A PUBLICATION OF THE UC DAVIS SCHOOL OF MEDICINE

UCDAVISHEALTH

Fall/Winter 2023

A national model for equity

UC Davis' medical and nursing schools are showing institutions nationwide how to increase education equity without affirmative action

New liver transplant program page 14 New geriatrics division, chief page 28 School of Medicine Alumni Weekend page 36

UCSE

A new era in health care for patients, communities



Teamwork and collaboration define all that we undertake at UC Davis Health. With a new school year underway, we are once again opening our doors to train our best students for tomorrow's health care today and to give our future patients their best hope for health, wellness and a long life.

Our students are fortunate to have the very best people, at the top of their field, to teach them and challenge them to do more, to do better than we have done before. We are always pushing the bar higher and exploring new ways to ultimately benefit patients and the world beyond Northern California.

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> Aligned with this innovative spirit, this issue of *UC Davis Health Magazine* provides highlights about some our most recent accomplishments, including:

- How our School of Medicine, over nearly two decades, has significantly boosted enrollment of students from communities underrepresented in medical education, and how we've earned national media attention for these efforts;
- Our new geriatric division that is serving as a national model and the latest structural example of UC Davis Health's overall commitment to healthy aging and wellspan in all aspects of life;
- A 'Blue Zones' partnership aimed at reducing Alzheimer's disease in the Sacramento region that will likely serve as a statewide model; and

 This year's U.S. News "Best Hospitals" awards, as well as other awards and key transitions for UC Davis Health staff and leaders.

Our highlights also extend to growing UC Davis Health's capabilities in precision health and personalized medicine, so we can help people live longer and in more healthy ways, keeping them out of the hospital. We're also expanding the provider-patient partnership with digital tools aimed at improving the experience for both patients and providers (to reduce provider burnout). This means more high-value interactions with patients and providers, and fewer low-value interactions, which benefit everyone.

To achieve this type of partnership with our patients, we are building best-in-class facilities and infrastructure to serve patients where they are located and with greater access and accuracy. Creating both digital platforms and physical spaces at the same time — ones that are state-ofthe-art nationally — will deliver exciting opportunities ahead for UC Davis Health and all our patients.

While we've already achieved so much, there is, of course, so much more important work to do in the months and years ahead. In future issues, I look forward to continuing to describe the profound and meaningful progress we're achieving on behalf of our patients, physicians, nurses, alumni, community and employees.

Yours in health,

Ny

David Lubarsky, M.D., M.B.A., F.A.S.A. Vice Chancellor of Human Health Sciences Chief Executive Officer, UC Davis Health

Advancing health and medical education equity without affirmative action



Ranked as the third most diverse medical school in the country, UC Davis School of Medicine continues to be in the spotlight as medical schools nationwide look to us as a model for training diverse physicians and scientists who are uniquely prepared and committed to meeting the needs of all our communities.

Following the June 29, 2023, Supreme Court ruling banning affirmative action in college admissions, our medical school received significant coverage in the *New York Times, CNN, JAMA* and many other outlets about how we tripled our enrollment of students who are historically underrepresented

Our medical school's groundbreaking faculty scientists and research teams achieved a new record-high \$401 million in external research funding in fiscal year 2022–23.

in medicine over the last 15 years with a race-neutral, holistic admissions model.

Central to our success in meeting California's physician workforce needs was our creation and expansion of pathway programs and partnerships focusing on training physicians to serve underresourced rural, urban and Native American and Alaska Native communities.

We are leading the way in meeting our state's urgent need for primary care physicians, with 58% of our 2023 graduates matching into primary care programs and 82% staying in California. Our students also matched into numerous other specialties at some of the finest programs in the country, with nearly a quarter staying at UC Davis. Our leadership as a research powerhouse also continued to grow. For the second consecutive year, UC Davis garnered more than \$1 billion in external research funding. Our medical school's groundbreaking faculty scientists and research teams generated 40% of that total, achieving a new record-high \$401 million in external research funding in fiscal year 2022–23. The school's National Institutes of Health (NIH) funding also reached a new high; most recently we were ranked 32^{nd} in the nation on this important metric.

This summer we also welcomed 137 students in our Class of 2027. These talented first-year students were selected from more than 8,000 applicants and were distinguished in their diverse life experiences and academic excellence. Nearly 40% of these students were the first in their families to graduate from college and more than 70% are from economically disadvantaged backgrounds.

We are delighted that the Class of 2027 has joined our distinctive UC Davis School of Medicine community in their exciting journey to become physician leaders.

Thank you for your support as we trailblaze new therapies and technologies, educate a future-ready workforce, and drive excellence in all we do.

Sincerely,

Susan Murin, M.D., M.Sc., M.B.A. Interim Dean, UC Davis School of Medicine Professor, Pulmonary, Critical Care and Sleep Medicine

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A publication for alumni, donors, faculty and friends of UC Davis Health

in this issue

22 JOURNEY TOWARD EQUITY

The Supreme Court's decision to ban affirmative action has many schools reevaluating admissions practices. But UC Davis' School of Medicine and School of Nursing adopted a holistic process years ago, and now they're serving as national models.

28 NEW GERIATRICS DIVISION, CHIEF

Rebecca Boxer is chief of the new division, the latest healthy aging advancement at UC Davis Health.

14 NEW LIVER TRANSPLANT PROGRAM

It's the third solid organ transplant program at UC Davis Health, joining adult and pediatric kidney transplants, and the only liver transplant program available in California north of San Francisco.

On the cover: UC Davis School of Medicine students gather in the hallway of UC Davis Health's Education Building.



News briefs and leadership updates
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Ranked among America's est



RANKED IN **3 SPECIALTIES**

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U.S. News & World Report ranked UC Davis Medical Center among the nation's top 50 hospitals in eight adult medical specialties for 2023-24, including:

- cancer (#36)
- cardiology, heart & vascular surgery (#27)
- diabetes & endocrinology (#33, tie)
- ear, nose & throat (#18)
- geriatrics (#32)
- neurology & neurosurgery (#32, tie)
- obstetrics & gynecology (#44, tie)
- pulmonology & lung surgery (#27)

The hospital also earned "high-performing" acknowledgement in the gastroenterology & gastrointestinal surgery and orthopedics specialties. U.S. News ranked the medical center the No. 1 hospital in Sacramento and No. 7 in California.

HIGH-PERFORMING IN MULTIPLE ADULT PROCEDURES AND CONDITIONS

SACRAMENTO METRO

RECOGNIZED IN 26 TYPES OF CARE 2023-2024

U.S. News also released ratings for common types of adult procedures and conditions. with "high-performing" considered the highest level of recognition. UC Davis Medical Center earned that rating in 16 common adult procedures and conditions:

- chronic obstructive pulmonary
- disease (COPD) colon cancer
- surgery
- diabetes
- heart attack
- heart failure
- hip fracture
- hip replacement
- kidney failure
- leukemia,
- lymphoma and myeloma

- Iung cancer surgery
- ovarian cancer
- suraerv
- pneumonia
- prostate cancer surgery
- stroke
- transcatheter aortic valve
- replacement (TAVR)
- uterine cancer surgery

MAGNET RECOGNIZED

Prestigious Magnet Designation for third time

UC Davis Health has once again been ranked among the nation's elite institutions for valuing the nursing profession, earning its third Magnet Designation from the American Nurses Credentialing Center (ANCC)'s Magnet Recognition Program[®] in June. The Magnet program is the nation's highest form of recognition for nursing excellence,

and less than 10% of hospitals in the nation earn the designation. UC Davis Medical Center is the only hospital in Sacramento and one of 52 hospitals in California to earn a Magnet designation, earning its first Magnet designation almost 10 years ago, in 2014.



NATIONALLY RANKED IN THREE PEDIATRIC SPECIALTIES

CHILDREN'S

RANKED IN

3 SPECIALTIES 2023-2024

U.S. News ranked UC Davis Children's Hospital among the nation's best in three pediatric specialties for 2023-24, including:

- pediatric diabetes & endocrinology (#41, tie)
- pediatric nephrology (#34, tie)
- pediatric orthopedics (#20)

The orthopedics ranking was awarded in collaboration with Shriners Children's Northern California, UC Davis Children's Hospital's longstanding partner in caring for children with burns, spinal cord injuries, orthopedic disorders and urological issues. Regionally, UC Davis Children's Hospital was ranked No. 8 in California and No. 10 in the Pacific Region.

In Brief

Murin interim School of Medicine dean through June 2025



The term of Interim School of Medicine Dean **Susan Murin**, **M.D.**, **M.Sc.**, **M.B.A.**, has been extended to June 30, 2025, Vice Chancellor of Human Health Sciences David Lubarsky and UC Davis Provost Mary Croughan announced in September. Murin, a professor and clinician in the Division of Pulmonary, Critical Care and Sleep Medicine, was appointed interim dean of the School of Medicine in November 2021. In their announcement, Lubarsky and Croughan cited Murin's exceptional job overseeing a successful full 8-year LCME accreditation and launching several critical initiatives to achieve efficiency, consistency and equity, as well as year-over-year historic highs in research funding. They also noted her ongoing tenure will strengthen the Office of the Dean in preparation for initiating the search for a permanent dean candidate, which will likely start in the fall of 2024. The firm of Witt Kiefer has been engaged to conduct that search.

Hall is UC Davis Health's first chief clinical officer

Bruce Hall, M.D., Ph.D., M.B.A., has been named UC Davis Health's first chief clinical officer, responsible for oversight of all clinical operations starting in 2024. Hall joins UC Davis from St. Louis-based BJC HealthCare, where he serves as the nonprofit system's chief medical officer and leads the Clinical Advisory Group for the BJC Center for Clinical Excellence. BJC includes two nationally-recognized academic hospitals, Barnes–Jewish and St. Louis Children's, affiliated with Washington University School of Medicine. Hall is a professor of surgery at Washington and also a professor of healthcare management for the Olin Business School. He has led Barnes-Jewish Hospital's participation as a founding member of the American College of Surgeons' National Surgical Quality Improvement Program (ACS-NSQIP) since 2001 and was a director in that program for ACS. He has served as an ACS liaison to the NQF, CMS, CDC and Joint Commission, and has been named a Becker's Healthcare "50 patient safety experts to know" multiple times.



Condrin interim medical center chief administrator

Mike Condrin, **M.B.A.**, chief operating officer for UC Davis Health's Ambulatory Care, has been appointed interim chief administrator for UC Davis Medical Center and chief operating officer for the UC Davis Health Hospital Division.

The appointment comes after former chief administrator/chief operating officer Brad Simmons accepted the positions of president of University of Washington Medicine Hospitals & Clinics and University of Washington's vice president for medical affairs, where he oversees multiple hospitals and clinics. Condrin has been with UC Davis Health for more than 20 years, leading different parts of health care operations, most recently outpatient services. David Del Pizzo, M.H.A., R.V.T., R.D.M.S., will serve as an interim associate chief operating officer for Ambulatory Services. Executive Director BJ Lagunday, M.H.S., assumes a larger ambulatory role focused on care-at-home expansion.



Aizenberg appointed UC Davis Medical Group executive director

Debbie Aizenberg, M.D., clinical professor in the Department of Otolaryngology – Head and Neck Surgery, has been appointed to a three-year term as executive director of the UC Davis Medical Group, which represents all organized medical group practices and primary and

specialty care faculty physicians. She had served as interim executive director since October 2022, and was unanimously endorsed by the medical group's executive council. Aizenberg will continue to provide oversight of physician practice operations, and help develop the medical group's overall vision and strategic direction. She will also continue as associate chief medical officer for ambulatory care, responsible for improving quality, safety, efficiency, and access to UC Davis Health's ambulatory practices.

Distinguished homegrown leader appointed neurological surgery chair

UC Davis Health professor and neurosurgeon **Kia Shahlaie, M.D., Ph.D.**, an alumnus of the UC Davis School of Medicine, is the new chair of the Department of Neurological Surgery, where he had been serving



as interim chair since July 2022. He will also continue serving as co-director of the Center for Skull Base Surgery. A Sacramento native, Shahlaie has a longstanding connection with UC Davis, having completed his

undergraduate, medical school and residency training all within the same institution. He completed fellowships at UCSF and the Pacific Neuroscience Institute before returning to UC Davis Health as a faculty member in July 2010.

Boxer chief of new geriatric division



UC Davis Health has combined geriatric-focused specialties into a new Division of Geriatrics, Hospice and Palliative Medicine in the Department of Internal Medicine, with geriatrician and researcher **Rebecca Boxer, M.D.**,

M.S., named its inaugural chief. For full story, see p. 28.

Bewley new ENT chair

Arnaud Bewley, M.D., associate professor and UC Davis Health

director of the Division of Head and Neck Surgery, has been appointed chair of the Department of Otolaryngology after serving as interim chair since June 2021. He is also the director of the UC Davis Head and Neck Fellowship and UC Davis Head and Neck Tumor Board. Bewley's areas of research include advanced skin cancers and transoral robotic surgery. He received an M.D. from Columbia University and completed his internship and residency training at University of Pennsylvania. He joined the UC Davis School of Medicine faculty in 2013 after completing his fellowship at Medical University of South Carolina.

Sarin new chief of expanded colorectal surgery team



Ankit Sarin, M.D., M.H.A., has been appointed chief of the Division of Colorectal Surgery at UC Davis Health. He also serves as vice chair of robotics and new technologies, and associate professor within the Department of Surgery. Sarin comes from UCSF, where he served as

clinic director of colorectal surgery and director of robotic surgery. He was drawn to UC Davis by the opportunity to help build the Division of Colorectal Surgery from the ground up; the five-surgeon team he leads offers the complete spectrum of care, such as laparoscopy, robotic surgery, advanced transanal techniques, Sacral nerve stimulator, high-resolution anoscopy and advanced endoscopy. UC Davis is also accredited by the National Accreditation Program for Rectal Cancer.

Atkinson new UC Davis vice chancellor for research

UC Davis Chancellor Gary S. May has named **Simon J. Atkinson** to be the next vice chancellor for research, effective Nov. 15. Atkinson currently serves as vice chancellor for research at the University of Kansas, a position he's held since 2019, and his portfolio includes direct oversight of 10 university-level centers and institutes. Prior to KU, Atkinson was vice chancellor for research at Indiana University – Purdue University Indianapolis and associate vice president for research for Indiana University, with systemwide responsibility for innovation and commercialization. Atkinson is internationally recognized for his studies in the prevention and treatment of acute kidney injuries that can be triggered by heart failure, cardiac surgery, toxins and contrast agents used in diagnostic tests. In 2005, he co-founded INphoton, a life sciences company.



Lyles new director of Center for Healthcare Policy and Research



Courtney Lyles, Ph.D., is the new director of the UC Davis Center for Healthcare Policy and Research (CHPR), and also joins the Department of Public Health Sciences faculty. Lyles was on faculty at UCSF's Division of General Internal Medi-

cine, Center for Vulnerable Populations, and Department of Epidemiology and Biostatistics. She served as a co-director of the Innovation in Research and Informatics core for the Clinical & Translational Science Institute (CTSI) and the Population Health Data Initiative at UCSF.

White House alum is first chief AI advisor



Dennis Chornenky, M.B.A., M.P.H., former senior advisor and strategy consultant in artificial intelligence (AI) and emerging technology for The White House, has been named chief AI advisor to UC Davis Health. In this newly created key role, Chornenky,

with his consulting and technology firm, Domelabs AI, will lead efforts to establish an AI strategy and governance framework that ensures UC Davis Health's approach to AI is safe, ethical, and meets emerging compliance standards. Chornenky has held additional senior roles at UnitedHealth Group and Morgan Stanley.

Meyers transitions to emeritus faculty

Frederick J. Meyers, M.D., M.A.C.P., distinguished professor of Internal Medicine, Hematology and Oncology, transitioned to emeritus status in July after 47 years of leadership and service. Meyers came to UC Davis Health in 1976, where he completed residency in internal medicine and a fellowship in hematology and oncology. He was part of the team that achieved National Cancer Institute comprehensive designation, and has served as



chief of hematology and oncology, chair of internal medicine, and vice dean of the School of Medicine. He helped establish one of the first palliative care centers in the country at UC Davis Health, and has been a leader in simultaneous care research. Meyers will retain his appointment at the Center for Precision Medicine and Data Sciences as co-director with Colleen Clancy, continue to direct the Academic Research Careers for Medical Doctors (ARC-MD) program, and serve as associate director for education and training for the cancer center.

New leader for Good Manufacturing Practice Facility

Brian Fury is the new director of the UC Davis Good Manufacturing Practice (GMP) Facility – the largest academic GMP facility in Northern California – replacing founding director Gerhard Bauer who recently retired. Fury has been with the UC Davis Institute for Regenerative Cures since 2011, is Bauer's mentee and has been part of the GMP's establishment and growth. The facility manufactures for phases one, two and three clinical trials, and recently received a grant to establish a GMP manufacturing network (see p. 17).

NEW ASSOCIATE CHIEF MEDICAL OFFICERS





Vice Chair for Quality and Safety and Division Vice Chief of Internal Medicine **Christian Sandrock**, **M.D.**, **M.P.H.**, **F.C.C.P.**, was appointed associate chief medical officer for inpatient care at UC Davis Health this spring, while UC Davis Vice Chair of Quality and Safety **JoAnne Natale**, **M.D.**, **Ph.D.**, was appointed to a new role as associate chief medical officer for children's health.

Lubarsky recognized among top 25 hospital executives and top academic medical center CEOs for 2023, and as a CEO influencer

UC Davis Health CEO and Vice Chancellor of Human Health Sciences **David Lubarsky, M.D., M.B.A., F.A.S.A.**, has been recognized by *Becker's Hospital Review* as one of the "top academic medical center CEOs to know" for 2023, and among

"60 health system CEO influencers" shaping the future of health care. *C-Suite Spotlight* also named him one of the top 25 hospital executives for 2023. The *Becker's* influencers article stated: "Whether these leaders are challenging the status quo, championing public health issues, pioneering new models of care, or embracing novel technologies, the nation — and even the world — is watching. More often than not, the precedents these executives set go on to become the golden standard for health care." *Modern Healthcare* also selected Lubarsky as one of the "100 Most Influential People in Health Care" for 2022, and Press Ganey named him "CEO of the Year" this February.

SADRO AMONG TOP CHIEF FINANCIAL OFFICERS



Cheryl Sadro, C.P.A., M.S.M., chief financial officer at UC Davis Health, has been recognized by *Becker's Hospital Review* as one of the "academic medical center CFOs to know" for 2023. *Becker's* recognized the leaders for their efforts to oversee the overall financial health

of their institutions, lead long- and short-term financial strategies, manage large budgets and oversee strategic partnerships. The magazine also included Sadro in its list of CFOs to know for 2023, which highlights key financial leaders in strategic financial planning, growth, and partnerships. And Sadro was honored in the annual *Becker's Healthcare* "Women hospital and health system CFOs to know" list for 2023.

GALANTE LISTED AMONG TOP CHIEF MEDICAL OFFICERS



Joseph M. Galante, M.D., M.B.A., F.A.C.S., interim chief medical officer at UC Davis Medical Center, has been recognized by *Becker's Hospital Review* as one of the "hospital and health system chief medical officers to know" for 2023. At UC Davis Health, Galante

has a broad portfolio of responsibilities, including leading and directing the professional portion of the medical center's clinical delivery system. He serves as liaison between the hospital, school of medicine and the self-governed medical staff, and is the senior officer for patient safety and quality at UC Davis Medical Center.

ATREJA AMONG TOP CHIEF DIGITAL OFFICERS



Ashish Atreja, M.D., M.P.H., F.A.C.P., A.G.A.F., chief information and digital health officer at UC Davis Health, has been recognized by *Becker's Hospital Review* as one of the top 35 "chief digital officers of health systems to know." The list recognized this prestigious group of

leaders for their efforts to oversee digital technology integration and improve the digital patient experience. A leading voice on evidence-based digital health and artificial intelligence, Atreja oversees UC Davis Health's expansion of its digital footprint. That includes bridging the gap between IT, academia, research and innovation, as "Digital Davis" becomes a global validation hub for digital health.

TON RECEIVES TOP NATIONAL DEI AWARDS



Hendry Ton, M.D., M.S., associate vice chancellor for health equity, diversity, and inclusion at UC Davis Health, has been recognized by *Becker's Hospital Review* as a "health system diversity, equity and inclusion officer to know" for 2023, and as one of *Modern Healthcare's* top

diversity leaders for 2023. Ton leads dedicated teams at UC Davis Health that work to advance DEI, such as the Office of Student and Resident Diversity and the Center for Reducing Health Disparities. He has presented nationally on cultural competence, education, and system change, and regularly receives awards for his work with health professionals and underserved communities.

Farmer first UC Davis Health faculty member appointed to a leadership role with the National Academy of Medicine

Department of Surgery chair and professor recognized for contributions to health and medicine

Diana Farmer, M.D., chair of the UC Davis Department of Surgery, has become the first UC Davis Health faculty member to be assigned to a prestigious leadership position within the National Academy of Medicine (NAM). This summer Farmer was appointed to the NAM membership committee, and will also serve as the Vice Chair of Section 6, which is one of 12 membership sections in the organization's structure. The section Farmer will help oversee encompasses surgery, anesthesiology, ophthalmology, and radiology. Her two-year term began July 1. The NAM is dedicated to advancing science, health, and medicine and inspiring positive change across sectors. As part of its mission, the organization annually recognizes remarkable professionals who have made significant contributions to their respective fields and have displayed an unwavering commitment to service. The appointment is considered one of the highest honors in health and medicine.

"It is both an honor and a tremendous responsibility to accept this leadership position within the National Academy of Medicine," Farmer said.



"I am deeply grateful for the opportunity to contribute to the advancement of health and medicine on a national level. Together, we will continue to push the boundaries of medical science, inspire future generations, and shape a healthier, more equitable world."

Farmer receives national research excellence award

Farmer also received the esteemed Robert E. Gross Award for Excellence in Pediatric Research and Achievement from the American Pediatric Surgical Association (APSA) this spring. The award acknowledges exceptional contributions that have revolutionized the way pediatric surgeons approach a specific issue, and recognizes groundbreaking work that stands the



test of time and is widely accepted as the gold standard in the field. Farmer's contributions have reshaped pediatric surgical practices, with her expertise encompassing treatment of birth defects both inside and outside the womb. She conceived the MOMS Trial in the early 2000s, which showed fetal surgery could reduce neurological deficits associated with spina bifida; she is now leading the world's first clinical trial combining stem cells and surgery to treat the most severe form of the disease. Her accomplishments extend over two decades, during which she has made significant advancements as the first female fetal surgeon. She has pioneered foundational techniques in pediatric and fetal surgery, revolutionizing the field and improving patient outcomes.

Microbiologist elected to National Academy of Sciences



Andreas Bäumler, Ph.D., vice chair of research and professor in the Department of Medical Microbiology and Immunology, was elected as a member of the National Academy of Sciences this spring. Members are elected in recognition of contributions to original research, and membership is considered one of the highest honors a scientist can achieve. Bäumler is a highly cited author of more

than 200 papers, with groundbreaking research focused on the role of intestinal epithelium in the composition of gut microbiota and its effects in infectious and inflammatory diseases.

LARA CO-CHAIR-ELECT OF SWOG CANCER RESEARCH NETWORK



UC Davis Comprehensive Cancer Center Director **Primo "Lucky" Lara, Jr., M.D.**, has been appointed co-chair-elect of the SWOG Cancer Research Network, a National Cancer Institute (NCI)-supported alliance. He'll share the job with Dawn L. Hershman, deputy director of the Herbert Irving Comprehensive Cancer Center at Columbia University. The two will serve as co-chairs-elect until the term of current

SWOG group chair Charles Blanke ends in 2025, when they will begin a six-year term as SWOG's first group co-chairs. Lara is SWOG's deputy chair and vice chair of operations.

SAUDER AMERICAN JOINT COMMITTEE ON CANCER APPOINTMENTS



Candice Sauder, M.D., M.S., M.Ed., F.A.C.S., assistant professor of surgery and specialist within the Division of Surgical Oncology, has been named by the American Joint Committee on Cancer (AJCC) to its Executive and Education Committees. Sauder will educate and improve efforts in using cancer staging standards and validate systems for classification and management of cancer. Founded in 1959

and administered by the American College of Surgeons, the AJCC has developed and compiled staging systems considered the gold standard for all cancers, and has staging experts from every field. Sauder was recently admitted to the ACS Academy of Master Surgeon Educators.

UC DAVIS ASSISTS WITH AMA HEALTH AT HOME FRAMEWORK

UC Davis Health played a key role in helping the American Medical Association (AMA) create comprehensive framework of medical services that can be delivered at home. AMA created the Health at Home framework after extensive research, input from experts and interviews with 10 organizations, including UC Davis Health. The article, released July 17 on the AMA website, provides insights into putting a care at home program into place and using digital technologies to enhance care. **Vimal Mishra**, **M.D.**, head of digital care at UC Davis Health, was co-author.



Johnson elected Academic Pediatric Association president

Tiffani Johnson, M.D., M.Sc., associate professor of emergency medicine, was named president-elect of the Academic Pediatric Association (APA) this spring. Her three-year term began April 30. Her responsibilities include chairing board meetings, representing the APA at regional, society and programmatic meetings, and serving on the APA Executive Committee. Johnson serves as a national mentor for the APA Young Investigator Award and New Century Scholars programs and co-chairs the APA Race in Medicine Special Interest Group, which seeks to bring awareness to the role of race in the practice of medicine and provide youth development support.

Morrison elected president of Society for Neuroscience

John Morrison, Ph.D., begins his term as president-elect of the Society for Neuroscience this November. Morrison is the director of the California National Primate Research Center at UC Davis and a distinguished professor in the School of Medicine's Department of Neurology. The three-year commitment includes one year as presidentelect, one year as president, and one year as past president. The three presidents work together and serve as an executive council. The society has nearly 35,000 members in more than 95 countries.

Spinal neurosurgeon earns '2023 Top Spine Paper of the Year'



A paper by Chief of Spinal Neurosurgery **Kee Kim, M.D.**, has been named the "2023 Top Spine Paper of the Year" by the Congress of Neurological Surgeons (CNS). Kim, also a professor in the Department of Neurological Surgery, was selected for

"Acute Implantation of a Bioresorbable Polymer Scaffold in Patients With Complete Thoracic Spinal Cord Injury: 24-Month Follow-up From the INSPIRE Study," published in *Neurosurgery*. The award from CNS recognizes his contributions to a clinical trial conducted across hospitals nationwide, including UC Davis. The intervention involves insertion of an investigational neuro-spinal scaffold, developed by InVivo Therapeutics Corp., directly into the injured spinal cord to help repair of nerve tissue.

Translational cancer researcher captures top imaging award

UC Davis Comprehensive Cancer Center researcher Julie Sutcliffe, Ph.D., was presented with the 2023 Society of Nuclear Medicine and Molecular Imaging (SNMMI) Henry N. Wagner, Jr., Image of the Year award for her leading-edge "theranostics" Phase I clinical trial in patients with metastatic



pancreatic cancer. Each year SNMMI chooses an image that best exemplifies the most promising advances in the field of nuclear medicine and molecular imaging, and this year's was chosen from more than 1,500 abstracts. Sutcliffe's award was the result of her team's first-in-human evaluation of the novel theranostic pairing of two radiolabeled peptides as a diagnostic and therapeutic.

Emergency physician wins geriatric medicine award



Emergency medicine physician **Katren Tyler, M.D.**, has been awarded the 2023 Academy of Geriatric Emergency Medicine (AGEM) Education

Career Achievement Award. Tyler is the vice chair for geriatric emergency medicine and wellness at UC Davis Health, and was the first in the nation to be named to such a role. Tyler was recognized by AGEM for her career achievements in advancing geriatric emergency medicine education through design and dissemination of training strategies, materials and standards for providers from several disciplines.

Pharmacology chair awarded for mentoring heart researchers



Distinguished Professor **Donald M. Bers, Ph.D.**, chair of the Department of Pharmacology and the Joseph Silva Endowed Chair for Cardiovascular Research at the UC Davis School of Medicine, received this year's Eric N. Olson Mentorship Award from the International

Society for Heart Research North American Section. The award recognizes heart researchers with a clear dedication to mentorship and support for trainees and young scientists. Bers has mentored more than 120 doctoral students, postdocs and junior faculty, and a similar number of undergraduate students and specialists.

Neurology chair receives international research honor

Department of Neurology Chair **Amy Brooks-Kayal**, **M.D.**, **F.A.A.N.**, **F.A.N.A.**, **F.A.E.S.**, is the 2023 recipient of the Child Neurology Society Bernard Sachs Award, given annually to honor a scholar of international status who has done leading neuroscience research related to the care of children with neurological disorders. Brooks-Kayal's research, published in numerous journals, focuses on how seizures affect the brain, and she is also working to develop new treatments for epilepsy prevention and potentially, a cure. Brooks-Kayal received the Founders Award from the American Epilepsy Society in 2019 and the Ambassador for Epilepsy Award from the International League Against Epilepsy in 2021.



Among the nation's **top hospitals**

UC Davis Medical Center was recognized as one of the nation's top hospitals by the 2023 edition of *Becker's Hospital Review's* "Great hospitals in America" list. This year, UC Davis is one of 91 hospitals nationwide, one of 12 hospitals in California and the only hospital north of San Francisco to receive recognition on the list.

A BEST MATERNITY HOSPITAL IN U.S.

UC Davis Medical Center was named to *Newsweek's* 2023 Best Maternity Hospitals, announced this spring by *Newsweek* and the global market research and consumer data firm Statista. The distinction recognizes facilities that have provided exceptional care to mothers, newborns and their families. It is the fourth year in a row that UC Davis Medical Center has been included on this list.



NATIONAL TOP-10 AWARD FOR CONSUMER LOYALTY

NRC Health awarded UC Davis Health the Consumer Loyalty Best in Class Award for 2023, joining institutions such as Mayo Clinic hospitals in Arizona, Rochester and Florida and The Cleveland Clinic's Weston Hospital. Each year, NRC Health ranks 100 health care facilities based on their consumer loyalty score, with only the top facilities receiving the highest honor of Best in Class. NRC Health is a market research organization that helps health care systems learn data-driven insights about their patients to improve patient and system outcomes.

A FORBES 'BEST EMPLOYER IN CALIFORNIA'

In lists by the global media company *Forbes*, UC Davis is ranked #3 statewide among educational institutions and UC Davis Health ranked #3 in health care for 2023. Out of all employers in California, the university outranked organizations like Apple and NASA, placing at #7 for UC Davis and #15 for UC Davis Health. For 2023, Forbes also identified UC Davis as a Best Employer for Diversity for the fourth consecutive year and a Best Employer for Women for the second consecutive year.

7 environmental excellence awards

Practice Greenhealth has recognized UC Davis Health as a national leader in environmental sustainability for the second year in a row. The health system was again named one of the Top 25 hospitals in the country, the nonprofit's highest honor for hospitals, and was also honored with the Greening the OR Recognition Award for the third time. It also received five designations in the Circles of Excellence, which honors up to 10 of the highest performing hospitals nationwide in various areas of sustainability — in this case, sustainable procurement, water, transportation, green building, and food (shared award).



Notable quotes

"Mr. Biden's proposal is similar to admissions systems already in use at the University of California, Davis, School of Medicine and elsewhere. Davis has successfully used a system it calls the 'socioeconomic diversity index' to become one of the most diverse medical schools in the country."

June New York Times coverage of the Supreme Court's ruling to overturn affirmative action in college and university admissions.

"In its most recent entering class of 133 students, 14 percent were Black and 30 percent were Hispanic. Nationally, 10 percent of medical school students were Black and 12 percent were Hispanic. A vast majority of the UC Davis class — 84 percent — comes from disadvantaged backgrounds, and 42 percent are the first in their family to go to college. The overall acceptance rate has been less than 2 percent."

July *New York Times* coverage of UC Davis School of Medicine's use of measurements such as a socioeconomic disadvantage scale in admissions.

"Sixty to 70 percent of women get screened in this country, and I'd love to see it be 100 percent."

Elizabeth Morris, M.D., chair of radiology, in a September CBS New York story on increasing breast cancer screening, especially in diverse communities. "In general, in our society, our voices aren't necessarily heard as firmly and we have to advocate for ourselves. Women and people of color, and especially people who identify in that intersectionality, it's going to be very hard to navigate."

Obstetrics and gynecology professor **Catherine Cansino, M.D., M.P.H.**, in August *WebMD* coverage of a CDC survey on mistreatment of women by medical professionals during maternity care. Cansino said the U.S. lags in overall maternity accommodations compared to other developed countries.

"Often people go into high gear in the immediate aftermath, where the need to get into survival mode is intense, and all systems are on high alert, and that can last for months. But at some point, it is too much to sustain and people crash, often around six months where they may sink into a deep depression."

Irva Hertz-Picciotto, M.P.H., Ph.D., chief of environmental and occupational health and director of the UC Davis Environmental Health Sciences Center, in August *Washington Post* coverage about "fire brain" and other health challenges faced by wildfire survivors. "I stopped masking this summer, and it felt weird sometimes to be maskless. But with COVID rates increasing, I'm thinking of going back to masking while indoors at stores and other venues."

Dean Blumberg, M.D., chief of pediatric infectious diseases, in a September Washington Post feature on how COVID experts are living during the first post-emergency uptick of the disease. The article also featured Anthony Fauci, former director of the National Institute of Allergy and Infectious Diseases, and Ashish Jha, former White House COVID-19 response coordinator.

"Ever since the pandemic I try to eat outdoors as much as possible and avoid going to movies on opening night. In general, I stopped masking, except in the hospital, but have been more cognizant of it this past month."

Infectious disease specialist **Natascha Tuznik**, **D.O.**, **F.A.C.P.**, in the same *Post* article.

A summary of recent findings in clinical, translational and basic-science research at UC Davis

Body of Knowledge



In a review published in *The Carlat Report*, UC Davis psychiatry researchers found listening to music reduces the overall severity of insomnia, improves sleep quality

and helps to initiate sleep. The effect was comparable to prescription sleep medications such as Z-drugs and benzodiazepines. Participants preferred familiar tunes without lyrics and songs with slow tempos, regular rhythms, bass tones and tranquil melodies. But one study showed music participants picked themselves – including pop – helped just as much as classical music.



A UC Davis Health study that looked at acute bone loss in mice who had COVID-19 showed that SARS-CoV-2 infection can cause significant changes in bone structure. The

study, published in the *Journal of Orthopaedic Research*, is the first to suggest that people with COVID-19 may experience long-term orthopedic issues, such as decreased bone mass, increased fracture risk and other musculoskeletal complications.



New UC Davis Health research reveals a significant association between the length of stay in the emergency department and the development of incident delirium in older

adults. The retrospective study of 5,886 patients aged 65 and older, published in the *Western Journal of Emergency Medicine*, was conducted by a team of emergency medicine physicians. For each additional hour a patient spent in the ED, the odds of experiencing delirium increased by approximately 2%. Volunteering in late life is associated with better cognitive function, according to findings of a study UC Davis Health presented at the Alzheimer's Association International Conference 2023. Volunteering was associated with better baseline scores on tests of executive function and verbal episodic memory, even after adjusting for age, sex, education, income, practice effects and interview mode (phone versus in-person). Those who volunteered several times per week had the highest levels of executive function. The study examined an ethnic and racially diverse population of 2,476 older adults.

-AA

A team of UC Davis and University of Oxford researchers have developed SparkMaster 2, opensource software that allows scientists to analyze normal and abnormal calcium signals in cells

automatically. Calcium is a key signaling molecule in all cells, including muscles like the heart, and the new software enables automatic analysis of distinct patterns of calcium release in cells. This includes calcium "sparks," microscopic releases of calcium within cardiac cells associated with arrhythmia. An article demonstrating the software's capabilities was published in *Circulation Research*.

UC Davis Health launches new liver transplant program

UC Davis Health has launched a new adult liver transplant program, expanding the existing services of the UC Davis Transplant Center and providing comprehensive care to patients with liver disease.

The liver transplant program is the third solid organ transplant program to launch at UC Davis Health, joining adult and pediatric kidney transplants. It's the only liver transplant program available in California north of San Francisco.

"As an academic medical center, UC Davis Health made an institutional commitment to develop a viable liver transplant program to meet the health care needs of our community," said Diana Farmer, M.D., F.A.C.S., F.R.C.S., chair of the Department of Surgery. "This expansion enhances our already robust Transplant Center and allows patients to have liver transplant care available in their own backyard."

The new program is approved by the United Network for Organ Sharing (UNOS), the agency that manages the nation's organ transplant system. UC Davis Health has already completed six successful liver transplants since the first procedure in July. The program will serve patients located in the 33 counties UC Davis Health covers, which includes a 65,000-square-mile area north to the Oregon border and east to Nevada.

Currently, transplantation is the only cure for liver insufficiency or liver failure because no device or machine reliably performs all liver functions. According to the U.S. Health Resources & Services Administration, livers are the secondmost awaited organ transplant with over 10,500 people on the waiting list in 2023.

"We're committed to ensuring equitable access to transplantation for patients throughout the region."



- SOPHOCLIS ALEXOPOULOS, TRANSPLANT CENTER MEDICAL DIRECTOR



"This expansion enhances our already robust Transplant Center and allows patients to have liver transplant care available in their own backyard."

DIANA FARMER, DEPARTMENT OF SURGERY CHAIR

"For liver disease patients, access to advanced therapies, including transplantation, can be difficult," explained Sophoclis Pantelis Alexopoulos, M.D., F.A.C.S., medical director for the Transplant Center. "At UC Davis Health, we are committed to ensuring equitable access to transplantation for patients throughout the region."

In preparation for launch, UC Davis Health has welcomed nationally recognized specialists to grow and build the program. The large team includes hepatobiliary surgeons, hepatologists, advanced practitioners, transplant coordinators, nurses, financial coordinators, social workers, dietitians, pharmacists, and transplant administrators.

"Our ability to successfully transplant complex cases of severe liver disease is due to the multidisciplinary, integrated care provided by our liver transplant team," said Lea K. Matsuoka, M.D., F.A.C.S., section chief for liver transplantation and hepatobiliary surgery at the Transplant Center. "Our team provides patients with comprehensive care throughout the transplant process, from assistance with lodging to support with nutrition and medications. Patient care does not end after the surgery; it is only beginning."

Established in 1985, the UC Davis Transplant Center has been a leader in organ transplantation for decades. Recently, it was selected as a model hospital by UNOS and also chosen to guide national best practices for transplant by the Centers for Medicare & Medicaid Services.

'Blue Zones' initiative takes aim at Alzheimer's

UC Davis Health will play a key role in a new pilot program aimed at reducing Alzheimer's disease in the Sacramento region and throughout California. The new Blue Zones Activate initiative, which aims to make the region dementia-friendly, is launching in Sacramento County, and UC Davis Health will be a partner.

It's of the earliest endeavors resulting from the Governor's Task Force on Alzheimer's Prevention, Preparedness and the Path Forward, launched in 2019 by Gov. Gavin Newsom and chaired by former first lady of California Maria Shriver. Other members included David Lubarsky, M.D., M.B.A., F.A.S.A., UC Davis Health CEO and vice chancellor of human health sciences, and UC Davis Health neurology researcher Oanh Meyer, Ph.D., M.A.S., who studies cognitive and mental health disparities in minorities and older adults.

Lubarsky and Meyer contributed to task force discussions, work groups and the proposals ultimately unveiled. In 2020, the task force delivered 10 recommendations — including one focused on Blue Zones — to better prepare California for an aging population and to prevent an expected surge in Alzheimer's cases. A recent study from the



Sardinia, Italy has been labeled one of the world's "blue zones"— regions where people live extraordinarily long, healthy and happy lives. Healthy aging advocates hope to apply lessons from such regions to enhance healthy systems in the Sacramento area.

Alzheimer's Association estimated that 720,000 people in California live with Alzheimer's – more than any other state.

'Blue Zones': healthy and happy

California selected Sacramento County to roll out the new Blue Zones pilot program with the intention that it will serve as a blueprint for the state to replicate and adapt for other communities. It is the first community in California to use the Blue Zones model on Alzheimer's.

The Blue Zones/county partnership will focus on equity, acknowledging the region is home to some of the state's most diverse populations. Blue Zones and Sacramento County are working on an in-depth assessment to identify zip codes of greatest need. Black and Latino older adults are at increased risk for Alzheimer's because of disparities in health care; according to an Alzheimer's Association report, 19 percent of Black and 14 percent of Latino adults over 65 have the disorder, compared with 10 percent of older white adults.

The company Blue Zones will implement the project. The name refers to "blue zone" regions around the world where people live extraordinarily



Meyer



Lubarsky

long, healthy and happy lives. The focus is on this single largest determinant of health — where people live. Instead of focusing on only changing individual behavior, Blue Zones aims to help communities make permanent changes to systems and surroundings so it's easier to eat wisely, move naturally, and connect with others.

UC Davis is also one of five U.S. sites implementing the Alzheimer's Associationfunded "U.S. POINTER study" of lifestyle interventions based on diet, exercise, and more. The UC Davis Alzheimer's Disease Center is one of 27 nationwide designated by the NIH's National Institute on Aging.

"As the most diverse state in the nation, we have an obligation and opportunity to be inclusive in our research, and make an impact in reducing disparities that affect historically marginalized communities who are often times more likely to be affected by Alzheimer's disease." UC Davis Health has purchased 20 acres of land at the corner of Elk Grove Blvd. and Laguna Springs Drive, where officials want to solidify UC Davis Health's regional footprint and expand its current Elk Grove clinics to offer additional primary care and comprehensive specialty care.

The acquisition is part of a strategic plan to develop a regional system of care that reaches more patients in more places. UC Davis Health CEO David Lubarsky, M.D., M.B.A., F.A.S.A., has positioned UC Davis Health as a resource to "complete,

EXPANDING HEALTH CARE SERVICES IN FAST-GROWING ELK GROVE

The population of Elk Grove grew by more than 50 percent between 2005 and 2016 (the date of this aerial photo) and is expected to reach 200,000 by 2029.

not compete" with other health systems to improve access and care throughout the region.

UC Davis Health is also developing a new health care hub in Folsom at Highway 50 and E. Bidwell, and purchased land in Rocklin near Highway 65 and the Whitney Ranch neighborhood. The outpatient clinic in Folsom will be the first to open in 2025; growth will continue over a long period to accommodate innovative care delivery and unique local needs.

UC Davis Health opens Sacramento's first rehab hospital

The 52-bed UC Davis Rehabilitation Hospital opened in April as the first such freestanding facility in Sacramento County, representing a second fully licensed hospital on the UC Davis Sacramento Campus.

The 58,000-square-foot facility at Broadway and 49th Street more than doubles inpatient rehabilitation capacity formerly available at UC Davis Medical Center, and is equipped with amenities and adaptive units where patients can practice daily living. It also includes a 12-bed brain injury unit and four private rooms for bariatric patients.

The hospital was developed by Lifepoint Rehabilitation, and is staffed by UC Davis Health and Lifepoint. The Department of Physical Medicine and Rehabilitation leads rehabilitation at UC Davis Medical Center. Learn more at ucdavisrehabhospital.com.

UC Davis Health celebrates community health center opening

For the past six years, physicians and residents from UC Davis Health's Department of Pediatrics have cared for children's medical needs at the Sacramento Native American Health Center (SNAHC), a nonprofit Federally Qualified Health Center (FQHC) in the city's midtown neighborhood. In June, SNAHC offered additional convenience to its patients by opening the doors to its newest location in South Sacramento.



The 35,000-square-foot new building will serve up to 12,000 patients a year.

UC Davis Health, which has long been committed to supporting patientcentered, community-minded care, donated \$250,000 toward the expansion. Additional community partners include Delta Dental Community Care Foundation, Indian Health Service, Sacramento Municipal Utility District and Sutter Health, among others.

SNAHC provides comprehensive health services to individuals with limited or no access to care, including Medi-Cal enrollees. It expanded its service to South Sacramento, recognizing that the Native American community comprises nearly 15% of the area's population. Despite its name signifying Native American heritage, SNAHC is committed to creating an inclusive and welcoming environment that respects and embraces the cultural diversity of the community it serves. There are no tribal or ethnic requirements to receive services at the center.

Partnership to boost access to gene and cell therapies in California

UC Davis and Orgenesis Inc. announced an agreement this summer to roll out Orgenesis Mobile Processing Units and Labs™ (OMPULs™) at multiple medical and academic institutions within the University of California. These OMPULs provide onsite development and manufacturing of cell and gene therapies, help reduce development costs, and increase access to therapies.

"We are very excited to move forward with this collaboration with Orgenesis," said Jan Nolta, Ph.D., director of the Stem Cell Program and the UC Davis Gene Therapy Center in the Institute for Regenerative Cures at UC Davis Health. "The OMPULs will allow wider access to promising cell and gene therapies for patients in different regions of California, improving accessibility and reducing health care disparities."

The collaboration is the initial step in bringing affordable therapies to patients in California. It sets out a staged approach to install and operate OMPULs using the point-of-care (POCare) Service Platform to produce onsite cell and gene therapies for clinical trials and therapeutics for hospitals. UC Davis Health joined the Orgenesis POCare Network in 2020, and has been utilizing the platform to develop and supply cell and gene products and therapies.

Access to cell and gene therapy through onsite manufacturing

Over the last three decades, the field of cell and gene therapies has transformed, with expanding applications each year. For example, Chimeric antigen receptor T (CAR T) cells are applied as first-line therapies to cure hematologic malignan-



UC Davis is home to one of the largest university-based Good Manufacturing Practice facilities in the U.S.

"(This) will allow wider access to promising cell and gene therapies for patients in different regions of California, improving accessibility and reducing health care disparities."

JAN NOLTA, DIRECTOR OF THE STEM CELL PROGRAM AND GENE THERAPY CENTER IN THE INSTITUTE FOR REGENERATIVE CURES

cies, giving thousands of patients hope that their immune systems could be trained to successfully combat their lymphomas or leukemias for the rest of their lives.

UC Davis has been working with Orgenesis on a paradigm shift to address accessibility issues for such treatments. Instead of only a few large manufacturing centers, mobile cell and gene therapy manufacturing units will be able to supply CAR T cell products to patients at locations that are remote from major universities or medical centers.

The new partnership includes establishing and validating the first OMPUL at UC Davis, followed by commercialization and installation at other sites in California. Morgenesis LLC., Orgenesis' POCare service subsidiary, will install the OMPULs.

The new agreement follows an \$8 million grant renewal for UC Davis Health's Alpha Stem Cell Clinic from the California Institute for Regenerative Medicine (CIRM). The grant enables the clinic to expand its clinical trials operation and advance toward onsite manufacturing of therapies.



UC Davis Health brings **in-home urgent care** to Sacramento

UC Davis Health is collaborating with DispatchHealth, the nation's first comprehensive in-home medical care provider, on a new program to provide patients same-day, in-home urgent medical care.

DispatchHealth's platform provides a wide range of care for injuries and illnesses, ranging from uncomplicated fractures and strains to exacerbation of COPD or congestive heart failure. It also administers bridge care assistance to high-risk patients transitioning from hospital care to home, aiding in recovery and helping prevent readmissions.

"We're proud to be the first health care system in Northern California to offer our patients and the community this exciting program which literally brings back house calls for health care," said David Lubarsky, M.D., M.B.A., F.A.S.A., vice chancellor of human health sciences and CEO of UC Davis Health.

DispatchHealth will operate using two vehicles within a 25-mile radius of UC Davis Medical Center, with care furnished by a nurse practitioner or physician assistant and a trained medical technician. A board-certified emergency department physician is available virtually as needed by the on-site care team at the patient's home. Each vehicle will serve six to eight patients per day.

After either speaking with nurse triage, their primary care provider, UC Davis Health's Express Care service, or upon discharge from UC Davis Medical Center, patients will have access to DispatchHealth's in-home urgent care services. Patients cannot directly make an appointment with the service.

Early pregnancy access center opens

UC Davis Health recently launched an early pregnancy access center, offering specialized expertise for patients in the beginning stages of pregnancy.

"This new clinic will provide specialized care for patients who are experiencing complications and want to be seen ASAP," said Anne Flynn, M.D., M.S.H.P., OB-GYN physician in family planning. "Our clinic will provide expedited and compassionate care to patients during early pregnancy. These may be patients diagnosed with pregnancies that need management, such as miscarriage or ectopic pregnancy. Or these may be patients experiencing symptoms of bleeding and cramping early in pregnancy."

Eight OB-GYN physicians with subspecialty training in complex family planning will work in the clinic, along with support from OB-GYN fellows and residents. The Early Pregnancy Access Center will provide care for patients with:

- Miscarriage/early pregnancy loss, including diagnosis and management (procedural or medical management)
- Pregnancy of unknown location, in which a positive pregnancy test occurs but ultrasound does not show intrauterine or ectopic gestation (including workup and management)
- Ectopic pregnancies, including cesarean scar ectopic and cervical ectopic pregnancies
- Complications of early pregnancy, such as bleeding and cramping
- Medication or procedural management of undesired pregnancy
- Pregnancy verification for patients not previously seen by a provider and who cannot be scheduled with a new OB provider for some time

Patients who would like to schedule an appointment can call 916-734-6900.

New volunteer doula program

When pregnant patients go into active labor at UC Davis Medical Center, they can now receive support from a trained doula. A new volunteer doula program launched in September currently includes a group of 15 volunteer doulas, and plans to double that by the end of the year.

Patients can request a doula upon admission based on first-come, first-served availability; the service is free to UC Davis patients, with each doula dedicated to one laboring patient and 1:1 support. Doulas are currently available during the day, with evening services envisioned in the future.

Assistance from a doula is shown to promote better birth outcomes, especially for socially disadvantaged mothers at risk for adverse birth outcomes. "Currently, accessing private doula care is very expensive. We are so pleased to provide labor support to all patients at our hospital, regardless of their socioeconomic background," said Angelique Silva, M.S., RNC-OB, C-EFM, C-ONQS, perinatal unit director and perinatal nurse manager at UC Davis Medical Center. "Having this program will address the disparities in health care that many of our patients face."

National recognition for heart disease and stroke care

UC Davis Medical Center has been recognized by the American Heart Association with multiple awards for its commitment to following researchbased guidelines for the treatment of heart disease and stroke. The practices ultimately lead to more lives saved, shorter recovery times and fewer readmissions. This year, UC Davis Medical Center received these achievement awards:



- Get With The Guidelines*-Stroke Gold Plus Award
 - » Target: Stroke Elite Plus Honor Roll
 - » Target: Type 2 Diabetes Honor Roll
- » Target: Stroke Advanced Therapy Honor Roll
- Get With The Guidelines*-Heart
 Failure Silver Plus Award
 - » Target: Type 2 Diabetes Honor Roll
- Mission: Lifeline[®] STEMI Receiving Silver Plus Award



FETAL ULTRASOUND ACCREDITATION

The UC Davis Fetal Care and Treatment Center and UC Davis Health Prenatal Diagnosis Center of Northern California have achieved a key ultrasound accreditation.

The Ultrasound Practice Accreditation Council of the American Institute of Ultrasound in Medicine (AIUM) awarded both centers ultrasound practice accreditation in the areas of obstetrics (OB) standard and detailed second trimester OB ultrasound. UC Davis achieved the recognition by meeting rigorous voluntary guidelines set by the diagnostic ultrasound profession.

DESIGNATED A PARKINSON'S FOUNDATION CENTER OF EXCELLENCE

The Parkinson's Foundation has designated the UC Davis Health Center for Movement Disorders & Neurorestoration as a Parkinson's Foundation Center of Excellence, making it one of 54 worldwide to receive the designation. Centers of Excellence bring together specialized teams of neurologists, movement disorder specialists, rehabilitation professionals, mental health experts, and others with extensive knowledge in PD medications, treatments, and research.

CANCER CENTER RECOGNIZED FOR EXCELLENCE IN SURGICAL ONCOLOGY

UC Davis Comprehensive Cancer Center has been designated an American College of Surgeons (ACS) Surgical Quality Partner, an award given to cancer programs that excel at providing quality of care, preventing complications, saving lives, and reducing costs.

The designation follows the news that the center and UC Davis Medical Center earned accreditation once again from the Commission on Cancer (CoC), an ACS quality program. The cancer center received a three-year re-accreditation without any noncompliant standards. Noteworthy Clinical Technology & Milestones

First in state to offer life-changing therapy for Duchenne muscular dystrophy



In August, a 5-year-old boy at UC Davis Medical Center became the first child in California to receive a ground-

breaking, potentially lifesaving infusion treatment — the first-ever gene therapy for treating Duchenne muscular dystrophy (DMD) in pediatric patients. He was the fourth child in the nation to receive the treatment outside clinical trials.

Years in the making and recently approved by the FDA, the treatment brings hope to as many as 12,000 people in the U.S. who live with DMD, one of the most severe types of muscular dystrophy. The genetic disorder leads to heart and breathing problems.

In June, FDA granted limited approval of gene therapy for children ages 4 and 5. The one-time infusion works by replacing the Duchenne variant of dystrophin with a manufactured version of the dystrophin gene.

Craig McDonald, M.D., chair of the UC Davis Health Department of Physical Medicine and Rehabilitation and an award-winning neuromuscular disorders researcher, helped facilitate the patient's treatment. "I've been treating DMD patients for 30 years," he said. "To now have a situation where we can offer transformational, life-saving gene therapy to these patients to replace a defective gene is incredibly gratifying and rewarding. It's been an inspiring journey to be on."

ENDOSCOPY



New procedures thanks to state-of-the-art endoscopy suite

UC Davis Health interventional gastroenterologists are offering a broad repertoire of new or advanced endoscopic procedures out of a new leading-edge endoscopy suite, such as:

procedures out of a new reading edge chaoseopy suite, such

- Endoscopic treatment for Achalasia, Gastroparesis and Zenker's diverticulum with peroral endoscopic myotomy (POEM)
- Locating and removing precancerous polyps and early-stage tumors in the colon, esophagus, stomach and duodenum
- Non-surgical treatment for gallbladder problems, gallstones, and obstructions from GI cancers and other conditions
- Characterization of pancreatic cysts using real-time laser microscopy, which obviates need for biopsy

"These procedures will provide our patients with a more effective approach to treat their condition, and keep them from needing painful, costly and more invasive procedures," said Antonio Mendoza-Ladd, M.D., medical director of endoscopy for gastroenterology.

ROBOTIC NEPHRECTOMY ON LIVING KIDNEY DONOR

UC Davis Health transplant surgeons have performed the first fully robotic nephrectomy on a living donor in the Sacramento region, a procedure carried out using the latest Intuitive Surgical Robotic System. Living donor nephrectomies have traditionally been performed using either a laparoscopic technique or open surgery; robotic-assisted procedures enable smaller incisions, which often lead to a quicker recovery with less pain and scarring. Moving forward, nephrectomy procedures will be performed using robotic and laparoscopic techniques, depending on availability of robotic systems. Transplant surgery is one of 14 specialties in which UC Davis Medical Center offers minimally invasive, robotic-assisted technology.

NEW TREATMENT FOR RECURRENCE OF C. DIFF INFECTION

Based on clinical trials run by UC Davis Health Chief of Infectious Diseases Stuart Cohen, M.D., the FDA has approved VOWST,™ a microbiota-based therapeutic to prevent recurrence of C. difficile Infection (CDI) in adults following antibacterial treatment for recurrent CDI (rCDIc). There will be an estimated 156.000 episodes of rCDI this year in the U.S., based on CDC data, and the agency has characterized the infection as an Urgent Health Threat. The new treatment is the first and only FDA-approved orally administered microbiota-based therapeutic for rCDI. FDA approval was based on clinical data from Phase 3 trials ECOSPOR III and ECOSPOR IV, overseen by Cohen as a principal investigator.

\$15 million to develop, assess AI for breast cancer detection and risk

How can we improve the early detection of breast cancer and better identify women who have higher risk for an advanced or second breast cancer and who need additional screening?

That's the mission of a national research team co-led by UC Davis Professor and Division Chief of Biostatistics Diana Miglioretti, Ph.D. Thanks to a \$15 million, five-year grant renewal from the National Cancer Institute, the team will use artificial intelligence (AI) to make screening and surveillance more accurate and equitable.



Miglioretti and her team started studying and promoting safer and more personalized breast cancer screening in 2011, and advanced the science of risk-based screening and surveillance in many ways. The team is now looking to integrate imaging features and AI algorithms to improve risk prediction. The grant will fund three new projects:

- Using AI to predict which women with no history of breast cancer are at high risk of being diagnosed with advanced cancer.
- Exploring whether use of AI detection scores and other facility-level interventions (such as mobile mammography) can improve outcomes, with special attention to health equity.
- Developing a risk-based approach to identify women at higher risk of surveillance failure, by examining multiple factors that might be linked to failures.

The program leverages the Breast Cancer Surveillance Consortium, a nationwide research network with data from geographically and socio-demographically diverse settings.

Digital pilot provides overdose surveillance for local counties

UC Davis Health and its Digital CoLab innovation hub have partnered with the CDC Foundation and Boston Children's Hospital on a pilot program called SMART Cumulus. The digital platform allows health care and research institutions to more easily exchange data with public health sites, allowing them to share the disease burden.

For the program's first application, the organizations created an opioid overdose surveillance dashboard for Sacramento County Public Health and the Yolo County Health and Human Services Agency, allowing public health officials to track across counties.

The program enables streaming of data formats in a secure, privacy-preserving environment for faster execution of multisite studies for population health initiatives. AI analyzes clinical notes and longitudinal medical histories; public health partners can then view dashboards populated with aggregate, de-identified data and perform analytics.

In addition to overdoses, other participating public health organizations are using the platform to track COVID-19, hypertension, mental health and diabetes.

New collaboration offers personalized treatment for asthma + COPD

UC Davis Health and Propeller Health have announced a new collaboration that will offer personalized treatment for high-risk patients with asthma and chronic obstructive pulmonary disease (COPD).

UC Davis Health will provide the Propeller remote monitoring program, which includes sensors and an app/web portal, to eligible patients. The sensors attach to a patient's inhaler and capture unique signals that record events, such as medication usage or respiration, transmitting the data to UC Davis Health's electronic health record to support remote monitoring.

The collaboration is a project of the UC Davis Health Operations Center of Excellence, a partnership between Innovation Technology and Clinical Operations. In 2022, UC Davis' Comprehensive COPD Clinic also created the first remote patient monitoring program in the Sacramento region for high-risk patients with COPD.

A unique journey

The U.S. Supreme Court's recent decision to ban affirmative action has many schools reevaluating admissions practices. But race-conscious admissions policies have been banned in California since 1996, and UC Davis' School of Medicine and School of Nursing adopted a holistic process years ago. Now they're serving as national models. Despite California's long-standing ban on affirmative action, the UC Davis School of Medicine has become one of the most diverse medical schools in the nation as ranked by U.S. News & World Report.

For two decades, the school has used strategies such as holistic admissions practices, mission-focused school tracks, and community partnerships to attract students who will help the field of U.S. health care better reflect the diversity of communities and populations it serves.

Those efforts have gained attention in the past, such as in an American Association of Medical Colleges (AAMC)



toolkit for admissions officers, and via excellence awards from *INSIGHT Into Diversity* magazine for the Betty Irene Moore School of Nursing at UC Davis (which also employs holistic admissions practices) and the School of Medicine.

But with the U.S. Supreme Court's ruling this summer to effectively ban affirmative action in college and university admissions, UC Davis practices are now front-and-center in the national spotlight and discussion including at the highest levels of government — as potential models for other schools.

"...Mr. Biden on Thursday called on leaders in higher education to consider financial means, where a student grew up and personal experiences when they are choosing among a pool of already qualified applicants," *The New York Times* wrote in a July 29 article on the president's reaction to the court's decision. "Mr. Biden's proposal is "Mr. Biden's proposal is similar to admissions systems already in use at the University of California, Davis, School of Medicine and elsewhere. Davis has successfully used a system it calls the 'socioeconomic diversity index' to become one of the most diverse medical schools in the country."

- JULY 29 NEW YORK TIMES STORY

In July *The Times* dedicated 1,200 words specifically to examining UC Davis' strategies. "To build a diverse class of students, the medical school at U.C. Davis ranks applicants by the disadvantages they have faced. Can it work nationally?" asked the article "With End of Affirmative Action, a Push for a New Tool: Adversity Scores," which had more than 15,000 college. The overall acceptance rate has been less than 2 percent."

National Public Radio's flagship All Things Considered program, *The Washington Post's* editorial board, CNN, STAT, Axios, and Bloomberg News covered the School of Medicine's admission strategies or interviewed school leaders such as Associate Dean for Admissions Mark Henderson, M.D. Henderson and Caro-

toward equity

similar to admissions systems already in use at the University of California, Davis, School of Medicine and elsewhere. Davis has successfully used a system it calls the 'socioeconomic diversity index' to become one of the most diverse medical schools in the country."

The Times was one of a number of prominent national outlets that mentioned and analyzed UC Davis School of Medicine's approach, as well as that of the University of California overall, in a series of articles up to and after the court's ruling. views online as of late September.

"The disadvantage scale has helped turn U.C. Davis into one of the most diverse medical schools in the country notable in a state that voted in 1996 to ban affirmative action," the article noted. "In its most recent entering class of 133 students, 14 percent were Black and 30 percent were Hispanic. Nationally, 10 percent of medical school students were Black and 12 percent were Hispanic.

"A vast majority of the U.C. Davis class – 84 percent – comes from disadvantaged backgrounds, and 42 percent are the first in their family to go to lina Reyes, M.D., an associate clinical professor of maternal-fetal medicine at UC Davis Health and board chair of the California Health Care Foundation, participated in a panel on admission strategies at the virtual STAT Future Summit, recapped in a STAT article.

School of Medicine leaders recounted the school's holistic admission practices in detail in an August *JAMA* "Viewpoint" article, discussed in the following pages of this issue of *UC Davis Health* (p. 24–25). Also read more about the human impact of holistic admissions at the School of Nursing on p. 26–27 of this issue.

JAMA article recounts School of Medicine's holistic admissions practices





Mark Henderson, Tonya Fancher and Susan Murin are authors of the JAMA article "Holistic Admissions at UC Davis – Journey Toward Equity."

Colleges nationwide turn to UC Davis for proven ideas to increase share of students underrepresented in medicine

Colleges and universities wanting to commit to health and education equity without using affirmative action can turn to the UC Davis School of Medicine for best practices, according to a new article published this summer in *JAMA* online.

The "Viewpoint" article posted Aug. 14 recaps how and why the school over nearly two decades has significantly boosted enrollment of students historically underrepresented in medical education. Authors include School of Medicine faculty members Mark Henderson, M.D., associate dean for admissions; Tonya Fancher, M.D., M.P.H., associate dean for workforce innovation and education quality improvement; and Susan Murin, M.D., M.Sc., M.B.A., interim dean of the School of Medicine.

They penned "Holistic Admissions at UC Davis – Journey Toward Equity," after the U.S. Supreme Court barred higher education institutions from admitting students based on race. Although California voters narrowly passed Proposition 209, banning race-conscious admissions in 1996, the School of Medicine has stood out as one of few institutions that has steadily increased enrollment of Black, Latino and Native American students.

Over the past 15 years, the article states, UC Davis School of Medicine "has tripled enrollment of these students by developing an admissions model that prioritizes state workforce needs and attention to the mission fit, lived experience, and socioeconomic background of each applicant."

In 2006, the proportion of entering Black, Hispanic and Native American students was less than 10%, despite the same groups being a majority of the state's high school graduates. It was also known that students from these groups experience greater income inequality, less access to care and poorer health outcomes.

"To fulfill the school's public mission," the article states, "radical change was needed — but without preference for race, sex, color, or ethnic or national origin in the admissions process."

A new model for medical education

That's when the school's leadership team committed to developing a process to admit students who would be best equipped to meet the workforce needs of California. It represented a new, radical model for medical education. It meant relying less on metrics such as the Medical College Admission Test scores, or undergraduate grade-point averages and adding a number of other criteria to provide a more holistic view of each applicant's life experience. The admissions committee also added new student and faculty members and implemented new methods of evaluating applicants, such as multiple mini-interviews that are less subject to individual bias and better at predicting who will make a great doctor.

"Asking the question, 'How will this applicant add to or strengthen the future physician workforce in California?" broadened the perspective of committee members, prompting them to consider attributes including maturity, work experience, military service, and personal illness, disability, or other adversity," the authors state.

Even after employing the new criteria, committee members needed ways to put traditional academic metrics into the context of the diverse educational experiences and opportunities of students from different backgrounds. Eventually, researchers Community Health Scholar (CHS) tracks that helped students align their medical education with workforce needs. They did this with the help of the UC Office of the President, state funding, and financial support from organizations such as Kaiser Permanente Northern California.

For example, ACE-PC (Accelerated Competency-based Education in Primary Care) is a three-year program that offers a medical degree to select students in just three years instead of four, helping alleviate the shortage of primary care physicians. Likewise, REACH PRIME (Reimagining Education to Advance central California Health) provides students with extensive patient-care experience in the Central Valley, which has a severe shortage of physicians.

Students who pursue CHS pathways often mirror the target patient population or specific workforce need the program intends to address.

And because students from historically underrepresented groups often come from low-resource families, including many



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- CO-AUTHORS MARK HENDERSON, TONYA FANCHER AND SUSAN MURIN

from UC Davis Health's Department of Family and Community Medicine developed the UC Davis Scale.[™] It is a continuous measure of socioeconomic disadvantage, incorporating factors from the medical school application such as parental income and education, growing up in a medically underserved area, and other socioeconomic variables.

"This scale is placed alongside other academic performance measures to provide context to these metrics, serving as a proxy for resilience or distance traveled, key physician attributes," the article states.

Pathways align medical education with workforce needs Meanwhile, the school developed innovative pathways or who are the first in their families to attend college, the school offers a strong support system that includes financial aid, academic coaches and mentors.

"UC Davis' mission-aligned holistic admissions journey shows that institutions committed to education and health equity can make progress in a race-neutral environment," the authors concluded. "Leveling the playing field for low-income students can reduce segregation of medical schools, enhance the impact of scientific teams, grow the primary care workforce, improve access to care for underserved communities, and increase provision of culturally humble care. All medical schools must recommit to their social mission if the U.S. is to achieve health equity."

UC Davis nursing school models how to increase diversity without affirmative action

Tonja Copeland, center, says the School of Nursing was "looking at me more than just my grades" when she applied to the entrylevel nursing program. more than 20 years. But during the School of Nursing application process, her perception changed.

"I got the sense they were looking at me more than just my grades. They gave me the chance to explain some things

School focuses on holistic admissions process and strong student support

Tonja Copeland woke up at 5 a.m. on July 3, the first day of summer quarter classes. She's a second-year nursing student in the Master's Entry Program in Nursing at the Betty Irene Moore School of Nursing at UC Davis.

"The excitement of getting into a nursing school is all my dreams come true," said the 55-year-old member of the Class of 2023. "It's a 'let's go moment' for me every day."

Before she applied to graduate school, Copeland counted herself out. She doubted her skills, even though she has been a licensed vocational nurse for that happened in my past," she recalled. "This whole program has surprised me since day one."

Holistic review brings wider perspective

The 113 future registered nurses, nurse practitioners and physician assistants that started their UC Davis journeys this summer are, like Copeland, the result of an admissions process that looks beyond grades.

"We are looking for unique experiences that will increase the diversity of our cohorts. We are looking for diversity of thought, in addition to diverse experiences. We weigh applications based on different life experiences," explained Associate Professor Jessica Draughon Moret, Ph.D., R.N., who chairs the school's Recruitment, Admissions and Fellowship Committee. "Then we also look at GPA, aptitude, essays and letters of recommendation. We do look at all of that, but we also know those are not necessarily the best measure of program success."

A holistic review considers experiences such as exposure to rural versus urban environments, military experience, and other markers common for people from underserved backgrounds. Applicants answer questions capturing socioeconomic background information such as attending an under-resourced high school, primary language other than English, living in a medically underserved area, and being the first in their family to attend college.

Forty six percent of students starting classes this summer were first-generation students.

When the school launched in 2009, faculty chose to not require a Graduate Record Examination (GRE) score for admission. They argued data from standardized tests is based on cultural bias and a barrier for underrepresented students.

"We also look at the clinical and life experiences applicants have that align with our mission, such as commitment to service, cultural sensitivity, empathy, capacity for growth, emotional resilience, and interpersonal skills," added Teresa Thetford, DHSc, M.S., PA-C, N.P., director of the P.A. program. "We're still looking at those demographics that we know may not otherwise rise to the top as a needed group if we only look at the GPA."

That approach resulted in the school's most diverse class of P.A.s last year, with more men, more students over 35, and the largest group of Hispanic students. Of the 2022 student body, 28.3% were Hispanic and 10.2% were Black, more than a third greater than the percentage of Black residents in California.

To attract a diverse pool, the school also developed videos advising prospective students on personal statements, letters of recommendation, and how to ensure clinical experiences meet requirements.

Diversity just the beginning

The school's strategic plan, launched in 2022, also includes a diversity, equity and inclusion component. Leaders focus on moving past statistics to advance a climate that fosters inclusion and secures sustainable and supportive resources to ensure an environment where all can thrive.

"We have a diverse, clinically active faculty and engaged staff who support our students to exceed their hopes and aspirations as future health practitioners. That fosters a culture of collaboration and belonging," said Dean Stephen Cavanagh, Ph.D., M.P.A., R.N., F.A.C.H.E., F.A.A.N. "When our students feel like they belong here, they act like they're made to be here."

Aliyah Bell, who will be prepared to sit for the P.A. licensing exam in a few months, applied to UC Davis because of its diversity, inclusiveness, collaboration, community connection and leadership.

"Since starting school, I made it my goal to continue to show that all of these

of students entering the entry-level nursing program mirrors the program's applicant pool.

Copeland has never felt this sense of family. "It's wonderful to look across the room to see someone that looks like you and someone who's different than you," she said. "We are tied to each other."

"I don't think we've gone through a lecture without a peer sharing a past experience about the topic that we're learning. That's extremely valuable as a student and future clinician to learn more about the people we'll be taking care of."

- NURSING STUDENT SANTIAGO GARCIA

values were important to me through various ways. Our school has done an amazing job at teaching us about how socioeconomic factors play a huge role in medicine. I feel that's where UC Davis students will excel in the field," said Bell, who was awarded the Student Excellence Award for Leadership.

Santiago Garcia, a representative for the entry-level nursing Class of 2023, credits the inclusive environment for rich learning experiences. "I don't think we've gone through a lecture without a peer sharing a past experience about the topic that we're learning," he said. "That's extremely valuable as a student and future clinician to learn more about the people we'll be taking care of."

Creating inclusion requires educators to anticipate individual needs, consider presentation of content, assign coursework with real-world meaning, and prioritize skills development. There are online learning programs where alumni facilitate study groups and workshops about testing strategies and time management. A faculty support team works with students, and staff help access resources.

School leaders say the strategies are working. For the past two years, the class

Aliyah Bell, receiving the excellence award for leadership this June, applied to UC Davis because its diversity and inclusion resonated with her.



Learn more about educational diversity at UC Davis Health: "I didn't think Black people could be doctors," p. 32

Filipina immigrant defies the odds to reach med school, *p. 34*

Growing diversity in nursing faculty and instructors, *p. 43*

New Division of Geriatrics, Hospice and Palliative Medicine

Geriatrician and researcher Rebecca Boxer is chief of the new division, the latest healthy aging advancement at UC Davis Health

As Americans live longer and their complicated health challenges increase, UC Davis Health has combined geriatricfocused specialties into a new Division of Geriatrics, Hospice and Palliative Medicine. To lead the new effort is Rebecca Boxer, M.D., M.S., a geriatrician and researcher who has dedicated her life to the care of this population.

In a 2023–24 survey of nearly 5,000 medical centers nationwide, *U.S. News & World Report* ranked UC Davis Medical Center 32^{rd} in the nation for geriatrics based on patient outcomes, key programs and above-average patient experience. UC Davis Health has also achieved age-friendly designations and developed specialized services focused on older adults. Boxer looks to expand that focus and expertise.

"I chose to come to UC Davis Health because of the systemwide commitment to age-friendly health care. A committed system means that programs and health care initiatives for older adults can truly be realized," Boxer said. "My hope is to provide excellent care to my patients and collaborate across disciplines, to teach all levels of learners the nuts and bolts of caring for older adults. I also want to be a conduit for national opportunities for faculty interested in aging research."

Boxer is a geriatrician caring for older adults with multiple chronic conditions, functional decline,

dementia, and frailty, and has broad research interests including heart failure management, nursing home care, polypharmacy and social determinants of health. She primarily conducts pragmatic clinical trials and often collaborates with investigators in other specialties and disciplines; prior to joining UC Davis Health, she served as medical director of clinical trials at Kaiser Permanente Institute for Health Research in Colorado.

New division streamlines services, attracts new faculty

An estimated 30% of people over 65 need a physician specializing in geriatrics. The new division, housed in the UC Davis School of Medicine's Department of Internal Medicine, aims to streamline and strengthen geriatrics, hospice and palliative medicine and provide leadership for the rest of the health system. Additionally, the division creates a home that will attract new faculty, new programs and funding in aging medicine. "I chose to come to UC Davis Health because of the systemwide commitment to age-friendly health care. A committed system means that programs and health care initiatives for older adults can truly be realized."

- REBECCA BOXER, CHIEF, DIVISION OF GERIATRICS, HOSPICE AND PALLIATIVE MEDICINE

"We recognize the incredible value of specialized geriatrics professionals who focus on the needs of providing care for older adults," said internal medicine chair Timothy Albertson, M.D., M.P.H., Ph.D. "They can be the drivers who ensure the rest of the health care team understands the unique needs of these patients and trains the future generation of providers."

Geriatric, hospice and palliative care experts provide interdisciplinary team-based care for frail, multicomplex older adults across care settings. Merging the three areas is critical to aligning care needs of older adults, and reduces unnecessary hospital or Emergency Department visits.

The new division is also home for scholarly work, and education in clinical work and aging-related research. Boxer looks to grow her team of new geriatricians to join UC Davis Health.

Program addresses geriatrician shortage

According to a federal model, a single geriatrician has the capacity to provide medical care for 700 patients with complex needs. While it's projected the nation will require 33,200 such physicians by 2025, currently there are only about 7,000 – with only half practicing full-time.

Boxer sees patients in UC Davis Health's Healthy Aging Clinic, where a multispecialty team offers services such as cognitive neurology, neuropsychology, nursing, dietary planning, pharmacy, and social work for patients 65 and older and their caregivers. Boxer also serves on the executive team of the Healthy Aging Initiative, UC Davis Health's systemwide commitment to age-friendly services that increase access to care, improve quality of life and make navigating the care system easier. Those efforts have earned Age-Friendly Health System Committed to Care Excellence designations for UC Davis in the inpatient, outpatient and Emergency Department settings.

A 2018 analysis revealed that, from the academic year of 2001–02 to 2017–18, the number of graduate fellowship programs that train geriatricians and are supported by Medicare increased from 182 to 210. However, when accounting for U.S. population growth, this increase is negligible.

Boxer's team collaborates with clinicians, researchers, and educators at the School of Medicine, the Betty Irene Moore School of Nursing at UC Davis and its Family Caregiving Institute, which focuses on preparing caregivers and health providers to work together, and developing support systems. In addition to several geriatric-focused fellowships, Boxer hopes to further integrate geriatrics content into the School of Medicine curriculum.

The next 40 years

Sacramento's population is growing older, more quickly. According to census figures, the share of residents aged 65 or older in the region grew by more than half from 2010 to 2020 – the fastest rate in 130 years.

While the latest census data did not surprise Boxer, one statistic does alarm her. According to the California Department of Aging, the region's population of adults over age 85 is expected to increase 400% by 2060. That underscores the need for a multipronged approach to care.

"Our new division serves as an academic home for passionate clinicians and innovative researchers to hopefully allow people to live healthier lives in their communities," she said. "We must have an environment that helps people stay healthy as they age, while we care for the older frail person needing more services."

Read a Q&A with Dr. Boxer on p. 30-31



Meet Rebecca Boxer

What led you to the field of geriatrics? There are a few reasons. I went into medicine because of my interest to help the underserved and advocate for equitable care. It became apparent during my training that older adults are an underserved population, especially those over 80. They have high care needs that can be difficult for our health care system to address effectively.



Rebecca Boxer, M.D., M.S.

Fellowships and special training

- Geriatric Medicine, University of Connecticut
- Advanced Heart Failure and Transplant, Case Western Reserve University
- M.S., Clinical Investigation, Case Western Reserve University

Research & academic interests

- Heart failure disease management
- Nursing home care
- Systems of care for older adults
- Polypharmacy
- Social determinants of health

I enjoy working with families and caregivers trying to attain the best care for older adult(s) in their lives. Interdisciplinary team care is very rewarding. I also enjoy helping individual patients navigate complex medical needs stemming from the combination of aging, disease, pharmaceuticals and psychosocial challenges.

How do outpatient geriatric clinical services work at UC Davis Health and our Healthy Aging Clinic?

The Healthy Aging Clinic geriatrics practice is growing! We have a multidisciplinary team that works in concert to assist in care and provide consultation to primary care physicians. For example, a physical therapist brings expertise to the evaluation of gait disorders, mobility and falls, and a social worker provides psychological support and troubleshoots issues of in-home support and caregiving. Pharmacists assist in management of complex medication regimens and polypharmacy. Importantly, our Dementia Care Program works closely with primary care providers to manage complex dementia care, and provides ongoing support to these patients and their support networks.

You served as medical director of clinical trials at Kaiser Permanente Institute for Health Research in Colorado. How do you carry these experiences into your role here, and what are some research goals for the new division?

I oversaw a team operationalizing trials in the clinical setting — primarily Phase 3 oncology trials, but also GI and infectious disease. My role expanded during the pandemic, in that we rapidly partnered with regional hospital systems to bring COVID trials to hospitalized patients. We were able to pool resources between institutions and establish protocols for remote recruitment.



Establishing a team with a shared vision during the pandemic was one of my most valued experiences.

From a research standpoint, my goal here is to build on the important work UC Davis aging researchers are already doing. Bring people from different departments and schools together who have similar interests and could benefit from each other's innovation. This has already started with the Healthy Aging Initiative, Healthy Aging in a Digital World, and the Family Caregiving Institute. I would like to see the Division as an aging research home.

How has the COVID pandemic affected older adults, and the practice of geriatrics?

It had a massive effect. Coping with the fear of life-threatening illness increased isolation and loneliness, which had a marked effect on health, happiness and vigor that still lingers. Many older adults still limit in-person interactions.

Of note, nursing home residents are some of the least likely to gain access to clinical trials. This is a problem, since older adults are often the most effected but the least studied. Thus, they're excluded from the benefit of new medications and approaches. For more, see Advancing Clinical Trials in Nursing Homes: A Proposed Roadmap to Success. J Am Geriatr Soc. 2022 Mar;70(3):701-708. PMID: 35195276; PMCID: PMC8910690.

What's needed to reverse the shortage of geriatricians in the U.S.?

Although compensation has often been cited as an issue for the lack of residents choosing geriatric medicine (salaries are actually less for a fellowship-trained geriatrician compared to a general internist), the reasons are more complex. Geriatrics is not "glamorous," and a field where it's "difficult to resolve patient problems." We have a "fixit" culture, and geriatrics is much more nuanced — based in supportive care and maximizing quality of life.

The value of geriatrics practice to a health system is rapidly being recognized. To improve geriatric care, it will be necessary to increase incentives to attract physicians into the specialty, and also increase innovative educational approaches for all physicians to improve compe-

tence in care of the older adult. For more, see The Paradoxical Decline of Geriatric Medicine as a Profession. JAMA. 2023 Aug 22;330(8):693-694. doi: 10.1001/jama.2023.11110. PMID: 37540519.

Additionally, I can't emphasize enough the importance of geriatricstrained advance practice providers (APPs) as an important part of the future of geriatric health care. We are partnering with the School of Nursing to train and provide opportunity for APPs to join our team.

Can technology play a role in mitigating the shortage?

Telehealth for geriatric consultation is of primary interest. For primary care physicians without local access to geriatric physicians, consultation can be very helpful to assist with care plans, reduce polypharmacy and manage multicomplexity. Wearables and remote monitoring are also helpful, usually for conditions such as heart failure, diabetes, and COPD. Wearables can also be useful in increasing and monitoring physical activity, which is key to maintaining function and independence.

Cognitive impairment and dementia can complicate care, and multimorbidity and polypharmacy create their own constellation of variables. What art and science do geriatricians use to address these challenges in practice?

"Most research that guides evidence-based care did not include older adults, especially those 75 or older. This puts much of our standard approach for the management of chronic conditions on shaky ground."

-REBECCA BOXER CHIEF, DIVISION OF GERIATRICS, HOSPICE AND PALLIATIVE MEDICINE

There are a few tenets I think are important:

- Listen to the patient and their support network (caregivers), especially for the cognitive impaired.
- Build trust with the patient and caregivers (very much part of #1).
- Do no harm, and provide a harm avoidance approach to care.
- Be willing to negotiate. Patients and their caregivers sometimes do not agree about, or want to adopt, the suggested plan of care. Provide explanations and alternatives, and align care with what matters most to the patient.
- It's important to know the data and its limitations. Most research that guides evidence-based care did not include older adults (especially those 75 or older). This puts much of our standard approach for the management of chronic conditions on shaky ground. Knowing what matters to the patient, and the limits of evidence-based medicine, both feed into care decisions.
- Working as an interdisciplinary team provides the most comprehensive care.

On a mission to bring healing to marginalized populations

Chelsea Nash once thought Black people couldn't be doctors now she's set on becoming one

> Chelsea Nash watched helplessly as her mom agonized in an East Bay emergency room. "I'm in so much pain!" her mom cried out to the medical personnel. "Please help me!"

> Nash, about 9 years old, was well aware of her mom's painful, lingering health conditions and disliked how doctors were reacting. "One physician after another came in and they were basically saying, 'there's nothing wrong

with you,'" Nash recalled. "Then they said to my mother, 'if you don't leave, we'll have you escorted out.'"

HEALTH SCHOOL O

Nash, the grandchild of 1960s Black Panther activists, suspects the mistreatment could have been race related. She and her mom are Black, and they never saw doctors who looked like them.

But the experience was so impactful that it became a catalyst for Nash's career choice: She is now a second-year student at the UC Davis School of Medicine.

"I would love to be able to help people like my mother who was hurt and who has pain that often goes unnoticed or dismissed," Nash said. "I want to be the kind of doctor who will say, 'hey, I know your pain is valid and I'm going to give you the best care possible, even if your condition isn't detected in the lab results.'"

'I didn't think Black people could be doctors'

Nash attended public schools in Oakland until her mother, a social worker, applied for an interdistrict transfer hoping for a better education. At Castro Valley High, Nash excelled and began to contemplate nursing — her grandmother was a licensed vocational nurse — but a friend talked her out of it. Medicine, the friend said, was more aligned with Nash's love for research and desire to advocate for patients marginalized in health care settings.

But Nash had a hard time picturing herself as a physician.

"I never saw a Black doctor, to be honest," she said. "I know it sounds foolish, but I didn't think Black people could be doctors." Her reasoning? "You can't be what you don't see."

During her senior year, Nash began to explore colleges in the South and on the East Coast, hoping to surround herself with a network of African American students. She chose Virginia State, a small and historically Black college. She was awarded the school's Presidential STEM scholarship, which covered four years of tuition, room and board.

Creating a support system for future medical students

Nash fell in love with Virginia State but quickly noticed a glaring omission: A support system for students who dreamed of becoming doctors. The school lacked a pre-medicine track or pre-med student-run organization.

Nash and her friends vowed to fix that. They founded the school's chapter

"I never saw a Black doctor, to be honest. I know it sounds foolish, but I didn't think Black people could be doctors. You can't be what you don't see."

- CHELSEA NASH

of the Minority Association of Pre-Medical Students, or MAPS, the undergraduate arm of the Student National Medical Association, or SNMA. The budding leaders worked with professors to establish an academic track for pre-med, pre-dental and pre-physician assistant students.

"It felt so amazing," Nash said, "we were finally making some changes and we were finally getting the same value of education as our counterparts in other schools, which we deserved."

It wasn't long before students connected with mentors, invited physicians to speak at gatherings, raised funds to attend medical conferences and landed summer internships. The organization also gave them access to tour medical schools including Howard, Duke and Eastern Virginia.

"What really moved me," Nash said, "is that this was the first time that a lot of students, myself included, had ever been to a medical school campus."

A family tragedy creates new challenges

The summer between her junior and senior years, Nash enrolled in a competitive 8-week global health internship through the University of Virginia, researching public health in the Caribbean. That experience propelled her to seek a master's in global health.

After graduating magna cum laude in 2019 she enrolled at UCSF. Then her life took a couple of unexpected turns – the coronavirus pandemic, and her mother's Stage 3 laryngeal cancer diagnosis.

Nash moved to Indiana and became an expert multitasker: taking her mom to radiation and chemotherapy, working on master's projects, studying for the MCAT, dispensing medicine and changing bandages, studying some more.

She succeeded in finishing the degree, and doctors later declared Nash's mother to be cancer free.

Choosing a medical school

Nash moved back to California where two medical schools extended offers: UCSF and UC Davis. Nash was unsure which to choose.

"UCSF had my heart, you know, because I went there for my master's and it's one of the top medical schools in the country," Nash said. But there was something drawing her to UC Davis, too — the sense of a tight-knit, supportive community.

UC Davis gave her the vibe that students felt their colleagues and professors cared for them. Of note, she remembers UC Davis internal medicine Professor Jorge García open up about his rocky journey through medical school, and how he is now in a position to encourage students who get discouraged.

Nash has taught in the Health Equity Academy, mentored high school students, served at the Imani studentrun clinic, joined the pediatric studentrun interest group, and been elected social chair of SNMA. She belongs to the TEACH-MS pathway, which prepares students to fill the shortage of doctors in urban, underserved settings. Just like the Oakland neighborhood she grew up in.

"I want to work with historically marginalized populations, that's just my jam," Nash said. "I just I want to help people. I want to be like the people who once served me when I received care from Federally Qualified Health Centers. I think that's my dream life." Alumni, students and friends

Filipina immigrant defies the odds to reach med school

Resilient future doctor Christi Candido now inspires thousands on social media with her story

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Christi Candido dreamed of becoming a doctor while in high school and all through college — but something always kept her back.

At times it was grades. Sometimes, low self-esteem. Even majoring in biology at UC Davis didn't push her any closer.

But during four years of soulsearching after college graduation she calls them "growth years" — everything began to change. Candido encountered events and people that persuaded her to believe she would be a viable applicant. Among them: her fourth-grade teacher, a Kaiser Permanente doctor who became her mentor, and a UC Davis Health physician whom she worked for as a research assistant.

And they were right. Candido is now a student at the UC Davis School of Medicine.

"This is surreal," Candido said with a bright smile in July on the first day for the class of 2027. "It feels like all my dreams have come true."

Candido, understandably, refuses to let go of this please-pinch-me, I'm-reallyin-med-school feeling. Which is why she filed much of class orientation on her Instagram account. It's a popular feed for hundreds of students across the country from underdog backgrounds who are cheering her on.

"I want to capture all these moments," Candido said. "This is what I've built up my life and my calling to be."

A journey that started in the Philippines

Candido's journey began in a rural village two hours from Manila, where she and her sister were raised by a single-parent mother who tended to farm animals for a living. The family lacked health care access, so relied heavily on prayers and folk medicine for healing, especially when Grandma Lola got sick.

They got a chance at a better life when Candido was 7 and the family's immigrant visa petition submitted by her aunt in Modesto was approved. They packed their belongings into a single suitcase and boarded a flight. "There were a lot of things I had to get used to, plus learning English," Candido said.

Betty Elvazian, a fourth-grade teacher, noticed something Candido didn't see in herself — a girl ambitious, focused and driven to learn. Elvazian promoted her to fifth-grade math. "That was the first time someone thought that I could accomplish something greater than what I was put in," Candido said.

When Candido was 11, her family moved into her mother's workplace, a residential care facility for the elderly. For the next seven years, Candido lived in a home with six senior citizens, sometimes helping with the residents' hygiene.

She developed a passion for caring for older adults, yet didn't seriously consider a career in medicine. She didn't think it was possible and had no idea how to get there. She also had never seen a Filipino doctor in the Central Valley.

Dreams dashed, then a big surprise

Candido graduated from Modesto High and attended UC Davis. Early on, she envisioned herself becoming a doctor. But she struggled in school, got sick for an extended period, and struggled more.

"I didn't know how to ask for help, and my family didn't know how to navigate these things either, so I was feeling scared and ashamed of failing," Candido said. "My mom crossed oceans to get me here, and I felt like it was a dishonor to even admit my failures."

By her fourth year, with a GPA below 3.0, Candido considered a career as a researcher or a master's in geriatrics. All the while, she volunteered at the H.L.U.B. student-run clinic, which serves Hmong residents, surrounded by high-achieving peers intent on becoming physicians.

"I will definitely not make it to medical school," she said to herself. The phrase stuck.

Candido graduated in four and a half years and continued her job helping with psychiatry research. But eventually, she started to open up about her shattered dream. And the feedback people provided shocked her. They told her she needed to be a doctor.

The most encouraging words came from her research supervisor, psychiatrist Glen Xiong, who said: "Someday there's going to be a patient that will benefit from the lenses you have lived through, because you're going to see something that nobody else is going to see in them, and that's why we need you in medicine."

Candido enrolled in a post-baccalaureate program with numerous science courses, a chance to overwrite sections of her transcript for a more promising med school candidacy. "I reinvented myself," she said.

Her program was based in the Bay Area, but she continued her UC Davis job and another as a health insurance broker. And she worked to keep up with her classes by studying, of all places, in vacant classrooms at the UC Davis School of Medicine, where she bumped into faculty members she hoped would one day be her professors.

She finished the program with a 3.95 GPA, took her MCAT twice (not unusual for students seeking a higher score), got accepted into a medical school in Michigan, but held out for her top choice, UC Davis. She's now part of the REACH pathway, which provides clinical experience in the Central Valley and where Candido plans to serve as a physician. She's interested in geriatrics and psychiatry.

Encouraging others through lived experience

Candido is so grateful that she's turned to Instagram to celebrate the successes with her nearly 1,500 followers. It's her way of encouraging others to realize that if she can defy the odds, so can they.

She also provides "tips for success" in posts, and one-on-one mentorship at no cost to students across who seek her out for encouragement. The mentees, whom she meets with via Zoom, are typically the first in their family to attend college and struggle academically.

Alumni association updates

School of Medicine Alumni Weekend and Awards Presentation



Doug Gross (M.D. '90) President UC Davis School of Medicine Alumni Association



Lisa Dicce Director of Alumni Engagement 279-386-6317 mobile ladicce@ucdavis.edu

In September, we held Alumni Weekend 2023 and enjoyed connecting with the UC Davis School of Medicine alumni community. We hope the photos in this issue make you smile and inspire you to stay engaged.

We were pleased to recognize our 2023 School of Medicine Alumni Association (SOMAA) Alumni Award recipients. We are so proud of this year's honorees and were thrilled to celebrate their accomplishments.

We hope you will join us for an upcoming Alumni Weekend! Whether you are an M.D., residency or fellowship graduate, in a reunion year or not, this is a time to reconnect, reminisce and learn about the great work happening at your medical alma mater.

The next Alumni Weekend also celebrates grads with class years ending in "4" and "9." If you are part of a reunion class, reach out to let us know how you want to celebrate or volunteer to rally your classmates.

We are confirming the Alumni Weekend 2024 date and look forward to sharing that with you soon!

Please help us identify outstanding alumni who deserve recognition through our annual awards. The nomination process is simple. Visit the SOMAA website (health.ucdavis.edu/medalumni), click the awards tab, and submit a nomination. Self-nominations are also welcome.

We are grateful to have you in the UC Davis School of Medicine Alumni Association and want to hear how we can keep the community strong. Please reach out with your feedback, ideas and updates. You can contact us via the SOMAA website, email (medalumni@ucdavis.edu), or phone (916-734-9410).

Thank you for staying connected, and we hope to hear from you soon!









- 1 Wilson Jung SooHoo (M.D. '83) and Ritu Jain (M.D. '82 and RS '87) arrive on the Sacramento health campus.
- School of Medicine Alumni Association President Doug Gross (M.D. '90, Ph.D., RS '93) at the official kick-off and lunch with students.
- ³ Linda Woo (M.D. '93), Steve Billigmeier (M.D. '93), and Carolina Vazquez (M.D. '93).
- ⁴ Hasan Khashwji (M.D. '13), Aarti Rao (M.D. '13), and Chelsey Villanueva (M.D. '13) take a break during family-friendly activities under the tent.

Alumni, students and friends





- ¹ Class of '93 members Linda Woo, Faye Jamali, Celia Chang, Steve Billigmeier, Jill Dunton, Carolina Vazquez, Suriti Kundu, and Janette Walker at the Alumni Welcome.
- 2 Tom Pong (M.D. '78) and Joan Li at the lunch with students.
- ³ Ivan Walks (M.D. '88) and Jeanell Hines at the reception and awards presentation.









- Katie Crean-Tate (M.D. '13) and kids look at class composite.
- 2 Distinguished Alumni Award Recipient Stuart Cohen (F '83) and School of Medicine Interim Dean Susan Murin, M.D., M.Sc., M.B.A., at the welcome reception and awards presentation.
- ^a Carole Gerst (M.D. '73, M.P.H.), Peggy Tun (M.D. '73), and Phillip Herzog at the official kick-off and lunch with students.

Humanitarian Award

Scott Christensen ('87, M.D. '91, RS '94, F '98)

Criteria: The Humanitarian Award, established in 1990, was created to give recognition annually to an alum of the UC Davis School of Medicine or the UC Davis Medical Center for outstanding contributions to their community through distinguished public service.

Scott Christensen, M.D., has made significant contributions as a physician and administrative leader for the cancer community. He continues to make a difference daily for the patients he treats and the colleagues he collaborates with to improve treatment and access to care.

Much of Christensen's education was completed at UC Davis, including his undergraduate degree, medical degree, internships, residency, and postdoctoral fellowships. He continues to serve the health campus as a physician, administrator, and a health sciences clinical professor in the Division of Hematology and Oncology.

Christensen is widely recognized for his dedication to patient quality of life. He specializes in treating breast cancer, melanomas, sarcomas and AIDS-related malignancies, and also serves as medical director for the UC Davis Inpatient Oncology Unit. He believes in a team-based approach, utilizing

Christensen has made significant contributions as a physician and administrative leader for the cancer community.

the expertise of nurses, pharmacists, social workers, and consultants to provide complete patient care.

Christensen previously served as medical director for

Yolo Hospice and the UC Davis Cancer Care Network, and volunteered at Easter Seals of Northern California. He has also worked as a physician for the Center for AIDS Research, Education, and Services in Sacramento, and led the board of directors as president of the Sacramento AIDS Foundation.

Distinguished Alumnus Award

Stuart Cohen (F '83)

Criteria: The Distinguished Alumnus Award, established in 1988, was created to give recognition annually to an alum of UC Davis School of Medicine or the UC Davis Medical Center for contributions to society and distinguishing themselves through outstanding achievements in medicine.

Stuart Cohen, **M.D.**, holds many critical UC Davis Health leadership roles in a field that's been front-and-center in medicine recently: Chief of Infectious Diseases, Director of Hospital Epidemiology and Infection Control, and professor. He also serves as a primary infectious diseases consultant to transplant programs.

Cohen is a prolific, highly published and influential researcher with expertise in clinical infectious diseases and infection control in the hospital environment. His substantial body of research encompasses a wide range of diseases including COVID-19, Clostridioides difficile (C. diff), Mpox, and meningitis, among others.

Throughout the COVID-19 pandemic, he was a fearless leader and tireless expert educator for both UC Davis Health and the communities it serves, locally and worldwide. He was also principal investigator for the UC Davis remdesivir clinical

Throughout the COVID-19 pandemic, Cohen was a fearless leader and tireless expert educator. trial, which the Food and Drug Administration approved as an important COVID treatment. Cohen's academic interests

also include AIDS, HIV infection, and treatment of immunocompromised patients.

Cohen cares deeply about his patients and is a selflessly dedicated public health educator. With 45 years of experience, he is renowned for personalized and compassionate care given with liberal doses of wry humor — things his patients, colleagues, and students are all grateful for.

Transformational Leadership Award

Bobeck Modjtahedi ('05, M.D. '09, RS '13)

Criteria: The recipient of the Transformational Leadership Award is an alum of the UC Davis School of Medicine or Medical Center whose professional achievements and contributions have enhanced the profession, improved the welfare of the general public, provided for personal distinction and brought honor to the alma mater.

Bobeck Modjtahedi, M.D., is a vitreoretinal surgeon and the Director of the Kaiser Permanente Southern California (KPSC) Eye Monitoring Center, which provides virtual care programs for hundreds of thousands of patients in Southern California, Georgia, Colorado, and Hawaii. In this capacity, he has developed programs that have improved access to vision care for a wide range of ophthalmic diseases.

He has worked with other organizations internationally to deploy similar innovative health care delivery models. He is a Clinician Investigator in KPSC's Department of Research & Evaluation. He also serves as an Associate Professor and the Ophthalmology Specialty Director for the Kaiser Permanente Bernard J. Tyson School of Medicine.

Modjtahedi is a member of the American Academy of Ophthalmology's Public Health Committee, Medical Information Technology Committee, Community Health Clinics Task Force,

Modjtahedi has developed programs that have improved access to vision care for a wide range of ophthalmic diseases. Myopia Task Force (as lead author for its white paper), and Autoimmune Retinopathy Task Force (Co-Chair). His work is widely published and

featured at international meetings with a focus on real-world "big data" analysis, telemedicine/virtual care, overcoming health care disparities, developing new public health programs, population-based outcomes research, predictive modeling, improving health care outcomes (e.g., cardiovascular, neurologic, and renal disease) using information from ophthalmic images, and artificial intelligence/machine learning.





An update from Stephen Cavanagh, dean of the Betty Irene Moore School of Nursing at UC Davis

Innovation through change

With the arrival of fall and another academic school year launched, I find myself reflecting on change. In the seasons, the calendar and in our psyches in this post-pandemic world.

When I arrived as dean of the Betty Irene Moore School of Nursing at UC Davis in July 2019, our annual magazine publication was titled, "Challenge of Change." When it arrived in mailboxes that October, none of us had an idea of just how much our world would change in five months. Yet, change it did.

"Change is the law of life. And those who look only to the past or present are certain to miss the future." Those words of John F. Kennedy underscore the necessity for health care educators to instill in future health care professionals a mindset that acknowledges the inevitability of change. Those who embrace that mindset are more likely to be open to adopting and championing innovative solutions that can improve patient care, streamline processes and address emerging health care challenges.

The COVID-19 pandemic pushed academia to re-evaluate the structure of traditional health care education. Lucky for us, this School of Nursing was founded upon the idea that breaking traditional boundaries is required to change the status quo. Guided by a mission to create change agents in health care, we now innovate in how we do that.

In 2022, we launched a new hybrid Doctor of Nursing Practice (D.N.P.) degree program to prepare future family nurse practitioners. The success of that innovative delivery set the stage for development of a second D.N.P. program to educate future certified registered nurse anesthetists (C.R.N.A.). When launched, our program will be one of only six C.R.N.A. programs in

Thanks to a resilient faculty and staff, and alumni who impact practice and research, the school continues to realize its mission of bold system change and preparing change agents for the future of health care.

California and only the second program to serve the Northern California region. It will also increase and strengthen the C.R.N.A. workforce within the UC Davis Health system, of which we are becoming an indispensable partner, and provide clinicians in rural areas where care is being delayed due to lack of anesthesia workforce.

There is also a lack of mental health providers across the state, particularly in underserved areas. In January, the



Stephen Cavanagh, Ph.D., M.P.A., R.N., F.A.C.H.E., F.A.A.N.

School of Nursing becomes the administrative home to a multicampus, hybrid program to prepare nurse practitioners across California as psychiatric mental health specialists. Together with our sister UC schools of nursing, we can expand the impact we have for those in desperate need of mental health services statewide.

Our region is fortunate to not have been affected by a nationwide shortage of nurses. To ensure that continues, we recently received a \$6 million grant to prepare new nursing faculty and address the health equity gap in America's underserved communities. As the School of Nursing is rooted in community-based solutions, this program relies on collaboration with academic. employer, nurse professional and workforce development organizations. The fact that our team was awarded the largest grant in the nation from the Department of Labor's Nursing Expansion Grant Program is a testament to our vision and ability to fill a critical need.

Vision, innovation, change. The trio drives our School of Nursing. Thanks to a resilient faculty and staff, and alumni who impact practice and research, the school continues to realize its mission of bold system change and preparing change agents for the future of health care. For us, change is about building the capacity to do something innovative that anticipates how we prepare our future health care providers to meet the needs of a health system not yet envisioned.

\$6 million to address health equity gap in underserved communities

Department of Labor funding supports program to grow diversity in nursing faculty and instructors As Americans age and more nurses retire, the need to educate and train new registered nurses has never been greater, espe-

cially in underserved areas. Adding to the challenge, only 3% of R.N.s in the workforce work in educational settings, and less than 1% in academic arenas.

Some undergraduate nursing programs are even turning away students due to a lack of nursing faculty. But the Betty Irene Moore School of Nursing at UC Davis is working to change that. With a new five-year, nearly \$6 million grant from the U.S. Department of Labor's Nursing Expansion Grant Program, the school aims to improve diversity in the health care workforce. This will allow the school to prepare new nursing faculty and address the health equity gap in underserved communities.

"We have a huge deficit of faculty in Northern California and rural areas in particular," explained Deb Bakerjian, Ph.D., A.P.R.N., F.A.A.N., F.A.A.N.P., F.G.S.A., associate dean for practice and the grant's principal investigator. "In addition, an advanced degree in nursing doesn't necessarily teach us to be good educators. This grant means in five years, we'll have more faculty who are stronger and better prepared and who will then turn around to educate and train nurses to work in their region to ultimately improve patient outcomes."

Mentors to guide

The Residency in Education, Teaching and Instruction in Nursing program will develop diverse graduates for employment as post-secondary nursing instructors and teachers in



two ways. The first is a 12-month term where nurses serve as nurse faculty residents, spending half their time pursuing a graduate degree and the other half co-teaching with a mentor and completing a graduate academic certificate in education.

"While the nurse faculty residents are working on either a master's in nursing or a Ph.D. or D.N.P. (Doctor of Nursing Practice), they will be partnered with a mentor to learn the skills they need for teaching," Bakerjian explained.

In addition to nurse faculty residents, 48 nurses will take part in a 6-month mentored clinical instructor internship

> "Research shows that when people of color are matched with a nurse or provider from a same background and culture, their experience of health care is better."

-Deb Bakerjian, associate dean for practice

and complete portions of the graduate academic certificate. This gives them the theory and techniques they need to be good clinical instructors for future R.N.s.

"The fact that our team was awarded the largest grant in the nation is a testament to our vision and ability to fill a critical need," said Dean Stephen Cavanagh, Ph.D., M.P.A., R.N., F.A.C.H.E., F.A.A.N. "This grant aligns with both the school's core attributes of community connection and collaboration. It's also part of our strategic plan's goals to strengthen community engagement and advance diversity in the workforce to improve health."

Partnerships focus on underserved

Sixteen of 33 Northern California counties are designated RN shortage areas (RNSA), based on population-to-nurse ratio, access to care and workforce projections. Recruiting will focus on these areas.

As the School of Nursing is rooted in community-based solutions, this program relies on collaboration with academic, employer, nurse professional and workforce development organizations. These include HealthImpact, California's Nursing Workforce Center and the California Organization of Associate Degree Nurses. Regional partners include California State University campuses in Sacramento and Sonoma, Cal Poly Humboldt, American River College, and Sacramento City College, as well as UCSF.

"We need to collaborate because we're all under the same stress for finding faculty," explained Tanya Altmann, Ph.D., M.S.N., department chair of Sac State's School of Nursing. "We can together solve the nursing faculty shortage by putting emphasis on the need to actually do education training for future faculty without that education background."

Humboldt State closed its Bachelor of Science in Nursing (BSN) program in 2011. Today, Cal Poly Humboldt provides an RN to BSN program and looks to partner with College of the Redwoods. Nursing leaders say all will benefit from this grant.

"We need to build our faculty infrastructure here," said Kimberly Perris, D.N.P., R.N., C.N.L., P.H.N., director of the

> Cal Poly Humboldt program. "Our nursing students are invested in our community. It's critical to get outside perspective to bring back to rural areas."

Organizations such as the Capitol City Black Nurses Association and National Association of Hispanic Nurses (NAHN), Sacramento will also be key partners in reaching out to nurses who qualify for the program. Sandra Calderon, M.S., R.N., F.N.P.-C., serves as local NAHN president.

A graduate of the School of Nursing's nurse practitioner degree program, she is in her second year of the Ph.D. program researching how to increase diversity in nursing education.

"If you want to increase diversity of students, you have to have faculty that mirrors the students that they are teaching," Calderon argued. "As a future researcher and a chapter president, I encourage current nurses to think about what it looks like to become nursing faculty. It's not difficult for me to get them to look at this great opportunity with UC Davis to become nursing faculty."

Diverse clinicians equal healthier people

What underlies efforts in diversifying the nursing workforce is the belief that increased diversity will lead to decreased health disparities among racial and ethnic minority populations. A goal of the government's Nursing Expansion Grant Program is to ensure people from historically marginalized and underrepresented communities have pathways to good nursing jobs and careers. The UC Davis team believes its program can both increase diversity in faculty and improve patient outcomes.

"Research shows that when people of color are matched with a nurse or provider from their same background and culture, their experience of health care is better," Bakerjian said. "Ultimately, we want to match the diversity of our faculty to the populations in our Northern California catchment area."

Betty Irene Moore School of Nursing Alumni Updates

ADVANCED PRACTICE PROGRAMS EARN ACCREDITATION

Two programs at UC Davis Health have earned the highest accreditation possible. The Nurse Practitioner Residency Program and the Advanced Practice Fellowship program earned three-year accreditation from the Consortium for Advanced Practice Providers after a recent review. Both are geared toward preparing nurse practitioners (N.P.s) and physician assistants

(P.A.s) for practice soon after graduation. This national designation means the programs are recognized for the highest standards of rigor and quality, with an expert health care work-force prepared to meet the needs of patients and society. More than 400 advanced practice providers (APPs), including certified registered nurse anesthetists, N.P.s, P.A.s and clinical nurse specialists work in multidisciplinary teams at UC Davis Health. Residency and fellow-ship training programs allow new APPs to receive intense focused training to increase their competency and skills as they move from the classroom to the clinical or community setting.

LEADER HONORED BY UNIVERSITY OF PORTLAND

Piri Ackerman-Barger, Ph.D., R.N., C.N.E., F.A.A.N., associate dean for health equity, diversity and inclusion and a clinical professor at the Betty Irene Moore School of Nursing at UC Davis, received an honorary degree in public service from the University of Portland School of Nursing and Health Innovations. Over her career, Ackerman-Barger has used her expertise in nursing and education to advance inclusive learning environments, education equity and workforce diversity. As a national consultant and speaker, she advocates for underserved and underrepresented groups in health professions. Her interdisciplinary work has been recognized through American Academy of Nurses fellowships, and she was awarded the UC Davis Charles P. Nash Prize in 2019 for public service.

3 NURSES CHOSEN FOR PRESTIGIOUS NATIONAL LEADERSHIP PROGRAM

When 1,000-plus nurses gathered at the National Black Nurses Association (NBNA) conference recently in Atlanta, they awarded 10 members the opportunity of a lifetime: a yearlong mentorship to grow their leadership skills. The NBNA and Johnson & Johnson Minority Nurse Leadership Program is a 12-month, in-person and virtual program that invests in future generations of nurse leaders, health care influencers, entrepreneurs and innovators. For UC Davis Health nurse manager Calene Roseman, assistant nurse manager Aron King, and clinical nurse III DaJanae Gresham-Ryder, it's a journey they will experience together in Sacramento. All are members of the Capitol City Black Nurses Association (CCBNA), the local chapter of the NBNA, and work in the UC Davis Health unit that provides care to stable adult emergency department patients awaiting an inpatient bed assignment.

Help make a difference

Need a quick and easy way to feel great about yourself and know you're making a difference in the lives of UC Davis students?

Make a gift to the School of Medicine or Betty Irene Moore School of Nursing. No matter the size of your donation, what counts is your participation!

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Record external funding supports UC Davis School of Medicine research

UC Davis exceeded more than \$1 billion in external research funding again in fiscal year 2022–23, and the School of Medicine was the top recipient with a new record of \$401 million.

The medical school received \$173.7 million from federal agencies, with the National Institutes of Health supporting hundreds of projects and 203 principal investigators — such as UC Davis Chief of Biostatistics Diana Miglioretti, Ph.D., right, who is co-leading a national team to improve breast cancer screening and surveillance with artificial intelligence.

State agencies like the California Institute for Regenerative Medicine (CIRM) also contributed significantly, and industry partners awarded \$68.4 million.

