faculty Excellence and Innovation Award to develop an OHSU Gun Violence Prevention Research Center. The goal: to be the go-to source for objective data in Oregon and regionally. Carlson’s research is supported by her work as chair of the OHSU-PSU Gun Violence as a Public Health Issue Initiative, which brings together faculty, public health practitioners, health care professionals, students and community members invested in reducing gun violence, using the multifaceted lens of public health. And she is leading multiple studies addressing gun injury, from summarizing the gun-related injuries treated at OHSU and other trauma hospitals in Oregon, to examining VA-based programs that can prevent gun injuries and suicides among veterans. “Mirroring my injury research as a whole, my gun violence prevention efforts consider how interventions in the health care setting can reduce risk, while also acknowledging and examining the broader socioeconomic factors that



contribute to the inequitable burden of this ‘disease’ across our population,” Carlson said.

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Nanotechnology could help treat endometriosis, locating and removing painful, dangerous lesions in the ovaries, fallopian tubes and pelvis without invasive surgery, researchers from OHSU and Oregon State University found. Endometriosis is a gynecological condition in which the endometrium tissue that normally lines the uterus forms lesions outside of the uterus. It causes infertility and severe pelvic pain in about 190 million women worldwide — roughly 10% of childbearing-age women. There is currently no cure. Co-lead authors **Ov**

**Slayden, Ph.D.**, professor in the Oregon National Primate Research Center and **Oleh Taratula, Ph.D.**, professor of pharmacy, College of Pharmacy, discussed their new paper in the journal *Small*. Slayden developed the animal model to test the iron oxide nanoparticles invented by Taratula. “Normally, treatment for endometriosis requires invasive surgical ablation of lesions. Lesions can return again and again, so that can mean multiple surgeries,” said Slayden. “This treatment could provide a non-surgical option for treating the disease, which would be a dramatic quality-of-life improvement for the many millions of people who suffer from endometriosis.”

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New research reveals private equity firms that acquire physician-owned medical practices appear to be imposing measures to squeeze out more profits. After they were acquired by private equity firms, the clinics saw more patients and billed more for visits among a large, commercially insured population, according to a study published today in *JAMA Health Forum* by researchers at OHSU and other institutions. Researchers examined a total of 578 physician practices specializing in dermatology, gastroenterology and ophthalmology that were acquired by private equity firms across the U.S. from 2016 to 2020. “The reason this is of concern to patients and policymakers is that private equity is often driven by profit margins of 20% or more,” said senior author **Jane M. Zhu, M.D.**, assistant professor of medicine, School of Medicine. “To do that, they have to generate higher revenues or reduce costs. Increasing private equity in these physician practices may be a symptom of the continuing corporatization of health care.” It’s not clear whether these practices hurt clinical outcomes for patients. However, the findings raise concerning parallels with the rapid growth of private equity acquisition of nursing homes and hospital systems. “Private equity investment in nursing homes has been associated with an increase in short-term mortality and changes to staffing,” the authors write, citing previous research. In the new study, researchers found an increase in the overall number of patients seen in these clinics. The study also reviewed commercial insurance claims data that showed an increased share of visits longer than 30 minutes, even though the complexity of cases remained similar to cases before acquisition. “These billing



Jae Downing, Ph.D., is using methodologies that avoid erasing transgender and gender diverse people from research. That includes an inclusive approach to study design and conducting research in ways that reflect the needs and issues of sexual and gender minorities. (OHSU/Casey Williamson)

patterns could mean more efficient documentation of services provided, or it could mean upcoding or up-charging insurance companies to make more money,” Zhu said. She believes more evidence is needed about how private equity impacts practice patterns. In Oregon, for example, lawmakers have established a Health Care Market Oversight program to review proposed mergers, acquisitions and other business deals to ensure they meet the state’s goals around health equity, lower consumer costs, increased access and better care.

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About half of transgender and gender-diverse patients in the United States who undergo gender-affirming genital surgery travel outside their home state to receive this care, and those who travel pay nearly 50% more in out-of-pocket medical expenses, according to new findings by OHSU researchers, published in *JAMA Surgery*. The OHSU-led study offers the first national estimate of the average cost for gender-affirming genital surgeries. Its findings can help patients and insurance companies better plan for receiving or covering this

medically necessary surgical care, says the paper’s lead researcher, **Jae Downing, Ph.D.**, assistant professor public health, OHSU-PSU School of Public Health.

“Traveling a long distance for a major procedure such as gender-affirming genital surgery places a large burden on patients,” Downing says. “We already knew that traveling for health care requires patients to take time off work and pay for travel and lodging on their own, and that it can make receiving follow-up care from qualified providers who are familiar with each patient’s unique needs challenging. Now, our study shows that traveling out of state also increases out-of-pocket medical expenses for trans and gender-diverse patients—even though their surgery’s total cost is largely the same.” Transgender and gender-diverse people are assigned a sex at birth that differs from their gender identity. Many transgender patients seek medically necessary care from health professionals to affirm their gender. Each transgender patient’s care needs are unique; some patients seek hormone therapy and others seek surgeries for their chest, face or genitals. Genital surgical care is complex, is led



by specialized surgeons and can require multiple, subsequent procedures. “Transgender and nonbinary patients experience enormous barriers to accessing gender-affirming surgery, with one barrier being the lack of local, qualified surgeons and dedicated support teams to help patients navigate this care,” said **Geolani Dy, M.D.**, the study’s corresponding author and assistant professor of urology, School of Medicine, who also provides vaginoplasty and other gender-affirming surgeries through the OHSU Transgender Health Program. “Patients and surgeons already know this well,” Dy continued, “and now this study helps quantify how severely we need more gender-affirming surgeons.”

Women in rural areas who use illicit drugs have low rates of contraceptive use and high rates of unintended pregnancies compared with women living in rural areas who aren’t using these drugs, according to survey findings taken from eight rural U.S. regions. The findings, published in the *Journal of General Internal Medicine*, come as access to reproductive health care—including abortion—is increasingly restricted across large swaths of the country, following the U.S. Supreme Court’s June 24 decision to overturn constitutional protections in place since *Roe v. Wade* became precedent in 1973. The cross-sectional study was produced by researchers at OHSU and co-authors across the country. The results may be especially notable given the Supreme Court’s recent decision. “It’s going to have consequences in terms of increased maternal injury and death, as well as exposing newborns to harmful substances during pregnancy,” said lead author **Ximena A. Levander, M.D.**, assistant professor of medicine, School of Medicine. Researchers examined data from the Rural Opioids Initiative, a survey taken in eight rural U.S. regions in from January of 2018 through March of 2020. They focused on women ages 18 to 49 who reported illegal drug use in the preceding 30 days—a total of 855 individuals. Only about 37% reported using contraceptives. By comparison, survey data from the National Survey on Family Growth indicates 66% of the overall population of women in rural areas used contraceptives. Researchers said the new findings underscore the need for expanding access to both reproductive health care and substance use treatment in rural areas.

Methamphetamine remains a stubbornly prevalent illicit substance in large swaths of rural America, according to a new study by researchers at OHSU and other institutions. The findings, published today in *JAMA Network Open*, show that methamphetamine remains a common drug and is driving overdoses in rural communities. About four of five people who use drugs in rural areas across 10 states reported using methamphetamines in the past 30 days, according to the researchers. That’s a huge problem that’s often overlooked, said the study’s lead author from OHSU. “Among people who use drugs in rural communities, methamphetamine use is pervasive,” said **Todd Korthuis, M.D., M.P.H.**, professor of medicine, School of Medicine, and head of addiction medicine at OHSU. “This has been a West Coast problem for a long time, but now we see methamphetamine use in rural communities across the United States.” The new study confirmed that the risk of nonfatal overdose was greatest among people using both methamphetamine and opioids; 22% of people using both drugs reported experiencing an overdose in the past six months. By comparison, 14% of rural people using opioids alone reported experiencing an overdose in the past six months. Among people using only methamphetamine, 6% reported nonfatal overdoses. “Co-use of methamphetamine and opioids is associated with a big increased risk of overdose in rural communities,” Korthuis said. “Some people view rural areas as immune to problems like drug use and overdose, but they’re not.” The study found a consistent presence of economic distress, including the fact that 53% of the respondents reported being homeless in the previous six months. The situation heightens the risk of so-called “deaths of despair”—drug overdose deaths, suicide and disease linked to drug and alcohol use.

A higher body mass index could be a risk factor in how effective the morning-after pill is in preventing pregnancy, and new research from OHSU found that doubling the standard dose did not improve outcomes. In the study, recently published in the journal *Obstetrics & Gynecology*, a double-dose of over-the-counter emergency contraceptives—commonly known as Plan B or the morning-after pill—was not more effective in participants with a body mass index (BMI) higher than 30. “Emergency contraception is a critical therapy for our

patients. We need to ensure that it works effectively for everyone no matter their BMI or weight,” said lead author **Alison Edelman, M.D., M.P.H.**, professor of obstetrics and gynecology, School of Medicine. Emergency contraception prevents pregnancy by delaying or inhibiting ovulation, or release of an egg: LNG rapidly reaches its peak level at a critical point before the body gives the signal to cause ovulation. Edelman’s prior research shows that LNG blood levels were 50% lower in individuals with a BMI of 30 after taking a standard dose of the morning-after pill—so it never reaches its peak level and thus likely fails to prevent ovulation. Researchers hypothesized that the simple strategy of doubling the dose of LNG emergency contraception may result in reaching that critical peak drug level at the right time, despite greater BMI. “Although this solution did not work as we hoped it would, it helps us identify new avenues to pursue for future research,” Edelman said. “The more we understand about why it doesn’t work as well and how to fix it, the better care we can provide for patients.”

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Acute myeloid leukemia, or AML, is the most common acute blood cancer in adults—and one of the most difficult to treat. Scientists at OHSU have discovered a potential new target for stopping it: a gene that, when active, predicts worse chances of survival. The discovery is the latest yield of the OHSU Knight Cancer Institute’s Beat AML project—a comprehensive platform for analyzing the DNA and RNA of leukemia cells, their sensitivity or resistance to drugs, and the medical outcomes of more than 800 people with AML from across the country who donated samples to the effort. “It’s giving us a better roadmap for understanding this disease,” said **Jeff Tyner, Ph.D.**, professor of cell, developmental and cancer biology, School of Medicine, co-senior author of a paper describing the new findings in *Cancer Cell*. First author **Dan Bottomly, M.S.**, is a senior computational biologist in the laboratory of **Shannon McWeeney, Ph.D.**, professor of public health, OHSU-PSU School of Public Health, co-senior author. McWeeney is a professor and head of the Division of Bioinformatics and Computational Biology in the OHSU School of Medicine and chief data officer for the Knight Cancer Institute. Bottomly and McWeeney co-led the modeling and analysis for this work. Each year, upward of 20,000 Americans are diagnosed with AML and 11,000 die from it. The

five-year survival rate for adults is 27%. New targeted therapy drugs have fallen short of their promise, because the cancer so quickly evolves to gain resistance, making the need for more effective therapies urgent. In the new analysis, vast gene expression data combined with the clinical outcomes enabled the researchers to zero in on a gene, called PEAR1, that is among the strongest predictors of whether a person will survive AML.

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The virus that causes COVID-19 undertakes a massive takeover of the body’s fat-processing system, creating cellular storehouses of fat that empower the virus to hijack the body’s molecular machinery and cause disease. After scientists at OHSU and the Department of Energy’s Pacific Northwest National Laboratory discovered the important role of fat for SARS-CoV-2, they used weight-loss drugs and other fat-targeting compounds to try to stop the virus in cell culture. Cut off from its fatty fuel, the virus stopped replicating within 48 hours. The researchers, who published their findings in *Nature Communications*, caution that the results are in cell culture, not in people; much more research remains to see if such compounds hold promise for people diagnosed with COVID. However, the scientists call the work a significant step toward understanding the virus. “This is exciting work, but it’s the start of a very long journey,” said **Fikadu Tafesse, Ph.D.**, associate professor of molecular microbiology and immunology, School of Medicine, the corresponding author of the study. “We have an interesting observation, but we have a lot more to learn about the mechanisms of this disease.”

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Nanotechnology could help treat endometriosis, locating and removing painful, dangerous lesions in the ovaries, fallopian tubes and pelvis without invasive surgery, researchers from OHSU and Oregon State University found. Endometriosis is a gynecological condition in which the endometrium tissue that normally lines the uterus forms lesions outside of the uterus. It causes infertility and severe pelvic pain in about 190 million women worldwide — roughly 10% of childbearing-age women. There is currently no cure. Co-lead authors **Ov Slayden, Ph.D.**, professor in the Oregon National Primate Research Center, and **Oleh Taratula, Ph.D.**, professor in the OSU College of Pharmacy, discussed their new paper



detailing the approach on Oregon Public Broadcasting's "Think Out Loud" program on April 29, the week following the paper's publication in the journal *Small*. Slayden developed the animal model to test the iron oxide nanoparticles invented by Taratula. Iron oxide nanoparticles—the tiny particles about 1/1000th the size of a speck of dust—were injected intravenously into mice to locate lesions; they accumulated in the tissue lesions, enabling them to be identified by imaging. Once the nanoparticles were in the lesions, they were exposed to an alternating magnetic field, causing the nanoparticles' temperature to reach more than 120 degrees Fahrenheit—hot enough to remove the lesions with heat rather than surgery. "Normally, treatment for endometriosis requires invasive surgical ablation of lesions. Lesions can return again and again, so that can mean multiple surgeries," said Slayden, who has joint appointments in the OHSU School of Medicine departments of obstetrics and gynecology and physiology and pharmacology. "This treatment could provide a non-surgical option for treating the disease, which would be a dramatic quality-of-life improvement for the many millions of people who suffer from endometriosis."

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Long-duration space flight alters fluid-filled spaces along veins and arteries in the brain, according to new research from OHSU and scientists across the country. The study published today in the journal *Scientific Reports*. "These findings have important implications as we continue space exploration," said senior author **Juan Piantino, M.D.**, assistant professor of pediatrics, School of Medicine. "It also forces you to think about some basic fundamental questions of science and how life evolved here on Earth." The research involved imaging the brains of 15 astronauts before and after extended tours of duty on the International Space Station. Researchers used magnetic resonance imaging to measure perivascular space—or the space around blood vessels—in the brains of astronauts prior to their launch and again immediately after their return. They also took MRI measurements again at one, three and six months after they had returned. Astronauts' images were compared with those taken of the same perivascular space in the brains of 16 Earth-bound control subjects. Comparing before and after images, they found an increase in the perivascular spaces within the brains of first-time astronauts, but

no difference among astronauts who previously served aboard the space station orbiting earth. "We all adapted to use gravity in our favor," Piantino said. "Nature didn't put our brains in our feet—it put them high up. Once you remove gravity from the equation, what does that do to human physiology?" Researchers decided to find out by measuring perivascular spaces, where cerebrospinal fluid flows in the brain. These spaces are integral to a natural system of brain cleansing that occurs during sleep. Known as the glymphatic system, this brain-wide network clears metabolic proteins that would otherwise build up in the brain. Scientists say this system seems to perform optimally during deep sleep. The perivascular spaces measured in the brain amount to the underlying "hardware" of the glymphatic system. Enlargement of these spaces occurs in aging, and also has been associated with the development of dementia. Researchers used a technique developed in the laboratory of co-author **Lisa C. Silbert, M.D.**, professor of neurology, School of Medicine, to measure changes in these perivascular spaces through MRI scans. Piantino said the study could be valuable in helping to diagnose and treat Earth-bound disorders involving cerebrospinal fluid, such as hydrocephalus. "These findings not only help to understand fundamental changes that happen during space flight, but also for people on Earth who suffer from diseases that affect circulation of cerebrospinal fluid," Piantino said.

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Children with ADHD and emotional dysregulation who were given a micronutrient-dense formula made of all known vitamins and essential minerals were three times more likely to have better concentration and improved moods, research from OHSU found. The findings, featured on the May cover of the *Journal of the American Academy of Child and Adolescent Psychiatry*, may provide another treatment option for clinicians and families. In the study, 54% of the children who were given supplemental vitamins and minerals showed improvement in their symptoms, versus 18% in the placebo group. "These findings, replicating results of a previous randomized trial of micronutrients in children with ADHD conducted in New Zealand, confirm that supplementation with a broad range of nutrients may benefit some children," said lead author **Jeanette Johnstone, Ph.D.**, assistant professor psychiatry, School of Medicine. "ADHD is a common diagnosis, affecting upward of 7% of children,

and common pharmacologic treatments can cause adverse side effects. Supplementing micronutrients may be an exciting integrative treatment for many families.”

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OHSU scientists have devised an accurate and sensitive way to test blood to see if a pre-cancerous condition is escalating to outright cancer—potentially enabling treatment early in tumor development when cancer is more likely to be curable. The OHSU researchers focused on two common conditions that can precede highly lethal cancers: liver cirrhosis, which boosts the risk of liver cancer, and a precursor to the blood cancer multiple myeloma called MGUS, which stands for “monoclonal gammopathy of undetermined significance.” If the findings hold up in larger clinical studies, they set the stage for a simple, affordable method to screen people at risk by taking a small blood sample a few times a year. “Our biomarker may recapitulate the transition to cancer,” says **Thuy Ngo, Ph.D.**, assistant professor of molecular and medical genetics, School of Medicine, who led the research. Ngo is a member of CEDAR, the OHSU Knight Cancer Institute’s Cancer Early Detection Advanced Research Center. Ngo’s team reported the findings in the journal *NPJ Precision Oncology*. Ngo and OHSU have filed a patent on their findings, and Ngo says she is talking with a company about a licensing deal to develop the technology. “We have several directions to move it forward,” she says. Ngo’s priority is people at risk for liver cancer. One-quarter to one-third of adults in the U.S. have fatty liver disease, making them vulnerable to cirrhosis and liver cancer. Across the globe, infectious hepatitis puts enormous numbers of people in danger of developing liver cancer. This is why, Ngo says, the world needs a simple, affordable test to identify those at highest risk and monitor their health for the earliest signs of malignant growth.

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New research hints at a possible explanation as to why people with diabetes, asthma and other conditions that involve chronic inflammation are more susceptible to the coronavirus and tend to experience more serious COVID-19. The pre-print study—which is being submitted to a scientific journal but hasn’t yet undergone peer review by other researchers—found the virus that causes COVID-19 infected more cells in lab-made blood capillaries, or tiny blood vessels, that were treated

with an inflammatory agent. “This study adds another piece to the puzzle as we work to unravel COVID’s inner workings,” said the study’s senior author, **Luiz Bertassoni, D.D.S., Ph.D.**, associate professor of biomaterials and biomechanics, School of Dentistry. The study’s first author, **Cristiane Miranda França, Ph.D., D.D.S.**, research assistant professor of restorative dentistry, School of Dentistry, and colleagues created two models to simulate large and small blood capillaries. Copies of each model size were either treated with a pro-inflammatory chemical known as TNF-alpha to recreate inflamed capillaries, or went without this treatment to recreate healthy capillaries. The researchers exposed the lab-made capillaries to spike proteins from the virus that causes COVID-19, and then compared the tissues under a microscope. They found significantly more spike proteins attached to the lab-made capillaries that were treated with the inflammatory agent. The authors hypothesized that chronic inflammatory health conditions, such as obesity, diabetes and asthma, could be particularly dangerous to pericytes. The researchers suggest this could, in turn, make it easier for SARS-CoV-2 to pass through vessels, proliferate and spread throughout the body. “Inflammation appears to expose pericytes more to SARS-CoV-2, the virus that causes COVID-19,” Bertassoni said. “Better understanding the vascular mechanisms behind this could help us find new ways to treat or prevent COVID.” While further research is needed, Bertassoni and colleagues describe their study as a proof of principle.

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The past decade has seen a disturbing increase in suicide attempts among youth across the country, OHSU researchers found, with a particularly startling increase in pre-teen children, ages 10 to 12, attempting to take their own lives. In a paper published today in the journal *JAMA Pediatrics*, OHSU researchers with the Oregon Poison Center, Pediatric Emergency Medicine, and Child Psychiatry examined over 928,000 incidents of intentional ingestion of toxic substances by 6- to 18-year-olds, reported to 55 poison centers across the United States between 2000 and 2020. Over that 20-year period, researchers observed an increase in suicidal overdoses beginning around 2012. The most significant increase was among children in the 10- to 12-year-old group, which increased from 1,058 in 2010 to 5,606 in 2020—a fivefold increase. “We knew that we were seeing



increasing suicide attempts in young children, but a more than fivefold increase in 10- to 12-year-olds nationally over the last 10 years was unexpected,” says **Rob Hendrickson, M.D.**, professor of emergency medicine, School of Medicine, co-author of the paper and associate medical director of the Oregon Poison Center at OHSU. “We know that the pandemic has increased anxiety and depression in young children, but this study shows that the increase in suicide attempts started well before that.” Recent warnings around children’s mental health have focused on the effects of the coronavirus pandemic and the stress it placed on adolescents and school-aged children. Leading pediatric health organizations in October declared a “national emergency in child and adolescent mental health,” and the U.S. Surgeon General followed in December with an advisory highlighting the “urgent need to address the nation’s youth mental health crisis.” OHSU researchers show that the crisis began long before the March 2020 lockdowns, and worsened through the end of that first year of the pandemic.

OHSU researchers have developed a new imaging method to measure the health of a placenta, which could help clinicians identify complications early in a pregnancy. The study, published this month in the journal *PLOS One*, used magnetic resonance imaging, commonly known as MRIs, and could be replicated on virtually all modern MRI scanners. With quick data analysis, researchers noted that the imaging method could be easily adopted by clinicians. “Any research that helps us find ways to improve prenatal care is crucial,” said **Victoria HJ Roberts, Ph.D.**, research associate professor in the Oregon National Primate Research Center, who co-led the study. “Pregnancy can be extremely taxing, both emotionally and physically, especially for someone who is experiencing a complicated pregnancy. It’s exciting that this research has identified a more effective way to detect complications early in pregnancy, so clinicians are able to provide the best care to the mother and developing baby.” The study results suggest that even data from early on in pregnancy—10 to 20 weeks—can be effective in the identification of at-risk pregnancies. Additionally, the MRIs in the study were performed using the imaging protocol developed by the OHSU team that could be implemented on virtually all modern MRI scanners, and data analysis is quick to perform, indicating that this

method may be easily adopted and expanded for use across prenatal health care settings.

Millions of Americans suffering from anxiety and insomnia are prescribed a class of sedatives known as benzodiazepines. Known under the popular trade names Xanax, Valium and Ativan, these medications have been widely prescribed beginning in the 1970s. However, long-term treatment with these medications have also been associated with serious clinical risks, including falls, respiratory problems, cognitive impairments and harmful interactions with other medications. Many physicians are now appropriately working with patients to taper these medications, but the tapers themselves often create a new set of problems: Severe physical withdrawal symptoms such as tremors and high blood pressure; dangerous psychiatric conditions such as depression and suicidal thoughts; and the recurrence of the underlying conditions of anxiety and insomnia that the medication was originally intended to treat. The underlying conditions often return much worse than before. Now, a group of physician-scientists at OHSU and the VA Portland Health Care System have coined a new term for this phenomenon: Complex persistent benzodiazepine dependence, or CPBD. “This is really a dangerous situation,” said **Christopher K. Blazes, M.D.**, assistant professor of psychiatry, School of medicine, and the director of OHSU’s addiction psychiatry fellowship. “We now know that long-term benzodiazepine prescribing is rarely indicated, but we are still left with the problem of helping those who have been on these medications for years to safely get off them. The process of discontinuation can be very challenging and even dangerous. There may even be some circumstances, when attempts to discontinue fail, that restarting safe doses may be indicated.” Because benzodiazepines are associated with a large uptick in mortality, Blazes said he works with patients to taper off these medications. At the same time, he recognizes that many patients who have been prescribed benzodiazepines over months and even years will experience severe repercussions from de-prescribing. “It’s a conundrum,” Blazes said. “You’re damned if you do and damned if you don’t.”



# AWARDS

OHSU once again ranks first among the best hospitals in Oregon, according to *U.S. News & World Report's Best Hospitals 2022-23*. Additionally, six of the hospital's adult specialties are ranked among the top 50 nationwide. The ranking follows *U.S. News'* recognition, announced June 14, of OHSU Doernbecher Children's Hospital as the one of the top children's hospitals in the country. "Despite unprecedented economic and health challenges stemming from the COVID-19 pandemic, these rankings reflect the dedication, hard work and talent that OHSU's faculty and staff deliver to the people of Oregon day in and day out," said **John Hunter, M.D.**, professor of surgery, School of Medicine, and executive vice president and chief executive officer of OHSU Health. "Our people make the difference in improving the health and well-being of Oregonians who rely on the state's academic health center to deliver the most complex care with compassion and professionalism."

**Nancy Haigwood, Ph.D.**, professor in the Oregon National Primate Research Center was chosen for the 2022 Alvin J. Thompson Award from the Northwest Association for Biomedical Research (NWABR). The award is especially meaningful as Dr. Haigwood served as the NWABR Board President prior to coming to OHSU. Dr. Haigwood received the award from for her work on Openness in research with animals, and her advocacy for biomedical research throughout her career.

**Monica Hinds, Ph.D.**, professor of biomedical engineering, School of Medicine, and assistant dean of Graduate Affairs in the OHSU School of Medicine Department of Biomedical Engineering, was elected to the 2022 class of the American Institute for Medical and Biological Engineering (AIMBE) college of fellows for her scientific contributions and advocacy for medical and biological engineering. This honor represents the top 2% of medical and biological engineers.

OHSU was recognized by the Human Rights Campaign Foundation as an LGBTQ+ Healthcare Equality Leader — earning a perfect score of 100 in an evaluation of OHSU's policies and practices dedicated to the equitable treatment and inclusion of its LGBTQ+ patients, visitors and employees. In the 15<sup>th</sup> anniversary edition of the Human Rights Campaign Foundation's Healthcare Equality Index (HEI), a record 906 health care institutions participated. "We are honored by this recognition, and we thank the Human Rights Campaign Foundation for its work over the past 15 years to inspire better, more inclusive health care settings for LGBTQ+ communities," said **Amy Penkin, M.S.W.**, clinical program manager of the OHSU Transgender Health Program. "Our policies, procedures and resources make a real difference in the lives of patients, community members and colleagues to help them feel respected in the health care environment. We are committed to the ongoing efforts to achieve meaningful change that will create a truly affirming, inclusive and welcoming environment for all LGBTQ+ individuals."

Two OHSU scholars have been named American Academy of Nursing fellows, a prominent recognition that is considered one of the highest honors nurses can receive. **Quin Denfeld, Ph.D.**, associate professor of nursing, School of Nursing, and **Ellen Tilden, Ph.D.**, associate professor of nursing, School of Nursing, are among 250 new fellows who have been elected by an American Academy of Nursing selection committee for being nursing's most accomplished leaders. Fellows transform America's health system practice by creating and sharing nursing knowledge, and are recognized for their contributions to advancing the public's health, championing health and wellness, and their expertise in policy, research, administration, practice and academia. Denfeld began her career in 2006 as a critical care nurse in OHSU's cardiac and surgical intensive care units, and then shifted to research. "I am deeply honored to be selected as an American Academy of Nursing fellow," Denfeld said. "This incredible opportunity will allow me to continue advancing my efforts to collaboratively build a clinically relevant knowledge base that is supported by robust science so we can advance adult cardiovascular care, including improving patient-reported outcomes such as quality of



life. As a fellow, I will strive to amplify the contributions of nursing science through national and international venues and also advance the OHSU School of Nursing's research, mentorship and other valuable missions." Having been published in *The New England Journal of Medicine*, *Annals of Internal Medicine*, *American Journal of Obstetrics and Gynecology* and other health journals, Tilden's research has influenced clinical guidelines and health policy related to where parents give birth, how long labor lasts, and the cost, quality and effectiveness of health system innovations. "I am sincerely honored to be named a fellow in the United States' preeminent nursing policy body," said Tilden. "But being a fellow is more than an honor; it also brings the opportunity to make a real impact on health systems and policy nationally as well as internationally. Given recent recognition of unacceptable rates of maternal morbidity and mortality in our country, and especially for people of color, I will use my new position to contribute to much-needed maternity care system improvements. It will be my privilege to leverage my record of partnering across disciplines to advance equity and wellness, promote innovation and sustainability, reduce burdens on patients, providers and systems, and create health systems that support parents and children in a way that they can both thrive."

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As director of one of the nation's leading neuroscience research institutes research scientist **Marc Freeman, Ph.D.**, professor in the Vollum Institute, has achieved numerous distinctions throughout a career rich in discoveries published in the world's leading scientific journals. Yet, he says that his greatest lasting influence may be in his postdoctoral researchers and other trainees who move on to advance scientific discovery in their own laboratories. That commitment to the next generation of scientists was recently recognized with a Landis Award for Outstanding Mentorship from the National Institute of Neurological Disorders and Stroke (NINDS). The trainee-nominated award comes with \$100,000 to support continuing efforts to foster the career advancement of early-career scientists. Freeman, director of the OHSU Vollum Institute, is one of six award winners across the country in 2022. "Sending good trainees out in the world is one of the most impactful things that a PI in basic science research can do," Freeman said. Award recipients are

nominated by trainees, and in Freeman's case, the steering committee cited his "exceptional contributions as a mentor, demonstrable dedication to diversity and inclusion, the rigorous quality of your work, and the notable impact you have had on your trainees." Freeman, whose own lab focuses on the function of neurons and glial cells in the central nervous system, said he is gratified by the award. "Research scientists don't get a lot of payoffs in terms of quick satisfaction," he said. "We toil away in the lab, writing grants and publishing papers eventually. All of that has a shelf life. Trainees are different, and they're special."

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A local couple, Dale and Julie Burghardt, have made a \$5 million gift to establish a new Food Allergy Center in the OHSU School of Medicine — the first and only food allergy-focused academic health center in the Pacific Northwest. Their philanthropic gift will support startup costs for the center, including a new endowed chair, enhanced clinical services, new research and clinical trials. The center will be located within the current OHSU Allergy and Immunology Clinic led by **Shyam Joshi, M.D.**, assistant professor of medicine, School of Medicine. It is expected to open in 2023. "It's going to be game-changing, not only in our region, but for the country," Joshi said. Presently, the nearest regional food allergy research center for patients is in the Bay Area, leaving patients across five states with just one option, hundreds or thousands of miles away. With the establishment of the Burghardt Food Allergy Center in Portland, OHSU will be able to serve patients across Oregon, Washington, Alaska, Idaho and Montana. With the Burghardt's generous gift, the food allergy center aims to:

- Provide enhanced patient care to both children and adults with food allergies.
- Educate patients in the community as well as clinicians who are not as specialized in identifying, diagnosing and treating food allergies.
- Expand research into the increased prevalence of food allergies and better ways to treat them, including severe allergies like FPIES.



# APPOINTMENTS

OHSU-PSU School of Public Health leaders announced that **Rick Johnson, Ph.D.**, professor of public health, OHSU-PSU School of Public Health, and associate dean for academic affairs, will serve as interim dean of the school. Johnson will lead the school while **David Robinson, Ph.D.**, OHSU interim executive vice president and provost, and **Susan Jeffords, Ph.D.**, Portland State University provost, undertake a national search to find a dean who will serve in a permanent capacity. “With more than three decades of experience as a faculty member at OHSU, and seven years with the SPH, Dr. Johnson will provide an experienced hand as the national search for a dean unfolds,” Robinson and Jeffords said in a joint statement. “We are grateful for his expertise, support and energy as the leadership of the School undergoes this transition.” Johnson did pioneering work dealing with the behavior of industrial solvents, such as trichloroethylene in groundwater. He also played an early role identifying the impact of the gasoline additive MTBE on drinking water supplies. “I thank both Interim Provost Robinson and Provost Jeffords for this opportunity, and for their support,” Johnson said. “I look forward to guiding the School of Public Health through this period of transition, and am committed to maintaining the positive environment for our learners built by Dean Bangsberg.”

**Jennifer Mensik Kennedy, Ph.D., M.B.A.**, assistant professor of Clinical Nursing, School of Nursing, was elected as the American Nurses Association’s next president to represent the interests of the nation’s more than 4.3 million registered nurses. Mensik has more than 25 years of nursing experience in a variety of settings ranging from rural critical access hospitals and home health to hospital administration, and academia. She has served as President of the Arizona Nurses Association and 2nd Vice President and Treasurer of ANA. The term of service for all newly elected leaders will begin January 1, 2023.



**Benjamin Hoffman, M.D., FAAP**  
(credit: OHSU News)

**Benjamin Hoffman, M.D., FAAP**, professor of pediatrics, School of Medicine, has been voted president-elect of the American Academy of Pediatrics. This is only the second time an OHSU faculty member has been elected to this position. Dr. Hoffman will take over as president in January 2024.

The OHSU Foundation has appointed **Greg Ness** as its new board chair, along with four new ex-officio members of the board of trustees. The OHSU Foundation is governed by a volunteer board of trustees comprising civic and business leaders who help develop goals and policies for the foundation to ignite the power of philanthropy in support of OHSU’s missions. Ness, who most recently served as board vice chair, has been a member of the OHSU Foundation Board for more than 10 years and has served on numerous committees, including chair of the investment committee. He is currently co-chairing the foundation’s presidential search committee. A well-known business leader in the Portland community, Ness is the chairman of StanCorp Financial Group, Inc. and The Standard. He retired as CEO on July 1, 2021, after serving Standard Insurance since 1979.





Alison Edelman, M.D., M.P.H., joins a World Health Organization advisory group to improve sexual and reproductive health globally. (OHSU/Christine Torres Hicks)

**Alison Edelman, M.D., M.P.H.**, professor of obstetrics and gynecology, School of Medicine, is one of only two from the Americas appointed to an international advisory group coordinated by the World Health Organization that aims to identify and address priorities for research to improve sexual and reproductive health. Initiated by the WHO in 1972, the Special Programme of Research, Development and Research Training in Human Reproduction, or HRP, works collaboratively to promote, coordinate, support, conduct and evaluate research in human reproduction, with a particular focus on the needs of developing countries. The HRP operates within a broad framework of intergovernmental and interagency cooperation, including the United Nations, bringing together policy-makers, scientists, health care providers, clinicians, consumers and community representatives. In this role, Edelman and other experts

from around the globe will support HRP in various initiatives in the reproductive health space, including promoting and supporting research, identifying and evaluating health and safety problems, strengthening the training and research capability of developing countries in the field of human reproduction, and establishing a basis for collaboration with other programs engaged in research and development in reproductive health. “I’m honored to be appointed to HRP,” Edelman said. “HRP provides key strategic guidance for sexual and reproductive health globally. It plays a critical role in protecting global programming around sensitive health care issues, including abortion, contraception, family planning and gender equity. Together, we’re working to create a world where all people have access to affordable, high-quality sexual and reproductive health information and services.”



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