

The Regents of the University of California

PUBLIC ENGAGEMENT AND DEVELOPMENT COMMITTEE

January 27, 2023

The Public Engagement and Development Committee met on the above date at the Highlander Union Building, Riverside Campus and by teleconference meeting conducted in accordance with California Government Code §§ 11133.

Members present: Regents Hernandez, Reilly, and Timmons; Ex officio member Leib; Advisory members Ellis, Raznick, Steintrager, and Tesfai; Chancellors Muñoz and Wilcox

In attendance: Regents Blas Pedral and Park, Secretary and Chief of Staff Lyall, Provost Newman, Chancellor Khosla, and Recording Secretary Li

The meeting convened at 3:05 p.m. with Committee Chair Reilly presiding.

1. REGIONAL PARTNERSHIPS WITH UC RIVERSIDE

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Chancellor Wilcox introduced California State Senator Richard Roth, who was elected in 2012. Senator Roth, a retired Major General of the U.S. Air Force with a 30-year legal career in Riverside, has been a strong advocate of UC Riverside and its medical school.

Senator Roth stated that the Riverside region, known for the transportation of consumer goods throughout the country, offered many jobs that paid low to moderate wages and was known for historically low high school graduation and college attendance rates, as well as extreme health disparity. Riverside County was the tenth worst county in the state for deaths due to coronary heart disease, and Latina women experienced the highest incidences of cervical cancer among any population group there. In San Bernardino County, the Latino(a) population had a diabetes-related death rate that was 50 percent higher than the white population. The region needed to improve the skillset of the work force through education and training, attract and retain high technology sector and higher-paying jobs, increase the number of healthcare workers, and improve access to healthcare facilities and health outcomes.

Riverside boasted a California State University campus nearby, multiple California Community College campuses nearby, and a UC campus with a robust research enterprise. A new educational facility would expand the UCR School of Medicine to about 500 students, and the Southern California headquarters of the California Air Resources Board (CARB) was now located on the Riverside campus. Another area of focus for the region and the state was mental health. In California, 3.9 percent of adults suffered from a serious mental illness, compared with 4.2 percent of adults in the Inland Empire.

Furthermore, 14.4 percent of adults in the state suffered from some form of mental illness, and 40 percent of adults who needed treatment for a serious mental illness never received it. Riverside County, which had a population of about 2.5 million people, had only 77 acute care psychiatric beds and no pediatric acute care psychiatric beds. Senator Roth stated that access to high-quality health care, including mental health care, was essential to attracting and retaining businesses, economic development, and quality of life. He stated that UC and UC Riverside had a role to play in this regard. He called for a dedicated UC teaching hospital and research facility for training UC medical residents and for enhanced practice opportunities for UC physicians. He believed that this could result in a different type of work force and jobs. This vision required support from the University, the Regents, and the State. Senator Roth opined that more needed to be done to link the new CARB headquarters to the teaching and research enterprise at UCR, as well as the commercialization of products resulting from such a joint effort. This would require collaborative planning among local governments, UC, and CARB. Senator Roth concluded his remarks by expressing his commitment to development and community engagement.

Chair Leib credited the successful establishment of the UCR School of Medicine to Senator Roth's leadership and expressed his gratitude for Senator Roth's advocacy of Riverside County. He asked how UC campuses could access County mental health funding under Proposition 63. Senator Roth replied that Proposition 63 funding was limited and that many wished to access it, noting that it was also meant for the K-12 system. Navigators were helping students and families who are eligible to enroll in Medi-Cal but who are not yet enrolled to do so, so that student mental health and educational deficiency issues could be addressed on campus by campus personnel; moderate cases could be directed to providers such as the Inland Empire Health Plan, a State Medi-Cal provider in the County, and serious cases need be directed to the County and addressed in hospitals and treatment facilities, although such facilities did not exist everywhere and were often inadequate. In Senator Roth's view, unless a stable new funding stream could be identified, funding would have to be directed from the State General Fund. Governor Newsom allocated mental health funding in the State budget that might need to be deferred. Still, no money has been allocated to address the acute care psychiatric bed shortage in the state. Senator Roth stated that the matter of Proposition 63 and the composition of County committees needed to be examined.

Chancellor Wilcox shared that he and Senator Roth have met with the Riverside County Chief Executive Officer and opined that Chair Leib's suggestion might not be the best use of the funding at this time, given the broader set of concerns that Senator Roth highlighted. Senator Roth stated that something could be done legislatively. Medicare funding for residency programs has not increased in some time. In California, the Song-Brown Healthcare Workforce Training Programs funded primary care residency, but psychiatric care was not considered primary care. Senator Roth emphasized the state's dire shortage of psychiatrists, psychologists, and social workers, especially for children.

Regent Park asked Senator Roth what he wished to see UC address this year and in what areas he wished to collaborate with the University. Senator Roth responded that he would advocate for a low- to no-interest loan program that would enable Counties to expand their

acute psychiatric care capacity. He had originally introduced the idea in a bill that was vetoed. He sought the Regents' support for establishing a medical teaching facility that would give UC control over medical rotations and enable the University to sponsor more residency programs, such as in psychiatric care. Senator Roth estimated that such a facility would cost \$200 million to \$300 million and could be funded with a bond. He stated that the bill he introduced had been misperceived as creating competition between hospitals and private practices. The teaching facility could provide care to underserved populations.

Chancellor Muñoz shared that he and Chancellor Wilcox successfully secured a share of the Inland Rising fund and thanked Senator Roth for his support. He noted the similarities between the San Joaquin Valley and the Inland Empire and stated that Senator Roth was creating a roadmap for introducing similar medical and psychiatric care in the San Joaquin Valley. He offered the support of UC Merced for these endeavors.

Regent-designate Tesfai noted that, with the expiration of the Medicaid continuous coverage requirement on March 31, millions would lose access to Medicaid. He asked how UC could support the State in ensuring access to Medi-Cal. Senator Roth replied that Governor Newsom used State funds to provide coverage, and that the State did not intend to end its commitment to providing Medi-Cal. The State must ensure that reimbursement rates are properly calibrated and that facilities and providers are available.

Regent Hernandez shared his past experience working as a psychiatric technician at Stockton State Hospital, which provided inpatient and outpatient psychiatric services and eventually closed. Stockton had a large homeless population that needed mental health services. He asked how the State was addressing this need and how UC could help. Senator Roth remarked that the mental health system began to unravel in the early 1970s when management of psychiatric services moved from the State to the County level. Involuntary detention became unpopular, and Governor Newsom proposed and later signed the Community Assistance, Recovery, and Empowerment (CARE) Act, which established a court system to provide treatment and establish conservatorships for homeless individuals with severe mental illness. Opponents of the CARE Court program were concerned about issues of control and liberty and had filed a lawsuit to prevent the program from moving forward. Senator Roth observed that some individuals, including pediatric patients, need a more restricted and intense treatment environment and are admitted into emergency rooms of acute care general hospitals due to the lack of acute care psychiatric beds. Where 24-hour monitoring was needed, gaps in such monitoring could lead to adverse consequences. One would not see the return of State psychiatric hospitals but rather an expansion of community and residential treatment facilities. If individuals placed on an involuntary psychiatric hold could be admitted into an acute care psychiatric hospital, they could begin to receive treatment and might agree to continue treatment after the hold ends.

2. **INITIATIVES TO ADDRESS HEALTH INEQUITY IN INLAND SOUTHERN CALIFORNIA**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Deborah Deas, UC Riverside Vice Chancellor for Health Sciences and Dean of the School of Medicine, provided an overview of the UCR School of Medicine (SOM), which enrolled its first class in 2013. UCR SOM had a mission to train a diverse work force and develop programs that serve the Inland Empire. Fifty percent of the 345 medical students currently enrolled had ties to the region. The School also had 140 residents and fellows. As a community-based medical school, UCR SOM did not have its own hospital or medical center and placed students in about 17 affiliate hospitals and clinics. The Inland Empire had the lowest ratio of primary and specialty care physicians to population in the state, about 41 primary care physicians per 100,000 people, compared with the recommended 60 to 80 physicians. Riverside and San Bernardino Counties were at the bottom quartile for health outcomes related to diabetes and heart disease; this was exacerbated by the COVID-19 pandemic. A new medical school facility was slated to open in late summer or fall 2023. Among its accomplishments, the School ranked sixth for diversity among U.S. medical schools in 2022, and its Pathway Programs, which spanned kindergarten to medical school, served about 1,200 local students annually and received national recognition. Some of the students who participated in those pathway programs were now enrolled in UCR SOM. The Dean's Mission Award program covered a medical student's tuition and fees in return for a commitment to return and serve in the Inland Empire. In the last seven years, the program has grown from granting about 30 awards to 130 awards. Graduates have returned to work at UCR SOM, Kaiser Permanente, Riverside University Health System, and Riverside Community Hospital. Forty percent of UCR SOM students completed their residency in the Inland Empire, and 40 percent of residents remained in the Inland Empire to practice medicine. National data indicated that students who attended medical school and receive residency training in a particular area were 75 percent more likely to stay there. Over the last five years, UCR SOM has increased its National Institutes of Health grant funding more than sevenfold.

Patrick Samones, fourth-year student at UC Riverside School of Medicine, shared that he has been a lifelong resident of the Inland Empire and was the son of immigrant parents. Growing up, he thought that the lack of healthcare access he observed in his region was normal and later realized that the Inland Empire had room for improvement when he met peers from other parts of the state as a UCR undergraduate student. He helped connect vulnerable populations to health care when working at free clinics and helped educate the community when working at health literacy organizations. Mr. Samones believed that UCR SOM could effect positive change in the region and that his perspective could be helpful in that effort. Mr. Samones' career goal was to provide health care to vulnerable populations and rebuild trust in the health care system. He credited UCR SOM and its pipeline programs for awakening his sense of service, his passion for community medicine, and his sense of self.

Dr. Deas underscored that the original vision of UCR SOM as a community-based medical school has limited the School's ability to reach its desired class size of 125 students per class in the next five years. With new medical schools being established in the surrounding area, it was becoming more challenging for UCR SOM to place students in rotations. Affiliate hospitals could take a limited number of students, and other medical schools were offering financial incentives to place their students, something that UCR SOM could not

do. Affiliates have also not committed to providing the additional capacity that UCR SOM would need when it grows its student population. The School sought to address these challenges by modifying its vision, such as expanding primary care access to certain communities, and was working to fill gaps in specialty areas such as urogynecology, cancer treatment, and multiple sclerosis care. UCR SOM was in discussion with the southern UC campuses about partnerships and joint ventures and would continue exploring the acquisition of its own hospital. Having one's own hospital meant being able to develop one's own residency and fellowship programs. Funding for residency programs flowed from the Centers for Medicare and Medicaid Services (CMS) to hospitals, and there had been instances in which affiliate hospitals wished to sponsor their own programs.

David Lo, Senior Associate Dean for Research at UCR SOM, stated that the mission of UCR SOM was to improve the health of the community it served while not sacrificing the quality of research. One example of the importance of the School's community engagement pertained to the public health crisis resulting from the shrinking of the Salton Sea. Dust from the area has led to high rates of asthma in the surrounding communities, which was especially severe among children, some of whom had to be transported from Coachella Valley to receive care. Through engagement with community members, organizations, and agencies, the UCR SOM Center for Health Disparities Research has learned about urgent symptoms and was able to communicate research findings from UCR back to communities. For example, in collaboration with the California Air Resources Board (CARB), the School hosted a series of community forum events and communicated its research on air quality and its health impacts. The School also published a comic book in English and Spanish to illustrate the research. UCR SOM has collaborated with the College of Engineering and the College of Natural and Agricultural Sciences to study dust from the Salton Sea and found that environmental changes led to novel impacts on pulmonary health. Similar impacts have been observed near other drying lakes.

Regent Park asked Dr. Deas to expound on the challenge of placing medical students in clinical rotations in light of the establishment of new medical schools in the area. Dr. Deas replied that the California University of Science and Medicine was a private institution that recently opened in San Bernardino County and accepted more students than UCR SOM. Students from this medical school were rotating in some of the same facilities as UCR SOM students.

Regent Park asked why affiliates might see these new schools as a better partner. Dr. Deas stated that some affiliates were trying to accommodate students from different schools. In other cases, these schools were compensating affiliates for rotation placements. In response to Regent Park's question, Dr. Deas confirmed that UCR SOM did not pay its affiliates.

Regent-designate Raznick asked if UCR SOM Pathway Programs offered general wellness or mental wellness education, career information, or training for medical students. Dr. Deas responded that Pathways Programs have existed since the inception of the medical school. UCR SOM staff partnered with local schools in Riverside and San Bernardino Counties, and Pathway Programs students could engage with medical students on campus. About 85 percent of participants graduating through Pathway Programs entered into a health

professional school, and 40 percent proceeded to a medical school. These students would often return to practice in the Inland Empire.

Chancellor Muñoz emphasized the increasing scarcity of undergraduate clinical clerkships and residency positions, as well as the ability of these newer entities to “purchase” these openings, which inhibited UC enrollment. He shared that UCSF-Fresno was facing a similar difficulty. Dr. Deas stated that this was occurring in other parts of the country as well. Chancellor Muñoz remarked that having one’s own teaching hospital would minimize the effect of this phenomenon. Dr. Deas responded in the affirmative. Having one’s own hospital would give UCR SOM more control over the core rotation and ensure that students are receiving comparable education.

Chancellor Muñoz reiterated a question once raised by Chancellor Khosla, whether the University wished to let local control determine its destiny and to be at the mercy of its affiliates. Dr. Deas stated that UCR SOM could expend much effort to achieve accreditation for a residency program only to relinquish control of the program if the hospital decides that it wished to take control of it.

In response to a question from Regent Hernandez, Dr. Deas replied that medical students were required to participate in both core and elective rotations. Without its own hospital, UCR SOM relied on affiliate hospitals to provide training opportunities for medical students, residents, and fellows.

Regent Hernandez asked if distance from campus was an issue in residency opportunities. Dr. Deas replied that UCR SOM worked with local affiliates for its residency programs and only placed residents outside of a given geographical area if local hospitals did not offer needed clinical training. The goal was to train residents locally. Regent Hernandez asked if this was the case for medical students. Dr. Deas replied that medical students have traveled as far as the Coachella Valley and Orange County, but UCR SOM tried to limit this.

Regent Timmons asked Mr. Samones about impediments in his medical school experience. Mr. Samones suggested more investment in Pathway Programs for undergraduate students. He recalled that the application process for the free clinic was competitive and wished there had been more openings for undergraduate students. Dr. Deas added that Pathway Programs were not State-funded. Rather, they relied on foundations and partnerships with school districts for funding. Dr. Deas expressed hope that UCR SOM would continue to receive funding that enabled it to offer these programs to students free of charge. Regent Timmons asked if the National Science Foundation was a funding source. Dr. Deas replied that she was not sure.

3. UC RIVERSIDE SCIENCE TO POLICY PROGRAM (S2P)

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Susan Hackwood, Director of the UC Riverside Science to Policy Program, shared that she was the founding Dean of UC Riverside Bourns College of Engineering and led the California Council on Science and Technology (CCST) for 23 years. CCST developed a fellowship program that trained Ph.D. graduates from the sciences, engineering, and social sciences on policy issues and embedded them as staff in the legislative and executive branches of government; 150 graduates have participated in this fellowship. At the Riverside campus, she found that there was great interest among Ph.D. students from science, engineering, mathematics, and the social sciences in the use of sound science in policymaking. The mission of the Science to Policy Program (S2P) was to build on the civic-minded attitude of faculty and graduate students to address pressing issues in the Inland Empire. S2P had both an academic program and professional development opportunities, such as placement in legislative offices, and has enjoyed support from Chancellor Wilcox, vice chancellors, and deans. Many legislators have taught S2P classes. Ms. Hackwood remarked on the relatively low cost of the program as there were no laboratories. She shared the experience of Agnes Varghese, a fellow who had worked for Assemblymember Eloise Reyes and now worked for the U.S. Agency for International Development. Fellows recently visited the State Capitol to discuss a wide range of policy issues.

Jacqueline Garrido, electrical engineering Ph.D. candidate, shared her experience as a Science to Policy Program fellow. Through S2P, Ms. Garrido learned about the State legislative process, the difference between science for policy and policy for science, and how research could benefit policymaking. By learning how to track legislation, Ms. Garrido became aware of bills related to her research on transportation electrification, and her experience has exposed her to different career paths. She prepared and presented a policy brief for the S2P course and learned how to speak to different audiences. The Science to Policy Education: Activating Knowledge for Sustainable Transportation (SPEAKS) Program was a five-year training program funded by the National Science Foundation (NSF) that applied the key elements of S2P to sustainable transportation and offered workforce training and leadership development in science, policymaking, and government. There were plans to make this this program a permanent Ph.D. emphasis.

Thomas Dugger, Research Strategy Officer at the Office of the President (UCOP) and former S2P fellow, explained the S2P certificate course, originated from several students approaching Ms. Hackwood and Associate Director Doug Brown, then the Program Advisor for CCST's Science and Technology Policy Fellowship. S2P has since grown, training more students, securing more grant funding, and connecting with more individuals in the State and federal government, its success amplified by the need for science in policy. Mr. Dugger cited the COVID-19 pandemic, climate change, and new energy technologies as examples, and he underscored how quickly SPEAKS secured NSF funding. The program's next goal was to expand across the UC system. Many campuses had similar programs but not the same resources as UCR. The programs focused on local communities and governments and had a multiplicative effect across the state. S2P has begun to co-write grants and cohosting events with other campuses. Student surveys indicated the effectiveness of S2P pedagogy, and the program was seeking NSF funding to study, improve, and disseminate this pedagogy. For instance, communication training from S2P

could be embedded in introductory graduate training courses. The program has recently secured funding for ten additional fellows. Mr. Dugger underscored the role of networking in obtaining more fellowship placements, funding, and opportunities to share the program's pedagogy. He invited the Regents to join the S2P network.

Regent Hernandez suggested seeking fellowship placements from federal entities that provide funding to the UC National Laboratories. Ms. Hackwood explained that S2P did not go that route because those entities were occupied by other fellowship programs, and a more local focus would be more effective. The pandemic also limited available options.

Regent Blas Pedral asked how S2P has promoted the new fellowships and whether it collaborated with other campuses or outside organizations to find talent. Ms. Hackwood responded that students participated in the fellowships, which had a commitment of about ten hours per week, in addition to pursuing their Ph.D. She has connected with UCSF and UC San Diego about launching similar programs, emphasizing S2P's origins in CCST's successful fellowship program. Mr. Dugger added that fellowships were funded by NSF, private foundations, and nonprofit organizations, and S2P utilized its network to find projects and placements, sometimes cold calling legislative offices.

Regent Leib offered his help connecting with legislators, who he believed were looking for this sort of expertise. He also suggested Regent Hernandez as a potential S2P speaker due to his experience as an astronaut. Ms. Hackwood shared that the offices where fellows were placed often offered to pay for their second year. Mr. Dugger added that some fellows could find employment through S2P, as was the case with his current position at UCOP.

Regent-designate Raznick asked if S2P was working with UCOP to share the fellows' findings to a wider audience. Ms. Hackwood replied that this was being explored. Given the program's focus on local elected offices, participation by more campuses meant a wider audience. Regent-designate Raznick stated that the University's two million alumni could be a potential audience for these findings.

Regent-designate Tesfai expressed support for the program, particularly the connection of research to policy and advocacy work, as well as embedding the program's pedagogy in entry-level master's courses. He observed that one concern of social science graduate students is that their research will not be taken outside of academia. Ms. Hackwood underscored the multidisciplinary nature of the program. Mr. Dugger added that, for its Research Traineeship program applications, the NSF was looking for convergent research and new ways of thinking to address great challenges.

Committee Chair Reilly suggested presenting S2P before the full Board in order to leverage more resources and a wider network.

The meeting adjourned at 4:50 p.m.

Attest:

Secretary and Chief of Staff