

UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE  
2020 REPORT TO THE  
WASHINGTON STATE MEDICAL ASSOCIATION

We very much appreciate this annual opportunity to provide information to the Washington State Medical Association (WSMA) on major activities and progress over the last year at the University of Washington School of Medicine (UWSOM). The strong mutual respect and support that exist between WSMA and the UWSOM have been vital to advancing our mutual agendas and priorities. It is gratifying to have such a strong partner in our work together to improve health for all people. Thank you for all that you have done on behalf of health care for the state of Washington and elsewhere!

COVID-19

The novel coronavirus, COVID-19, continues to significantly impact clinical, educational and research activities at UW Medicine. Since the first case in the United States was confirmed in Washington State in January, UW Medicine has been a national leader in responding to the crisis.

- **John Lynch**, medical director of Harborview Medical Center's Infection Prevention and Control (IPC) program, is leading the UW Medicine COVID-19 Response Team. The team includes infectious disease physicians, nursing and administrative leadership, IPC team members from all sites, communications, supply chain, facilities and leaders of other critical functions.
- The Institute for Health Metrics and Evaluation, an independent global health research center administratively based in UW Medicine, is responsible for creating the nationally publicized COVID-19 Projections model, which has helped inform the general public's understanding of the virus's impact and guide policy.
- Harborview Medical Center (HMC) is King County's Disaster Medical Coordination Center (DMCC), coordinating medical response during mass casualty incidents. The DMCC sends patients to hospitals across the community to ensure patients receive timely access to care and that no one hospital is overburdened. **Mark Taylor**, director of Trauma and Emergency Preparedness at HMC, and **Steve Mitchell**, medical director of the Emergency Department at HMC, built a long-term version of the DMCC called the Regional COVID-19 Coordinating Center (RC3). The RC3 is staffed 24/7 with a critical care nurse and an on-call physician. It has the capability to place people in medical facilities based on a hospital's capability and capacity. Additionally, the RC3 provides support to various facilities where people are living in close proximity, such as homeless shelters, jails and nursing homes.
- Seattle became an early epicenter for the COVID-19 outbreak in the U.S. In response, Airlift Northwest rapidly adapted its procedures and policy to safely transport patients and flight crew. Other air medicine programs, both regionally and nationally, have been adopting these procedures. New procedures center on reducing the transmission of respiratory droplets and decontaminating aircrafts. Along with sharing air transport protocol, Airlift's Seattle base has offered to assist with plane and crew decontamination (cleaning of the aircraft and showers for the crew) for any air medicine companies that fly in and out of Seattle.
- In the face of a national shortage of diagnostic tests, UW Medicine virologists developed a novel COVID-19 assay, ensured its accuracy, and earned the Food and Drug Administration's approval to test patient specimens - all before February had ended.
- On March 6, UW Medicine began offering drive-thru testing for employees at the UW Medical Center - Northwest in Seattle. On April 22, Harborview Medical Center and Public Health - Seattle

& King County teamed up to introduce a mobile testing site in the Rainier Beach neighborhood of Seattle to reach underserved populations. The site offers drive-thru testing and walk-up testing.

- In the initial days of the pandemic, UW Medicine took steps to free up personnel, supplies and space for potential large volumes of COVID-19 cases. Efforts included postponing all elective and non-urgent surgeries and procedures and shifting appointments to telehealth to reduce viral exposure to patients and healthcare teams. All UW Medicine hospitals have limited hospital visitors until the transmission of COVID-19 is no longer perceived as a threat to patients, staff and community.
- The UW Medicine Virology Lab is offering blood tests to all employees to look for the presence of an antibody people produce in fending off COVID-19. The tests are expected to improve medical understanding of the virus, including how long antibodies stay in the body and if they provide immunity. This knowledge could support the development of treatments and vaccines.
- **Elizabeth Rosenman**, director of the simulation program for the Department of Emergency Medicine, held over 10 simulation trainings for attending physicians and residents to feel supported and confident in their skills intubating a COVID-19 patient. In the training, providers wear the full personal protective equipment required by UW Medicine and practice intubating a manikin using a variety of tools.
- Under the leadership of **Geoff Baird**, interim chair of the Department of Laboratory Medicine, the UW Medicine Virology Laboratory with the support of countless volunteers is processing 10,000 COVID-19 tests a day.

The UW Medicine community has come together to respond to the COVID-19 pandemic in an unprecedented and sustained display of courage and altruism:

- To keep up with increased demand, UW Medicine pharmacists made hand sanitizer to supplement the supply available for all UW Medicine hospitals, prioritizing supply for patient care areas.
- A website initially launched to help match UW Medicine frontline employees with childcare blossomed into a platform of kindness. The UW Medicine Care & Share website was launched March 16. In its first week, about 100 offers for services were made, ranging from providing childcare, pet care, grocery shopping and more.
- Seattle-area philanthropists are accelerating UW Medicine's COVID-19 response with more than \$30 million in contributions towards a \$50 million need for the UW Medicine Emergency Response Fund. Early supporters of the fund include Connie and Steve Ballmer, The Paul G. Allen Family Foundation, The Bezos Family, Susan Brotman, The Neukom Family, M.J. Murdock Charitable Trust, Wendy and Eric Schmidt, Christine and Bryan White, Janet and James Sinegal, Washington Research Foundation, Anu and Satya Nadella, and an additional 3,380 community members. These funds are being used to increase testing capacity, including testing and care for unsheltered populations, accelerate COVID-19 research, and increase inpatient care capacity.
- In response to the remarkable outpouring of inquiries from the public asking how they can help frontline staff; UW Medicine established a website where individuals can make cash or in-kind donations and leave messages of support for healthcare workers.
- Community member Tim Prestero, of Design That Matters, a nonprofit in Redmond, worked with UW Medicine to create a design for 3D printed face shields for frontline healthcare workers. The design of these face shields was put through a rigorous review process to ensure it could handle routine use and offer adequate splash protection. After the review period, the National Institutes of Health put Prestero's face shield design into the public domain as a "recommended" device, freely sharing its specifications with organizations worldwide. All 3D printers across UW campuses (more than 70) have been put to use printing the face shield design.

- UW Medicine nurses and doctors have traveled to nursing homes throughout King County in partnership with public health to test residents and staff for COVID-19. Since early April, volunteers have tested more than 1,500 residents of long-term care facilities.

#### COVID-19 Research:

- A research team at UW School of Medicine and Fred Hutchinson Cancer Research Institute is studying how the COVID-19 virus attaches, fuses and gains entry into cells. Analysis is locating the virus's vulnerabilities and gathering other information that could prompt the discovery of countermeasures against the virus. The lead authors are **Alexandra C. Walls**, a recent postdoctoral fellow, and **Young-Jun Park**, a research scientist. Both conduct studies in the lab of **David Veessler**, senior author of the report and assistant professor of biochemistry.
- Most of the COVID-19 patients placed on a ventilator spent an average of 10 days on it, according to a UW Medicine-led analysis of the early weeks of the U.S. pandemic. A study of 24 of the most critically ill patients in the Puget Sound area indicated a high mortality rate of 50 percent, and a prolonged time on respirators for the patients who did survive the virus. **Pavan Bhatraju**, a pulmonary and critical care physician, led the study.
- The results of a Seattle study led by **Alison Roxby**, professor of medicine, allergy and infectious diseases and global health, could have implications for health practices at independent and assisted living communities for senior adults. One of the valuable lessons from the study: health professionals should not rely solely on symptoms to determine if an older adult should receive a lab test for COVID-19.
- A multi-site clinical trial, led by the UWSOM in collaboration with New York University Grossman School of Medicine, aims to determine if a commonly used anti-malarial and autoimmune-disease treatment, hydroxychloroquine, can prevent transmission of COVID-19. **Ruane Barnabas**, associate professor of global health in the UW schools of Medicine and Public Health, is the principal investigator. The research team is expecting results in summer.
- Community sampling to spot potentially serious or previously unseen respiratory viruses might help in mitigating present and future pandemics. Widespread community sampling of people experiencing respiratory illnesses may become essential to early detection and control of future pandemics. This is one of the implications of findings made during the Seattle Flu Study. The lead study author is **Helen Chu**, assistant professor of medicine, Division of Allergy and Infectious Diseases. The senior author is **Trevor Bedford** of the Fred Hutchinson Cancer Research Center. The report is based on work their team conducted over the past year as part of the Seattle Flu Study, an effort to track strains of influenza and other respiratory viruses. The researchers tapped into this existing surveillance platform to see if home testing can help in the community detection of COVID-19. This strategy enabled the researchers to find early cases on the coronavirus in the Puget Sound region in February and the first evidence of community transmission in the United States.
- Study findings suggest that pregnant women who contract the virus face a higher incidence of severe pneumonia, which could lead to preterm birth. The study found that COVID-19 can severely affect pregnant women who are overweight or obese before becoming pregnant. This is the first study published by the Washington State COVID-19 in Pregnancy Collaborative, a group of obstetricians across hospital systems that facilitate 40 percent of births in Washington State. The senior author of the study was **Kristina Adams Waldorf**, professor of obstetrics and gynecology and an expert on prenatal infections and their consequences.
- An antibody first identified in a blood sample from a patient who recovered from Severe Acute Respiratory Syndrome (SARS) in 2003 inhibits related coronaviruses, including COVID-19. The antibody, called S309, is now on a fast-track development and testing path at Vir Biotechnology in

the next step toward possible clinical trials. The senior authors are **David Veessler**, assistant professor of biochemistry, and Davide Corti of Humabs Biomed SA, a subsidiary of Vir. The S309 antibody is particularly potent at targeting and disabling the spike protein that promotes the coronavirus's entry into cells. These initial results may pave the way for using the S309 antibody as a preventive measure for people at high-risk of exposure to COVID-19 or as post-exposure therapy to limit or treat severe illness.

## 2020 State Legislative Recap

On behalf of UW Medicine, we appreciate this annual opportunity to provide information to the Washington State Medical Association regarding our engagement on state policy issues over the past year. We very much are grateful for the partnership and support between our organizations, on issues related to state policy and beyond.

On January 13, the Washington State Legislature began the 2020 Legislative Session with the primary duty of adjusting the 2019-2021 biennial state operating budget that funded state government operations in the 2019 session. After passing a number of policy and budget provisions, the Legislature adjourned on time on March 12, 12 days after the first death from COVID-19 was announced in the U.S., in Washington State. As the magnitude and potential impacts of the pandemic became increasingly clear, Governor Inslee vetoed a number of broadly supported bills and budget provisions in the interest of reducing expenditures to preserve state funds for the COVID-19 response. We expect the pandemic to impact both UW Medicine's needs and lobbying priorities, as well as the state's resources and priorities, for years to come.

Throughout the session, UW Medicine worked closely with our partners at the Washington State Medical Association. The following provides a summary of UW Medicine's legislative policy and budget efforts in the 2020 session.

### **UW Medicine 2020 Session Policy Priorities**

- **Prior Authorization Legislation (ESSB 6404):** UW Medicine worked jointly with WSMA and the Washington State Hospital Association on this provision, which addresses the administrative, financial, and patient care burden of seeking prior authorization from insurance carriers in situations where it is almost always granted. This new law creates a work group to address this issue.
- **Post-Acute Care Difficult to Discharge Legislation (HB 2597 / SB 6275):** This bill would have reformed the State Department of Social and Health Services' (DSHS) process for placing hospital patients who have reached post-acute care status but are "difficult to discharge" for reasons including homelessness, behavioral health issues, and other non-acute factors. Despite support from UW Medicine and others, the bill did not pass.
- **Gunshot Survivor Services Proposal (SB 6553):** This bill would have provided enhanced mental health services for gunshot wound survivors throughout the state through Harborview's Injury Prevention and Research Center (HIPRC). Though the bill did not pass, key pieces of it were included in SB 6288, a bill that did pass to create the Washington Office of Firearm Violence Prevention.
- **Telemedicine Payment Parity (ESSB 5385):** UW Medicine, along with WSMA and others, strongly supported this bill, which ensures physician payment parity for acts of telemedicine. The bill passed this session.

- **Making Washington State a Member of the Interstate Nurse Licensure Compact (HB 2376 / SB 6209):** This bill would allow nurses from out of state to receive reciprocity for their licenses in state. It did not pass this session.
- **International Medical School Graduates and a Path to practice (SSSB 5846):** This bill, which extends the International Medical Graduate Work Group, passed with the support of UW Medicine, which has participants on the work group.
- **Financial Transparency (HB 2036):** This bill would have created additional reporting requirements for healthcare organizations. UW Medicine had concerns about the administrative burden associated with the bill. It did not pass the legislature.
- **Death with Dignity Study (SHB 2419):** This bill would have required UW Medicine to complete a study on barriers to individuals accessing death with dignity. Though the bill passed the Legislature, it was vetoed by the Governor.
- **Establishing the health care cost transparency board (SSHB 2457):** This bill would create a panel to assess healthcare cost increases and would make public information about organizations whose costs grew over a certain threshold in a given year. Despite concerns from UW Medicine and other providers about how costs would be assessed, the bill passed.
- **Implementing a sustainable funding model for the services provided through the children's mental health services consultation program and the telebehavioral health video call center (SHB 2728):** This bill, which would provide sustainable funding for telehealth consult services run out of UW Medicine, passed with our support.

#### UW Medicine 2020 Session Operating Budget Priorities

- **Daily State Medicaid Reimbursement Rate for Involuntary Inpatient Psychiatric Beds:** Last session, UW Medicine secured initial and long-term capital funding for the new Behavioral Health Teaching Facility to be built at Northwest Hospital. However, we continue to push to ensure adequate payment rates for the facility when it opens. While the budget did not address the needs of UW Medicine this year, it did provide for a work group to assess current payment policies and make recommendations for next year's budget.
- **Paramedic Simulator Training Funding:** UW Medicine sought \$450,000 to pay for a simulator to avoid the use of live animals in paramedic training. This passed as part of the budget but was vetoed by the Governor.
- **Funding for Sexual Assault Nurse Examiner Training:** Harborview Medical Center's Abuse and Trauma Center sought and received \$300,000 in support of its training program for sexual assault nurse examiners.

#### UW Medicine 2020 Session Capital Budget Priorities

- **Magnuson Health Sciences T-Wing Renovation Pre-Design Funding:** UW Medicine sought and received \$1 million in pre-design funding for the demolition and renovation of the existing T-Wing space in the Magnuson Health Sciences Building. We requested the funding as Phase 2 of a two-phase project to update and expand the health sciences teaching space at the University, with Phase 1 being the construction of the new Health Sciences Education Building.
- **Maintenance & Operation Funding for the Population Health Facility:** In 2017, the Bill & Melinda Gates Foundation provided \$220 million to build a new Population Health Facility on the UW's Upper Campus. UW Medicine sought \$3.6 million in maintenance and operation funding for this building, which it did not receive.

### **UW Medicine Priorities for the 2021 Session**

Due to the impacts of the novel coronavirus on the economy, in an unofficial update to the state's revenue forecast, the state's chief economist projected that revenue collections over the next three fiscal years will be about \$7 billion lower than was forecast less than three months ago. Furthermore, healthcare providers have been significantly impacted by the pandemic as they grapple with high costs related to treating COVID-19, at the same time revenues are down significantly due to cancellation of non-urgent and elective procedures to preserve capacity. UW Medicine is no exception: indeed, these impacts are magnified by the large amount of uncompensated care provided by UW Medicine, as well as its teaching and research leadership. UW Medicine provided more than \$700 million of uncompensated care last year.

Much remains to be seen how the economic and political landscape will change between now and the 2021 session. There is strong likelihood that a special session will intervene between now and the next regular session, with the purpose of addressing budget needs related to the pandemic. We look forward to working with our partners, including WSMA, to address the important needs for healthcare providers related to COVID-19, while at the same time ensuring existing priorities maintain momentum where possible.

### **UW School of Medicine Status**

The nationally recognized consulting firm of Parker Philips conducted a study of UW Medicine's economic contributions to the Washington state economy. The study highlighted the economic benefits of UW School of Medicine's research activities. In 2018, research conducted by faculty based at UW Medicine and its affiliates totaled \$1.8 billion, and this research supported and sustained 8,705 jobs.

The University of Washington is No. 7 among world universities and No. 8 in the field of medicine in the annual performance rankings by national Taiwan University (NTU). The NTU ranking system evaluates and ranks the scientific paper performance of the top 800 universities worldwide. The UW was also highly ranked in the following subjects related to clinical and basic biomedical science research:

- Microbiology: No. 2
- Immunology: No. 4
- Clinical Medicine: No. 7
- Biology & Biochemistry: No. 11
- Molecular Biology & Genetics: No. 11
- Pharmacology & Toxicology: No. 11

### **Education Programs**

#### ***Administrative changes:***

- **Gerald Tolbert**, assistant clinical professor of emergency medicine, was named Assistant Dean for Student Support in May 2020. In this new role, Dr. Tolbert will serve a key role as the Foundations Phase (preclinical) Dean for the Seattle campus.
- In July 2020, **Maya Sardesai**, associate professor of otolaryngology, will step into the role of Assistant Dean for Student Development. This role will oversee and support academic and career programs for medical students throughout their tenure in medical school.
- In October 2018, **Patricia Kritek**, professor of medicine, Division of Pulmonary & Critical Care Medicine, was named Associate Dean for Faculty Development reporting to **Mark Green**, Vice Dean for Administration and Finance. In January 2020, the title was updated to Associate Dean for

Faculty Affairs and now reports to **Tim Dellit**, chief medical officer, vice president for medical affairs and president of the University of Washington Physicians.

- **Anne Browning**, affiliate assistant professor in the College of Education, was named the School of Medicine's Assistant Dean for Well-Being.
- **Giana Davidson**, associate professor of surgery, will take over as Assistant Dean for Professionalism effective July 1, 2020. Davidson replaces **Molly Jackson**, who now serves as Assistant Dean for the Colleges. Davidson will join the Associate Dean for Faculty Affairs and the Assistant Dean for Well-Being in the office of faculty affairs.

#### *Changes among department chairs:*

- **Beth Buffalo** was named interim chair of the Department of Physiology & Biophysics, replacing **Stan Froehner**.
- The Department of Laboratory Medicine and the Department of Pathology were combined to form the Department of Laboratory Medicine and Pathology. **Geoff Baird** is serving as the interim chair of the new department. **Charles Alpers** was the interim chair of the Department of Pathology.
- **Ramesh Rengan** was named permanent chair of the Department of Radiation Oncology.
- **Barbara Jung** was appointed chair of the Department of Medicine on September 1, 2019. The department is the largest in the School of Medicine. Before joining UW Medicine, Dr. Jung was in a leadership position at the University of Illinois.
- **Michael Regnier**, adjunct professor of physiology and biophysics and director for UW Translational Muscle Research, was named interim chair of the Department of Bioengineering, effective July 1, 2020. Dr. Regnier previously served as both the vice-chair for academics and the associate chair for research in the department. Dr. Regnier replaced **Ceci Giachelli**. During her tenure she guided the launch of the Master of Applied Bioengineering program, created BioEngage (a partnership program with industry/NGOs), and fostered a culture of collaboration between the College of Engineering and the School of Medicine.

#### *Medical student update:*

**Incoming 2020 class:** A total of 270 first-year positions are being filled for fall 2020. The Washington component of the entering 2020 medical school class had 947 applicants, of whom 142 are matriculating. The ratio of Washington applicants to admissions is 6.5 to 1. Overall, 7,572 applications were received for the 270 first-year positions. Among all entering students, 59 percent are women. The average age in the new class is 25 and the average GPA is 3.66.

**Medical students in residency match:** Our medical students had another successful match for residency positions. Among 253 graduates, 125 matched into primary care specialties. Thirty-nine percent of students are remaining in the WWAMI (Washington, Wyoming, Alaska, Montana and Idaho) region, including 79 in residencies in Washington.

**Thank you, WSMA:** Our educational programs are unique nationally in our ongoing partnership with community physicians to train the next generation of physicians. Many members of WSMA, side-by-side with our full-time faculty and staff, provide outstanding mentorship, guidance and role models for our students and trainees. Thank you very much for your participation in our teaching and mentoring programs.

***Graduate medical education (GME) update:***

**UW residency and fellowship training programs:** The UWSOM served as the sponsoring institution for 118 residency and fellowship programs accredited by the Accreditation Council for Graduate Medical Education (ACGME), and over 70 clinical fellowship programs that are not accredited by the ACGME. The GME Office also operationally supports four dental residency programs accredited by the Commission on Dental Accreditation (CODA).

Over 1,000 residents and 300 fellows participate each year in training programs. Internal medicine is the school's largest residency program, with 170 filled positions in the 2019-2020 academic year, followed by pediatrics (126), anesthesiology (112), psychiatry (75), general surgery (54), emergency medicine (48), diagnostic radiology (43), and orthopedic surgery (39). The UWSOM received approval for accreditation of the following programs during the 2019-2020 academic year: Addiction Medicine, effective September 27, 2019; Addiction Medicine Boise, effective April 3, 2020; Obstetrics Anesthesiology, effective July 1, 2019; and Pediatric Hospital Medicine, effective April 23, 2020.

The WWAMI Family Medicine Residency Network (FMRN), overseen by the UWSOM, consists of 31 affiliated residency programs located within the WWAMI region, including 21 in Washington. The Network trains over 500 family medicine residents; many remain in the WWAMI region to practice after completion of training.

UW Medical Center, Harborview Medical Center, Seattle Children's Hospital, and the VA Puget Sound Health Care System are the primary training sites in Seattle for our residents and fellows. The School of Medicine also maintains close affiliations with over 300 community-based training sites in Seattle and the surrounding area, as well as with many inpatient and outpatient settings for a growing number of specialties throughout the WWAMI region.

The UWSOM partners with multiple hospitals throughout the region to provide exemplary training experiences across a range of diverse settings and patient populations. Expanding training opportunities and building new GME programs throughout the region are critical to meeting the healthcare needs of the region. With a high correlation between site of residency training and later site of practice, providing training opportunities in communities with physician shortages is one of the best ways to recruit physicians to the area. Without additional residency positions and programs, expansion of medical school opportunities will have a limited long-term impact on the region's workforce.

**ACGME accreditation:** All ACGME residency and fellowship training programs are accredited (including five in initial accreditation status).

As the sponsoring institution, UW Medicine holds Continued Accreditation status. This very favorable status reflects the strong leadership, oversight, and administration of residency and fellowship education at the School of Medicine, primary training sites in Seattle, and training sites throughout the WWAMI region.

**Residency match:** Our residency programs did extremely well filling positions in the national match. Ninety-five percent (276/291) of available UW resident positions were filled in the initial NRMP Match and the remaining 15 positions were filled immediately afterwards during the Supplemental Offer and Acceptance Program (SOAP). Matched residents include 52 UW students: 52 (tied for the largest Match of UW students).

## *Education*

### *Educational initiatives and milestones:*

- In July 2019, UW Medicine participated in the Chehalis School District's annual High School Student STEM Camp. **Robert Sweet**, urologist at the Kidney Stone Center at Northwest Hospital, and executive director of the Center for Research in Education and Simulation Technologies (CREST) and the WWAMI Institute for Simulation in Healthcare (WISH), led the two-day camp where students rotated through a series of workshops. Students from Chehalis, Hoquiam School Districts and the Quinault Tribe participated in activities that included working with materials to make simulation manikins and anatomical structures, learning how to communicate effectively as a team and more.
- The University of Washington and Gonzaga University have partnered to develop a new center for medical education, health sciences and innovation in Spokane. The building, expected to be completed by August 2022, will house the University of Washington School of Medicine-Gonzaga University Regional Health Partnership. The building will be equipped with state-of-the-art teaching classrooms, anatomy labs, research and innovation centers, offices and study spaces.
- The **Elizabeth M. Kanny** Endowed Student Support Fund was established in August 2019. The scholarship recognizes Dr. Kanny's long-standing dedication to the education of occupational therapists and the value of diverse perspectives in the program and the profession.
- The MEDEX Northwest Physician Assistant Program at the UW School of Medicine, founded by **Richard Smith**, recently celebrated its 50<sup>th</sup> anniversary. In 1968, Dr. Smith saw an opportunity to train a group of highly skilled corpsmen and medics returning from Vietnam to work in civilian medicine at a time of unprecedented physician shortages. The program has grown into the largest civilian physician assistant program in the country. With four campus sites, it has trained about 2,600 healthcare professionals.

## Scientific Discovery

- A genetic link has been found for some instances of Sudden Infant Death Syndrome (SIDS). The study, headed by **Hannele Ruohola-Baker**, professor of biochemistry and associate director of the UW Medicine Institute for Stem Cell and Regenerative Medicine, is the first such to make an explainable link tracking the mechanism between a genetic anomaly and some forms of the syndrome.
- Researchers developed a new technique to overcome several limitations of typical screens conducted on cell samples. These screens, commonly used to discover new cancer drugs, are limited in the amount of data they produce. The new technique, called Sci-Plex, combines improvements in labeling cell nuclei with advances in profiling what genes are expressed. The researchers think Sci-Plex will be a powerful tool to categorize drugs and understand their mechanisms. Lead researchers include **Sanjay R. Srivatsan**, an MD/PhD student in the Medical Scientist Training Program, **Jose L. McFaline-Figueroa**, a postdoctoral fellow in genome sciences, and **Vijay Ramani**, a former UW genome sciences graduate student.
- Researchers found that suppressing a specific gene might protect people from Alzheimer's disease. The gene, *MSUT2*, regulates the biology of a protein in the brain called tau. Misfolded tau is one of the culprits in brain diseases that cause dementia. This research is a step forward in treating Alzheimer's disease. The senior author was **Brian Kraemer**, research professor of medicine in the Division of Gerontology and Geriatric Medicine.

- A study led by **Sandra E. Juul**, professor of pediatrics and head of the Division of Neonatology, suggests that erythropoietin treatment may not provide neuroprotection for extremely premature babies. The researchers randomized more than 900 infants to receive either high-dose erythropoietin or a placebo. The results suggest that high-dose erythropoietin treatment does not lower the risk of death or severe brain damage before 2 years of age in children who had been born at a very premature stage.
- **Sean Murphy**, associate professor of laboratory medicine and microbiology, led a multi-institutional team that developed and assessed a new biomarker to detect malaria parasites earlier in an infection. The new molecular test outperforms traditional blood smears and has qualified for Food and Drug Administration clinical trials. This is important in the efforts to develop vaccines and better drugs.
- Scientists have created the first completely artificial protein switch that can work inside living cells to modify the cell's complex internal circuitry. The switch is called LOCKR, short for Latching, Orthogonal Cage/Key pRotein. The project was led by **David Baker**, director of the UW Medicine Institute for Protein Design, and Hana El-Samad at University of California San Francisco. LOCKR gives scientists a new way to interact with living cells and could lead to new therapies for a variety of diseases including cancer, autoimmune disorders and more.
- **Alex Greninger**, assistant professor of laboratory medicine, co-lead a project that looked at two versions of the human herpesvirus-6 that can integrate into chromosomes and be inherited like any other gene. The researchers found that the virus can produce proteins in the brain and other tissues. These findings might help explain why some people who inherit this "fossil virus" appear to have a higher risk of developing neurodegenerative diseases such as multiple sclerosis and Alzheimer's.
- A study led by researchers at the University of Washington and the University of Pittsburgh identified 48.9 million global cases of sepsis in 2017 and 11 million deaths, representing 1 in 5 deaths worldwide. The study revealed twice as many people as previously believed are dying of sepsis. Among them are a disproportionately high number of children in poor areas. **Mohsen Naghavi**, professor of health metrics sciences and researcher at the Institute for Health Metrics and Evaluation, is senior author of the study.

***Major new research awards:***

- In October 2019, Lynn and Mike Garvey gifted UW Medicine \$50 million to establish the Garvey Institute for Brain Health Solutions. The institute is an integral part of UW Medicine's larger plan for revolutionizing mental health care and improving brain health for our region and beyond. In the first five years, the Garvey Institute will work on three flagship projects: cognitive aging and brain wellness, the effects of physical and emotional trauma on the brain, and addiction.
- **Cecilia Lee**, assistant professor of ophthalmology, received a \$17.2 million grant from the National Institute on Aging to research the association of eye diseases with Alzheimer's disease. Dr. Lee was the lead author of a 2018 study that found a significant link between Alzheimer's and three degenerative eye diseases: age-related macular degeneration, diabetic retinopathy and glaucoma.
- The National Library of Medicine announced a \$2.8 million grant to fund the UnBIASED project, led by **Andrea Hartzler**, associate professor in the Department of Biomedical Informatics and Medical Education and co-director of the Clinical Informatics and Patient-Centered Technologies program. The project will analyze patient-doctor communications to detect and provide feedback on implicit bias.
- **Deborah J. Bowen**, professor of bioethics and humanities, will lead a five-year, \$3.5 million project funded by the National Cancer Institute to explore the feasibility and benefits of administering genetic cancer-risk screenings in the primary care setting, enabling patients with positive findings to pursue follow-up care sooner. Currently most genetic tests for hereditary cancer risks are prescribed after the patient has been diagnosed with cancer.

*Research highlights from the year:*

- A study led by **Ramesh Rengan**, professor and chair of the Department of Radiation Oncology, found that a drug long used to treat HIV, when paired with chemotherapy and radiotherapy, appears to enhance survival for patients with inoperable non-small cell lung cancer.
- Senior researchers **Joseph Mougous**, professor of microbiology, and **Elhanan Borenstein**, a former associate professor of genome sciences at the UWSOM and current associate professor of computer science and of medicine at Tel Aviv University in Israel, found that certain groups of prevalent gut bacteria have a secretion mechanism to inject toxic proteins into other bacteria that crowd too close. At the same time, they keep themselves safe from their own or their kin cells' poison by carrying specific immunity factors that neutralizes toxins. The state of the human gut microbiome is critical to aspects of health and disease.
- Wound healing events in mucous tissues during early infection by Simian Immunodeficiency Virus (SIV) guard some primate species against developing AIDS, according to a recent study. The multi-institutional study was led by **Michael Gale, Jr.**, professor of immunology and director of the Center for Innate Immunity and Immune Disease. The study sought to uncover successful virus-fighting tactics that could inform the design of better antiviral drugs to treat HIV in human beings.
- A combination of two different kinds of heart cells derived from stem cells might be key to designing an effective graft for repairing damaged hearts. In a study co-led by **Charles Murry**, director of the Institute for Stem Cell & Regenerative Medicine, scientists found that stem-cell derived epicardium augmented the structure and function of engineered human heart tissue in laboratory tests. For example, the muscle cell reached a greater maturity and showed an increase in the ability to contract and relax.
- A team of scientists invented a device that can control neural circuits by using a tiny brain implant managed by a smartphone. The device could help develop new therapeutics for pain, addiction and emotional disorders. The study was co-authored by **Michael Bruchas**, professor of anesthesiology and pain medicine, and pharmacology.
- An observational study led by **Jocelyn James**, assistant professor of medicine in the Division of General Internal Medicine, found that patients coming off chronic opioid therapy for pain management were three times more likely to die of an overdose in the years that followed. According to the research team, improved clinical strategies, including multimodal pain management and treatment of opioid-use disorder may be needed for this high-risk group.
- **Benjamin Freedman**, assistant professor of medicine in the Division of Nephrology, will team up with researchers at UC Berkeley to study the promises and challenges of genome editing in the search for new treatment or cures for a number of genetic disorders on kidney organoids – tiny, kidney-like structures grown from stem cells.
- Changes in heart rate due to low oxygen conditions experienced by the fetus during pregnancy could predict the future heart health of babies, suggests a study led by **Martin Frasch**, assistant professor of obstetrics and gynecology. If babies from complicated pregnancies are identified to have abnormal fetal heart-rate patterns, doctors could then follow the development of these children more closely to protect against future risk of heart disease.
- A study led by **Susan Ferguson**, associate professor of psychiatry and behavioral sciences and director of the Alcohol and Drug Abuse Institute at UW, found that relapse can be prevented by controlling cells in a brain region called the nucleus accumbens on rats. This process could be used to prevent relapse for any kind of addiction.
- A study led by **Elizabeth Blue**, associate professor of medicine in the Division of Medical Genetics, and **Timothy Thornton**, associate professor of biostatistics at the UW School of Public Health, found that a gene implicated in Alzheimer's disease has two variants that act differently among Caribbean

Hispanics, depending on ancestral origin. Individuals with African-derived ancestry had lower odds of Alzheimer's than individuals with the European-derived variant. The study's results have important implications for the use of personalized genetic risk assessment in populations with diverse ancestries.

- Supplements of vitamin D and omega-3 fatty acids do not help people with type 2 diabetes stave off chronic kidney disease, according to the findings from the largest clinical study to date of the supplements in this patient population, led by **Ian de Boer**, professor of medicine.
- A working group convened by the National Heart Lung and Blood Institute at the National Institutes of Health suggested that expanding the growing knowledge of mitochondria into clinical applications could improve the outlook for prevention, assessment and treatment of heart failure. **Rong Tian**, physician-scientist and anesthesiology professor, was head of the working group. Newer evidence suggests that mitochondria not only act as the energy suppliers of cells, but also oversee critical decision points, including cell survival and death decisions. These newly discovered roles make it an important target for therapy.
- A new technique makes it possible to track changes in gene activity across a cell's entire genome over time in more detail than has been possible before. The technique, called sci-fate, was developed as part of a collaboration between UW Medicine and Brotman Baty Institute researchers and scientists from the Allen Discovery Center for Cell Lineage Tracing and Illumina, Inc. Lead author **Junyue Cao**, a postdoctoral fellow in the laboratory of **Jay Shendure**, professor of genome sciences and scientific director of the Brotman Baty Institute for Precision Medicine, hopes this method will improve understanding of normal cell physiology and cell dynamics during the development of diseases or in response to drug treatments.
- A study found that artificial intelligence algorithms could help improve the accuracy of breast cancer screenings when used in combination with assessments from radiologists. According to **Christoph Lee**, professor of radiology and lead radiologist and co-first author of the paper, this approach could potentially prevent 500,000 unnecessary diagnostic workups each year in the United States.
- Two different types of surgical treatments for ankle arthritis are effective, but ankle replacement appears to have better outcomes overall. Patients with severe ankle arthritis who had total ankle replacement surgery, did better overall after two years than those who had the more traditional surgery that fuses the joint, according to a multi-center study. **Bruce Sangeorzan**, professor of orthopedics and sports medicine, led the study.
- The Dog Aging Project will track 10,000 pet dogs from across the country for 10 years. The goal of this study is to learn why some pets have longer, healthier lives than others. Researchers at Texas A & M University College of Veterinary Medicine and UWSOM are leading the project. The project will advance knowledge about how genes, habits, and the environment influence dog aging. UW leaders are **Matt Kaerberlein** and **Daniel Promislow**, both in the Department of Pathology.
- The composition of the gut microbiome may make a difference in height gain in infants with cystic fibrosis during their first year of life, according to a study led by **Lucas Hoffman**, professor of pediatrics and microbiology. Infants with cystic fibrosis did not develop variety in gut bacteria at the same rate as healthy infants. These findings could influence topics of future studies to improve growth and long-term outcomes for infants with cystic fibrosis.
- A study led by **Florian Hladick** and **German Gornalusse**, both in the Department of Obstetrics and Gynecology, has provided insight into how the HIV-1 virus reemerges after treatment stops. The study looked at the mechanisms by which cells containing the virus are triggered into producing HIV. The research team found that they could partially block this process by inhibiting a specific cytokine that acts as an immune messenger between cells.
- Patients with chronic illnesses who have signed medical orders (Physician Orders for Life Sustaining Treatment or POLST forms) that indicate their wish to limit the types of treatments they receive near the end of life are less likely to receive unwanted intensive care if they are admitted to the hospital. This

is the finding of a study led by **Robert Y. Lee**, acting instructor in the Division of Pulmonary, Critical Care and Sleep Medicine, **Department of Medicine**, and researchers in the UW Medicine Cambia Palliative Care Center of Excellence. Nevertheless, more than one third of those who had asked for limited care received treatments they stipulated they did not want. POLST forms are not necessarily included in patients' medical records. The study highlights the need to consider how to better integrate POLST forms into records and to educate family members and healthcare providers on how they should be implemented.

- Research led by **Kimberly Harmon**, professor of family medicine and orthopedic surgery and sports medicine, indicates that health screenings that incorporate electrocardiograms are more effective at detecting cardiac conditions that put athletes at risk. Over the past 30 years, colleges and universities have increasingly screened athletes for health conditions that may pose undue risk to sports participation. Sudden cardiac death is the leading cause of death among college athletes, so a primary function of these screenings is to reveal unknown heart conditions.
- Glasses to stop myopia, or nearsightedness, in children have been shown to work in a multi-site trial of 256 children. The glasses are the vision of scientists **Jay Neitz**, professor of ophthalmology and adjunct professor of biological structure, and **Maureen Neitz**, professor of ophthalmology. After a year, the trial showed a reduction in myopia progression.

## Patient Care Programs

### *Administrative changes:*

- In September 2019, **Anisa Ibrahim** was named medical director of Harborview Medical Center's pediatric clinic.
- After 16 years leading the UW Neighborhood Clinics (UWNC), **Peter McGough** retired as medical director at the end of 2019. During his time as medical director, McGough advocated for new ways to make healthcare more accessible, effective and affordable. In the recruitment of Dr. McGough's successor, the position was expanded to not only provide physician leadership for the UWNC, but also to work with primary care leadership to ensure alignment of primary care clinical practice and population health while strengthening the collaboration between primary care and specialty care across UW Medicine. **Vicky Fang** will take over on July 1, 2020 as Medical Director for Primary Care and Population Health. Dr. Fang has been with UW Medicine for 19 years.
- **Chris Martin**, executive director for Airlift Northwest (ALNW), retired in February 2020. Martin worked at UW Medicine for 40 years, starting as a pediatric nurse at the UW Medical Center. In 2008, she became the executive director of Airlift Northwest. She has been a tireless champion for patients and their families, overseeing the safe and rapid air transport for the most critically injured patients.
- Three UW Medicine leaders have new titles as of January 1, 2020:
  - **Lisa Brandenburg's** new title is President of UW Medicine Hospitals & Clinics. In this role, she oversees operations of the UW Medicine clinical entities. She also continues to serve as a senior officer of the University of Washington as vice president for medical affairs.
  - **Paul Hayes'** new title is Chief Executive Officer of Harborview Medical Center.
  - **Cindy Hecker's** title is Chief Executive Officer of UW Medical Center. This role is now responsible for both the Montlake and Northwest campuses of UW Medical Center.
- In February, **Lucy Berliner** partially retired from her role as the Harborview Abuse and Trauma Center's director.
- **Madeline Grant** became the permanent UW Medicine Director of Government Relations in April after serving as the interim director since February. She took over the position from **Ian Goodhew**, who

served in the role for five years and who was instrumental in achieving the historic investments that UW Medicine received in the biennial budget passed in 2019.

- **John Inadomi** stepped down as the head of the Division of Gastroenterology in the Department of Medicine to take a leadership position at the University of Utah School of Medicine. During his tenure, he grew highly competitive fellowships, increased grant funding, more than doubled endoscopic procedures, and established a new endowed chair and professorship. **Cynthia Ko**, associate professor of Gastroenterology and Medicine, will act as interim head of the division while a national search is being conducted.
- On April 18, 2020 **Margaret Peyton** assumed the role formerly held by **Lori Oliver** of UW Medicine clinical business and regulatory affairs officer and associate vice president for Medical Affairs, Additionally Peyton will have executive oversight of UW Medicine Compliance.
- On July 1, 2020 **Paula Houston**, current director of health equity for UW Medicine, will become the founding executive leader of a new UW Medicine Office of Healthcare Equity. Her new title will be chief equity officer, UW Medicine and associate vice president for medical affairs, University of Washington. The new office will consolidate the work of the existing School of Medicine's Center for Equity, Diversity and Inclusion (CEDI) and UW Medicine's existing healthcare equity program. The new Office of Healthcare Equity will be an integrated system-wide program to support UW Medicine's mission to improve the health of the public and promote equity, diversity and inclusion across all aspects of our healthcare system, research and educational programs.

***Key clinical initiatives and milestones:***

- On January 1 2020, Northwest Hospital became "UW Medical Center - Northwest," a second campus of the UW Medical Center.
- On July 7, 2019 UW Medicine's lung-transplant team performed its 1,000<sup>th</sup> transplant. Ten other U.S. programs have reached such a milestone.
- On August 21, 2019, the UWSOM and VA Puget Sound Health Care System announced a two-year partnership to develop new uses of 3D printing to aid in the diagnosis and treatment of complex heart conditions. The collaboration is expected to help cardiologists better visualize the complex anatomy unique to each patient and improve access to, and outcomes for, new minimal invasive treatments.
- In September 2019, the Paul G. Allen Family Foundation and UW's Alcohol & Drug Abuse Institute announced the Meds-First Initiative, which expands an innovative approach to treating opioid-use disorder for high-acuity populations to four locations in Washington (North Seattle, Spokane, Tacoma and Walla Walla). The initiative removes barriers to medications for opioid-use disorder and provides a research-based model of care for high-needs populations, such as people experiencing homelessness.
- UW Medicine partnered with MultiCare Health System and LifePoint Health to form a new company, called Embright, to develop care delivery models in the Pacific Northwest. Embright is a network of healthcare providers committed to working together using evidence-based protocols and measures to improve patient care and reduce costs. Embright represents 14 hospitals, 6,500-plus providers and 600-plus outpatient sites of care. It will establish clinical standards and performance metrics to achieve what is known as the Quadruple Aim: better health outcomes, lower costs and greater satisfaction for both patients and clinicians.
- UWSOM researchers joined an international effort to create a completely new, comprehensive human genome reference. The Human Pangenome Project will be based on the complete genome sequences of 350 individuals from a variety of the world's populations. **Evan Eichler**, professor of genome science, will lead the UW team.

- UW Medicine joined TIME'S UP Healthcare as part of the commitment to creating a workplace and clinical environment that focuses on gender equity and the prevention of sexual and gender harassment.
- **Kristina Adams Waldorf**, professor of obstetrics and gynecology, and **Michael Gale, Jr.**, professor of immunology, launched a research program on Maternal-Fetal Health to delve into how viruses and bacteria, specifically the Zika virus, attack the fetus and how the body fights back.
- The Center for Translational Muscle Research celebrated its opening in October 2019 at its main location at UW Medicine South Lake Union. Collaborating with labs across the UW and other Seattle-area institutions, the center will encompass a myriad of muscle science and disease investigations. Study topics will range from the basics of muscle-related proteins, genes and cell biology to the design of potential treatments for devastating muscle diseases.
- UW Medicine is partnering with stakeholders throughout the state to improve mental health care:
  - **Jennifer Piel**, associate professor of psychiatry and behavioral sciences, is heading a new center at UW focused on mental health, policy, and the law. The center is seeking partners and hopes to help the state make data-driven decisions at the intersection of mental health and the law.
  - The Partnership Access Line (PAL) supports primary-care providers caring for children and adolescents' mental health. UW Medicine and Seattle Children's psychiatrists staff the line.
  - A new Psychiatry Consultation Line, staffed by UW Medicine psychiatrists, helps prescribing providers caring for adult patients over the age of 18.
  - Any healthcare provider in the state caring for a pregnant or new mother can receive consultation, recommendations and referrals to community resources from a UW psychiatrist through the program, PAL for Moms. Providers can also present a case to a panel of experts through a program called the Moms' Access Project ECHO. Experts include UW Medicine perinatal psychiatrists, obstetrician gynecologists, maternal fetal medicine experts, advanced registered nurse practitioners, therapists and social workers.
- UW Medicine is one of eight founding members in the Washington Health Care Climate Alliance, which will work to address the health impacts of climate change on Washington communities. The alliance was announced on December 6, 2019, and includes CHI Franciscan, Kaiser Permanente, MultiCare, Providence St. Joseph Health, Seattle Children's, Swedish Health Services and Virginia Mason Medical Center. The alliance will work together to promote legislative and regulatory "climate-smart policies related to energy, transportation, food, waste, infrastructure, and community resiliency." They have also made a commitment to promote sustainability and reduce the carbon footprint of their own operations.
- In January 2020, the Department of Surgery announced the new Division of Healthcare Simulation Sciences. This new division is the first of its kind in the Pacific Northwest and combines the research and educational delivery expertise of two well-established simulation programs: The Center for Research in Education and Simulation Technologies (CREST) and the WWAMI Institute for Simulation in Healthcare (WISH). At the helm is **Robert Sweet**, professor in urology and adjunct professor in surgery. The new division will continue to serve the simulation-based efforts of the more than 30 departments and programs across UW Medicine and the WWAMI region.
- Early in 2020, UW Medicine launched a Peer to Peer program to help formalize access to trained peer supporters. This program represents an important step toward developing a culture of well-being for everyone at UW Medicine. Peer supporters are healthcare team members trained to be supportive, non-judgmental and confidential listeners. Every Peer to Peer team member is trained on tools and strategies they can use to provide support to their colleagues experiencing similar stress.
- The Harborview Center for Sexual Assault and Traumatic Stress was renamed the Harborview Abuse and Trauma Center in January. The name change better reflects the breadth of knowledge, experience and treatment abilities of the center's providers.

- Early this year, the Medical Assistant Apprentice Program was created to help bolster the number of medical assistants throughout the UW Medicine system. The year-long program offers paid, on-the-job training to medical assistant apprentices at UW Medicine hospitals and clinics, with guaranteed job placement upon graduation.
- In 2019, UW Medicine announced a new tagline: a higher degree of healthcare. This tagline underscores UW Medicine's status as the only healthcare system in the Pacific Northwest offering an inseparable connection to the region's leading medical school and an internationally known center for research.
- UW Neighborhood Clinics staff will be moved to University of Washington employment by January 2021. This transition is vital to strengthening the UW Medicine Health System and furthering the mission of UW Medicine. This decision comes after the successful integration of UW Medical Center – Northwest and the UW Physicians staff.
- In the wake of the opioid epidemic, the National Institute of Health is launching a massive “Helping to End Addiction Long-term” (HEAL) initiative, to help people with opioid addiction and to explore safer treatment options for chronic pain. The UWSOM received at least 10 awards totaling about \$40 million.
- In January 2020, the Washington Entrepreneurial Research Evaluation and Commercialization Hub (WE-REACH) was created with \$4 million in matching funds from the National Institutes of Health. WE-REACH will provide project funding to fuel four to six biomedical startups a year with up to \$200,000 each.

***Clinical accomplishments and honors:***

- A recent study conducted by Parker Philips, a nationally recognized consulting firm, showed UW Medicine's contributions to the Washington state economy. In 2018, UW Medicine generated \$8 billion in economic activity and supported or sustained 51,489 jobs. These numbers represent a significant portion of the UW's total impact of more than \$15.7 billion in economic activity.
- UW Medical Center has been named *U.S. News & World Report's* No.1 hospital in Washington state and in the Seattle metropolitan area. The 2019-2020 ranking is the eighth consecutive year UW Medical Center has achieved both distinctions. Three specialties at UW Medical Center also received top 20 national rankings: No. 5 in rehabilitation medicine, No. 8 in diabetes and endocrinology, and No. 15 in cancer care, jointly with the Seattle Cancer Care Alliance.
- The UW Medical Center received certification as a Center of Excellence in Robotic Surgery in October 2019. It is the first major academic center on the West Coast with this distinction. Robot-assisted surgery allows for more versatility in movement, a 3-dimensional view and is minimally invasive.
- The Human Rights Campaign Foundation awarded its “2019 LGBTQ Healthcare Equality Leader” designation to UW Medicine's four hospitals. Each UW Medicine hospital received a perfect score of 100 on the 2019 survey, which assessed four criteria: non-discrimination and staff training, patient services and support, employee benefits and policies, and patient and community engagement. Harborview Medical Center and UW Medical Center have received the “LGBTQ Healthcare Equality Leader” designation every year since 2011. Valley Medical Center has been recognized annually since 2012, and Northwest Hospital has been an annual recipient since 2013.
- On November 6, 2019, the UW Medicine MEDEX Northwest Physician Assistant (PA) Program was granted continued accreditation for the next 10 years by the Accreditation Review Commission on Education for the Physician Assistant.
- In October 2019, UW Medical Center was named among the top performers in the 2019 Ambulatory Care Quality and Accountability Award from Vizient. The award recognizes organizations that

demonstrate excellence in delivering high-quality outpatient care in five key domains: access to care, quality, efficiency, continuum of care and equity.

- At the Harborview Benefit, held November 17, 2019, over \$3.5 million was raised. The proceeds are being used to fund Harborview's work in burn care, spinal cord injuries, and long-term recovery from trauma.

### Faculty/Staff Honors

- **Gail Jarvik** was elected president of the American Society of Human Genetics. Dr. Jarvik holds the Arno G. Motulsky Endowed Chair in Medicine and leads the Division of Medical Genetics. The American Society of Human Genetics is the primary professional membership organization for human genetics specialists worldwide.
- In November 2019, **Russell Van Gelder**, professor and chair of the Department of Ophthalmology, was appointed to the National Institutes of Health Council of Councils by the Secretary of Health and Human Services.
- **Darryl Potyk**, chief of medical education for UW School of Medicine-Gonzaga University Regional Health Partnership and Associate Dean for Eastern Washington for the UW School of Medicine, received the President's Unsung Hero Award, which recognizes the Washington State Medical Association member who offers extraordinary service to the profession to make Washington State the best place to practice medicine and receive care.
- **Cecilia Giachelli**, W. Hunter and Dorothy Simpson endowed chair in the Department of Bioengineering, and **Elizabeth Swisher**, division director of gynecologic oncology in the Department of Obstetrics and Gynecology, received the 2019 UW Medicine Award for Excellence in Mentoring Women Faculty. The award recognizes faculty members who are creating the next generation of leaders and mentors. Attributes of excellence in mentorship include a long-term commitment to mentoring and faculty development, wise counsel, and encouragement of mentees to develop autonomy as faculty members and independent scholars.
- **LeeAnna Muzquiz**, family physician and Associate Dean for Admissions, was awarded the Legacy of Leadership Award from the Montana Medical Association. The award celebrates Montana's exceptional physician leaders who have made inspiring changes and long-lasting, outstanding contributions to advance Montana's health systems.
- The Accreditation Council for Graduate Medical Education selected **Daniel Leifer**, pediatrician and dermatology resident, as one of the recipients of the 2020 David C. Leach award. Dr. Leifer was selected for his project DermLinks, a collaborative, easy-to-edit online homepage for UW dermatology residents.
- **Lisa Taitsman**, professor of orthopedics and sports medicine, was elected as director-elect of the American Board of Orthopaedic Surgery.
- UW Medicine experts participated in the 2019 Cardiac Arrest Survivor Summit, which was put on by the Citizen CPR Foundation and held in Seattle. **Mickey Eisenberg**, professor of emergency medicine, was among leading experts in cardiac arrest and resuscitation who spoke at the summit.
- *Puget Sound Business Journal* recognized **Charlotte Guyman** and **Julie Nordstrom** as 2019 Women of Influence. Guyman and Nordstrom have made it their mission to advance medicine, address global health disparities and help disadvantaged populations. Collectively, they've chaired or held local board positions at UW Medicine, Brotman Baty Institute, UW Department of Global Health and Institute for Health Metrics and Evaluation. They are also members of UW Medicine's Campaign Initiatives Committee, the key volunteer leadership group of the Accelerate fundraising campaign, which surpassed its original \$2 billion goal 18 months early.

- On November 14, 2019, UW Medicine hosted the 20<sup>th</sup> anniversary celebration of The DAISY Foundation. For the past two decades, The DAISY Foundation has helped establish nurse recognition programs to honor the work that nurses do for patients and families. In 1999, UW Medical Center was the first hospital to implement the DAISY award program. Now, it is used to celebrate nurses in over 4,000 healthcare facilities and schools of nursing across the world. At UW Medical Center, eight nurses are recognized each quarter for their outstanding patient care.
- In December 2019, the *Puget Sound Business Journal* hosted its inaugural Health Care Leadership Awards. The awards highlight innovative and influential thinkers whose leadership has had a lasting impact on the region. UW Medicine honorees included **Paula Houston**, administrative director for UW Medicine’s Healthcare Equity Initiative, **Patricia Dawson**, medical director for UW Medicine’s Healthcare Equity Initiative, and **Edward Verrier**, professor in the Division of Cardiothoracic Surgery. In the past year, Houston and Dawson established a system-wide infrastructure for equity, diversity and inclusion by offering guidance on developing local committees, engaging more than 4,000 leaders through diversity training and presentations, launching clinical improvement projects to address disparities among marginalized populations, and training more than 2,000 staff to provide patient-centered and gender-affirming care. Verrier was the recipient of the Physician Educator of the Year Award for his dedication to surgical education not only at UW Medicine, but also nationally and internationally.
- **Carlos Pellegrini** was recognized as a 2019 Icon in Surgery honoree by the American College of Surgeons. Pellegrini retired from UW Medicine at the end of 2018. He served as chair of the Department of Surgery for 23 years and was UW Medicine’s first chief medical officer. After retiring, Pellegrini went back to school to become a coach; he now works for Marquis Leadership in developing clinical culture.
- **Paul James**, chair of the Department of Family Medicine, co-chaired the Eighth Joint National Committee on hypertension. The committee’s report for the management of high blood pressure was named one of the top 10 most important articles of the last decade for clinical medicine and public health, according to the *Journal of the American Medical Association*.
- The Society of General Physiologists created an endowment in **Sharona Gordon’s** name. Gordon, professor in the Department of Physiology and Biophysics and associate dean for research and graduate education, is an advocate for workplace equity. She established equitable standards in a peer-reviewed journal, educates peers about sexual harassment and provides mentorship opportunities. Each year she will be able to award an individual who works to increase equity in science.
- In March 2020, **Trisha Davis**, professor and chair of the Department of Biochemistry, was named to the Cellular and Developmental Biology, Microbiology and Immunology section of the Biological Sciences class of the American Academy of Arts and Science.

Due to the COVID-19 pandemic, the UW School of Medicine is postponing the announcement of the Distinguished Alumni Award recipients in 2020. The awardees will be honored in 2021.

### Passages

- **Irv Emanuel** passed away in autumn of 2019. Dr. Emanuel worked in the UW School of Public Health and the UWSOM for 50 years. He founded the UW’s Maternal and Child Health Program and served as the first director of the UW’s Center on Human Development and Disability.

- **Richard Morrison** passed away on October 25, 2019. He was a neuroscientist and educator in the Department of Neurological Surgery. Rick was a highly respected neuroscientist with a 5-plus-year history in the Department of Neurological Surgery.
- On March 17, 2020 **Stephen Schwartz** died after being hospitalized with COVID-19. He was a member of the Department of Pathology since 1967. Dr. Schwartz had a distinguished career as an investigator in the field of vascular biology. His honors include being named as an established investigator of the American Heart Association. He was the founding Chair of the Gordon Research Conference on vascular biology, co-founder of the North American Vascular Biology Organization and chaired numerous meetings both nationally and internationally in the field of vascular biology.
- **Earl Davie**, professor emeritus and former chair of the Department of Biochemistry, passed away on June 6, 2020. He is known as a giant in the field of biochemistry for his life-saving research around blood clotting and therapeutic proteins.

### Thank You

On behalf of UWSOM, I would like to thank all the members of the WSMA for your unwavering commitment to health care and to our medical students, residents and other trainees across the state and throughout the WWAMI region. Your partnership truly enables us to advance our mission to improve health for all people. We look forward to more successes through this remarkable collaboration.

If there are areas that are not covered in this report and about which you would like additional information, please feel free to contact me ([pramsey@uw.edu](mailto:pramsey@uw.edu)), and I will make sure that you receive that information. In addition, if you have comments, suggestions, concerns or ideas related to the UWSOM, we would like to hear from you. Thank you.

Sincerely,



Paul G. Ramsey, M.D.  
CEO, UW Medicine  
Executive Vice President for Medical Affairs and  
Dean of the School of Medicine,  
University of Washington