

A FIVE-YEAR REPORT TO THE REGENTS

President Richard C. Atkinson - January 2001

Members of the Board:

Five years ago, at the beginning of my tenure, I announced a set of goals that I intended to pursue as president of the University of California. These goals grew out of several assumptions about the character of UC and the environment in which it will operate over the next decade or so. Those assumptions were, first, that California will continue its commitment to the Master Plan for Higher Education and the division of responsibilities it mandates in higher education; that UC will remain a research university in which every activity is shaped by the search for knowledge; and that society's increasing need for applications of knowledge will place new demands on the University.

I was convinced, in light of those assumptions, that UC needed to take certain steps educational, organizational, financial, technological, and political to fulfill its responsibilities as California's land-grant university and one of the nation's leading research institutions. These steps were summed up in nine goals that can also be expressed as nine answers to a single question: what must the University do to prepare itself for the twenty-first century? What follows is a progress report on these goals, as they were first publicly announced, from the vantage point of five going on six years as president.

1. Maintain faculty quality.

By every measure of academic quality, UC's faculty excel. In the last five years 11 faculty associated with the University of California have been awarded Nobel Prizes, three of them this past October. UC faculty make up 14 percent of the membership of the National Academy of Sciences and are well represented in other distinguished scientific, scholarly, and professional organizations, among them the National Academy of Engineering, the Institute of Medicine, and the American Philosophical Society.

In the 1990s, maintaining faculty quality meant restoring the University's ability to offer competitive salaries. Fortunately, thanks to a vigorous California economy and the generosity of the State, faculty compensation at UC is once again competitive with that of our peer institutions.

The next challenge will be recruiting more than 7,000 new faculty members to meet expanding enrollments and faculty retirements over the coming decade. Recruiting outstanding faculty rapidly enough to meet the pressures of growth will be difficult for campuses and departments alike. But the opportunity is clear: the chance to revitalize the faculty with new perspectives and new talent, including an unprecedented opportunity to expand the proportion of women and underrepresented minorities. The representation of both groups in ladder-rank positions has declined over the last five years a trend that runs counter to national data showing increasing numbers of women and minorities receiving doctoral degrees.

The imperative of growth means that, in virtually every department on every campus, change in the composition of the faculty will occur. We have what may be the best chance in several generations to shape this change in ways that serve the University's goals. Among public universities, we have played a special role in maintaining quality. My aim is to see that we focus on UC's tradition of excellence during the coming years of intensive faculty recruitment. The chancellors and the leaders of the Academic Senate understand the dimensions of this challenge and are prepared to ensure that faculty quality is maintained.

2. Ensure diversity at UC.

In a state that is experiencing one of the great demographic transformations in American history, the allocation of educational opportunity is *the* principal public policy issue. The University of California has been at the center of this debate. As the first selective public university to seek student diversity without affirmative action, we are a laboratory for the nation. That is not always a comfortable role; the issues are complex and controversial. Yet the University of California has a contribution to make in elucidating the issues, exploring the alternatives for action, and clarifying what is at stake, in California and elsewhere. This is what we have sought to do during the past five years, and it is clear that we are far from finished with this effort.

There are two principal ways in which an academic institution like UC can approach the goal of a diverse student body: through its admissions process and through its role in the preparation of K-12 students. UC's strategy over the past five years has embraced both.

First, we have scrutinized our admissions policies and processes to make them more valid tools for assessing academic talent and potential. The Regents have approved a number of policy initiatives in the past few years that reflect this strategy: Eligibility in the Local Context, the New Eligibility Index, and the Visual and Performing Arts requirement, for example. The proposed Dual Admissions Plan, by broadening the path to UC for high-achieving students in low-performing schools, also seeks to make our admissions process more sensitive to academic potential. The policy recommendations coming out of last December's conference on admissions convened by Vice President Saragoza and Academic Council Chair Cowan will also be useful in helping campuses make difficult choices from a pool of applicants that is surely among the most talented in the nation.

As I have told the Board, it is also important to focus on another dimension of this issue—the role of standardized tests in admissions decisions. It is time to again assess what tests we require and how we use them. We have to be sure that the tests are valid; that they are used responsibly in our admissions process; and that they foster sound educational practices in high school.

3. Expand UC's partnership with K-12 schools.

The 1997 Regents' Outreach Task Force Report concluded that achieving diversity in the post-209 era requires dramatic improvement in the academic preparation of all California students; UC's future is tied to the future of the K-12 schools. While we have worked with the schools on admissions and other issues throughout UC's history, in response to the Outreach Task Force Report we have embarked on major collaborative efforts to work with students and their families, improve teachers' skills, and strengthen the academic performance of schools.

The most dramatic expansion has been in professional development for K-12 teachers:

- In 1999 the governor, concerned about improving instruction in California's lowest-performing schools, asked UC to create the Governor's Reading Professional Development Institutes for K-3 teachers. These institutes led by faculty from UC, CSU, and independent colleges as well as master teachers from the public schools provided over 6,000 teachers with the skills they need to teach initial reading.
- Building on the success of the Reading Institutes, UC extended its efforts to reach 70,000 K-12 teachers annually from the state's lowest-performing schools to offer, in addition to initial reading, programs in mathematics and English-language development. Further, the governor expanded UC's

network of California Subject Matter Projects, which has for the past twelve years helped teachers deepen their knowledge in subjects required for University admission.

Research confirms the central role teachers play in advancing student learning and the overriding importance of teacher preparation. Yet, on average, 14% of California teachers are underqualified in the subjects they teach (nearly 50 percent in mathematics), with the vast majority of these teachers concentrated in schools serving poor, minority, and non-English speaking students. Governor Davis's commitment to strengthening the teaching profession is reflected in this year's proposed budget, which devotes nearly \$900 million over the next three years to training for teachers and principals. UC will have a central role to play in reaching this goal.

A second area of UC commitment has centered on technology as a way to reach as many students as possible in California's vast K-12 system. For example, the UC College Preparatory Initiative (UCCP), begun as a pilot program at UC Santa Cruz, offers on-line Advanced Placement (AP) courses to students in high schools that offer few or no such courses important because AP courses are given additional weight in UC's admissions process. Other examples are UC Links, a statewide network of after-school programs that involves K-12 students in computer activities to develop their skills in mathematics, science and basic literacy; and UC Nexus, which brings UC faculty, staff, and students together with their counterparts in K-12 schools to use the Internet for learning both in and out of the classroom. As more and more of the state's K-12 schools are linked with the Internet, Web-based learning will become an important dimension of UC's outreach partnership.

The public clearly supports the governor's focus on improving the academic performance of K-12 schools. And the public expects UC to make a difference through its wealth of disciplinary knowledge, its resources for analysis and research, and its capacity for innovation. We want to make that difference in order to improve the quality of life for the state's nearly six million children. But it is also critical to our own prospects. The public will support UC only if it believes we are helping to create a better future for all of the state's citizens.

4. Reinforce public perception of UC's critical role in research.

Public awareness of the value of research conducted at universities has grown significantly with the advent of the knowledge economy and the stunning contributions of university research to economic growth in fields from agriculture to telecommunications. No one has been more focused on the role university research plays in the economy than Governor Davis. He recently announced the establishment of three California Institutes for Science and Innovation, with a fourth to be funded next year. The goal of these institutes is to create the knowledge-based industries of the future, just as today's biotechnology and other high-technology industries are the products of research conducted years ago. UC and industry researchers will work together to advance fields vital to the California economy nanotechnology, telecommunications, information technology, and molecular biology. And the institutes will give both undergraduate and graduate students the opportunity to involve themselves in research with some of the state's best minds from both industry and academia.

Cross-fertilization between academic and industrial research is what distinguishes science in the U.S. from that of most other nations and is one of the reasons that university research is so rapidly translated into new industries, products, and services. The institutes will ensure that UC remains a leader in translating its research into benefits for California's citizens.

Among UC's other contributions to the state's innovative and economic strength:

- The Industry-University Cooperative Research Program (IUCRP), established in 1996 and jointly funded by the State, private industry, and UC, is a partnership program intended to strengthen the state's leadership in high technology. IUCRP invests over \$60 million a year in matching grants in six key industries: biotechnology, communications, digital media, life sciences informatics, microelectronics, and semiconductor manufacturing.
- NASA and UC recently announced an historic partnership to create a world-class educational R&D campus at the NASA Research Park in the heart of Silicon Valley. Located at the NASA Ames Research Center, the research park will allow UC and NASA scientists to collaborate on advances in science and technology that will foster new industries and provide new products to benefit California's economy.
- The recently established Mission Bay campus at UCSF will include a special zone reserved for biotechnology, pharmaceutical, and other life sciences companies. The proximity of these industries to UCSF's health-sciences faculty will foster powerful research partnerships.

As these examples suggest, UC is responding vigorously to the demands of a knowledge-based society. We are able to do so because of the talent of our faculty and the size and distinction of our research enterprise. In FY 2000, UC earned almost \$2.2 billion in federal research grants (not including UC's national laboratories), an increase of 8 percent from the previous fiscal year. With this year's increases in the federal research budget, the prospects for UC research are excellent.

5. Maintain the vitality and quality of education at UC.

The University's educational mission involves two responsibilities. The first is to prepare our students to take charge of their own lives by giving them a broad liberal education. The second is to meet society's need for well-educated people in critical fields.

UC does an excellent job in fulfilling both responsibilities. But we cannot continue to succeed without a better student-faculty ratio than we now have. For a variety of reasons, the student-faculty ratio (the number of students per faculty member) has deteriorated over the years from 17.6 to the current 19.4. This figure compares unfavorably to the student-faculty ratio at our eight peer institutions, which averages 17 at the public and 10.4 at the private universities.

We have begun an initiative to improve the student-faculty ratio. UC's 2001-2002 budget plan includes \$8 million for the second year in this improvement plan. Besides hiring additional faculty to reduce class size, offering more seminars, and increasing opportunities for students to work with faculty on research projects, we will also provide funds to expand academic advising.

There are two commissions whose work will have important implications for education at UC. The UC Humanities Commission, which includes 24 faculty members, three of them from outside the UC system, is co-chaired by Professor Hayden White of UC Santa Cruz and Dean of Humanities Karen Lawrence of UC Irvine. I am optimistic that in this period of growth we can reverse some trends that have hindered the work of humanities faculty and students, and accordingly I have asked the Commission to recommend ways to ensure the continued vitality of UC's excellent humanities programs. The Commission is examining such issues as the humanities' educational and public service roles, graduate student support, career opportunities for humanities PhDs, and funding for individual and collaborative research. UC's programs in the humanities are among the best in the nation and we cannot let them be diminished.

Chair Sue Johnson and I have appointed a commission to develop strategies to generate financial support for the addition of at least 11,000 graduate students over the next decade. Graduate enrollments at UC have been virtually level over the last 30 years, while undergraduate enrollment has doubled. The Board has made clear that righting this imbalance is a priority, essential both to meeting the needs of California's economy and the needs of higher education for more faculty to deal with expanding enrollments. The Commission on Growth and Support of Graduate Education will report by next fall on steps UC should take to attract the best graduate students and to offer competitive financial packages.

6. Maintain UC's world leadership in the application of digital technology to learning and instruction.

Universities are about tradition and conserving the past, but they are also about change and creating the future. In UC's work with digital technology, we are doing both.

The California Digital Library (CDL), launched in late 1997 and opened for use in January 1999, is recognized as a national and international leader. Over 5,000 electronic journals are now accessible to our faculty, students, and staff. The CDL has produced many projects and partnerships that open digital resources from photographs and works of art to specialized scientific databases to the UC community and to the citizens of California. Through its eScholarship initiatives, it is also an innovator in new forms of publishing and scholarly communication. UC's library collections second only to those of the Library of Congress are an extraordinary treasure whose use has been limited by the constraints of time and place. Thanks to increasingly sophisticated computer and Internet technologies, these constraints are now coming to an end.

This will happen sooner than many expect because of CalREN2, the California portion of the national networking initiative to create tomorrow's Internet. Internet2 and CalREN2 are enabling revolutionary Internet applications that are contributing to teaching and research. UC is a partner with the State, corporations, and other universities in a project to extend the Internet into each of California's 58 counties, where in turn it will connect to K-12 schools to provide online teaching and learning activities. Last September CalREN2 also established links with Mexico's equivalent network, a step that will multiply the opportunities for California and Mexican students and faculty to collaborate in research and education.

Finally, the University of California Teaching, Learning, and Technology Center is a systemwide effort to facilitate campus activities in teaching and learning technologies. The Center provides support to foster innovative uses of technology and cross-campus partnerships in implementing them. The Center plans an online magazine to publicize technological tools and strategies and promote best practices.

7. Expand UC's role in extended education.

CalREN2 and the California Digital Library are part of a transformation of teaching and learning that will expand the boundaries of universities beyond their geographical borders. At the same time, the emergence of new professions, the restructuring of the workplace, and the transition to an information-based economy are requiring individuals to renew their skills continually. UC Extension is key to the University's response to these far-reaching trends in American society.

UC Extension offers 21,500 courses to almost a half-million Californians every year at no cost to the State. More and more of these courses are becoming available on the World Wide Web, accessed through an electronic catalogue developed by UC in collaboration with the rest of higher education in California. Over 440 of these courses are offered by UC a trend that will accelerate in coming years.

UC's new degree, the Master of Advanced Study (MAS), offers professional education and liberal studies beyond the bachelor's degree at times and places convenient for working adults. Eight campuses are developing MAS degrees in subjects ranging from healthcare management to criminology. The first MAS in Management of Healthcare Organizations at UC San Diego has received final approval; several more will be approved during the coming academic year.

Just as the University's traditional research mission is being rethought in terms of the demands of the new economy, so its role in extended education needs to be re-examined in light of the mounting need for individuals to engage in lifelong learning and the opportunities offered by the technological revolution. Whether identified as extended education, distance learning, Web-based instruction, or professional certification, bringing education to the people of California is an essential aspect of the University's mission.

8. Restructure business practices and distribute authority to the campuses so that they are as entrepreneurial as possible, yet with the clear proviso that authority is exercised according to systemwide policy, with the Office of the President playing an oversight role to ensure accountability.

Since the early 1990s, UC has progressively sought to reduce administrative costs and complexity, decentralize decision-making, and incorporate advances in information technology all in the interest of improving business practices. Over the last several years, we have taken specific steps to strengthen accountability and control throughout the University. We have appointed controllers on each campus who act as the lead financial officer; employed private-sector models to encourage managers to understand risk and ways to mitigate it; given managers more and better training; and created a systemwide network for evaluating business risks and for collaborating among campuses on best practices. These have been significant accomplishments, given that the budget cuts of the early 1990s fell heavily on the business side of UC and have never been fully restored.

Yet we know that our administrative structures must be recast in terms of the challenges of the next decade. These will include, among other things, dramatic enrollment growth, technological advances, and increasing regulatory complexity. The New Business Architecture Planning Group has been working over the past year to lay the foundation for major changes in our business and administrative structure. Among the strategies proposed are new approaches to recruiting and retaining outstanding employees, streamlining our complex and sometimes cumbersome policies and processes, and using technology to contain costs and improve management and financial systems. We are well on our way to implementing these strategies.

9. Strengthen UC's ties with the public, its elected representatives in Washington, D.C. and Sacramento, and the University's one million alumni.

The governor and the legislature have given the University extraordinary support during the past five years. Over that time, UC's State-funded budget has increased by 67 percent, from \$1.9 billion to \$3.2 billion. Student fees have not been raised in six years and are actually 10 percent lower for undergraduates, and five percent lower for graduate students, than they were in 1994-95. We have reached accord with the governor on a Partnership Agreement that will give UC the financial foundation needed to manage the coming decade of enrollment growth. And for the first time in many years, UC sought no vetoes from the governor because there were no bills passed by the legislature that UC opposed.

In Washington, the California delegation has been helpful to the University on a wide range of issues. One of the most notable accomplishments of the past year was our success in changing the way that "direct medical education funds" are calculated, resulting in significant increases for UC's medical centers. The FY 2001 federal budget provides increased support for basic research in every major agency. The National Institutes

of Health and the National Science Foundation received the largest dollar increments ever, with increases of 15 percent and 14 percent, respectively. Student financial aid, particularly Pell grants, has received healthy increases as well.

The Washington, D.C. Center, scheduled to open next fall on Scott Circle near the White House, will integrate UC programs in a new building that will house 280 students. We are exploring the feasibility of establishing a similar facility in Sacramento.

Private support reached a milestone last year; the University received more than \$1 billion in private support from friends and alumni, an increase of 32 percent over the previous year. This represents the sixth consecutive year that annual donations set a record, continuing UC's distinction as the leader in philanthropy among the nation's colleges and universities, and second only to the Salvation Army among all charitable institutions.

Concluding remarks

Progress on the nine goals I announced at the outset of my presidency has been possible in large measure because the governor, the legislature, and the public have given UC generous support. Problems remain, of course. UC's five academic medical centers, like similar institutions around the country, have yet to find a secure footing in the new health-care marketplace. All of our medical centers are struggling with the punishing squeeze brought on by the advent of managed care and the shrinking of traditional sources of support for medical education and care of the poor. Recent changes enacted by Congress have offset some of the damage the Balanced Budget Act of 1997 inflicts on university medical centers. Yet the funding of these centers remains at a risky ironic situation, given American academic medical centers' great potential for achieving scientific breakthroughs in this age of discovery in biology and medicine. The future of academic medical centers is a national issue that must be addressed at a national level. We need a new social contract that defines what the public expects of these enormously valuable assets which have ensured American leadership in the health sciences and what it is willing to pay for them.

UC's relationship with organized labor has long been troubled, a factor that influenced graduate students to vote for collective bargaining last year. I believe we are making progress in this area, and I intend that we will make more. The newly formed Institute for Labor and Employment, located jointly at UC Berkeley and UCLA, is one step toward establishing a better understanding of labor issues and, I hope, a better relationship between UC and its unions.

We need to improve staff salaries, especially for our lower-paid employees. A start on that improvement has been made, but we will need to do more to attract and retain the people we need in today's labor market. I am also concerned about the compensation of the University's chancellors and vice chancellors; chancellors' salaries lag those at our comparison institutions by more than 26 percent, and by nearly 30 percent if UCSF is excluded. As a major research university, we must compete with the best public and private institutions for leadership, and the salaries we offer should reflect that reality.

Most important of all is the diversity of our faculty, students, and staff. There are pedagogical and philosophical arguments on the importance of diversity in a university setting; how best to achieve it is one of the great debates in this period of our nation's history. But whatever side of the argument one chooses, it would be unwise for any public university to assume that it can flourish indefinitely if it does not reflect the society that supports it.

Historically, the University has succeeded by steadily enlarging the circle of opportunity while maintaining quality the education we provided G.I.s returning after World War II is an example. The California of the

twenty-first century, struggling with wide disparities of education and income among its diverse population, will look to the University for answers, through our research, our teaching, and our public service. Of all the issues facing UC, diversity will play a dominant role in whether we succeed in the future as we have in the past.

Let me conclude on a personal note. It is an honor to represent UC as its president; this university is known, envied, and admired throughout the world. I am constantly impressed by UC's incredible array of intellectual talent, the broad support we enjoy from the State, the public, and our friends and alumni, and the constructive governing role played by the Board of Regents. The University of California has demonstrated over and over again that "public" and "excellent" are compatible terms.