**THE REGENTS OF THE UNIVERSITY OF CALIFORNIA**
**MEETING AS A COMMITTEE OF THE WHOLE**

February 26, 2003

The Regents of the University of California met on the above date at Thornton Hospital, San Diego campus.

Present: Regents Davies, Kozberg, Lee, Ligot-Gordon, Montoya, and Moores

In attendance: Regent-designate Seigler, Secretary Trivette, General Counsel Holst, Chancellor Dynes, and Recording Secretary Nietfeld

The meeting convened at 4:05 p.m. with Chairman Moores presiding. It was noted that the public comment period would take place in the context of the Regents' visit to the San Diego campus, rather than as a formal meeting of the Board, and as such a quorum of The Regents was not required.

1. **PUBLIC COMMENT**

Chairman Moores explained that the Board had been convened as a Committee of the Whole in order to permit members of the public an opportunity to address University-related matters. The following persons addressed the Board concerning the items noted.

A. Mr. Christian Hertzog, an employee at UCSD, expressed concern about the performance of The Regents' equity portfolio. He compared the value of a share in the UCRP in 1995, when he joined the University, to that in 2000, when former Treasurer Small left her position, noting the increase in value over that time period. Since her departure, the value of a share has fallen considerably.

B. Mr. Jorge Olvera, the vice president of AFSCME Local 3299 on the San Diego campus, stated that while employees recognize the severity of the budget crisis, the Regents should ensure that management as well as workers share in the pain.

C. Ms. Carolan Buckmaster, a staff research associate and a member of the Union of Professional and Technical Employees, spoke of the high turnover rate among researchers at the campus, which she believed was a result of the failure to reach agreement with the University at the bargaining table.

D. Ms. Maggie Muñoz read a letter to Chancellor Dynes from Erik Matwijkow, a member of the Coalition of University Employees, in which he suggests the irony in the fact that the Chancellor had requested employees to donate 1.5 percent of their salaries to the United Way. The University has offered clerical employees a 1.5 percent pay increase.

2. **OPENING REMARKS**

Chancellor Dynes observed that the San Diego campus had undergone many changes since the Regents last visited in 1999. He stated the intention to share with the members of the Board some of the important issues facing the campus today, which include enrollment growth in the context of severe budget difficulties. The Chancellor touched on the benefits that derive from being a public institution charged with the three-fold mission of research, teaching, and public service. He reported that, in order to address the challenge of growth, private funding will be required; the public phase of the campus' largest capital campaign will be announced over the next two weeks.

3. **ACCOMMODATING CAMPUS GROWTH**

Vice Chancellor Woods presented an overview of the ways in which the San Diego campus intends to accommodate growth within the context of the Long Range Development Plan and the UCSD Master Plan. The LRDP in use today was approved by The Regents in 1989; its time frame extends to the year 2005. At steady state, it assumed an enrollment of 25,500 full-time-equivalent students. Since the Plan was approved, campus land use has increased by nearly 50 percent. The projected growth of the campus and new federal and state regulations will need to be taken into consideration as the campus prepares a new LRDP and the companion Environmental Impact Report. Summer enrollment could provide a safety valve for the campus as it absorbs an additional 6,500 students. The campus envisions the need for an extra 3 million gross square feet of space in order to accommodate these students. The campus' Master Plan provided a set of principles to guide campus development over the period governed by the 1989 LRDP. These principles included the maintenance of open space, the concept of neighborhoods, the use of the University Center as a commercial district, and control of vehicle and pedestrian traffic such that the main campus remains open to pedestrians.

Mr. Woods addressed some of the challenges that the campus faces, including how to leverage the support provided by the State with other funds. He noted that UCSD had been successful in attracting private support and federal grants to construct the research facilities that it needs. A further challenge arises from the campus' goal of housing 40 to 50 percent of its students on campus. A number of beds will come on line next year in the new Eleanor Roosevelt College; further housing will be provided by a third-party developer. Finally, he noted the need to improve public transportation in light of increased traffic congestion in the greater San Diego area as well as the high cost of real estate in the community of La Jolla. A trolley extension is planned with service to the campus, but this improvement is not anticipated until 2013. A shuttle service conveys staff and students to campus from remote parking sites.

4. **LAUNCHING HEALTH SCIENCES INTO THE 21st CENTURY**

Dr. Edward Holmes, Vice Chancellor for Health Sciences and Dean of the School of Medicine, observed that the campus had made great strides in breaking down the barriers that impede cross-disciplinary research and training. This is crucial because great medical discoveries take place at the boundaries between disciplines. Dr. Holmes spoke of some of the unique qualities of the San Diego campus, including the structure of its medical school, which has fused its basic science departments with its clinical faculty. A second feature is the fact that the campus has always embraced novel and innovative approaches to problem solving. Dean Holmes introduced the College of Integrated Life Sciences (COILS), which is a multidisciplinary approach to health sciences education, research, and patient care.

Dr. Kenneth Chien, Director of the Institute of Molecular Medicine, explained that the purpose of COILS is to break down boundaries and create effective collaborations throughout UCSD in order to translate the discoveries of science into the improvement of health. Its broad focus is to train future doctors to have multiple areas of expertise. He then introduced Mr. David Merrill, a Ph.D. in neurosciences whose M.D. will be granted in June 2003. Mr. Merrill discussed his research on the subject of aging, using older rats as his subjects. His laboratory is working on methods of delivering trophic factors to the older brain in hopes of ameliorating age-related memory deficits.

Dr. Gary Firestein discussed the focus of the Clinical Investigation Institute, which works with patients to understand the clinical aspects of disease and its causes. Using clinical samples from patients, researchers in the laboratory try to understand the mechanisms of disease and, after animal experimentation, to develop innovative and aggressive therapies to treat disease. The campus collaborates with biotechnology companies in the area who bring their own innovations into clinics and laboratories. Dr. Firestein introduced Dr. Emily Lukacz, a fellow in reproductive medicine and reconstructive surgery. Dr. Lukacz explained that her research concentrates on female pelvic disorders, a largely ignored problem for aging women, over 13 million of whom suffer from urinary incontinence. Although surgeries are 85 percent successful, they are not without risk. She believed that more attention should be brought to bear on the factors which give rise to this condition, and this is the focus of her research. One issue is whether vaginal birth is a risk factor for urinary incontinence. Dr. Lukacz noted that the Clinical Research Enhancement through Supplemental Training program, which is funded by the National Institutes of Health, had been key to her research efforts.

Dr. Angela Scioscia described the work of the Academy of Clinician Scholars, which is committed to recognizing faculty who have demonstrated exceptional clinical skill as well as a commitment to patient care, medical education, and the advancement of new knowledge. The goal of the academy is to enable the continuous career development of these faculty. She called upon Ms. Katherine Calvo, Ph.D., a student in molecular pathology, for comments about the student-run free clinics and the student magazine *Human Conditions.* Ms. Calvo explained that she and her fellow students were inspired by a course on Anton Chekhov to found a literary magazine. She commented that the culture at the San Diego campus allows new ideas to flourish. Ms. Calvo displayed a series of slides which illustrated

the services that medical students perform in the San Diego community through its free clinics, first established in 1996. Each patient is seen by a licensed physician following initial contact with a medical student. Dental clinics have also been established to respond to patient needs.

Dr. Ajit Varki explained that, in addition to being a Professor of Medicine, he was involved in studying the origin of humans through the Glycobiology Research and Training Center. He and his colleagues found the first genetic difference between humans and great apes; researchers are studying how this difference relates to disease. Dr. Varki then introduced Ms. Kathleen Hubbard, a third-year medical student with a Ph.D. in linguistics and a former faculty member at UCSD. Ms. Hubbard explained that travel to East Africa during her tenure as an assistant professor had changed her outlook on her work and led to her decision to become a doctor after seeing the appalling medical conditions that patients there face. She commented on the unique conditions at the San Diego campus which encourage continuing education.

In response to a question from Regent Kozberg, Dean Holmes explained that the San Diego campus has a Department of Family Medicine which serves as a clinical and basic sciences department. It trains primary-care physicians as well as offering a dual-degree program with pediatrics and with psychiatry. Ms. Calvo added that the free clinics would not have been possible without the support of the Department of Family Medicine.

Regent Lee asked about the results of Mr. Merrill's research on aging. Mr. Merrill commented that he has learned that not every individual degenerates with age; it is his intention to uncover why this is so in order to help people to retain their memory as they age. Regent Lee observed that residents of Hawaii tend to live longer. Dean Holmes confirmed that there are certain populations that are more long-lived than others. A critical question relates to the influence of genetics versus that of the environment, a subject that the Institute for Molecular Medicine is seeking to understand. Dr. Chien commented on the important role that is played by the UC system in training generations of physician-scientists.

Regent Kozberg commented on the ability of the student speakers to communicate their research. Ms. Calvo discussed some of the mentoring that takes place on the campus, while Dr. Lukacz noted that doctor-patient communication is an ongoing emphasis.

Regent Montoya asked whether federal funding agencies such as the NIH prefer that a medical doctor be the principal investigator on grants involving medical research. Dean Holmes observed that, according to the National Research Council, the greatest shortage of personnel in the bio-medical area is the physician-scientist. Dr. Varki reported that, based upon his experience as president of the American Society of Clinical Investigations, 70 to 80 percent of these grants are awarded to people who do not have an M.D. degree. He added that the tradition of physician-scientists is unique to the United States.

Regent Lee spoke of the potential for medical students to serve as ambassadors of American healthcare overseas. Ms. Calvo noted the existence of medical teams that treat patients in Mexico. Dean Holmes stated that the campus was interested in forming partnerships with universities in other countries to provide opportunities for students to study abroad.

The Committee recessed at 6:05 p.m.

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The Committee reconvened at 9:10 a.m. in the Visualization Center, Scripps Institution of Oceanography.

Present: Regents Davies, Kozberg, Lee, Ligot-Gordon, Montoya, Moores, and Preuss

In attendance: Regent-designate Seigler, Faculty Representative Binion, Secretary Trivette, General Counsel Holst, Chancellor Dynes, and Recording Secretary Nietfeld

5. **PUBLIC COMMENT**

There were no members of the public wishing to speak.

6. **OVERVIEW AND PRESENTATION ON KEY ACADEMIC AND EDUCATIONAL ISSUES**

Chancellor Dynes spoke of the worldwide reputation that is accruing to the San Diego campus as a model for the 21st century university. The campus is committed to creating California's next generation of leaders.

Senior Vice Chancellor Chandler discussed some of the academic challenges that the campus will face during its upcoming period of growth. She noted that, in order to accommodate the increase in the student body, the campus will need to hire an additional 1,000 faculty by 2010; this recruitment will take place in a highly competitive environment. A majority of those recruited will be junior faculty, and their fields will be approximately 50 percent in science and engineering and 50 percent in the arts, humanities, and social sciences. A measure of the quality of the faculty at UCSD is the growth in the contracts and grants that they are awarded.

Ms. Chandler reported that the undergraduate student population was expected to grow from over 18,000 to close to 25,000 students by 2010. An important focus for the campus will be to increase the research opportunities that are available to undergraduates and to continue the popular freshman seminars. She continued that the campus' colleges represent for students small communities set in the midst of a large research university. She anticipated that a seventh college would be added in the next three to four years in order to

accommodate increased enrollment. Vice Chancellor Chandler acknowledged the importance of instructional technology to the development of new undergraduate programs.

Turning to graduate and professional education, Senior Vice Chancellor Chandler stated that growth in these programs was fundamentally important to the San Diego campus. Graduate students represent the future as new areas of research are developed. She noted the recent establishment of two new professional schools at UCSD, the School of Pharmacy and the Graduate School of Management, both of which will play key roles in the growth of the region.

In concluding her presentation, Senior Vice Chancellor Chandler introduced the theme of the campus' capital campaign: "Imagine What's Next."

Regent-designate Seigler raised the issue of the recruitment of women and minority faculty. Vice Chancellor Chandler noted that diversification of the faculty plays an important role in the campus' recruitment strategy. One example of this commitment is the gender equity task force, which looked at issues that pertain to the recruitment of women faculty. A similar approach to the recruitment of minority faculty is in the development stage.

Regent-designate Seigler asked how the campus was addressing any generation gap that may exist with respect to information technology. Vice Chancellor Chandler reported that the campus had developed one-on-one tutoring programs to train faculty to access the internet and to use technology in the classroom. She confirmed that appropriate courses were available to the community through University Extension.

Regent Preuss observed that the Regents should be aware of how many new faculty members are being hired on each campus and in particular asked what the systemwide hiring rate will need to be to achieve 7,000 new hires within a ten-year window.

7. **NEW APPROACHES TO RESEARCH, TEACHING, AND COMMUNITY SERVICE**

Professor Larry Smarr, director of the California Institute for Telecommunications and Information Technology [Cal(IT)$^2$], discussed how the creation of a wireless internet would affect education. He recalled that the State had provided $100 million in capital funding for facilities to house Cal(IT)$^2$ in Irvine and San Diego; each will be constructed of materials that facilitate the use of wireless technology. With the assistance of a slide presentation, Professor Smarr illustrated how students take advantage of the wireless internet in various aspects of campus life, including in the classroom. He discussed some of the ways in which the institute's research is being applied, including electric cars at the Irvine campus that have access to global positioning technology. More recently there has been a focus on homeland security, including coordination with local police and fire officials during the Super Bowl which was held at Qualcom Stadium in San Diego. Professor Smarr commented that the San Diego campus had developed an unprecedented level of collegiality among people working

in the Super Computer Center, people working on the infrastructure, and other researchers that will become a model for universities across the country.

Mr. Graham Kent, an associate researcher in the Institute of Geophysics/Planetary Physics, took the Regents on a three-dimensional tour of the floor of Lake Tahoe and its adjacent topography using the technology of the Visualization Center. One goal of his research is to identify previously unknown earthquake faults in the area using the new technology that is available to researchers.

The Committee then adjourned for lunch, where remarks were made concerning new student life initiatives and the campus' undergraduate college structure.

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The Committee reconvened in Fung Auditorium, Powell-Focht Bioengineering Hall.

8. **21st CENTURY RESEARCH AND COMMUNITY SERVICE**

Chancellor Dynes observed that, as a public research university, UCSD has a primary responsibility for the stewardship of America's intellectual property. The United States achieved world dominance in the previous century on the basis of research and development that took place in the private sector. Once the technologies spread around the world, the United States was no longer the dominant force, and U.S. industry began to pull away from basic research in order to focus on short-term goals. These changes have led to a new role for the country's research universities; they must move discoveries from the bench into the public domain.

A. ***California Cultures Initiative***

Dean Paul Drake introduced the California Cultures initiative, which is designed to address the challenge of diversity in the 21st century. Professor David Pellow, director of the new initiative, explained that one impetus for the establishment of California Cultures was the fact of the state's great diversity, which has enormous implications for how UCSD will meet the needs of its students as well as for the kinds of research that it conducts. In order to address these issues, UCSD is developing new approaches that push the traditional boundaries within academic disciplines. It is creating new programs that speak to social and cultural changes occurring in the state, and it is building links between the campus and the community. Professor Pellow explained that the goal for the California Cultures initiative is to serve as a center for cutting-edge research, teaching, and collaboration among faculty, staff, students, and the public. He described some of the strengths which already exist on the campus to undertake this endeavor. Ten faculty positions have been allocated to the California Cultures initiative to bolster this strength.

Professor Pellow described some of the research projects, conferences, and workshops that will take place as part of the initiative.

B. ***Homeland Security***

Chancellor Dynes recalled that creating ways to protect the nation from harm was not a new mission at UCSD. The Scripps Institution of Oceanography performed studies and calculations during World War II that were used by the Navy to save many lives and shorten the war. The Chancellor observed that a younger generation of scientists had become engaged in issues that relate to homeland security following the events of September 11, 2001.

Dean Mark Thiemens explained that, following September 11, Chancellor Dynes had initiated a dialogue across the campus which led to unique ways in which the campus would respond to the increased threat. In order to introduce the topic, Dean Thiemens presented a videotape which gave a synopsis of what the campus had achieved in the area of homeland security in light of the unique nature of the San Diego region. Under the campus' leadership, people involved in first-response activities have come together to address such issues as the port and the border, biological and chemical infrastructure, and cyber-security policy. He described innovations under way in the Division of Physical Science to detect potential terrorist activity.

Dean Frieder Seible described research under way in the Jacobs School of Engineering to address blast mitigation on critical structures. He presented slides of various structures that had been blown up by different explosives over the past decade and illustrated some of his research which involves blowing up buildings in order to understand how these explosives work. A further project involves protecting the U.S. Embassy building in Greece from a terrorist attack. Dean Seible reported that he had been asked by Governor Davis to chair the California Bridge Assault Advisory Panel, which will address ways to mitigate threats against the State's important bridge structures.

Mr. David Moore, a Ph.D. candidate in structural engineering, discussed his research on how and why the internet fails. The connectivity that is provided by the various service providers allows for hackers to cause bad things to happen rapidly. Mr. Moore described how internet worms use existing flaws in computer programs to do damage and how the San Diego campus is playing a role in mitigating against this. He reported that the White House had produced a strategy for securing cyberspace, with five priorities being provided for the nation. The University has a role in performing research in these areas.

Dr. Karl Hostetler reported that his research involves the potential treatment of smallpox, which has been eliminated by the World Health Organization, with the last

known case occurring in Somalia in 1977. The WHO has estimated that as many as 200 million people died of smallpox in the 100 years prior to its eradication. According to the Central Intelligence Agency, smallpox is in the possession of the United States, Russia, France, North Korea, and Iraq. Researchers have created recombinant viruses that are able to avoid vaccine protection, leading to speculation about a doomsday virus. Dr. Hostetler explained that work to develop an antiviral drug for smallpox is an attempt to address the fact that 40 million Americans cannot be safely vaccinated. A large category is that portion of the population with eczema or atopic dermatitis and anyone living in the same household. He described research which led to the development of potential anti-viral treatments. Research on new methods will continue.

Professor Peter Cowhey discussed policy issues for the United States that are raised by acts of terrorism. One question is how to address the threat of an invisible organization operating globally below the radar screen. It is known that all networks have vulnerabilities because they are designed for certain capacity needs. Terrorist networks have the capacity to deal with police and intelligence probes against them. One strategy of the Bush administration is to try to overload their networks through multilateral efforts. September 11 caused many countries that believed they were not vulnerable to terrorist attacks to revisit their analyses. As they did, they came to the conclusion that they shared common interests with the United States in mobilizing a level of police and intelligence coordination not seen since World War II. The European Union has agreed to coordinate passenger lists on all civilian aviation traffic crossing Europe with the United States. The second part of an anti-network strategy is to go after essential facilities as was done in Afghanistan following September 11. In this instance, it was faster for U.S. forces to act unilaterally than to attempt to engage the participation of allies, and such an approach was not opposed by the world community. In the situation that is posed by Iraq, the concern expressed in Europe is that the United States will proceed to act unilaterally in a large number of cases where there is no clear evidence of terrorist activity and no permission to intervene. Professor Cowhey commented on the threats that arise in connection with countries that formerly comprised part of the Soviet Union. While governments may step in to clear out terrorist facilities, a long-term challenge will be to stabilize those areas of the world where ethnic, racial, and religious conflicts exist.

In concluding the visit, Chancellor Dynes commented on the important contributions that are made to the campus by the staff, noting that these contributions often go unrecognized. Because it was felt that the staff were not being provided with the tools and the support to accomplish the jobs they were being asked to do, he created a staff retention and support steering committee. He asked the committee to produce an action plan rather than a report. Following a ten-month period, the committee recommended 63 steps to improve staff morale and effectiveness, some of which were implemented immediately and some of which were long-term strategies. Chancellor Dynes reported that he, all of the vice chancellors, and the

chair of the Academic Senate had signed the committee's action plan, and resources were allocated to effect the changes. The Chancellor observed that staff identify strongly with the campus where they work; the University cannot afford to lose this asset.

And then the Committee adjourned.

Attest:

Secretary