

Office of the President

TO THE MEMBERS OF THE COMMITTEE ON EDUCATIONAL POLICY:

ACTION ITEM

For the Meeting of November 14, 2006

APPROVAL TO PROCEED WITH THE NEXT PHASE OF PLANNING FOR A PROPOSED SCHOOL OF MEDICINE, RIVERSIDE CAMPUS

EXECUTIVE SUMMARY

The Riverside campus has submitted a preliminary proposal to the President for a proposed new School of Medicine to meet statewide and regional physician workforce needs through expanded professional training in medical education. The proposal builds upon a long-standing partnership in medical education between the Riverside campus and the David Geffen School of Medicine at the Los Angeles campus. For more than 30 years, UCR has provided the first two years of instruction to 24 medical students per year. These students then go on to UCLA to complete their third and fourth years and to earn their Doctor of Medicine (MD) degrees.

In response to recent national and statewide studies forecasting future shortages of physicians, a January 2006 report of the Association of American Medical Colleges recommended a 30 percent expansion of student enrollment in all U.S. allopathic (MD granting) medical schools by 2015. The AAMC recommended that this occur through both expansion of enrollments in existing medical schools and development of new schools.

Provost Hume will provide an overview of California's physician workforce needs, recommendations for future enrollment growth at existing UC medical schools, and the rationale for planning for a proposed new medical school at UC Riverside. He will introduce Chancellor Córdova who will discuss the next major phases of planning for a new medical school and the timeline that is envisioned. The Regents will be requested to endorse continuing efforts leading to the development of a proposed new medical school. Upon completion of these and other activities, a formal proposal will be submitted to The President. This proposal will be subject to all customary review and approval requirements of the University and state, including final approval by The Regents.

RECOMMENDATION

The President recommends that the Committee on Educational Policy recommend to The Regents that The Regents endorse continuing efforts leading to the development of a proposed new School of Medicine at the University of California, Riverside (UCR). It is further recommended that The Regents give its approval for UCR to proceed with activities and the next phase of planning in support of this goal, including the hiring of a founding dean; developing the curriculum, business plan, and full proposal; creating a Clinical Medical Education Program; planning for construction of the initial infrastructure; and seeking review and approval of the curriculum and the new school by the Riverside Division of the Academic Senate as well as the Academic Council.

Upon completion of these and other activities, the formal UCR proposal to establish a new medical school will be submitted to the President. The proposal will then be subject to all customary review and approval requirements of the University and State, including final approval by The Regents. The support and approval of The Regents for the steps outlined above will enable the campus to successfully recruit a founding dean to help lead these activities and will facilitate fundraising efforts and discussions with regional and community partners.

BACKGROUND

The Riverside campus proposes to establish a new four-year School of Medicine that would be the first new (MD granting) medical school to open in California in more than 40 years. The mission of UCR's School of Medicine will be to improve the health of the people of California and to serve Inland Southern California by training a diverse physician workforce and developing innovative research and health care delivery programs that will both improve the health of the medically underserved throughout the region and serve as models for improving health care access in California and nationally. UCR's proposed School of Medicine will include:

- An innovative and distinguished research program, building on areas of research in which UCR has existing strength, such as genomics, nanotechnology, and vector-borne diseases, and/or can make unique contributions, such as population health, preventive medicine, and development of new health care delivery models. UCR's teaching, research, and clinical programs will include a focus on diseases and health issues that are relevant to the region and the people who reside there.
- Educational programs that are innovative, with a human disease-based, integrative curriculum. Students will have the opportunity to focus on improving health outcomes in both primary care and specialty areas. These programs will help

contribute to the development of a diverse workforce of physicians that reflects the face of 21st century California.

- A distributed clinical training model that is consistent with the mission of serving the medically underserved throughout Inland Southern California and that will provide new methodologies and approaches for the redesign of health care delivery systems.
- Partnerships with regional hospitals and clinics that will offer students a broad range of experiences and leverage existing health care resources in lieu of financing and constructing a new hospital.

Physician Workforce Needs

A January 2006 report of the Association of American Medical Colleges (AAMC) calls for a 30 percent expansion of enrollment in all U.S. allopathic (MD granting) medical schools by 2015. The AAMC recommends that this occur through both expansion of enrollments in existing medical schools and development of new ones. By virtually all measures, California lags well behind national averages with respect to education and training of its physicians. Among such measures, California ranks 39th in the nation for the number of medical school students enrolled in “in-state” schools (per 100,000 population). The state also ranks in the bottom half nationwide for physicians training in residencies and fellowships and the proportion of active physicians who attended medical schools in-state.

By 2015, the statewide supply of physicians is expected to be approximately 16 percent less than projected demand. In the Inland Empire, the shortfall is expected to be much greater (53 percent or approximately 1,140 physicians). This area has the lowest number of active patient care physicians and primary care physicians per capita in the state. Between 2000 and 2015, Riverside and San Bernardino counties are expected to have a 47 percent increase in population on an existing base of nearly 3.3 million people. During this period, the Inland Empire is also expected to see the largest statewide growth in Hispanics (92 percent), African-Americans (54 percent), and Asians (105 percent). These and other demographic changes will pose distinct challenges for meeting future health needs in the region.

Medical Education Activities

The vision for UCR’s proposed School of Medicine builds upon numerous existing campus strengths, including the UCR/UCLA Program in Biomedical Sciences. For more than 30 years, UCR has provided the first two years of medical student education to 24 students per year (48 students across the first two years of medical school). These

students then go on to the David Geffen School of Medicine at the University of California, Los Angeles to complete their third and fourth years and to earn their Doctor of Medicine degrees. This history provides a strong foundation for development of a new four-year medical school.

Within the context of the campus and mission of the proposed new school, it is also important to note that *U.S. News and World Report* recently ranked UCR's undergraduate population third in the nation for diversity among all public doctoral research universities. The diversity of the UCR student body will provide a valuable pipeline for achieving much-needed diversity in a new School of Medicine. Students from diverse backgrounds throughout the state are also likely to be attracted by the mission of service to the medically underserved.

Research Activities

The proposed UCR School of Medicine will develop and support research activities that are essential to providing high-quality educational experiences for students, improving health care delivery, and distinguishing the School's research and clinical programs. From the outset, UCR intends to become a national leader in biomedical sciences and health sciences research. UCR's core of approximately 100 faculty conducting research in health fields will be expanded by a campus commitment of 40 new faculty positions in the health sciences by 2010.

In 2006, UCR launched its Health Sciences Research Institute (HSRI), aimed at strengthening research and graduate education in the biomedical and related health sciences at UCR and fostering interdisciplinary collaboration with the private sector. An investment of new faculty positions will enable the campus to build upon its current strengths in the biological, agricultural, and physical sciences; engineering; and the socio-behavioral sciences, including neuroscience; and to enhance the capacity of existing faculty and departments to link more effectively to new frontiers of biomedical and related health sciences research. The HSRI will significantly increase the number of faculty, postdoctoral researchers, and graduate students whose research interests are in health-related fields. Ultimately, the HSRI will help enhance UCR's national reputation in biomedical and health sciences research and graduate education, serving as a powerful magnet for prospective faculty to join the new School of Medicine and helping to create a knowledge-based economy for the vast inland region.

Distributed Clinical System

The new UCR School of Medicine plans to cultivate and use a distributed clinical training system. This model is consistent with the School's proposed mission and will be both socially and economically advantageous. Rather than constructing its own

hospital, UCR will partner with area hospitals and clinics in Riverside and San Bernardino counties, thus leveraging existing health care resources and allowing UCR students to train throughout the Inland Southern California region. Because national and statewide data show that physicians tend to practice in locations where they complete their residency training, this approach is expected to steadily improve access to health services.

As a parallel and intermediary step, UCR plans to establish a Clinical Medical Education Program (CMEP), which will serve as a locus for organizing the clerkship sites and training opportunities upon which to build a full-fledged medical school. The CMEP will identify and coordinate, in collaboration with UCLA's Geffen School of Medicine, clerkship rotations for 3rd and 4th year medical students. The CMEP will also facilitate development of new and existing residency training opportunities with local hospitals and clinics. The CMEP will provide an organizational structure for monitoring, evaluating, and tracking student progress throughout the distributed system. As part of these activities, the CMEP will also offer an evaluation-based approach to continuing medical education.

Enrollment

At maturity, the proposed UCR School of Medicine is projected to have a total enrollment of 384 medical (MD) students and 160 graduate (PhD) students. Current plans call for building upon the 48 medical seats in the existing UCR/UCLA Haider Biomedical Sciences Program to achieve this goal by 2021-22.

To recruit and retain physicians who will practice in the region, the proposed UCR School of Medicine plans to have a comprehensive postgraduate medical education network, including residency programs, fellowship programs, and continuing medical education programs. These programs will ultimately be developed across all specialties and will be developed by partnering with regional hospitals, clinics, and medical groups. Current plans envision approximately 100 first-year residents and fellows across a wide range of medical and surgical specialties. The initial sites for these programs would involve two county hospitals and their strategic partners, with subsequent expansion (over an approximate fifteen-year time period) to include facilities located throughout Inland Southern California, including those in rural communities. Curriculum for these programs will be developed in partnership with affiliated hospitals and will include content addressing the specific populations of the region, including Native Americans, Hispanics, and African-Americans. Areas of focus will include cultural competency, chronic disease management, health information technology, and translational research.

Timeline

UCR is pursuing a phased approach to the development of a School of Medicine. In the first year of Phase I, a formal proposal will be completed and submitted to The Regents and the State for approval to establish an independent four-year medical school. As currently planned, Phase I, which will last from 2007 to 2012, will focus on hiring the founding dean and faculty; developing the curriculum, business plan, and full proposal; establishing the Clinical Medical Education Program; and planning for construction of new infrastructure. At the conclusion of Phase I, accreditation will be sought from the Liaison Committee on Medical Education. Phase II would begin in 2012, when the School of Medicine is proposed to open, and would continue until 2022, when the School would reach maturity and full enrollment at a size comparable to existing UC medical schools at Davis, Irvine, and San Diego. (UCLA and UCSF are considerably larger, with 150-160 students per class enrolled.)

Operating Costs

Based upon the preliminary proposal, the total projected costs associated with Phase I (2007-12) are estimated to be approximately \$15 million (in 2005-06 dollars), exclusive of the cost of residencies. This figure includes both operational expenses during the ramp-up years and some initial one-time start-up costs. UCR plans to request \$7.5 million from the State for this phase. This State support would be used to fund the dean's position, eight faculty lines, and associated support costs over a period of five years. The remaining \$7.5 million will be funded through gifts, grants, and other non-State sources of revenue, much of which has already been raised.

Operating costs during Phase II (2012-22) would gradually increase with projected growth in student enrollment. At full enrollment and build-out, annual operating costs are estimated to be \$124 million (in 2005-06 dollars and exclusive of residencies). This funding would be provided from a combination of State funds and educational fees, professional school (medical student) fees, clinical revenue, contracts and grants, and gifts and endowments. Approximately 26 percent (\$32 million) of the total annual operating costs would be expected to come from the State. This is comparable to the proportion of State funding provided to existing UC medical schools.

The projected cumulative State contribution over this 10-year period is estimated to be \$185 million of the total projected costs of approximately \$860 million. Across a 15-year period (Phases I and II), the total investment by the State in operating costs is estimated to be \$193 million. A full business plan will be developed as part of Phase I, including a more detailed analysis of possible future residency costs. The cost of residencies has not yet been determined because UCR is still in the initial stages of discussion with the two county hospitals and other regional hospitals and clinics. It is expected that the cost of

new residency training positions will be covered through a combination of federal graduate medical education funds, participating hospitals, patient care revenue, grants, fund raising, and state support.

Capital Costs

Capital projects and expenses for Phase I include enhancing existing facilities in support of the UCR/UCLA Biomedical Sciences Program and construction of additional facilities for medical education and research. Additional off-campus space will be leased for clinical purposes. As indicated in the preliminary proposal, the total cost is expected to be roughly \$150 million. For Phase II, growth of the school will require expanded education and research facilities, vivaria (animal research facilities), and a new ambulatory care facility. The cost of facilities for this period is estimated to be \$350 million. The total capital costs for both Phase I and II are projected to total approximately \$500 million. Funding for capital projects is expected to come from a combination of enhanced fundraising efforts, expanded contract and grant activity, new sources of clinical revenue, strategic industry partnerships, and investment by the State.

Fundraising Efforts

In view of UCR's nearly 30-year partnership in medical education with UCLA, and in light of planning efforts to develop a new independent school, UCR has already raised new funds to support several aspects of the medical school. To date, the campus has raised \$23.3 million for endowed chairs, professorships, and planning funds (approximately half of which is in planned gifts), with an additional \$7.6 million pending.

Next Steps

As the campus moves forward, a variety of efforts are under way to support the goal of developing a new medical school at UCR. A distinguished External Advisory Board, including deans and other experts from UC San Francisco, Harvard Medical School, the University of Minnesota, UCLA, Duke University, and the Association of American Medical Colleges, is helping to craft a distinctive academic vision for the medical school and a business plan to ensure the school's success. UCR is also continuing to benefit from widespread support from the community, including business leaders, hospital and other health care executives, and elected officials. This support, together with that of the Regents, provides a strong foundation as the campus works to establish the first new allopathic medical school in California in more than 40 years.