#### UNIVERSITY OF CALIFORNIA

## Progress Report on the School of Medicine at the University of California, Riverside

Response to Item 6440-001-0001 of Section 2.00 of the Budget Act of 2013-14 states:

"On or before April 1 of each year, the University of California shall provide progress reports to the relevant policy and fiscal committees of the Legislature pertaining to funding, recruitment, hiring, and outcomes for the School of Medicine at the University of California, Riverside. Specifically, the report shall include, but not be limited to, information consistent with the published mission and vision for the School of Medicine at the University of California, Riverside, in all of the following areas:

- (1) The number of students who have applied, been admitted, or been enrolled, broken out by race, ethnicity, and gender.
- (2) The number of full-time faculty, part-time faculty, and administration, broken out by race, ethnicity, and gender.
- (3) Funding and progress of ongoing medical education pipeline programs, including the UCR/UCLA Thomas Haider Program in Biomedical Sciences.
- (4) Operating and capital budgets, including detail by funding source. The operating budget shall include a breakdown of research activities, instruction costs, administration, and executive management.
- (5) Efforts to meet the health care delivery needs of California and the inland empire region of the state, including, but not limited to, the percentage of clinical placements, graduate medical education slots, and medical school graduates in primary care specialties who are providing service within California's medically underserved areas and populations.
- (6) A description of faculty research activities, including information regarding the diversity of doctoral candidates, and identifying activities that focus on high priority research needs with respect to addressing California's medically underserved areas and populations."

## I. EXECUTIVE SUMMARY

The School of Medicine at the University of California, Riverside (UCR SOM) opened in 2013 as the first public M.D.-granting medical school to open in California in over 40 years. It has a specific mission to train a diverse physician workforce to serve Inland Southern California (Riverside, San Bernardino, and Imperial counties) and to deliver programs in clinical care and research that addresses the needs of this medically underserved region, which according to the California Health Care Foundation has the greatest shortage of primary care and specialist physicians of any region in California<sup>1</sup>. In its first nine years, the UCR SOM has been successful in recruiting and training a culturally competent and diverse student body, and in expanding residency programs in the region to encourage trainees to remain in the area upon completion of training. The UCR SOM is engaging in research that is targeted toward improving the health of people living in the region, and has launched and expanded its clinical enterprise, UCR Health.

<sup>&</sup>lt;sup>1</sup> Meeting the Demand for Health, Report of the California Future Health Workforce Commission, February 2019.

The State of California provided the UCR SOM \$15 million base funding in 2013 to launch the first phase of the establishment of the medical school with an initial class size of 50 students. The School currently has 328 M.D. students, 34 Ph.D. students, and 19 students pursuing a M.S. in Biomedical Sciences. To fully deliver on its mission, the UCR SOM aspires to increase enrollment to 500 medical students over the coming years, and this requires an increase in both capital and operating funds. The UCR SOM is now on a path toward achieving this growth thanks to the leadership support of the University of California, the California Legislature, and the Governor:

- 1) Capital needs were addressed through the State Budget Act of 2019, which authorized funding to build a new School of Medicine education and administration building on the UCR campus to accommodate this increased enrollment.
- 2) In 2020, Governor Gavin Newsom included \$25 million in new ongoing annual operating funding for the UCR SOM in the proposed 2020 State Budget. The COVID-19 pandemic reinforced the need to address health care disparities, and the final budget approved in July 2020 included the full \$25 million in additional operating funding.
- 3) The State Budget Act of 2021 included one-time appropriations of \$25 million to support and expand the UC Riverside School of Medicine (SB 170 (Skinner)), and \$10 million for the exploration of Acute Care Teaching Hospital partnerships or a hospital acquisition (SB 129 (Skinner)). Both one-time appropriations are based on an implementation plan of 3-5 years. These funds will be spent in support of academic and clinical training expansion through FY2025/26.

Together, these investments will support expanded enrollment and operational costs for the UCR SOM.

The COVID-19 pandemic continues to reinforce the relevance of the UCR School of Medicine and the need to continue to prepare and retain physicians across the Inland Empire. UCR Health has remained committed to serving patients in all locations and specialties, with clinical sites continuing to use telehealth visits whenever possible, especially for psychiatry and high-risk patients. The SOM continued to conduct necessary clinical skills learning in person during the pandemic, and safely resumed full in-person instruction in early August 2021. Due to strong vaccination compliance rates, along with strict adherence to indoor mask usage and physical distancing guidelines, the UCR SOM was able to ensure low COVID-19 positivity rates since returning to campus.

#### II. BACKGROUND AND APPROACH

The UCR SOM has a mission distinctive among U.S. medical schools: to expand and diversify the physician workforce in Inland Southern California and to develop research and health care delivery programs that will improve the health of the people living in the region. Inland Southern California – a geographically large, ethnically diverse, and rapidly growing region of 4.4 million people – has barely half of the primary care doctors it needs – a ratio of only 41 primary care physicians for every 100,000 people, according to the California Health Care Foundation, and is

underserved in many medical specialties as well.<sup>2</sup> The region performs poorly in relation to most other California regions in many measurable health outcomes, such as diabetes and coronary heart disease.

Unlike the five other academic medical centers in the University of California system, the UCR SOM does not own a hospital, and does not have access to robust clinical funds flow to help support its educational mission. As a result, the School faces an array of distinct challenges, including an inability to meet expected requirements related to ob/gyn placement and the Regents Affiliation Policy. As a community-based school of medicine, the UCR SOM partners with community hospitals and other medical providers across the Inland Southern California area to provide training locations for medical students and residents. The School's clinical enterprise – UCR Health – provides an additional training platform for students and residents, while also increasing the numbers of physicians in primary care and other medical subspecialties lacking in the region.

To fully respond to the physician shortage and health care needs in Inland Southern California, the UCR SOM developed a focused, community-based approach to its student recruitment and admissions, curricula, research activities, and clinical enterprise. Priorities include:

- 1) Student recruitment focused on the Inland Southern California region. Students with ties to the Inland Empire community are much more likely to remain in the area to practice upon completion of training.
- 2) Medical education highlights issues that are relevant to and prevalent in the community. The curricula focus on care for the underserved, ambulatory settings, prevention, wellness, chronic disease management, health disparities, and cultural competence.
- 3) Expansion of graduate medical education (GME) opportunities in the region in partnership with community providers. The best predictors of a physician's ultimate practice location are where they grow up (or have important family or community ties) and where they complete residency training. The UCR SOM has developed GME programs in primary care and other short-supply specialties family medicine, general internal medicine, pediatrics, general surgery, and psychiatry.
- 4) Scholarship Award programs that provide access to medical education and encourage physicians to remain in the region. The UCR SOM's Mission Scholarship Award program provides an enrollment incentive for students by alleviating medical school debt, provided students remain in Inland Southern California following graduation and completion of residency training. Scholarships are awarded solely to students committed to practicing medicine in one of the following disciplines Pediatrics, Family Medicine, General Internal Medicine, OB/GYN, General Surgery, Emergency Medicine or Psychiatry. For recipients who meet the above requirements, their award becomes final after the individual practices medicine in the Inland Empire for five years (following residency training), in one of the aforementioned disciplines. Failure to meet these requirements automatically results in the conversion of the scholarship award into a loan

<sup>&</sup>lt;sup>2</sup> <u>California Health Care Almanac, "California Physicians: A Portrait of Practice"</u>, Report of the California Health Care Foundation, March 2021.

- that must be repaid. Sixty-five currently enrolled medical students are recipients of these scholarships, which are funded by the UCR SOM, private individuals, and various philanthropic foundations. The medical school is continuing to raise external funds to establish additional scholarships.
- 5) Pathway programs that increase access to medical school for students who may be educationally or economically disadvantaged. A robust set of programs that span middle school to undergraduate levels are designed to help more of the region's students become competitive applicants for admission to medical school. These programs have served over 2,000 students in 2021 in Riverside and San Bernardino counties.
- 6) Research programs that prioritize community-engaged research and address issues that are relevant to the community. The UCR SOM's Department of Social Medicine, Population and Public Health, and the Center for Healthy Communities are actively engaged with research that is co-led and co-developed by community members.
- 7) Expansion of the UCR Health clinical enterprise. UCR Health has expanded access to primary care and has six clinic locations, located from Downtown Riverside to La Quinta in the eastern Coachella Valley. Additionally, UCR Health has added specialty physicians in areas such as neurology/multiple sclerosis, minimally invasive gynecologic and pain management, increasing access to care that was previously limited in the community.

The COVID-19 pandemic has posed a unique challenge for all healthcare workers as it can be easily transmitted both in the community as well as in clinical settings. This healthcare crisis has further reinforced the relevance of the UCR SOM and the need for more practicing physicians across the Inland Empire. UCR Health has remained committed to serving patients in all locations and specialties, with clinical sites continuing to use telehealth visits whenever possible, especially for psychiatry and high-risk patients. Due to flexibilities afforded by Governor Newsom's Executive Order, the SOM and UCR Health teamed with colleagues in the UCR College of Natural and Agricultural Sciences to develop an on-campus COVID-19 diagnostic lab that can handle between 400-600 tests per day, with the potential to increase further, and the UCR SOM organized a partnership with the California Department of Public Health to provide on-campus testing for the full campus community as well as family members of students, faculty, and staff. In addition, through a partnership with the City of Riverside, UCR provides a location for regular mobile testing that is open to the broader community as well as campus. Once COVID-19 vaccines were made available, UCR SOM and UCR Health's frontline healthcare providers, including clinicians, staff, residents, and medical students, were among the first to receive vaccinations. Following the first wave of vaccinations for providers, UCR Health offered regular vaccine clinics for UCR students, employees, and the general public. These vaccine clinics were pivotal to UCR achieving its 95% vaccination rate, providing over 4,372 vaccines to UCR faculty and staff. Additionally, the UCR SOM was heavily involved in community education and outreach efforts related to COVID-19 including the "Stop COVID-19 in the Black Community" town hall meeting and the "Rebuilding Trust in the Healthcare System in the era of COVID-19" webinar, both hosted by the Center for Healthy Communities.

## III. STUDENT RECRUITMENT AND MATRICULATION

## A. Recruitment and Application Process

Recruitment activities focus heavily on schools located within Inland Southern California, including high schools and community colleges involved in UCR's pipeline programs and four-year institutions such as California State University, San Bernardino. Additionally, up to 24 of the medical school seats are reserved for students who earn their bachelor's degree at UC Riverside – maintaining the original charter of UCR's former UCLA/UCR Thomas Haider two-year medical education program to recruit, admit, and support students from UCR who aspire to become physicians.

UCR SOM's admissions process uses a holistic review approach to selecting outstanding future physicians who are most likely to fulfill the school's mission. The UCR SOM applicants apply through the American Medical College Application Service. For the ninth class of 86 medical students (Class of 2025), application statistics include:

<b>Academic Year 21/22 Admissions Statistics</b>	
Total Applications Received	6,772
Completed Secondary Applications Received	4,288
Candidates Interviewed	250
Offers of Admission	144
Matriculants	86

The UCR SOM has a Conditional Admission Program for promising UCR undergraduates who would benefit from an extra year of preparation prior to medical school. Additionally, an Early Admissions Program is available for applicants to the Thomas Haider Program (the aforementioned 24 reserved seats). The latter program is designed to accept the top applicants before they apply to other medical schools and commit them to the UCR SOM.

## **B.** Medical Student Enrollment

The UCR SOM has recruited nine classes of high-quality, diverse students. The current first-year class is composed of 86 matriculants: 63% are female, 41% self-identify as being underrepresented<sup>3</sup> in medicine. By comparsion, AAMC national enrollment data<sup>4</sup> for 2021-22 medical school matriculants indicates that 53% are female and 15% self-identify as being underrepresented in medicine. In addition, 56% of students in the current first year class are from socioeconomically and/or educationally disadvantaged backgrounds, approximately 63% have ties to Inland Southern California, and 35% are the first in their family to complete a bachelor's degree. Further demographic characteristics are illustrated in the following table.

<sup>&</sup>lt;sup>3</sup> Per the AAMC definition of "Underrepresented in medicine" that refers to those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population, these students self-identified as being Black/African-American, LatinX, American Indian/Alaska Native, or Native Hawaiian/Pacific Islander.

<sup>&</sup>lt;sup>4</sup> <u>2021 FACTS: Enrollment, Graduates, and MD-PhD data</u>. AAMC, November 17, 2021. https://www.aamc.org/data-reports/students-residents/interactive-data/2021-facts-enrollment-graduates-and-md-phd-data

Race and Ethnicity for 2021 Entering Class of the UCR School of Medicine (Self-Reported)								
	Admits Female	Matriculants Female	Admits Male	Matriculants Male				
American Indian/Alaska Native	0	0	0	0				
Cuban	0	0	0	0				
Asian	31	21	13	8				
Mexican American/Hispanic	13	8	16	9				
African American	16	9	8	3				
Native Hawaiian/Pacific Islander	0	0	0	0				
White	7	4	5	4				
No response	4	2	1	1				
Other	3	3	6	4				
Multiracial	13	7	8	3				
Totals	87	54	57	32				
TOTAL ENROLLMENT CLASS OF 2025: 86 Students								

Notes: Admission and matriculation data were analyzed from students' self-reported application information; "Filipino" identification was included in "Asian".

#### IV. FACULTY AND ADMINISTRATION

Achieving diversity among its faculty and staff is crucial to the success of the School of Medicine and the attainment of its mission. The UCR SOM aims to attract and retain a diverse and talented workforce that will contribute to the University's goals, mission, and vision. The UCR SOM also seeks to recruit employees who are from disadvantaged backgrounds (socioeconomically and/or educationally), speak English as a second language, completed high school in the region (preferably from medically underserved areas), and/or are first-in-family to attend college. Demonstrated scholarly, educational, or service contributions to diversity is also built into the recruitment process and evaluated as part of the academic hiring process. Guidelines from the University of California Office of the President enable search committees to give special consideration to a number of factors in faculty and academic appointments. These include, but are not limited to:

- A candidate's exceptional service to increase science participation by underrepresented groups
- Acknowledging barriers facing individuals underrepresented in science careers as evidenced by a candidate's life experiences and educational background
- A candidate's significant experience teaching students who are underrepresented in the sciences

An individual's potential to bring to their research the creative critical discourse that comes
from their non-traditional educational background or training, and/or their experience as a
member of a group underrepresented in science

Once appointed to the faculty, the UCR SOM strives to provide a supportive and collegial environment, in part through mentorship by peers both within and outside of the medical school. Both academic divisions in the medical school, Biomedical Sciences and Clinical Sciences, provide newly appointed and junior faculty members mentorship to assist them in navigating local systems and culture and to support their scholarly success. UCR SOM provides a new faculty orientation on a bi-annual basis and an extensive array of faculty development workshops that cover topics such as teaching professionalism, teaching in a flipped classroom environment, navigating the advancement process, creating an inclusive working environment, and interpreting teaching evaluations.

UCR SOM utilizes a number of internal and campus-wide resources that ensure that equal employment opportunity principles are embedded into the school's recruitment, selection, retention, and advancement practices.

The following table provides the demographics of the faculty and administrative staff.

UCR School of Medicine										
Faculty and Staff Headcounts by Ethnicity and Gender (Self-Reported) *										
		Facu	lty**		Non-Faculty Academic and Administrative Staff***					
Ethnicity	Male	Female	Decline to state	Total	Male	Female	Decline to State	Total		
American Indian or Alaskan Native	1	0	0	1	0	2	0	2		
Asian	49	27	0	76	46	55	3	104		
Black/African American	7	7	0	14	14	8	28	0	36	
Decline to State	57	25	41	123	9	20	10	39		
Hispanic	14	4	0	18	25	110	0	135		
Native Hawaiian or Pacific Islander	0	0	0	0	1	1	0	2		
White	70	33	0	103	34	81	6	121		
TOTAL	198	96	41	335	123	297	19	439		

<sup>\*</sup>Statistics current as of 12/10/2021. Does not include community-based clinical teaching faculty or student employees.

<sup>\*\*</sup>Includes administrative leaders who also hold faculty appointments.

<sup>\*\*\*</sup>Per Diem Physicians with academic appointments counted on paid appointment

Additionally, the UCR SOM has more than 1,000 community-based clinical teaching faculty. These community faculty members serve as attending physicians in residency training, deliver lectures, and teach clinical skills to medical students. An important priority for the upcoming year, made possible by the recent increase in ongoing state funding to support medical student enrollment and teaching, will include efforts focused on the recruitment and hiring of full-time faculty.

#### V. MEDICAL EDUCATION OUTREACH AND PATHWAY PROGRAMS

Working in partnership with community stakeholders, the UCR SOM's goal is to produce culturally responsive, service-minded physicians who are drawn largely from Inland Southern California and thus more likely to remain in the region to practice. As previously noted, the UCR SOM is continuing the tradition of providing a unique pathway into medical school for UCR students, similar to the former UCR/UCLA Thomas Haider Program in Biomedical Sciences, the precursor to UCR's four-year independent medical school. The Thomas Haider Program at the UCR SOM maintains the charter of its predecessor to recruit, admit, and support students from disadvantaged backgrounds who attend UC Riverside. Up to 24 of the medical school seats each year are filled by students who attend UCR for at least six consecutive academic quarters and complete their bachelor's degree at UCR.

UCR SOM also offers a series of student pathway and outreach programs to increase medical school access for socio-economically and/or educationally disadvantaged students. External funders support these initiatives, including the National Institutes of Health, The California Wellness Foundation, Department of Health Care Access and Information (HCAI), and Riverside Community Health Foundation, as well as a number of generous private donors. The UCR SOM also devotes core personnel resources to coordinating these programs. The current programs are organized into 11 major initiatives (each described below) which create a comprehensive pathway program addressing the needs of aspiring physicians at each stage of their educational pathways.

## **UCR SOM Signature Pathway Programs**

The programs described below are designed to prepare prospective UCR undergraduate applicants for admission to medical school and are focused on students who are socioeconomically disadvantaged, from medically-underserved communities, attend low-performing high schools, were raised by single parents, speak English as a second language, and/or are underrepresented in medicine (URiM).

1) FastStart is an intensive summer program for 30-35 UCR freshmen who aspire to medical and other science-based careers. Due to the COVID-19 pandemic, a shorter JumpStart program was offered virtually. The goals of JumpStart are to increase students' knowledge and interest in careers in medicine/health, inform participants of academic success strategies, match students with a peer mentor, and introduce students to college wellness resources. Participants completed a team project to create a college wellness resource video and presented videos to their peers at the program symposium. Upon completing the program, participants were enrolled in the Medical Scholars

- Program for continued mentorship and academic support. Forty-nine students enrolled in the program and all students successfully completed JumpStart.
- 2) Medical Scholars Program (MSP) is a comprehensive learning community designed to provide academic, personal, and professional development support for 150 socioeconomically and/or educationally disadvantaged students per year. The academic focus is in the sciences, with the goal of increasing students' graduation rates and promoting their entrance to medical school, graduate school, or other health profession postgraduate programs. Over its 17-year history, over 1,000 students have participated in MSP, of which 61% are URiM. The program graduates 88% of students; and 38% of graduates have enrolled in health professions or research-based graduate programs, including 156 students in medical school.
- and medical Post-Baccalaureate Program (PPP) is a one-year science enhancement and medical school application program for dedicated college graduates from educationally and/or socio-economically disadvantaged backgrounds. In addition to full-time enrollment in upper-division science courses, PPP provides classes to enhance critical thinking, test-taking, and study skills; a structured MCAT preparation course; and seminars on health disparities and the health system. Over the past 13 years, the program has trained 109 post-baccalaureate students, of which 72% are URiM. More than 98% of participants completed the program and 89% of the students met the program's academic contract to achieve a GPA greater than or equal to 3.50. Seventy-four of the graduates applied to medical school and 68 of those (91%) have completed, are currently enrolled, or were recently accepted. Seventy-five percent of these admitted students are URiM. The remaining participants are either studying for the MCAT, applying for medical school, or enrolled in other graduate professional programs.

## **Outreach Programs**

The School of Medicine has the following outreach programs designed to attract socio-economically disadvantaged students to one of the UCR SOM's pathway programs. During 2021, most of the pipeline programs shifted from in-person formats to virtual platforms as a result of the COVID-19 pandemic. A general description of the pathway programming is provided below.

- 1) K-8 Outreach: UCR partners with local Kaiser Permanente Hippocrates Circle Programs to provide student panels and campus tours for 30-60 of their middle school students on an annual basis. The Hippocrates Circle Programs aim to increase diversity of incoming physician population by creating opportunities to expose middle school students to careers in medicine.
- 2) Medical Leaders of Tomorrow is a one-week summer program for high school juniors established in 2013 in collaboration with the Riverside County Office of Education and the San Bernardino County Superintendent of Schools. This year the program was offered virtually and enrolled 93 participants. The program seeks to: 1) increase students' awareness and interest in careers in the healthcare field; 2) increase students' awareness and interest in higher education; and 3) inform students' parents about the significance, affordability, and accessibility of a college education.
- 3) Health Sciences Partnership (HSP) is a mentoring program in which 20-25 UCR undergraduate pre-health student volunteers (mostly science majors) provide monthly

- presentations at nine high schools to promote medical career pathways for students. Established in 2001, the program has grown to serve three regional areas: Coachella Valley, Riverside, and San Bernardino.
- 4) Future Physician Leaders (FPL) is a nine-week summer internship program providing mentorship for 150 pre-health high school seniors, community college students, and university students. Established in 2009, the program includes four components: a teambased community health project supervised by public health professionals, a Leadership Lecture Series with industry professionals, a symposium in which teams present their health education project, and a mentorship program. In 2021, 137 participants completed FPL and 21 UCR medical students volunteered as mentors. After successfully completing the program, participants are invited to networking events and professional development workshops and activities.
- 5) Community College Outreach Program (CCOP) provides Riverside and San Bernardino County community college students with the tools and resources necessary to prepare for their medical education, leading to a successful career in healthcare. Pathway Programs staff conducted online presentations and professional development workshops intended to increase the number of transfer students enrolling at UC Riverside and encourage students to complete a premedical education. In fall 2021, a new mentorship program was launched to match local community college students with UCR medical students in an online program.
- 6) Bridges to the Baccalaureate (B2B) is an NIH-funded partnership between the UCR SOM and Riverside City College (RCC) providing biweekly information sessions and guest speakers to RCC and a full-time ten-week summer research program for their students. Research students have a UCR SOM faculty mentor, earn a stipend, and attend weekly professional development workshops.
- 7) Mini-Medical School allows UCR students to develop supervised health education projects reviewed by subject matter experts that include clinicians, public health professionals and medical students. Each health education project aims to inform the community about important health issues. Over 200 students each year present on 31 different topics to audiences in K-12 schools, churches, family engagement centers, and health fairs.
- 8) Health Coach Program is a partnership with Riverside University Health System that trains 30-35 undergraduate volunteers annually as health coaches to support over 1,500 patients with chronic conditions (diabetes, hyperlipidemia, and hypertension). Health coaches volunteer eight hours per week in clinics and Community Health Centers operated by the county hospital. Health coaches receive premedical advising and attend professional development workshops given by the SOM faculty and staff.

While not a specific program, the School of Medicine also partners closely with the campus Health Professions Advising Center, which serves all UCR undergraduate students and alumni interested in careers in the health professions. Professional staff and peer mentors are available to guide students and graduates in planning pre-health professions course work, gaining health-related experiences, completing service work, and preparing to apply for admission to graduate and professional programs. Approximately 2,000 UCR undergraduates are served by the center each year.

#### VI. OPERATING AND CAPITAL BUDGETS

## A. Operating Budget

During the first eight years of its existence, necessary operations were subsidized through support from the central UCR campus and initial startup funding from the UC Office of the President. The State Budget Act of 2020 included an additional \$25 million in annual operating support for the UCR SOM, augmenting the \$15 million in annual support approved previously. The State Budget Act of 2021 included one-time appropriations of \$25 million to support and expand the UC Riverside School of Medicine (SB 170), and \$10 million for the exploration of Acute Care Teaching Hospital partnerships or a hospital acquisition (SB 129). Both one-time appropriations are based on an implementation plan of three to five years. These funds will be spent in support of academic and clinical training expansion through FY 2025/26.

The FY 21/22 operating budget appears below, showing total core state funding of \$40 million. In the current fiscal year, this additional funding has been used to: 1) cover existing ladder rank faculty positions and fixed costs, as well as other non-salary expenses previously subsidized by Central Campus, with a total value of \$7M (see summary table below); 2) sustain current operations; 3) add additional faculty and staff in the medical education program; and 4) fund student support areas in an effort to ensure sufficient personnel and infrastructure for teaching and learning activities and to replace depreciated equipment. In particular, there are several one-time investments in equipment to outfit the new clinical skills learning center (the Center for Simulated Patient Care). The School of Medicine projects a Net Operating Income of \$35.2 million, which includes the one-time appropriations from the State Budget Act of 2021 of \$35 million. Without this one-time allocation of \$35M, the school would be projecting near a breakeven Net Operating Income of approximately \$.2 million (see next page).

# SCHOOL OF MEDICINE OPERATING BUDGET FY21/22 - PROJECTED

(\$ In Millions)

(\$ In Millions)	
Classification	Projected \$ Amount
Revenues	
Core Funds	
State Funds - Start Up <sup>1</sup>	40.0
State Funds - Clinical One Time Appropriations <sup>2</sup>	35.0
State Funds - SOM Tuition and Other State Funds <sup>3</sup>	4.8
Professional Degree Supplemental Tuition (PDST) Gross	7.3
ICR	1.6
Other Student Fees	.5
Core Funds Total	89.2M
Non-Core Funds	
Clinical - Patient Billing	15.1
Clinical - Professional Services Agreement (PSA)	7.4
GME	10.4
Contracts & Grants (C&G) <sup>4</sup>	12.7
Gifts & Endowments	.7
Sales & Service	.5
Other	.2
Non-Core Funds Total	47.0M
Other Transfers <sup>5</sup>	-2.9M
Total Revenue	133.3M
Total nevenue	10010111
Expenses	
Academic Salaries	38.5
Staff Salaries	20.1
Employee Benefits	15.8
Salaries and Benefits Total	74.4M
General Supplies and Expenses	28.1
Equipment/Other Inventorial	1.8
Facilities	2.9
Recharge <sup>6</sup>	-9.1
Non-Salary Support Total	23.7M
Total Expenses	98.1M
N . O	25.000

Net Operating Income/(Loss)	35.2M

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> Original \$15M State allocation approved in FY12-13, plus FY20-21 alloc of \$25M

<sup>&</sup>lt;sup>2</sup> One time appropriations for Clinical Facilities (25M) and Acute Care Teaching Hospital (10M)

 $<sup>^3</sup>$  Includes 50% tuition paid by medical students (remaining 50% is retained by campus) and other state funds, such as funds allocated directly to faculty, etc.

Excludes Indirects

<sup>&</sup>lt;sup>5</sup> Includes 1/3 UC required set-aside, plus a \$1M SOM Mission Scholarship.

<sup>&</sup>lt;sup>6</sup> Recharge of \$9.1M represents an assessment on all clinical and GME external revenues that is subsequently re-directed (within SOM) to fund UCR Health and centralized GME costs, such as

Summary of SOM Expenses Previously Subsidized by Campus now included on Operating Budget Above

SCHOOL OF MEDICINE SCHEDULE OF EXPENSES - PREVIOUSLY PAID BY UCR						
						(\$ In Millions)
Classification	Projected \$ Amount					
Expenses						
Salaries and Fixed Costs	2.8					
Debt Service/OMP	1.4					
Other Non-Salary Expenses	2.8					
Total Expenses	7.0M					
Footnotes:						
<sup>1</sup> These expenses are included in the projected operating budget schedule ab <sup>2</sup> Please note that this expense total will increase to \$8.5M in FY23 and will in thereafter based on costing increases. The incremental change of \$1.5M in FY to SOM assessed by campus. All the new campus subsidy costs are reflected in expense section.	crease proportionally 23 includes new costs					

## B. Budget Act of 2021 Budget Detail Schedules

Budget Act of 2021
Budget Detail - One-time Appropriations
<u>Riverside</u>
<u>UC Riverside School of Medicine Facilities</u>

7					Y 2023-24		Y 2024-25		Y 2025-26		Totals
	25,000,000	\$	-	\$	-	\$	-	\$		\$	25,000,000
2	25,000,000	\$	-	\$	-	\$	-	\$	-	\$	25,000,000
	3,856,890	\$	3,769,319	\$	1,467,788	\$	1,467,788	\$	1,467,788	\$	12,029,572
	3,080,981	\$	3,166,467	\$	2,165,243	\$	2,165,243	\$	2,165,243	\$	12,743,176
	62,129	\$	64,214	\$	33,636	\$	33,636	\$	33,636	\$	227,252
	7,000,000	\$	7,000,000	\$	3,666,667	\$	3,666,667	\$	3,666,667	\$	25,000,000
1	18,000,000	\$	(7,000,000)	\$	(3,666,667)	\$	(3,666,667)	\$	(3,666,667)	\$	-
1	18,000,000		11,000,000		7,333,333		3,666,667		-		
	1	3,080,981 62,129	3,856,890 \$ 3,080,981 \$ 62,129 \$ 7,000,000 \$	3,856,890 \$ 3,769,319 3,080,981 \$ 3,166,467 62,129 \$ 64,214 7,000,000 \$ 7,000,000 18,000,000 \$ (7,000,000)	3,856,890 \$ 3,769,319 \$ 3,080,981 \$ 3,166,467 \$ 62,129 \$ 64,214 \$ 7,000,000 \$ 7,000,000 \$	3,856,890 \$ 3,769,319 \$ 1,467,788 3,080,981 \$ 3,166,467 \$ 2,165,243 62,129 \$ 64,214 \$ 33,636 7,000,000 \$ 7,000,000 \$ 3,666,667 18,000,000 \$ (7,000,000) \$ (3,666,667)	3,856,890 \$ 3,769,319 \$ 1,467,788 \$ 3,080,981 \$ 3,166,467 \$ 2,165,243 \$ 62,129 \$ 64,214 \$ 33,636 \$ 7,000,000 \$ 7,000,000 \$ 3,666,667 \$ 18,000,000 \$ (7,000,000) \$ (3,666,667) \$	3,856,890 \$ 3,769,319 \$ 1,467,788 \$ 1,467,788 3,080,981 \$ 3,166,467 \$ 2,165,243 \$ 2,165,243 62,129 \$ 64,214 \$ 33,636 \$ 33,636 7,000,000 \$ 7,000,000 \$ 3,666,667 \$ 3,666,667 18,000,000 \$ (7,000,000) \$ (3,666,667) \$ (3,666,667)	3,856,890 \$ 3,769,319 \$ 1,467,788 \$ 1,467,788 \$ 3,080,981 \$ 3,166,467 \$ 2,165,243 \$ 2,165,243 \$ 62,129 \$ 64,214 \$ 33,636 \$ 33,636 \$ 7,000,000 \$ 7,000,000 \$ 3,666,667 \$ 3,666,667 \$	3,856,890 \$ 3,769,319 \$ 1,467,788 \$ 1,467,788 \$ 1,467,788 \$ 3,080,981 \$ 3,166,467 \$ 2,165,243 \$ 2,165,243 \$ 2,165,243 \$ 2,165,243 \$ 62,129 \$ 64,214 \$ 33,636 \$ 33,636 \$ 33,636 7,000,000 \$ 7,000,000 \$ 3,666,667 \$ 3,666,667 \$ 3,666,667 \$ 3,666,667	3,856,890 \$ 3,769,319 \$ 1,467,788 \$ 1,467,788 \$ 1,467,788 \$ 3,080,981 \$ 3,166,467 \$ 2,165,243 \$ 2,165,243 \$ 2,165,243 \$ 62,129 \$ 64,214 \$ 33,636 \$ 33,636 \$ 33,636 \$ 7,000,000 \$ 7,000,000 \$ 3,666,667 \$ 3,666,667 \$ 3,666,667 \$ 18,000,000 \$ (7,000,000) \$ (3,666,667) \$ (3,666,667) \$ (3,666,667) \$

Budget Act of 2021
Budget Detail - One-time Appropriations
<u>Riverside</u>
UC Riverside School of Medicine Acute Care Teaching Hospital

	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Totals
One time Appropriation Revenue	\$10,000,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000,000
Total Budgeted Revenue	\$10,000,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000,000
Payroll Expenses	\$ -	\$ -	\$ 1,223,210	\$ 1,223,210	\$ 1,223,210	\$ 3,669,629
Supplies and Expenses	\$ -	\$ -	\$ 758,443	\$ 758,443	\$ 758,443	\$ 2,275,330
Operation and Maintenance of Plant (OMP)	\$ -	\$ -	\$ 18,347	\$ 18,347	\$ 18,347	\$ 55,041
Outside Services / Awards	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 4,000,000
Total Budgeted Expenditures	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 10,000,000
Budgeted Operating Income	\$ 8,000,000	\$(2,000,000)	\$(2,000,000)	\$(2,000,000)	\$(2,000,000)	\$ -
	-					
Carryforward	\$ 8,000,000	\$ 6,000,000	\$ 4,000,000	\$ 2,000,000	\$ -	\$ -

## C. Capital Budget

Prior to the SOM's opening, the UCR campus made a significant investment in two necessary facilities – the School of Medicine Education Building (renovation of the Statistics building constructed in the 1960s) and the School of Medicine Research Building. The budget for these two buildings totaled approximately \$58 million, with funding comprised of campus equity funds (\$24 million from campus discretionary funds and indirect cost recovery), external financing (\$30 million with debt service provided by the campus), and Federal Grant Funds (\$4 million).

The current School of Medicine Education Building provides educational and administrative space, including a remodeled anatomy lab, a small medical simulation laboratory, and space for small-group, problem-based learning sessions and Objective Structured Clinical Examinations. The School of Medicine has a Memorandum of Understanding with the UCR Libraries to provide additional classroom and study space for medical student education. The Center for Simulated Patient Care (CSPC) was developed to expand education space in the Orbach Science Library, which is adjacent to the SOM Education Building I. The principal and guiding objective of the center is to advance and improve patient care and patient and care-provider safety. This objective is accomplished by a combination of exploration, team-building opportunities, and analysis of innovative techniques of instruction, treatment, management, communication, and recovery. The CSPC provides the necessary space needed to expand medical simulation and clinical skills training facilities. The project budget was \$7.0 million and funded by campus funds. Construction on this nearly 13,000 gross square feet (gsf) of renovated space began in March 2020 and the CSPC was completed in March 2021.

The School of Medicine Research Building (a \$37 million project) is a three-floor, 58,000-square-foot building. This building served as the initial research platform for the medical school, enabling the recruitment of additional faculty needed to deliver the curriculum to an expanded medical student body at UCR (pre-existing faculty have their laboratories in Webber Hall on the UCR campus). Additional laboratory space for medical school faculty was provided in 2019 in the recently completed Multidisciplinary Research Building (MRB) on campus. Construction of the 180,000 gsf, five-floor building provides wet and dry research laboratories, shared instrumentation, a vivarium, and faculty and administrative support. The MRB building is shared

among several UCR schools and colleges and will help accommodate planned growth of the medical school's basic science faculty into the next decade.

Growth in the Division of Clinical Sciences faculty, UCR Health, and of administrative staff has required the medical school to utilize a sizeable portion of the UC Intellicenter Building, located approximately six miles from UCR. This is a University of California-owned building that is also the headquarters of the UCPath Center, the UC's initiative to streamline and centralize human resources and payroll functions. The distance from the School of Medicine and teaching space creates barriers for students, staff, and fragments the overall local learning environment. There are also further existing unmet needs for academic office space for clinical department chairs and clinical faculty.

Unfortunately, the spaces detailed above are not entirely sufficient for the current medical student enrollment and planned future growth, including the School of Medicine's goal of enrolling 125 medical students each year. The State Budget Act of 2019 included language that authorized the University of California to pursue a medical school project at the UCR campus using external financing supported by State General Funds as allowed under Section 92493 et seq. of the Education Code. The campus determined that a maximum project budget of \$100 million was appropriate for the School of Medicine Education Building II (SOM Ed II) in consideration of the School's programmatic space needs. The project will be delivered through design-build, and the total project budget will be funded by external financing supported by State General Funds. UCR Campus and UCR SOM received approval to initiate planning for this building from the UC Regents Health Services Committee in October 2019 and from the Finance and Capital Strategies Committee in January 2020. Final approval for construction of the new building was given by the UC Regents in March 2021, including the selection of Hensel Phelps Construction/CO Architects as the design-build partner. The LEED platinum-certified SOM Ed II will be located south of the current building and will have approximately 57,000 assignable square feet within 90,000 gross square feet. Preliminary construction began in August 2021, and a formal groundbreaking ceremony was held in October 2021. As of this writing, construction is underway and expected to be completed in summer 2023.

#### VII. RESIDENCY TRAINING AND MEETING HEALTH CARE DELIVERY NEEDS

## A. Residency Training

In addition to expanding its student pathway programs, another key strategy for physician retention is creating a broad range of residency training programs.

The UCR SOM initially concentrated on developing GME in the primary care and short-supply specialties of general internal medicine, family medicine, primary care pediatrics, psychiatry, and general surgery. Programs in these specialties have been established – sponsored either directly by the School or by hospital affiliates — in the region. In addition, fellowship programs have been established and are operating in addiction medicine, child and adolescent psychiatry, gastroenterology, cardiovascular medicine, and interventional cardiology. There are a total of 131 resident physicians and fellows training in UCR-sponsored residency programs for the academic year 2021-2022. These are residents from the psychiatry, family medicine, internal medicine residency programs and fellows from the cardiovascular, interventional cardiology and child & adolescent psychiatry fellowships.

Number of Trainees in UCR SOM- Sponsored Training Programs – FY22						
Residency Programs						
Internal Medicine	50					
Family Medicine	24					
Psychiatry	30					
Fellowships						
Addiction Medicine Fellowship	2					
Cardiovascular	11					
Child and Adolescent Psychiatry	4					
Gastroenterology	3					
Interventional Cardiology	1					
Critical Care	6					
Total	131					

In 2021, UCR SOM-sponsored residencies and fellowships graduated a total of 33 residents in Internal Medicine, Family Medicine, Psychiatry, and fellows in Cardiovascular, Interventional Cardiology, Addiction Medicine and Child & Adolescent Psychiatry. Among these graduates, 78% remained in California, and 50% chose to stay in Inland Southern California to practice. Since 2016, 131 residents and fellows have completed residencies and fellowships sponsored by the UCR SOM.

The medical school continues to be successful in securing extramural funding to partially support several GME programs through the HCAI-Song-Brown Workforce Training grants and through CalMedForce grants. The medical school also received support in the State Budget Act of 2018 to expand the psychiatry residency program and psychiatric telemedicine in underserved areas.

Fifty-seven individuals, or 98%, of the UCR SOM Class of 2021 graduates matched into residency training programs. For the Class of 2021, twenty-two graduates (38%) secured residency training in Inland Southern California, including three in UCR general surgery and psychiatry programs. Fifty graduates (86%) remained in California to complete their residency training.

## B. UCR Health

UCR Health, the clinical enterprise of the UCR SOM, is a critical component of both the training platform and resource for meeting regional health care needs. UCR Health now comprises six separate clinics in locations across Riverside, Apple Valley, and the Coachella Valley. In fiscal year 2020-2021, UCR Health clinics provided care for 42,718 patient visits, a 68% increase over the previous year. In October of 2019, UCR Health opened its first stand-alone pediatrics clinic

in La Quinta, addressing the shortage of pediatric providers in the eastern part of the Coachella Valley.

## VIII. FACULTY RESEARCH ACTIVITIES

The UCR School of Medicine continues to build on the current research strengths at UCR through the recruitment and retention of clinical and basic science faculty and an enhanced support infrastructure. 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. School of Medicine faculty demonstrate success in a broad range of scholarship, from traditional "wet-lab" biomedical research to securing grants that support innovation in teaching and health care delivery.

Many research activities are focused in research centers that align with the School's unique mission:

- The Center for Healthy Communities, established in 2014, pursues research to improve the health of the culturally and economically diverse communities in Inland Southern California.
- The Center for Molecular and Translational Medicine is a multi-disciplinary center that translates basic science findings into diagnostic therapeutics and tools.
- The BREATHE Center (Bridging Regional Ecology, Aerosolized Toxins, and Health Effects) focuses on regional climate modeling, culture and policy studies on air quality and health, environmental justice and health disparities, and health impacts.
- The Center for Glial-Neuronal Interactions is a "brain health" center that focuses on prevention and therapeutic intervention of neurodevelopmental, neurologic, and neurodegenerative diseases, such as Alzheimer's disease, autism spectrum disorders and epilepsy, among others.
- The Center for Health Disparities Research was established in July 2019 with a five-year, \$16 million grant from the National Institutes of Health. One of only 13 centers in the nation, this Center brings together environmental scientists, biomedical scientists, and social scientists to study health disparities. In addition, the Center offers pilot grants to UCR researchers interested in working on health-disparity projects and provides training and support to the next generation of investigators seeking to develop community-engaged research projects.

The ongoing COVID-19 pandemic has spurred several creative and critical research activities in the School of Medicine. One of the School's Biomedical Sciences research faculty is participating in a University of California Multicampus Research Program (UC MRPI) to study coronavirus viral capsid assembly. Another Biomedical Sciences faculty member has reported on the protein structures of key SARS-CoV-2 components, which will aid vaccine and antiviral drug design. The impact of COVID-19 has been disproportionately severe among minority communities, and the Center for Health Disparities Research has been active in community-based research on this question with our community partners.

Medical school faculty have been successful in competing for research funding from diverse sources including the National Institutes of Health, the National Cancer Institute, Patient-Centered Outcomes Research Institute (PCORI), and private foundations. Examples of grant awards and funding from this academic year include:

- \$727,000 (three-year) grant from the National Institute on Drug Abuse for a project titled "Engaging Native Hawaiians and Pacific Islanders in opioid use disorder treatment."
- \$373,000 grant from the National Multiple Sclerosis Society for a project to select the five best candidate compounds to speed up nerve impulses, a promising new avenue to treat multiple sclerosis
- \$525,000 in funding awarded from the National Heart, Lung, and Blood Institute and the National Institute on Minority Health and Health Disparities to the Center for Health Disparities Research as part of a statewide initiative to address health disparities related to COVID-19.
- \$1.75 million award from the UC MRPI awards program as part of a UC Riverside-led, multi-campus, multi-disciplinary consortium that will aim to understand the physical principles underlying the formation of coronaviruses.
- \$1.1 million, three-year grant from the National Institutes of Diabetes and Digestive and Kidney Diseases, a division of the National Institutes of Health, to explore how a certain protective gene's loss of function can increase the risk of infection with SARS-CoV-2.

The SOM supports a UCR Ph.D. graduate program in Biomedical Sciences and MS graduate degree program with a mission to bridge the gap between basic research and new translational and clinical innovations. Ph.D. students are embedded in the first-year medical school curriculum so that they can learn the same human pathophysiology required to conduct medically translational research. These students are also preparing to be liaisons between practicing clinicians, experimental clinical trials, patient advocates, and basic researchers. Thirty-four students are currently enrolled and of these, 38% are from underrepresented minority groups.

## IX. CONCLUSION

The UCR SOM has set its course towards increasing enrollment to 500 total medical students, and towards incrementally building the necessary infrastructure, expanding faculty hires, and addressing other critical needs. The State Budget Act of 2021 provided \$35 million in one-time funding for both the SOM/UCR Health expansion and to explore the future model of UCR's academic health system. With the additional \$25 million in annual operating support authorized in the State Budget Act of 2020, the UCR School of Medicine's ongoing state funding now totals \$40 million. This increase in State funding has allowed the SOM to reduce the need for subsidies from the UC Riverside campus and to continue to focus on its mission through strategic growth in the academic mission and the expansion of its patient care mission. The global COVID-19 pandemic continues to demonstrate the need to address the physician shortages in the Inland Empire and to reduce the health disparities that exist in the region. With the increased funding, the development of the CSPC and the ongoing construction of the School of Medicine Education Building II, the UCR SOM continues its transition to the next phase of growth and development. This growth will expand medical education opportunities for California students and increase the school's capacity to fulfill its mission of improving the health of people living in the region.

Contact Information: Office of the President 1111 Franklin Street Oakland, CA 94607 http://www.ucop.edu