

Office of the President
January 12, 2000

TO MEMBERS OF THE SPECIAL COMMITTEE ON UC MERCED:

ITEM FOR DISCUSSION

For Meeting of January 20, 2000

UPDATE ON PLANNING FOR UC MERCED

This report summarizes significant developments in planning for UC Merced that have occurred since the July meeting of the Special Committee.

Governor's Initiatives

By Executive Order, the Governor has established a University of California Merced Implementation Team to:

- c bring together as partners state, federal, and local agencies to facilitate implementation of the new campus and associated centers throughout the Central Valley;
- c proactively explore ways to streamline the review and approval process of multiple state and federal agencies;
- c ensure that the review, approval, and permitting processes are conducted efficiently and are accomplished in a manner that allows the Merced campus to break ground in 2001; and
- c provide expertise and advice from respective agencies to help meet the challenges of opening the new campus and its associated centers.

The Team is being co-chaired by the Secretary of State and Consumer Services and by the Chancellor of UC Merced. Other members of the Team include Lieutenant Governor Cruz Bustamante, Regent Joanne Kozberg, and the Secretaries or Director of the following agencies:

- c Office of Planning and Research
- c Trade and Commerce Agency
- c Environmental Protection Agency
- c Resources Agency
- c Business, Transportation, and Housing Agency
- c Department of Food and Agriculture
- c Office of the Secretary of Education.

The Governor has also proposed that the opening date for the campus be accelerated to Fall 2004, a year earlier than the planned opening date of 2005. The University is making every effort to meet that target, including:

- C develop by the end of March a long-range operating budget plan that reflects the accelerated schedule;
- C help state agencies represented on the Implementation Team to identify ways they can be of assistance;
- C offer for-credit classes as soon as possible to enroll Central Valley students even before the campus opens;
- C accelerate efforts to recruit faculty;
- C accelerate development of initial academic programs at Distributed Learning Centers in Modesto, Merced, Fresno, and Bakersfield;
- C explore the possibility of acquiring space in downtown Merced and at the Castle Air Force Base to accommodate the initial “staging” of faculty and staff and, along with Distributed Learning Centers, serve students in Fall 2004 should on-site facilities not yet be completed;
- C work closely with federal, state, and local agencies, as well as with the owners of property surrounding the campus site, recognizing that acceleration of the schedule for physical development may be constrained by a number of factors outside the University’s control, including federal environmental assessment and permitting requirements, the availability of capital funding for campus development, and the schedule and financing for development of off-campus, community infrastructure systems necessary to serve the campus; and
- C prepare a critical path schedule that updates both the timing and interrelationship of the relevant academic, administrative, physical planning, and fiscal steps that must be taken.

Academic Planning

In close cooperation with Chancellor Carol Tomlinson-Keasey, the Universitywide Academic Senate Task Force on UC Merced has been shaping key elements of UC Merced’s academic organization and is moving toward its implementation. That organization is described below.

The Academic Senate has also established interim bodies to carry out UC Merced Senate functions until the campus has a sufficient number of faculty to organize its own Senate division. The Task Force has been authorized to act as an approval agency for UC Merced credit courses. Another essential Senate action has been establishing a UC Merced Committee on Academic Personnel (CAP). CAP plays a critical role in assuring that new faculty appointments meet UC’s high standards for quality.

Academic Organization

UC Merced is being planned as a university which emphasizes links among disciplines and keeps the barriers between academic areas as low as possible. Three academic divisions will be formed, each headed by a Dean: Engineering, Natural Sciences, and Social Sciences/Humanities/Arts. All three divisions will be full participants in planning and offering the undergraduate general education program, as well as undergraduate and graduate degree programs.

The **Division of Engineering** will initially develop four foci:

Computing and Communications, drawing upon electrical and computer engineering and computer science;

Energy Conversion and Resources Engineering, drawing upon environmental engineering, environmental sciences, civil engineering, chemical engineering, and mechanical engineering;

Biotechnologies and Bioengineering, drawing upon bioengineering, environmental engineering, molecular biology, and bioinformatics;

Microelectronics, Nanotechnologies, and Microscale systems.

All of these areas offer the potential for collaboration with the Lawrence Livermore National Laboratory.

The **Division of Natural Sciences** will develop the core areas that need to be in place for a strong science and technology campus: the biological sciences, chemistry, earth sciences, mathematics, and physics. Early areas of research excellence that would draw on both natural sciences and engineering include biotechnology and structural biology, environmental sciences, and materials sciences. A combination of a nanotechnology emphasis in engineering and a cooperative relationship with Lawrence Livermore National Laboratory suggests exciting prospects for collaborative research on nanoscale issues in physical and inorganic chemistry, biochemistry, and X-ray laser physics.

The **Division of Social Sciences, Humanities, and Arts** may be organized in innovative ways. For example, disciplines that depend on quantitative and textual approaches might form two groupings. Expressive studies, including digital arts, might be grouped with textual studies. While faculty may be organized in innovative ways that encourage new forms of collaboration across traditional disciplinary lines, the undergraduate curriculum will feature programs built around core fields, especially fields that are in high demand elsewhere at UC. For example, programs that could attract students interested in economics, psychology, literature and language, and digital arts are likely candidates, and would be informed by the cross-disciplinary faculty groups described above.

Initial Research Initiatives

The **Sierra Nevada Research Institute** will be a cornerstone of research and education at UC Merced. A prospectus outlining a preliminary academic plan is complete and can be found on the Internet (<http://www.ucop.edu/ucmerced/acadplan/snri.htm>). A search is in progress for the founding Director.

UC Merced Partnership Agreement with Yosemite, Sequoia, and Kings Canyon National Parks: To support mutually beneficial research, the Yosemite and Sequoia/Kings Canyon administrations have identified options for Sierra Nevada Research Institute field research stations in the parks. UC Merced is investigating with park officials the feasibility and funding sources for the most promising of the station options.

The partnership with the National Parks is creating a pipeline of students from Central Valley K-12 schools into future undergraduate programs at UC Merced. The partnership tested two field courses for rising 10th and 11th graders in summer 1999: a Sequoia and Parlier Unified School District course and a Yosemite and Merced Union High School District course. Both courses were very successful, with students and their parents expressing satisfaction with the combination of hands-on field experience and classroom learning. The partnership also brought together the Lawrence Hall of Science to collaborate with Sequoia/Kings Canyon in instituting a Great Explorations in Math and Science program to provide advanced professional education for Tulare and Kings County teachers. UC Merced is also working with the Lawrence Hall of Science in contributing to the Sierra National Parks' development of a mobile interpretation unit that will bring an experience in the Sierra conifer forest to rural Central Valley schools.

Research Initiatives in the Social Sciences, Humanities, and Arts: Planning has begun for a **California Studies Center**. The Center will study California as a regional example with global applications. Research themes include:

Regional identity and cultural mobility;

Religious identity and religious diversity;

The region's history of immigration from abroad and the history and consequences of indigenous peoples' displacement by waves of migration;

The wilderness and coastal impact of the region;

The history of agriculture;

The evolution of rural communities in the Valley and nationally.

General Education

While the detailed development of UC Merced's general education program will be in the hands of the founding faculty, the Chancellor and Task Force have begun work on a concept that has the support of higher education leadership throughout the San Joaquin Valley. UC Merced will create a Center for General Education that will afford in-depth attention to development and assessment of a vibrant curriculum. UC Merced faculty will use the Center as a think tank for development of curricular paths and assessment of student outcomes. In addition, the Center will be a collaborative involving California Community College and California State University faculty in the Valley with a goal of working together to assure strong linkages and articulation among the segments. In particular, the Center will give special attention to enhancing success of Community College transfer students to UC Merced. Curricular collaboration between UC Merced and Community Colleges will be an integral part of the program. Goals are to prepare students for what to expect when they transfer to UC Merced and to develop lower division preparation for UC Merced.

Student Planning Advisory Committee

An advisory committee consisting of (1) UC campus leadership staff from a variety of student services areas, (2) Valley UC, CCC, and K-12 representatives, and (3) a Valley student has been working on a range of planning issues for UC Merced. The committee has developed a set of student planning principles, expanding on the guiding themes of integration, flexibility, and community. The committee has helped Office of the President staff refine enrollment estimates, including in-depth discussions of recruitment issues for Valley K-12 and CCC students, and other California students. The UC Merced physical planning staff has consulted the committee extensively on issues such as student housing, transportation, and location and funding of student living and academic support services. Currently, the committee is developing a detailed strategy for staffing student services at UC Merced and offering guidance on how to develop a summer session, prior to opening day, that would serve UC students who return to the Valley in the summer to live at home and work.

Academic Programs

UC Merced has already initiated a variety of academic programs designed to acquaint the Central Valley community with the array of opportunities the campus will bring.

K-12 Teachers and Students

UC Merced continues to expand its academic program initiatives throughout the San Joaquin Valley to prepare Valley teachers and students for the new campus. In collaboration with the UC Berkeley Lawrence Hall of Science and the Challenger Learning Center in Merced County, UC Merced brought to the Valley for the first time last Fall an interactive science exhibit from the Hall of Science. The exhibit, named Chem-Mystery, enables K-12 students to learn more about chemistry in a playful setting. Chem-Mystery has already attracted 1,500 students and teachers from the region and it is expected that over 5,000 people will have visited by the end of the exhibit in June 2000. The Chem-Mystery exhibit offers new educational opportunities to Valley youth who would not normally have access to the Hall of Science and it marks the beginning of a series of exhibits that will be brought to the Valley in the future.

In Fall 1999, UC Merced joined forces with the Yosemite Institute and local K-12 school districts to offer teachers two sets of professional development workshops focused on environmental science. Teachers from Merced, Fresno, and Tulare Counties participated in the three-day workshops held in Yosemite National Park. In addition, UC Merced and the Yosemite Institute collaborated with the Armona School District in Kings County to offer a special environmental science program at Yosemite for 30 K-12 students. This pilot project was so successful that additional programs at Yosemite will be offered later this year to students from other Valley counties. Each of these programs was funded in part by the Yosemite Institute and local school districts, as well as by UC Merced funds.

The first pilot courses for the UC College Prep Initiative were launched successfully in the Valley in Fall 1999. The on-line courses offered were aimed at helping to expand access for high school students to advanced placement courses. An advanced placement chemistry course offered to high school students in seven different school districts in Fresno County has proved to be the most complicated course to administer, but also the most successful. Approximately 25 students are enrolled in the year-long course. On-line psychology courses are also being offered in Mariposa and Merced Counties and other on-line courses are being offered to students in Kern County. During 2000, the number of courses offered and the number of students served will be expanded significantly, particularly in Stanislaus County.

This month, UC Merced will co-sponsor, with the Lawrence Livermore National Laboratory, a Laser Science and Optics in the Classroom Program for Fresno County teachers. This program offers exposure for Valley high school teachers to laser curricula ideas and customized laser kits from LLNL, which will help better prepare students for advanced physics courses. The program for Fresno County teachers follows a very successful program that was sponsored in Summer 1999 for Merced County teachers.

Division of Professional Studies

The UC Merced Division of Professional Studies is emerging as a viable provider of high-quality training to individuals and corporations in the Valley. The Division is offering customized training to Texaco and Safeway and is preparing to offer e-commerce training to the thousands of subscribers to The AgZone, which will open in early 2000 as the first web portal focused on e-commerce for agricultural products. In addition, the Division has offered training to human services professionals in Merced County, co-sponsored the professional development workshops for K-12 teachers held at the Yosemite Institute, and will sponsor a conference this Spring on building leadership skills for women in agriculture.

Summer Session

UC Merced is planning to launch its first for-credit summer session courses in 2000 at its distributed learning centers in Modesto, Merced, Fresno, and Bakersfield. In collaboration with UC Davis, UC Merced will offer undergraduate courses for Valley students attending Davis and other UC campuses. The courses will enable Valley students who are home for the summer to take courses toward their degree.

Distributed Learning Centers

The opening of distributed learning centers in Modesto and Bakersfield is scheduled for Spring 2000. Completing these centers will increase access to students through the San Joaquin Valley. The UC Center in Fresno and the Merced Tri-College Center continue to be the home to many exciting academic program initiatives serving a wide variety of needs. With the help of a \$200,000 grant from the San Joaquin Valley Air Pollution Control District, UC Merced is equipping the Fresno Center and Merced Tri-College Center with videoconference technology.

Information and Instructional Technologies

The long-term vision of UC Merced involves using technology to extend our reach to the entire San Joaquin Valley. Appropriate technological innovations will be incorporated into courses, business practices, and outreach efforts.

CalREN-2

UC Merced's network strategy is to use CalREN-2 as the communications link among its multiple Distributed Learning Centers, and UC Merced's early academic and administrative buildings. The initial Sierra Nevada Research Institute faculty can conduct their early research collaboratively with other campuses and the San Diego Supercomputer Center, via CalREN-2 connectivity.

In October, Governor Davis signed SB 735, which included \$2.25 million in state funds for installing the north-south link in the Valley. Current plans call for the link, and the first hub in Fresno, to be installed in Spring 2000 in the UC Fresno Center. The second hub, in Merced, will be installed in the following fiscal year.

A proposal has been submitted to the National Science Foundation for funding assistance to create two UC Merced connection hubs (in Fresno and Merced) on the north-south high-speed CalREN-2 link through the San Joaquin Valley. This proposal helped build consensus for locating this link through the Valley rather than along the Pacific Coast. The NSF peer review committee recommended funding of the proposal, subject to fund availability. NSF's funding situation should be clarified for a decision in early 2000.

Distributed Learning Centers

The initial plan for interactive audio-visual technologies for the learning classrooms in the Distributed Learning Centers was adopted in November 1999. Each learning center will be equipped to send as well as to receive multimedia instruction from other sites, specifically from other UC campuses. Each center will consist of a multimedia presentation system, fully controllable from the instructor's lectern. The system will include a touch-pad control system, a ceiling-mounted projection system, sophisticated audio system with echo cancelling and integrated student microphones in both sending and receiving sites, and a videoconferencing system.

The design goal is for each center to be capable of originating programs that the other sites, and UC campuses, can receive. As well, each center can receive instructional programs from another center or UC campus. Each center will allow students to connect their own laptops into the UC Merced network. Some will have workstations permanently installed for student use.

The instructional infrastructure has been designed such that a single remote operations center can support the entire network of Distributed Learning Centers, and provide the instructors with technical assistance in real time. A modular sub-system approach was adopted to facilitate future upgrades and replacements of the more rapidly evolving technology components.

Physical Planning

Technical Studies

A full range of joint technical studies and planning efforts are underway with the County of Merced to document existing physical conditions, constraints, and opportunities on the site and to develop collaborative planning assumptions and directions. These efforts support land use planning activities associated with both the University's Long Range Development Plan for the Merced campus and the County's University Community Plan for the surrounding property, as well as joint environmental planning and permitting activities.

Completed biological surveys undertaken in 1999 and related to documentation of endangered species including crustaceans, plants, and mammals, have been submitted to the U.S. Fish and Wildlife Service. Work continues on the delineation of jurisdictional waters of the United States in conformance with the requirements of the U.S. Army Corps of Engineers. Additional surveys are required during the 1999-2000 wet season to complete the studies. Joint studies to document amphibians on site will be initiated in March 2000.

Initial studies investigating geological conditions and hydrological issues related to site drainage and identification of flood plains have been completed. Additional studies examining potential seismic conditions will be initiated shortly. A major review and update of population, employment, economic impact of campus growth, and the financial viability of private development is in progress to verify the level of development projected for the University Community in the earlier *University Community Concept Report* completed in May 1999. This work involves collaboration with several local governmental agencies and will be completed in March 2000.

Conservation Planning and Permitting

In October 1999, UC and the County signed a Joint Statement committing the two entities to initiate a conservation planning and permitting program that will be developed and implemented for the University Community (including the UC Merced campus). The program will also address off-site infrastructure related to the University Community and potential future development of other areas in eastern Merced County.

The overall planning area contains rolling annual grasslands, vernal pools, and other wetlands including seasonal swales and drainages, and seasonal and perennial creeks. The vernal pools in this ecosystem support federally listed species, such as vernal pool fairy shrimp and vernal pool tadpole shrimp. Other listed species associated with the vernal pools include succulent owl's clover, Colusa grass, and San Joaquin orcutt grass. The planning area also supports unlisted,

special status species such as California tiger salamander, Merced kangaroo rat, several species of wintering raptors, and several species of wetland and upland plants.

The County General Plan, Open Space and Conservation Chapter, expressly recognizes the importance of conserving habitats which support rare and endangered species. Specifically, the General Plan establishes numerous policies intended to meet the goal of preserving such habitats, by minimizing development-related impacts through appropriate siting of development and designations of land uses.

The University Community planning process, in addition to supporting these General Plan goals and policies, has recognized the value and importance of integrating habitat conservation into both University Community planning and regional planning. As noted in the *University Community Concept Report*, "Preservation of large contiguous blocks of high value habitat, both within and outside of the planning area, can provide an important amenity and establish the character of the community . . . A comprehensive conservation strategy can also contribute in an important way to a regional preservation program."

In addition, the conservation planning and permitting program will help secure certain permits and approvals from federal and state resource agencies that are necessary for development of the University Community.

Transportation and Water-related Planning

The County and the University are jointly undertaking transportation planning, which includes identification of major transportation corridors to serve the community and the campus. Regional traffic models to assess both capacity and environmental impacts are being developed. Working with representatives from the County, City of Merced, and the Merced Irrigation District, an initial framework for approaching development of a system of water-related infrastructure (potable water, wastewater treatment, water for irrigation, site drainage, flood control, and water amenities) is being crafted.

Capital Budget

The Regents' Capital Budget for 2000-01, approved in November 1999, included the preliminary five-year capital funding plan for state-supported campus facilities. This included a request for funding in 2000-01 of the first phase of site development and infrastructure for the campus, and for design funds associated with initial academic facilities -- a Science and Engineering Building, and a Library/Information Technology Center. A total of \$14.3 million has been requested for these projects in 2000-01, with funding to be provided from the general obligation bond measure approved by California voters in November 1998.

University Advancement

Endowed Chairs and Foundation Board of Trustees

The Vice Chancellor for University Advancement has been working toward the establishment of several endowed chairs, which will provide the academic backbone for the new campus. In addition, he has recruited business and community leaders from throughout the Valley to serve as founding members of the UC Merced Foundation Board of Trustees. The members of the board will be announced in early 2000.

Alumni

UC Merced is reaching out to communities through contacts with UC alumni located in the Central Valley. Although UC Merced has yet to graduate its first class of students, a significant effort has been made to establish a strong advocacy group for the University. An all-UC Alumni Network spanning the length and breadth of the San Joaquin Valley has been formally organized with the assistance of the Office of the President. As part of its objectives, the membership will promote the development of a UC Merced Alumni Association. Quarterly events have been successful in building its membership base and in boosting overall enthusiasm for a UC campus in the Valley.

UC Merced Mascot Contest

In November, a contest to name a mascot for UC Merced was opened to San Joaquin Valley students currently enrolled in the 9th grade or lower. The grand prizewinner, to be announced May 22, 2000, will receive a four-year scholarship that will cover student fees for a course of study towards a Bachelor's degree from UC Merced. Co-sponsored by the Great Valley Center of Modesto, the winner will also receive \$1,000 towards books.

Conclusion

The push to open the campus in 2004 has required an acceleration of efforts in all areas. This report represents a brief summary of those efforts and indicates the direction and pace that will have to be maintained in order to open UC Merced by 2004.