

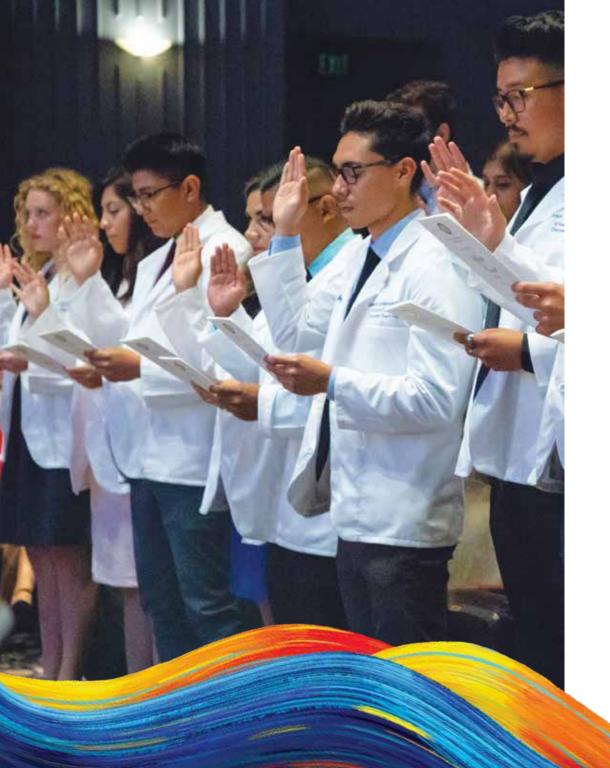
# School of Medicine

### **THE CASE FOR SUPPORT**



"We connect innovative medical discoveries with the humanistic aspects of patient care. With a focus on integrative health, we deliver a patient-centered approach to healing."

> - Michael J. Stamos, M.D. Dean, UCI School of Medicine



# Academic Medicine for the Future

The UCI School of Medicine shines on the world stage as an enterprising champion of innovation and discovery. An integral part of the Susan and Henry Samueli College of Health Sciences and UCI Health, we are collaborating with partners campuswide to advance high-impact medical research, educate a diverse health workforce and deliver evidence-based, patient-centered healthcare. The brilliant future that we envision propels us forward.

We are not only reimagining academic medicine for the 21st century; we are also creating a transformative model of healthcare and wellness for you, our community and people across the globe.

Distinguished faculty from the School of Medicine are drawing some of the nation's top students to our medical school, where the leaders of tomorrow are testing the boundaries of medical knowledge and learning to deliver the right healthcare to the right people — and the right populations — at the right time. Our faculty are also driving the clinical activities and medical breakthroughs that attract patients to UCI Health for personalized treatments and clinical trials.

Whether using artificial intelligence to expedite diagnoses and treatments or customizing dietary plans to empower patients, our faculty and students understand the value of treating the whole person with precision.

Michael J. Stamos, M.D., dean of the School of Medicine, captures the essence of our approach when he states: "We connect innovative medical discoveries with the humanistic aspects of patient care. With a focus on integrative health, we deliver a patient-centered approach to healing."

Medical students benefit from a unique, forward-looking approach to education that brings together in one college the School of Medicine, the Sue & Bill Gross School of Nursing, the planned School of Pharmacy and Pharmaceutical Sciences, and the planned School of Population and Public Health. The UCI Susan Samueli Integrative Health Institute, a foundational partner, introduces students to the principles and practices of evidence-based, integrative health.

The more than 400 medical students, 130 masters and doctoral students and 700 residents and fellows whom we train each year thrive in an academic environment that nurtures big ideas and reaffirms the American Dream.

With your support, we will translate our big ideas into lifesaving treatments for patients and pave the way for scientific breakthroughs; we will recruit and retain preeminent faculty; we will offer talented students the opportunity to study medicine at UCI, regardless of their circumstances or background; and we will build state-of-the-art facilities that foster the success of dynamic, interprofessional teams.

This is the time to take the next leap with us and make UCI's progress a part of your own legacy. Working together, we have the power to transform healthcare and wellness for the greater good. Our mission is clear:

### Discover. Teach. Heal.



## Discover.

### Pushing the Boundaries of Innovation and Discovery

Our dedicated teams collaborate across schools and disciplines to catalyze medical breakthroughs that save lives, cure diseases and promote wellness. While UCI maintains research portfolios across all critical areas of human health, we have developed particularly strong capabilities and opportunities for collaboration in precision medicine, gastrointestinal diseases, neuroscience, cancer (oncology), stem cell research, infectious diseases, and epigenetics and metabolism.

Moving forward, we aim to accelerate the progress of basic, translational and clinical research that builds on the wide-ranging accomplishments of our industrious faculty.

Establishing endowed chairs to recruit and retain preeminent faculty is essential to our continued growth. We intend to double the faculty in the next five years, and in so doing, also double the amount of research funding that our faculty generate — a path toward increasing the national ranking of the School of Medicine.

Providing research faculty with state-of-the-art facilities and well-designed infrastructure is an integral part of our strategic plan. Our priorities include designing a facility to support a clinical trials infrastructure for the newly launched Center for Clinical Research and constructing an FDA-approved current Good Manufacturing Practice (cGMP) facility for stem cell research on campus.

University of California, Irvine



### **Revolutionizing Cancer Treatment**

The National Cancer Institute (NCI) awarded UCI School of Medicine researchers a \$3.4 million grant as part of the Beau Biden Cancer Moonshot initiative. The principal investigator, Michael Demetriou, M.D., Ph.D., FRCP, is a professor of neurology, microbiology and molecular genetics and a member of the NCI-designated UCI Chao Family Comprehensive Cancer Center. Demetriou and his team are attempting to provide proof of principal data for a new class of immunotherapeutics capable of targeting many types of cancers (solid and hematopoietic). The research focuses on a technology the team created called Glycan dependent T cell Recruiter (GlyTR). This promising translational research, part of the over \$145 million awarded to the School of Medicine in 2019, brings hope to cancer patients across the globe.

### Driving Precision Medicine with Artificial Intelligence

Trailblazers at the UCI Center for Artificial Intelligence in Diagnostic Medicine (CAIDM) are integrating the expertise of healthcare professionals, software engineers, data scientists and other researchers to develop AI applications that have the potential to detect, characterize and predict selected medical conditions faster and more accurately than previously possible. The co-directors of CAIDM, Peter D. Chang, M.D., and Daniel S. Chow, M.D., are both assistant professors in the Department of Radiological Sciences, UCI School of Medicine. One result of their work has been to decrease the time to treatment for stroke from 68 minutes, as seen across the nation, to under five minutes at UCI Health. "PRIME-LC prepared me to work with Latino patients, but more important, it allowed me to develop my leadership and analytic skills. It has also created a massive supportive network of like-minded physicians throughout the state committed to improving the health of our underserved communities. I feel very supported by my fellow alumni and see PRIME-LC's influence all around me."

> *— Karla Garcia, M.D. '10* Family medicine, M.P.H. (Harvard)

### Teach.

### Educating a Diverse Health Workforce

Healthcare and medical education are changing at breakneck speeds, and the UCI School of Medicine is educating a culturally, linguistically and economically diverse health workforce ready to lead. Honoring our commitment to inclusive excellence, we are preparing students to address the state's and the country's growing, aging and increasingly diverse population, while also ensuring that students have opportunities to gain expertise in integrative medicine that treats the whole person.

Increased funding for scholarships and outreach programs will augment our efforts to educate the best and brightest, regardless of their circumstances and background — a means toward attracting a diverse student body that reflects the society our graduates will serve.

Students will have the chance to participate in programs expressly designed to meet the health demands of underrepresented and underserved populations, such as the two mission-based educational tracks that the School of Medicine has created for future physicians: the Program in Medical Education for the Latino Community (PRIME-LC) and Leadership Education to Advance Diversity — African, Black and Caribbean (LEAD-ABC).

Medical students who wish to specialize in integrative medicine will have the opportunity to enroll in a third mission-based educational track called Health Education to Advance Leaders in Integrative Medicine (HEAL-IM). Students in this four-year program (with an optional fifth year of instruction) will learn to practice evidence-based, compassionate, whole-person care that promotes individual and population wellness. The impact of this rare training will be felt regionally, nationally and globally as HEAL-IM students make their marks in the world.

Whatever their specialties, our graduates will be ready to tackle the most pressing healthcare issues of our time. Because many of our graduates remain in Southern California, the region's entire healthcare ecosystem will benefit from our students' rigorous training in research and clinical practice.

# Heal.

### **Delivering World-Class Healthcare**

The School of Medicine's research, teaching and clinical activities have helped to position UCI Health as a regional and national leader in translational medicine and teambased care. As the only academic health system in Orange County, UCI Health provides the primary teaching sites for our health sciences students and professional trainees. We use the latest clinical research, including studies pioneered by our investigators, to offer patients the most advanced therapies and treatments available.

The School of Medicine trains a sizeable number of the physicians who provide emergency, primary and specialty care in a region of nearly 4 million people. No other institution is better positioned to affect healthcare in and around Orange County. The planned UCI Health Medical Complex in Irvine will significantly extend the reach of UCI Health. This easily accessible, state-of-the-art medical complex planned for the UCI campus will house a teaching hospital and an advanced medical outpatient facility, both dedicated to specialty services, including comprehensive care for cancer, neurosciences, orthopedics, and advanced medical and surgical procedures. The complex is expected to house the UCI Center for Child Health and be supported by an emergency department to stabilize critically ill patients, especially those requiring specialty services.

Patients who visit the planned UCI Health Medical Complex in Irvine are expected to gain access to the exceptional treatments, clinical trials and integrative, whole-person therapies they expect from UCI Health. In this new, patientcentered facility, faculty, residents, fellows and students from the School of Medicine will shape the future of healthcare and health education.



UCI Health urologists are using a UCI-developed system of virtual reality to improve surgical outcomes. Before removing kidney stones or tumors, a surgeon dons a special headset and manipulates a joystick to access an immersive, 3-D view of a patient's anatomy. As many as 2,500 CT images are converted into a personalized, virtual model that the surgeon examines in exceptional detail. The surgeon may then revise the original surgical plan to better serve the patient. Preliminary studies of this new technology are encouraging.



### How You Can Help

Please join us as we change the trajectory of healthcare and redefine wellness for the generations to come. Let's be brilliant together.

### **Campaign Funding Priorities**

### **Endowed Chairs for High-Impact Faculty**

The endowed chairs that you establish will provide the prestige and resources necessary for us to recruit teams ("star clusters") of prominent physicians, scientists and scholars and to retain prized faculty members, who are frequently coveted by other institutions. Chair holders will expand the size and stature of both our clinical and our research teams and mentor future generations.

### **Scholarships for Medical Students**

Your investment in scholarships will ensure that talented students from all backgrounds and communities have opportunities to advance in health professions — a proven way to reduce healthcare inequities. Without burdensome student debt, aspiring physicians will be free to follow their passions and choose a broad range of specialties and, for some, to practice in underserved areas, where the shortages of physicians are acute.

### **UCI Center for Child Health**

Working together with our philanthropic partners, we will improve the value of healthcare delivery for children and their families by consolidating all pediatric services in one easily accessible facility that offers unparalleled continuity of care from birth through early adulthood, with an emphasis on children with chronic conditions. You will have opportunities to invest in the areas of your choice, including pediatric primary care, rehabilitation/simulation, pediatric subspecialty clinics, urgent care, the Center for Autism & Neurodevelopmental Disorders, and educational support services.

### **Center for Clinical Research**

The Center for Clinical Research is poised to become a premier local and national clinical research organization that provides lifesaving clinical trials by strengthening and accelerating the pathway of discovery from the laboratory bench to the patient's bedside. Funding for a fully equipped facility that supports a cutting-edge clinical trials infrastructure will contribute to our success. Gifts to the center will boost our efforts to bring novel, state-of-the-art therapies for devastating diseases to patients in Orange County and beyond.

### cGMP Facility for Stem Cell Research Center

We plan to construct an FDA-approved current Good Manufacturing Practice (cGMP) facility for the Sue & Bill Gross Stem Cell Research Center, the Chao Family Comprehensive Cancer Center, and other teams on campus. Your investment in this facility will further our efforts to advance stem cell and cancer therapy and to purify, expand and process stem cells for use in clinical trials with human subjects.



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