

Health Starts Here

School of Medicine University of California, Riverside

**Strategic Plan 2016-2020
September 2016**

Letter from the Dean

Achieving the ambitious mission of the UCR School of Medicine to expand and diversify the region's physician workforce and to improve the health of people living in Inland Southern California requires the collective wisdom and effort of the entire community. The SOM tapped the experience, insight and innovation of the broadest possible group of stakeholders -- basic science and clinical faculty, students, and staff in the medical school; faculty, physicians and leadership outside of the medical school; and leaders in the community from government, healthcare and non-profit organizations – to assist in charting the course of the medical school over the next five years.

The product of this effort, “Health Starts Here,” will serve as the guidepost for our initiatives in education, research and clinical care over the next five years. This comprehensive plan will serve as a platform from which we will develop specific measureable objectives and action plans in education, research and clinical care. In addition, we will create the structure to monitor progress of our objectives and to engage in continuous quality improvement as we move into the next phase of the medical school's development.

I am tremendously gratified by the participation of our community in this planning process. About 170 people participated in each of the three planning sessions held in summer 2016, with some attending two or all three. Our strategic plan and our ultimate collective success will rest on the commitment of the School of Medicine community and stakeholders who remain dedicated to our mission. Thank you.

Deborah Deas, M.D., M.P.H.
The Mark and Pam Rubin Dean
CEO, Clinical Affairs

Mission and Values

Mission

The mission of the UCR School of Medicine is to improve the health of the people of California and, especially, to serve Inland Southern California by training a diverse workforce of physicians and by developing innovative research and healthcare delivery programs that will improve the health of the medically underserved in the region and become a model to be emulated throughout the state and nation.

Values

- **Inclusion** – Embracing diversity in the broadest sense and appreciating all points of view
- **Integrity** – Exhibiting honesty and the highest ethical standards in all matters
- **Innovation** – Pursuing organizational goals with creativity and novelty
- **Excellence** – Demonstrating extraordinary dedication to the highest quality outcomes
- **Accountability** – Taking responsibility and ownership
- **Respect** – Showing consideration and appreciation for others

Executive Summary

The School of Medicine (SOM) at the University of California, Riverside (UCR) received preliminary accreditation from the Liaison Committee on Medical Education (LCME) in October 2012 and the inaugural medical student class enrolled in August 2013. Provisional accreditation from the LCME was secured in June 2015 and the SOM is preparing for the final step of the three-step accreditation process that all new medical schools must complete.

Two degree programs are offered by the School of Medicine, the M.D. degree and a Ph.D. degree in biomedical sciences. In cooperation with the UCR School of Public Policy, there is a concurrent M.D./Master of Public Policy that together comprise a five-year educational program. The school does not currently sponsor Continuing Medical Education. The SOM currently (2016-17) enrolls more than 200 medical students and 21 biomedical sciences graduate students. Graduate Medical Education programs, some in partnership with area hospitals, enroll a total of 160 residents and fellows in seven programs. In order to measurably reverse the region's physician shortage, medical school leadership and community stakeholders recognize that the size of the school must ultimately be expanded. Thus, principal goals are to double the medical student class size from its current level of 60 incoming students and to work with hospital partners to achieve a concomitant expansion in Graduate Medical Education (GME) programs. In concordance with its mission, the school will build upon a record of enrolling a diverse student body and employing a diverse staff with strategic efforts to improve diversity among faculty, senior administrative staff and leadership.

In research, the SOM is building on its current strengths through recruitment and retention of basic/clinical science faculty and faculty in population-based health areas, as well as an enhanced infrastructure to support the research enterprise. Faculty are pursuing new medical discoveries and healthcare innovations to serve the needs of the region while training physicians in basic principles of evidence-based medical research and practice. With research expertise spanning the range from neuroscience to endocrinology to inflammation to cancer imaging, medical school faculty are making progress on autism spectrum disorders, traumatic brain injury, Alzheimer's disease, obesity, fertility, inflammatory bowel disease and parasitic infections, as well as safe and effective vaccines. With rapid growth in its physician researcher ranks, progress has begun in expanding clinical trials research. To build on this base of translational and basic science research, the SOM will expand its current initiatives to create an affinity network of researchers, continue to strategically hire faculty to augment current strengths and build in new areas, intensify community-engaged research, and create new centers of excellence such as the planned Center for Molecular and Translational Medicine to join the current Center for Healthy Communities and Center for Glial-Neuronal Interactions.

The SOM's clinical enterprise, UCR Health, was established upon the school's opening in 2013. It is built upon the premise of serving community needs, most often working collaboratively with healthcare partners to create new services that fill gaps and that are mutually beneficial. UCR Health has established a family medicine practice in Palm Springs and has begun to create a psychiatry outpatient presence in the community. Hospitalist programs are in operation at three medical centers in the region, and services are being established in obstetrics/gynecology – including the subspecialty areas of gynecological oncology, urogynecology, and endocrinology –

and in advanced neurosurgery, neurology and reconstructive surgery. Focus areas will include leveraging existing strengths in the region to expand healthcare services through partnerships, coordinating efforts in electronic medical records, and expanding in areas that will enhance the community teaching platform of the medical school. As it expands, UCR Health will also help create an environment in the region for expanding clinical trials of developing pharmaceuticals and medical devices.

Planning Methodology

The 2016-17 UCR School of Medicine strategic plan aligned objectives and measurable outcomes with the UC Riverside campus-wide strategic plan. “UCR 2020: The Path to Preeminence” has four pillars – academic excellence, access, diversity and engagement. The School of Medicine added a fifth pillar, service, due to its importance to the social mission of the school. Three half-day planning retreats were held in July and August 2016 focusing on the three mission areas of the school – education, research and clinical care. Retreat participants included medical school faculty, students, and staff, as well as faculty from other UCR departments, campus leadership, and community stakeholders including representatives of clinical affiliates, community-based organizations, public officials and donors.

During the strategic planning retreats, all participants were assigned to a table focusing on one of the five pillars – academic excellence, access, diversity, engagement or service – and exploring how the school’s education, research and clinical care activities contribute to each of these campus goals. Each table of about eight participants was comprised of a diverse set of representatives in order to get an inclusive and holistic understanding of the topic. There were at least two tables of participants assigned to each of the five pillars. Following an in-depth discussion, the groups were tasked with identifying four leading objectives for their topic. After each table determined their top four objectives, all participants selected their final top four in each pillar that they thought would be most important and achievable for the SOM moving forward. The results of this inclusive process have been consolidated into this strategic plan document, which serves as a guidepost for the school to achieve its ambitious visions in education, research and clinical care.

Education

Goal

Educate and retain a diverse physician and research workforce needed to help address the underserved patient care needs of the people of California and, in particular, the Inland Southern California region

Overview

The SOM continues to build an innovative medical education program that is consistent with its mission. The Undergraduate Medical Education program’s curriculum emphasizes wellness, disease prevention, patient-centered care and cultural competence, as well as training to address workforce needs, and offers a greater proportion of clinical training in ambulatory settings. This includes the innovative Longitudinal Ambulatory Care Experience (LACE), a three-year experience beginning early in the first year of medical school that emphasizes patient continuity,

progressive learning, public health, social determinants of health, and practice improvement research. Considerable effort has been put into the third- and fourth-year curriculum, which UCR had not previously taught. Of note is the third-year Clinically Integrated Longitudinal Clerkships, which replace the traditional short rotations in medical specialties with two 24-week “blocks” – Block A includes internal medicine paired with surgery and Block B integrates pediatrics, OB/GYN and family medicine. Psychiatry, Emergency Medicine and Neurology are threaded throughout the third year. **Engagement** with the community continues to be strengthened so that students have expanded opportunities for interprofessional education and service.

The Interdepartmental Ph.D. Program in Biomedical Sciences, led by the SOM, maintains its mission to bridge the gap between basic research and new clinical innovations in concert with the campus strategic goal of **academic excellence**. To this end, Ph.D. students are embedded in the first-year medical curriculum so that they can learn the human pathophysiology required to do clinical translational research. They are also preparing to become the liaisons between practicing clinicians, experimental clinical trials, patient advocates and basic researchers. The program’s national visibility is rising, and it experienced its most successful recruiting year to date in fall 2016, enrolling eight new graduate students. The ongoing strategy for graduate student education includes growing the cohort size progressively, aligned with growth of the research faculty size. The scope of the existing Ph.D. program in biomedical sciences will continue to expand to include more translational and clinical biomedical research as well as population-based health outcomes research.

Strategic planning for both growth of the class/cohort size for medical students and Ph.D. students will enable the SOM to expand **access** to medical education and research training in the region. This will maximize the positive impact of the school through a greater number of physicians educated and researchers trained to facilitate the translation of new knowledge to improve human health. Growth will also be necessary in Graduate Medical Education (GME), as the location where a physician completes residency training is the most reliable predictor of practice location. The SOM is committed to sponsoring GME programs and to partnering in community-based GME programs to ensure quality of residency education and to meet its **service** mission to encourage trained physicians to remain in Inland Southern California. It is important for the SOM to continue supporting this growth to match or exceed UME growth in order to assure that all UCR medical students who want to obtain residency training in Inland Southern California have the opportunity to do so. This will include creation of fellowship programs, with a planned fellowship in child and adolescent psychiatry in the early planning stages.

Understanding that another major determining factor for where a physician practices is where he or she is from, the SOM works to recruit as many qualified applicants from Inland Southern California as possible. Feasibility of expanding the size of the undergraduate class will require ensuring a sufficient pool of available candidates who fit the mission. Growing the pool of qualified “mission fit” applicants is another key approach, thus the SOM has enlarged its continuum of student pipeline programs that attract, recruit and retain the diverse workforce needed to address the region’s doctor shortage and improve health outcomes. This “growing our own” strategy capitalizes on the racial and ethnic **diversity** of the region the SOM serves.

Objective #1

Double medical student enrollment and the number of Graduate Medical Education slots in the region over a five-year period, with concomitant growth in capital infrastructure and the community-based teaching platform

Objective #2

Build upon the school's early successes in medical student and leadership diversity, including concentrated effort in educator and senior administrative staff diversity

Objective #3

Expand the school's student pipeline programs, extending the continuum into the Ph.D. program and faculty ranks, and build a comprehensive faculty development program

Objective #4

Augment the innovative undergraduate medical education and graduate medical education programs with new opportunities in inter-professional education, community service and outreach

Objective #5

Broaden outreach regionally to enrich the pool of applicants, increase awareness of the school and its mission, and reinforce community support

Strategic Initiatives

- Conduct a needs assessment and action plan for rationally expanding medical student and graduate student enrollment
- Implement the M.D./Ph.D. program
- Work with affiliates to expand existing residency training programs and create new residency training and fellowship opportunities in the region
- Develop a program that motivates graduating medical students to seek residency training opportunities in Inland Southern California
- Initiate a community advisory partnership group
- Develop a comprehensive strategy for faculty development and recognition, with special attention to community-based teaching faculty, and expand opportunities for staff professional development
- Continue to engage in continuous quality improvement of the pre-medical student pipeline programs, based on metrics currently measured and newly developed outcome measures
- Increase the school's communications efforts to reach all internal and external stakeholders, using a variety of media including in-person gatherings, digital and hard copy publications
- Create and publicize to learners a database of community service, research and professional development opportunities
- Complete the educational continuum by developing robust Grand Rounds series and by planning a School of Medicine-sponsored Continuing Medical Education program

- Establish a Dean’s Academy of Medical Education involving faculty and community stakeholders to develop new opportunities in interprofessional education, cultural competency training and service learning

Research

Goal

Develop a platform for expanded biomedical, translational, clinical and population-based research programs to advance knowledge in the medical sciences

Overview

The UCR School of Medicine is a research-based medical school with a priority for teaching evidence-based clinical practice. Therefore, it is of the highest importance to build on an already strong base of translational and basic science research programs, and grow to stand among its peer medical schools in the UC system, and to fully contribute to the UCR 2020 Path to Preeminence. Toward this future, the SOM will create a network of researchers in translational sciences, develop a research collaborative database to increase basic science, clinical and population health research collaborations, and increase partnerships between research centers, science, and social science departments across campus, as well as with our clinical partners. The school will expand to promote *academic excellence* through a centralized database and enhanced communications, and a series of research forums and symposia to connect researchers across disciplines. In particular, the SOM aims to establish a Center for Molecular and Translational Medicine that will, in part, stimulate research leading to advances in precision medicine.

These new efforts will be integrated into ongoing growth in faculty recruitment, including physician-scientists, and their highly successful research programs, measured by our rapid growth in recruiting biomedical sciences graduate Ph.D. students and postdoctoral fellows, growth in extramural funding, and growth in prominent research publications. These researcher are supported by administrative assistance in grant application development, core instrumentation facilities, clinical study coordination, and growth in basic, clinical and population health research space. Strategic planning for growth in these critical infrastructure components will be needed to nurture and guide our rapid expansion.

In recognition of the critical role that the community has played in the establishment of the school, the research enterprise aims to build on the already strong community *engagement*, forged principally by the Center for Healthy Communities, by expanding community outreach to include greater participation in community-based organizations and sharing of our research findings. The school’s connection with community educational institutions will also help build a pipeline of trained researchers from our *diverse* regional population, but also grow a more science-savvy community. We value the role of the community as full partners in our research enterprise, and aim to build research-receptive groups, thereby expanding *access* for community stakeholders to participate with us in identifying research priorities, including research in social medicine and population health.

Specific efforts to build these connections will include a goal to expand our infrastructure to *serve* both our campus and community by enabling expanded engagement with community organizations, neighboring educational institutions and school districts, and other stakeholders. The SOM commits to being full participants in community organizations, including board memberships and other leadership roles. This unit will serve as a clearinghouse to minimize duplication of efforts, and to track UCR-community research partnerships and collaborations, both to promote our successes and to help identify strategic opportunities as they arise.

Objective #1

Continue to build on excellence in fundamental research, augment translational research, and build capacity and strength in clinical research

Objective #2

Connect research with community relevance through expanded community engagement

Objective #3

Expand collaborative research with other UCR academic units, community-based organizations, and other higher education and research-focused institutions

Objective #4

Increase extramural funding and philanthropic support to sustain and expand the school's research enterprise

Strategic Initiatives

- Develop a centralized database and communications network, and a series of research forums and symposia to connect researchers across disciplines at UCR, at other higher education and research-focused institutions, and with diverse community stakeholders
- Establish the Center for Molecular and Translational Medicine and capitalize upon the success of the Center for Glial-Neuronal Interactions and the Center for Healthy Communities
- Augment school administrative support for grant application development, core instrumentation facilities, clinical study coordination, and growth in basic, clinical and population health research space
- Pursue additional philanthropic funding and partner with the Office of Research and Economic Development to commercialize the discoveries of medical school researchers that show promise for improving health outcomes
- Expand community outreach with a series of forums and regular visits to community organizations to share the latest research findings and encourage greater medical school participation in community-based organizations
- Augment the infrastructure to engage with potential research partners, including higher education institutions, research-focused organizations, governmental agencies and community-based organizations to stimulate additional community engagement opportunities
- Establish infrastructure and capacity for clinical trials research in collaboration with the campus Office of Research and Economic Development, UCR Health and regional clinical partners

UCR Health Clinical Enterprise

Overview

UCR Health, the clinical enterprise, was established in 2013 to expand *access* to medical care in the underserved Inland Southern California, to enlarge the teaching platform of the medical school, and to help support the school financially as is the model of most medical schools in the U.S.

The clinical care mission of the school has emphasized *service* to the community by building capacity in primary care and selected specialties where there is community need. UCR Health has created a family medicine practice in Palm Springs, along with an associated residency training program, which addresses the severe primary care shortage in the Coachella Valley in the near- and long-term. It has established, in partnership with the Riverside County health system, a clinic that serves the complex, specialized medical care needs of the disabled adult population. An adult hospitalist program is thriving at Riverside Community Hospital and pediatric hospitalist programs are newly established at Desert Regional Medical Center and JFK Memorial Hospital. The medical school's psychiatry program, in addition to expanding the number of physicians in the Riverside University Health System-Behavioral Health division, is creating a UCR Health outpatient presence in the community to address the region's severe need to expand access to mental and behavioral health services.

UCR Health has also begun to establish programs in obstetrics/gynecology – including the subspecialty areas of gynecological oncology, urogynecology, and endocrinology – and in advanced neurosurgery, neurology and reconstructive surgery. These areas have great potential for developing into centers of *clinical and academic excellence*.

Continued *engagement* with existing and future healthcare partners is paramount to successfully fulfilling the vision of the clinical enterprise and SOM to achieve appreciable improvements in population health outcomes that move our community into the top performers' category of regional rankings. Significant health disparities among racial and ethnic groups persist, as they do statewide and nationally, calling for clinical care programs designed specially to address the rich *diversity* present in Inland Southern California. The clinical strategy will include expanding relationships with existing healthcare partners and creating new partnerships that fill community needs and are mutually beneficial. Focus areas will also include leveraging existing strengths in the region to expand healthcare services, coordinating efforts in electronic medical records, and expanding in areas that will enhance the community teaching platform of the medical school. As it expands, UCR Health will also help create an environment in the region for expanding clinical trials of developing pharmaceuticals and medical devices.

Goal

Enhance clinical delivery through relationships with community hospitals, physicians, and other providers, attracting and training new physicians, as well as measuring and improving the health of the communities served by the medical school

Overarching Strategy

- Recruit physicians regionally and nationally and train and retain new physicians to address the profound shortage of primary care physicians in Inland Southern California
- Recruit specialty and sub-specialty physicians to address gaps in care and provide services currently unavailable locally to the population of Inland Southern California
- Identify partners with similar mission and values to work and synergize with to improve the health of the people in Inland Southern California
- Support the education and research mission of the UCR SOM

Objective #1

Expand and maximize currently provided clinical services based on community needs and financial capacity.

Objective #2

Increase community provider engagement by expanding and strengthening relationships to:

- improve the overall health status of the region, especially for the most prevalent diseases with the highest morbidity and mortality rates;
- expand primary care services;
- develop new services currently absent or scarce;
- partner in research, including clinical trials; and
- create centers of excellence in care.

Objective #3

Create a diverse range of delivery models, such as telemedicine, home visits, shared medical appointments, mobile units and multidisciplinary care.

Objective #4

Increase the visibility of UCR Health in the community, utilizing traditional and emerging marketing modalities and becoming involved in community-based organizations, advisory boards and educational initiatives.

Objective #5

Collaborate with other UC Health clinical enterprises.

Objective #6

Develop a major medical center affiliation.

Objective #7

Recruit and retain medical students and resident physicians trained in Inland Southern California to capitalize on their deep understanding of and commitment to patients and communities in the region.

Strategic Initiatives

- Identify a medical center as a primary collaborator for the future
- Develop a thorough needs assessment, incorporating focus groups, to understand the demographic characteristics and health status of the region's diverse populations

- Create a financially viable and comprehensive clinical strategy that will measurably improve health outcomes and expand the medical school's teaching platform
- Design and implement a telemedicine strategy to reach populations that lack access to care and are otherwise underserved
- Implement an electronic health record system and assess the capabilities of new technologies in connecting patients with their physicians and with actionable health information, such as phone apps
- Initiate a community liaison position that optimizes the patient experience with UCR Health and that engages with community members and stakeholders
- Expand marketing and communications efforts to support growth of the clinical enterprise
- Improve patient and community engagement through a program that includes a robust patient portal, educational activities open to the public, presence at community-based outreach events, and medical school communications
- Engage a market analysis consultant to perform a clinical needs assessment and conduct a feasibility study to determine the clinical needs of the Inland Southern California area