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MESSAGE FROM THE DEAN

On behalf of the UCR School of Medicine, I am pleased to present this year-in-review publication. The 2016-17 academic year was a milestone period for our community-based medical school. We graduated our inaugural class of medical students – all of whom matched into residency training programs, and 80% of them in California! This was also the year the UCR School of Medicine secured full accreditation from the Liaison Committee on Medical Education, a monumental achievement that signifies the high quality of the educational and support programs we offer to our students.

I hope you enjoy learning of the many accomplishments of the UCR medical school in the following pages, and that you watch our progress in the years to come. Our successes are due to the dedication of our students, faculty and staff to our mission and to the steadfast support of our community, Inland Southern California. Collectively, we are living the African proverb, “If you want to go fast, go alone; if you want to go far, go together.”

Thank you,

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

UCR SCHOOL OF MEDICINE
BY THE NUMBERS
2016-2017

210 MEDICAL STUDENTS
21 PH.D. STUDENTS
164 RESIDENT PHYSICIANS (INCLUDING AFFILIATED PROGRAMS)
19 BIOMEDICAL SCIENCES FACULTY
186 CLINICAL FACULTY
848 COMMUNITY-BASED CLINICAL FACULTY
242 STAFF
195 NON-FACULTY ACADEMIC STAFF

55 LACE TRAINING SITES
70 CLERKSHIP TRAINING SITES

39 NEW GRANT AWARDS
$9.25 MILLION TOTAL GRANT AMOUNT AWARDED
$1.91 MILLION IN DONATIONS
Our 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 health care delivery programs that will improve the health of the medically underserved in the region and become models to be emulated throughout the state and the nation.

Our Values

Inclusion  Excellence  Respect
Integrity  Accountability  Innovation

CLASS OF 2020

60 (43.3% / 56.7%) MENDICAL STUDENTS

58.3% TIES TO INLAND SOUTHERN CALIFORNIA

26.7% ATTENDED HIGH SCHOOL IN RIVERSIDE, SAN BERNARDINO, OR IMPERIAL COUNTIES

30.0% FIRST IN FAMILY TO COMPLETE BACHELOR’S DEGREE

43.3% SOCIOECONOMICALLY/EDUCATIONALLY DISADVANTAGED

ENGLISH AS A SECOND LANGUAGE 15.0%

28.3% UNDERREPRESENTED IN MEDICINE
The inaugural class of medical students celebrated a historic milestone when they participated in the School of Medicine’s first Hippocratic Oath and Graduation Ceremony on June 9, 2017. Approximately 1,000 family members and friends of the graduates, faculty and staff, campus leaders and benefactors, elected officials, and community members joined the students to celebrate the momentous occasion for the medical school.

"My congratulations to the Class of 2017 on their achievements. I commend each and every one of our graduating students for completing this major milestone toward becoming a physician," said Deborah Deas, M.D., M.P.H., the Mark and Pam Rubin Dean and Chief Executive Officer for Clinical Affairs. "Our students truly embody the values of our medical school."
On March 17, 2017, the UCR School of Medicine inaugural class celebrated Match Day – the day when medical students throughout the country find out their residency positions at hospitals and health systems. Nationwide, not all applicants are matched into a residency program, but all 40 students in the inaugural class were matched – an impressive achievement for a new medical school and exceptional generally.

“I’ve been at this ceremony for more than 15 years, but I have to tell you this inaugural class of 2017 matched 100 percent, which is a marvelous feat,” said Deborah Deas, M.D., M.P.H, the Mark and Pam Rubin Dean and Chief Executive Officer for Clinical Affairs at the medical school. “I offer my sincere congratulations to the Class of 2017 because they chose to step up as trailblazers for our medical school. They believed in what we promised, and we delivered.”

Of the 40 students who celebrated Match Day, 33 students are staying in California for their residency training with 10 of them matching into programs in Inland Southern California. Additionally, 46% of the students matched to their top choice and 77% matched at one of their top three choices of residency programs.

In addition to a successful residency match, the inaugural class also received a 100 percent passing rate on the USMLE Step 2 Clinical Skills exams – the only medical school in California to do so.
MATTHEW GOMEZ
Third Year Medical Student

The UC School of Medicine received a $2.3 million grant from the Health Resources and Services Administration, an agency of the U.S. Department of Health and Human Services. The five-year Health Resources and Services Administration Primary Care Training and Enhancement grant allows the medical school to help transform the local healthcare system and build on established links with the community. The school is accomplishing this by embedding continuous quality improvement in Inland Southern California primary care practices throughout the healthcare provider training spectrum.

“Before coming to UCR, I had done a lot of shadowing in emergency rooms and really enjoyed the variety of cases and the range of skills required to treat them. I liked having to always be on your toes, prepared to handle whatever walked through those doors,” he said. “Now, I’m beginning to expand my horizons a bit and considering internal medicine and family medicine as well, because I enjoy forming long-lasting doctor-patient relationships and hearing their full story. That’s not something that I’ll be able to do in emergency medicine.”

Dr. Kendrick Davis, Ph.D., associate dean for the Office of Assessment and Evaluation, at the 2016 Conference on Teaching, Learning, and Research.

The San Bernardino Free Clinic (SBFC) celebrated its second anniversary in November 2017. To learn more about the SBFC, visit sanbernardinofreeclinic.com.

The Riverside Community Hospital works in partnership with the UCR School of Medicine to sponsor the OB/GYN residency program.

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Grant to School of Medicine Aims to Expand Inland Southern California’s Primary Care Workforce

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PH.D. PROGRAM IN BIOMEDICAL SCIENCES

The Ph.D. in Biomedical Sciences trains independent research scientists to enable them to bridge the wide gulfs that currently exist between basic science research and clinical medicine. In 2016-17, the following accomplishments were achieved.

Two students, Tyler Landrith (pictured leftmost) and Abdullah Madany (rightmost), completed the Ph.D. program. Tyler Landrith, Ph.D. is now a postdoctoral fellow with Ambry Genetics and Abdullah Madany, Ph.D. is a postdoctoral fellow with Dr. Monica Carson’s lab in the UCR School of Medicine.

Abdullah Madany was selected by competitive application and review to serve on the International Society of Neurochemistry (ISN) Young Scientist Steering Committee.

In August 2016, eight new students joined the program – Kelley Atkinson, Stephanie Guardado, Jessica Noll, Kelly Radecki, Maham Rais, Parima Udompholkul, Erin Walch, and Mark Wiley.

Anica Sayoc received a one year Pease Cancer Fellowship, established by Mrs. Dorothy Pease to provide funding for cancer research. The award is merit-based for students committed to working on cancer-related research projects.

Tasha Barr received the Ruth L. Kirschtein Predoctoral Individual National Research Service Award from NIH. The purpose of the program is to enhance the diversity of the health-related research workforce by supporting the research training of predoctoral students from population groups that have shown to be underrepresented in the biomedical, behavioral, or clinical research workforce.

Andrew Lapato received a Helmsley Charitable Trust Award to attend the Cold Spring Harbor Laboratory Course “Ion Channels in Synaptic and Neural Circuit Physiology.”

In early 2017, Morrison-Banks also received a $55,000 training grant from AbbVie, a global research-driven biopharmaceutical company, to support a one-year multiple sclerosis fellowship for local nurse practitioner Lynsey Lakin, who will become one of the first fellowship-trained multiple sclerosis specialists in her field.
Fiscal year 2017 marked a historic milestone for UCR Health with a major expansion of the clinical enterprise of the UCR School of Medicine. UCR Health’s flagship location at Citrus Tower in Riverside had its public grand opening in May 2017, introducing to the community expanded services in adult, child and adolescent psychiatry, family medicine, neurology, general obstetrics and gynecology, pain medicine, physical medicine and rehabilitation, sports medicine, and aesthetic and reconstructive plastic surgery.

In May 2016, the website for UCR Health debuted on www.ucrhealth.org. The patient-focused website includes a blog featuring entries by UCR Health doctors as well as access to a patient portal.

UCR Health Psychiatry opened the new Airport Tower Clinic in Irvine.

UCR Health rolled out a new electronic medical record system (EMR), Epic, as part of a partnership with UC San Diego Health. Implemented in May 2017, this new EMR system with a patient portal is used in each of the UCR Health clinical sites and can share healthcare data across the UC Health system.

Epic has grown into one of the leading EMR systems in the world, accounting for more than 190 million patient records, including more than 50% of the records in the United States. This creates great potential benefits for UCR Health patients.

“If a patient is visiting a UCR Health physician for the first time and shares that they previously visited a physician that used Epic, anywhere in the world, we can query and receive their medical records in just a matter of minutes,” explained John Luo, M.D., chief medical information officer for the School of Medicine. “It also provides benefits to physicians through population health tools, best practice alerts, and a number of quality improvements created by UC San Diego Health.”

These major developments were led by Michael Nduati, M.D., senior associate dean for clinical affairs, and Tae Kyu Kim, M.D., chief medical officer. Both were appointed in 2016-17 and charged with building capacity in primary care, which is in extremely short supply in the region, and selected specialties where there is community need. In fiscal year 2017, 11 new physicians were recruited to UCR Health.

The new services added to an existing family medicine practice in Palm Springs, neurosurgery in Riverside, women’s health services in the Mission Grove area of Riverside, adult hospitalist services at Riverside Community Hospital, and pediatric hospitalist services at Desert Regional Medical Center and JFK Memorial Hospital in the Coachella Valley. Future growth is planned in primary care, including internal medicine, family medicine and pediatrics, along with post discharge clinics. In the longer term, UCR Health is partnering with UCR in the multi-floor UCR Health Outpatient Pavilion at the gateway of the campus to further increase medical services to the greater Riverside area.

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The new Citrus Tower venue for UCR Health helps expand access to medical services in the Riverside area. “The UCR School of Medicine was founded on a premise of providing service to Riverside and the entire Inland Empire, and this new facility is a profound symbol of that commitment,” said UCR Chancellor Kim A. Wilcox.

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- Kim A. Wilcox,
RESEARCH

The School of Medicine Research Building features state-of-the-art labs that allows for cutting edge research.

NEW RESEARCH CENTERS
AT THE SCHOOL OF MEDICINE

The 2017 fiscal year saw the creation of the Center for Molecular and Translational Medicine and the BREATHE Center for the School of Medicine.

The Center for Molecular and Translational Medicine (MolMed) brings together researchers and clinicians from across campus to help improve the health of individuals by translating basic findings into diagnostic tools or therapeutics. This center allows investigators to use innovative drug discovery technologies that may reveal therapeutic targets that were previously considered “undruggable,” and many discoveries from faculty in MolMed have resulted in commercial agreements with pharmaceutical and biotech companies such as Pfizer and Iron Horse Therapeutics.

MolMed, operated under its director Maurizio Pellecchia, Ph.D., M.S., also gives researchers access to funds so they can advance early translational ideas into pre-clinical studies or to accelerate late-stage projects into early drug development activities.

“MolMed, working closely with the Vice Chancellor’s office for Research and Economic Development (UCR RED) and their Entrepreneurial Proof of Concept and Innovation Center (Epic), has already awarded three proof-of-concept grants to MolMed investigators, and a second tier of awards will be announced late in January 2018,” said Pellecchia. “I am very excited to bring together such talented investigators from various UCR colleges that share the same scientific vision of the Center, and that at the same time bring to the proposed endeavors complementary expertise and capabilities.”

A fully equipped 3,000-square-foot incubator space meant to support MolMed’s discoveries is currently being built on campus and is projected to start operating in 2018.

The BREATHE Center, or Bridging Regional Ecology, Aerosolized Toxins, and Health Effects Center, is a multidisciplinary collaborative involving faculty whose research involves regional climate modeling, culture and policy studies on air quality and health, environmental justice and health disparities, and the health impacts of aerosolized particles.

“There are many components present in the air and other parts of the environment that have negative health effects. Exposure to dusts, pathogens and allergens, and other materials are often exacerbated by economic conditions where some populations have limited choices in working and living environments,” said David Lo, M.D., Ph.D., and director of BREATHE. “Thus there are correlations between low socioeconomic status and poor health outcomes that can be attributed in part to these environmental exposures. We are hoping that BREATHE can act as a center for engagement, community outreach, and dissemination of research findings to address these problems.”

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neurodegenerative diseases. Together, they seek to define neuronal-glial interactions required for optimal brain and spinal cord function as well as prevention and therapeutic intervention of neurodevelopmental, neurologic and mental health concerns of three predominately Latino neighborhoods in Riverside, and to expand the capacity of community partners, faculty, and local community based organizations to engage in comparative effectiveness research. Through a deliberative, community-engaged process, it was determined that the community would like to first address mental health, including children’s mental health, mental health services in community settings, community education about mental health and stigma, and prevention and treatment.

The Center for Healthy Communities completed the Latino Health Riverside project, also funded by the Patient Centered Outcomes Research Institute. The project aimed to learn more about the health concerns of three predominately Latino neighborhoods in Riverside, and to expand the capacity of community partners, faculty, and local community based organizations to engage in comparative effectiveness research. Through a deliberative, community-engaged process, it was determined that the community would like to first address mental health, including children’s mental health, mental health services in community settings, community education about mental health and stigma, and prevention and treatment.

In January 2017, the Center for Glial-Neuronal Interactions celebrated its 10th Annual Southern California Symposium on Glial-Neuronal Interactions in Health and Diseases at UCR. There were more than 250 participants and nearly 60 posters from all over Southern California. Top scientists and brain-researchers discussed and presented their latest findings in gial-neuronal interactions – now one of the most active pursuits in brain research. The Center for Glial-Neuronal Interactions brings together researchers with very diverse expertise. Together, they seek to define neuronal-gial interactions required for optimal brain and spinal cord function as well as prevention and therapeutic intervention of neurodevelopmental, neurologic and neurodegenerative diseases.

The UC Riverside School of Medicine is one of many departments on campus that will benefit from the new Multidisciplinary Research Building 1 (MRB1). The building, which is expected to be completed by fall of 2018, intends to expand research capabilities and encourage cross-disciplinary cooperation between up to 56 faculty investigators and their teams from life sciences, chemical sciences, medicine, and engineering.

Two new research core facilities were made available to those in the Division of Biomedical Sciences over the past year. The multiphoton core facility houses the Nikon A1R MP Plus (pictured left), a multiphoton confocal microscope used for brain research, neuroscience applications and in vivo imaging of living specimens. The cell sorter core facility houses the MoFlo Astrios EQ Cell Sorter, which has state-of-the-art capabilities in Flow Cytometry applications and high-speed isolation of specific cell populations.

Byron Ford, Ph.D.
Professor of Biomedical Sciences

Byron Ford, Ph.D., has researched the effects of and possible ways to prevent stroke and brain inflammation for over two decades since his postdoctoral fellowship in Harvard Medical School with Dr. Fischbach, who discovered a protein now known as neuregulin-1 (NRG). In his early research, Ford found that this protein could prevent brain cell death and inflammation, and in 2001, Ford started his laboratory at the Morehouse School of Medicine (MSM) in Atlanta, Georgia, where he was later appointed full professor and vice chairman of the Department of Neurobiology, the positions he held prior to joining the UCR School of Medicine. "My lab discovered that NRG could prevent brain damage following stroke, even when given up to 13 hours after the stroke," said Ford. "We are developing NRG to initiate clinical trials for stroke. NRG is currently in FDA-approved clinical trials for heart failure and was shown to improve cardiac function in patients. It will be amazing to see our work actually help a human patient of stroke and other neurological disorders."

Ford also started a company with one of his three brothers, Dr. Gregory Ford, who worked closely with him through a postdoctoral fellowship and through MSM’s sister school, Morehouse College. Their company, Brain-Gen, was formed with the hope of translating their research findings into commercial use, and they have produced nine U.S. patents and three worldwide patents so far.

At UCR, Ford and Ph.D. students Catherine Augello, Angela Avera, Jessica Noll and Hakeem Omotayo continue to work with NRG in multiple ways, examining its role in systemic inflammation, regeneration after stroke, and protection from traumatic brain injury and concussions.

Ford joined the UCR School of Medicine in early 2015. "I came for my first interview and fell in love with UCR and the city of Riverside," said Ford. "To be at a high-level research institution with a mission to serve the underserved and the community is a dream come true."
LEADERSHIP APPOINTMENTS 2016-2017

- Andrew Alexander, Associate Dean for Clinical Medical Education
- Louise Borda, Associate Dean and Chief Financial and Administrative Officer
- Kendrick Davis, Associate Dean for Assessment and Evaluation
- Iryna Ethell, Associate Dean for Academic Affairs
- Armando Gauna, Chief Technology Officer
- Kendra Harris, Director of Student Affairs
- Tae Kim, Chief Medical Officer for UCR Health
- John Luo, Chief Medical Information Officer
- Christian Lytle, Associate Dean for Pre-Clerkship Education
- Gerald Maguire, Associate Dean for Graduate Medical Education
- Samar Nahas, Chair of the Department of Obstetrics and Gynecology
- Michael Nduati, Senior Associate Dean for Clinical Affairs and CEO of UCR Health
- Ramdas Pai, Chair of Internal Medicine and Chair of the Clinical Sciences Division
- Rosemary Tyrrell, Director of Faculty Development