Letter from the Vice Chancellor–Business Affairs

I am happy to present the UCSD 2001 Annual Financial Report containing an overview of the ways the university is planning to take advantage of the opportunities that will present themselves as the campus enters a ten-year period of unprecedented growth.

The report also contains a summary of the significant impact the university is having on the economy of the region, the state, and the nation, along with a review of the UCSD Technology Transfer program and a summary of some basic financial statements for fiscal 2001.

Sincerely,

Steven W. Relyea
Vice Chancellor–Business Affairs
# Contents

Facts About UCSD ..............................................................Inside Front Cover

Letter from the Chancellor .........................................................4

Planning Ahead: Academic and Administrative Strategies ..........6

Arts and Humanities ..............................................................12

Social Sciences ........................................................................13

International Relations and Pacific Studies ..............................14

Biology ..................................................................................15

Physical Sciences ......................................................................16

Jacobs School of Engineering ..................................................17

Scripps Institution of Oceanography .........................................18

Health Sciences ........................................................................19

San Diego Supercomputer Center ..............................................20

Extended Studies and Public Programs ....................................21

Economic Impact and Technology Transfer .............................22-28

Financial Highlights ...............................................................29

Regents and Officers ...............................................................Inside Back Cover
Although the University of California, San Diego is just forty-one years old, it has already achieved a national and international reputation for excellence that many much older and better-known institutions of learning crave.

UCSD has achieved this reputation in an age when research is revealing spectacular insights into every conceivable facet of our universe, from the tiniest particle of matter to the worlds of galactic proportions millions of light years away.

As this report clearly demonstrates, UCSD is in the vanguard of this research. The quality of UCSD research and discovery in the arts and humanities, the social and natural sciences, medicine, engineering, and oceanography is unmistakably world-class.

What is equally indisputable is the fact that this process of research and discovery is anything but static. Every discovery contains within itself an invitation to further research and the keys to the next breakthrough. And when we approach this process on an interdisciplinary scale—the cross-fertilization of new ideas from one field of study to another—we come to the realization that the possibilities are endless and our aspirations for the future should have no bounds.

This is a future that we at UCSD embrace. Because of enrollment pressure that all California universities face over the next ten years, we expect to grow by 10,000 students and 450 faculty. Our growth will be strategic and managed in such a way that we will build on our excellence and avail ourselves of the opportunities that present themselves.
We welcome that challenge to grow, not in a spirit of responding to a situation over which we have little control, but determined to take advantage of the possibilities that present themselves, with the confidence that our record of excellence inspires.

We cannot deny that the tragic events of September 11 have added a new dimension to the urgency of our task. We recognize a certain amount of hesitation, economical and political. But we also recognize that society looks to institutions such as universities for stability in turbulent times. And so we rededicate ourselves to the task ahead with an even stronger resolve to provide the research, teaching, healthcare, and public service that the world awaits.

Sincerely,

Robert C. Dynes
Chancellor, University of California, San Diego

http://www-chancellor.ucsd.edu
As the University of California, San Diego celebrated its fortieth anniversary last year, it found itself in the company of many of the best universities of the United States. The story of the campus’s growth from a few derelict buildings on a decommissioned military base to a world-class university with specialties in all the major disciplines is truly astonishing. No other university founded in the last century can boast of the leadership UCSD exercises in the worlds of culture and community, communication and information, and life science and health.

Although UCSD is a state university, barely 20 percent of its revenues come from the state of California. The campus leverages that support, principally with federal funding, tuition and fees, and private donations, into a $1.6 billion educational enterprise providing teaching, research, healthcare, and public service for San Diego, California, the nation, and beyond.
Over the next ten years, the campus is expected to grow as never before. By the year 2010, there will be 10,000 more students on campus than there are today, and approximately 450 more faculty members.

Clearly, UCSD is challenged by these projections of growth, but the real challenge is to take advantage of the opportunities for even greater excellence that this growth will provide. And, with its record for enterprise and its reputation for excellence, UCSD does not doubt that it will succeed. The planning is already in the works.

**Into the Future Together**

Academic Affairs has developed a planning process driven by the thinking and aspirations of the academic departments, divisions, organized research units, programs, and colleges on the general campus to take full advantage of the opportunities that will present themselves over the next ten years. This process, “Charting the Course,” recognizes the astonishing success that UCSD has already achieved in so many areas, and stimulates planning by facilitating interdisciplinary initiatives, recognizing patterns that emerge from faculty teaching and research, and proposing sets of priorities to guide future development. “Charting the Course” is not a “top-down” process.

Among the curricular initiatives already identified and prioritized by “Charting the Course,” are: bioinformatics, which brings together scholars in biology, engineering, physical sciences, and medicine to study the flow of information in living systems; and California Cultures in Comparative Perspective, a joint venture of the Divisions of Social Sciences and Arts and Humanities, which examines the growing diversity of California’s population and the social and cultural implications of that diversity for the state. These efforts will help to enhance the quality of both undergraduate and graduate education at UCSD. [http://academicaffairs.ucsd.edu](http://academicaffairs.ucsd.edu)

**Attracting More Faculty and Graduate Students**

As the campus grows, Academic Affairs is determined to maintain the exceptionally high quality that has distinguished UCSD faculty since the campus was founded forty-one years ago. The opportunity to add 450 new faculty positions over the next ten years will enable the campus to attract and recruit not only already well-established scholars, but also the brightest members of an exciting new generation who will be given the opportunity to realize their full potential.

Graduate education is a fundamental part of a research university such as UCSD. Because of the synergy among undergraduate education, graduate education, and research, the campus is committed to increasing the proportion of graduate students from today’s 13 percent to a total enrollment of 18 percent by 2010, and ultimately to 20 percent. And as the general campus divisions expand their master’s and doctoral programs, they will develop collaborations with the School of Medicine and Scripps Institution of Oceanography.
New Schools of Pharmacy and Management

A thoroughly modern School of Pharmacy and Pharmaceutical Sciences has already received the approval of the UC Board of Regents and will receive its first students in fall 2002. The school will collaborate with general campus faculty in the Department of Chemistry and Biochemistry and train practicing pharmacists to work in clinical settings and pharmaceutical scientists to work in drug discovery and development.

A School of Management—to give entrepreneurial-minded managers the expertise to lead technology-driven companies with a global vision—has also been approved and will involve significant interactions between faculty in the social sciences, engineering, and medicine. It will receive its first students in fall 2003.

Even as the campus embarks on these new and exciting fields of research, it will continue to promote excellence and innovation in all aspects of undergraduate education and to ensure that undergraduate students benefit from all new initiatives. The campus also remains committed to the college system and, in keeping with this rich tradition, Sixth College will admit its first students in fall 2002.

http://ogsr.ucsd.edu

A Student Body that Represents California

The addition of 10,000 students to UCSD over the next ten years will provide the campus with an exceptional opportunity to enhance student diversity, improve the overall quality of student life, and maintain the high standards for which the UCSD student body is renowned. The surge in numbers will enable the campus to recruit and retain a student population that truly represents all the people of California. UCSD outreach efforts to attract underrepresented groups of students already begin well before they reach their senior year of high school. And once students apply and are admitted to UCSD, the colleges and faculty in collaboration with alumni and funding corporations will encourage them to enroll.

Resources to Meet Growing Needs

Since quality of student life is essential to the quality of the educational experience, UCSD will do everything in its power to ensure that the resources are there to meet student needs. When construction of the twelve-acre Eleanor Roosevelt College is completed, the colleges will again be able to guarantee housing to all entering freshmen and transfer students. At the same time, commuter students will be given access to an expanded off-campus services office.

A new 75,000-square-foot student service facility is expected to open in 2006 in the heart of campus. It will accommodate the Office of Graduate Studies and Research, Admissions and Relations with Schools, and the Offices of Judicial Affairs and Student Policies, Student Research and Information, and the student bursar, cashier, registrar, and financial aid office.

http://vcsa.ucsd.edu

Prognosis for Health Sciences

The Division of Health Sciences encompasses the UCSD School of Medicine, UCSD Healthcare, and the new UCSD School of Pharmacy and Pharmaceutical Sciences. With a medical faculty ranked second in the nation in terms of federal research funding per faculty member, the division already teams with colleagues from biology, chemistry, the physical sciences, engineering, the social sciences, and
marine sciences to advance the knowledge and develop the technology that inevitably leads to better health.

Health Sciences plans to build on that foundation by creating a “Collegium of Integrated Life Systems,“ which will build upon new knowledge and technologies and speed the translation of fundamental discoveries to new medical interventions that benefit patients and society at large.

This collaborative model already applies to the multidisciplinary Institute of Molecular Medicine, which is focused on the genetic origins and therapies for disease, and the Rebecca and John Moores UCSD Cancer Center, whose membership spans more than twenty departments from mathematics to family medicine. http://medicine.ucsd.edu

Planet Earth: a Living Laboratory for Oceanography

No other scientific community is better positioned than UCSD’s Scripps Institution of Oceanography to understand planet Earth in its totality. As the largest and most diverse center of marine research in the world, the institution is engaged in more than 300 research programs on every continent, in every ocean, at both polar regions, and in space.

Because of such research, the physical, chemical, and biological compositions of the oceans are much better understood, and this understanding provides even greater opportunities for Scripps scientists to delve deeper into the many mysteries of our home and our environment.

As scientists continue their exploration of this vast laboratory, they will discover startling opportunities for understanding the keys to the sustainable balance upon which all of our futures depend.

Building on its reputation of nearly one hundred years of outstanding research and discovery, SIO will continue to assume the leadership this mission requires. http://sio.ucsd.edu

Keeping California Competitive

Few ventures better illustrate the opportunities that impending growth presents for UCSD than the California Institute for Telecommunications and Information Technology, Cal-(IT)², a massive undertaking by researchers from more than fifty top California, national, and international companies, and some 220 UCSD and UC Irvine faculty.

One of four special institutes that are part of a single initiative undertaken by Governor Gray Davis, Cal-(IT)² promotes interdisciplinary cooperation and academic–business partnership to ensure that California maintains its worldwide leadership in telecommunications and information technology.

The institute conducts research on issues such as wireless communications, optical networks, data storage, sensor simulation and human-computer interfaces, intelligent transportation, digitally enabled medicine, new media arts, policy management, and socioeconomic considerations of the Internet’s evolution.

A four-year, state of California allocation of $100 million matched by more than $200 million from industry, federal, private, and university resources supports the institute.

http://medicine.ucsd.edu

http://sio.ucsd.edu
Providing for Lifelong Learning

As San Diego becomes an increasingly important player in the global high-technology marketplace, UCSD Extended Studies and Public Programs (Extension) continues to link the university, civic leadership, and corporate management with leaders around the world.

One of Extension’s programs, UCSD CONNECT, an internationally recognized program, puts technology entrepreneurs in touch with smart capital, management know-how, and strategic global partners. Its Executive Education Programs provide the leading-edge knowledge needed for today’s continuously changing business environment; and UCSD-TV broadcasts informative and enriching programs to 800,000 households.

With such highly successful initiatives, UCSD Extension is superbly positioned to continue to help the university respond to the vital economic development of the San Diego region and beyond.

http://extension.ucsd.edu

Tending to Infrastructure and Human Resources

The Divisions of Business Affairs and Resource Management and Planning, the UCSD departments that oversee physical infrastructure, finances, human resources, Providing for Lifelong Learning

As San Diego becomes an increasingly important player in the global high-technology marketplace, UCSD Extended Studies and Public Programs (Extension) continues to link the university, civic leadership, and corporate management with leaders around the world.

One of Extension’s programs, UCSD CONNECT, an internationally recognized program, puts technology entrepreneurs in touch with smart capital, management know-how, and strategic global partners. Its Executive Education Programs provide the leading-edge knowledge needed for today’s continuously changing business environment; and UCSD-TV broadcasts informative and enriching programs to 800,000 households.

With such highly successful initiatives, UCSD Extension is superbly positioned to continue to help the university respond to the vital economic development of the San Diego region and beyond.

http://extension.ucsd.edu

Tending to Infrastructure and Human Resources

The Divisions of Business Affairs and Resource Management and Planning, the UCSD departments that oversee physical infrastructure, finances, human resources, Providing for Lifelong Learning

As San Diego becomes an increasingly important player in the global high-technology marketplace, UCSD Extended Studies and Public Programs (Extension) continues to link the university, civic leadership, and corporate management with leaders around the world.

One of Extension’s programs, UCSD CONNECT, an internationally recognized program, puts technology entrepreneurs in touch with smart capital, management know-how, and strategic global partners. Its Executive Education Programs provide the leading-edge knowledge needed for today’s continuously changing business environment; and UCSD-TV broadcasts informative and enriching programs to 800,000 households.

With such highly successful initiatives, UCSD Extension is superbly positioned to continue to help the university respond to the vital economic development of the San Diego region and beyond.

http://extension.ucsd.edu

Tending to Infrastructure and Human Resources

The Divisions of Business Affairs and Resource Management and Planning, the UCSD departments that oversee physical infrastructure, finances, human resources,
and other administrative functions on campus, are also looking at the next ten years as an opportunity for growth.

At a time when new knowledge flows from laboratories to classrooms at an unprecedented rate, the campus is building the Next Generation Network, which avails of state-of-the-art computer technology to provide faster data transmission, improved security, and wireless capability for research, teaching, and administration.

BLINK (http://blink.ucsd.edu), a new Internet initiative that posts information, tools, and other campus resources on one integrated Web site, is already online. It is the first Web portal of its kind for university staff anywhere in the United States.

http://vcba.ucsd.edu

A $792 Million Plus Construction Plan

To accommodate the impending growth in student enrollment and faculty, buildings with an additional 1.3 million square feet will be constructed and equipped at a total cost of more than $792 million over the next five years. Among those facilities will be a new cancer center that will bring cancer research, prevention, clinical trials, and treatment under one roof; a Functional Magnetic Resonance Imaging Center for basic studies of heart, lung, and muscle physiology; and a La Jolla Playhouse play-development and education center with a space for experimental forms of staging and viewing performances.

http://www-vcrmp.ucsd.edu

Expanding and Engaging the Community

Over the next ten years, UCSD intends to enhance its distinguished reputation as a world-class center of research and learning. The goal is nothing less than the design and creation of the model university for the twenty-first century.

UCSD sees its projected student growth as a golden opportunity for the campus to build a stronger community in San Diego and beyond, and to reach out and invite those who support and benefit from the university to become more involved in its life.

The aim of UCSD External Relations is to engage the community and key constituents in the building of a greater university by showing how our gains and achievements will improve the quality of life in San Diego and beyond.

The Value and Reward of Private Support

Because the state customarily provides just 20 percent of UCSD revenues, those goals cannot be reached without private support. The campus will be depending on private funding to increase the number of scholarships and fellowships it provides for its rapidly growing student body; to recruit and retain the very best as the faculty grows by some 450; and to construct the buildings and fund the research for which UCSD is justifiably proud.

Those who help UCSD reach its goals, whether it is with their leadership, financial resources, or both, will be assisting in the training of the researchers and leaders who will shape the discoveries that will benefit not just the people of San Diego and California, but the people of the nation as a whole and, ultimately, all humanity.

http://er.ucsd.edu
The Division of Arts and Humanities at UCSD covers the Departments of Music, Theatre and Dance, Visual Arts, History, Literature, and Philosophy. In recent years two of these departments, music and visual arts, have established the interdisciplinary computing and the arts major (ICAM), which has become the fastest-growing undergraduate major on campus.

Taking for granted the fact that the computer has become a meta-medium, ICAM draws upon and brings together ideas and paradigms from computer science, art, and cultural theory. The program recognizes that creating sophisticated artistic works with computers requires a new model of the creative process, one which combines traditional artistic processes with the experimental methods of science. It aims to train a cultural producer who is equally at home with computers and artistic skills and who is comfortable interacting with scientists and computer technologists.

Graduates of ICAM function in a computer-mediated culture with the technical, theoretical, and historical background required to contribute to the development of a new aesthetics. They are able to mediate between the worlds of computer science and technology, the arts, and the culture at large; and they understand computer hardware and software at least to the extent that they can anticipate trends without being locked into off-the-shelf applications.
The Division of Social Sciences, the largest academic division on the UCSD campus, is composed of nine academic departments and a wide range of interdisciplinary programs. UCSD awards more bachelor’s degrees in the social sciences than in any other area of study.

Among the division’s activities, the Center for Comparative Immigration Studies (CCIS), launched in 1999, has already gained worldwide recognition as an interdisciplinary, multinational research and training program that studies international migration and refugee movements.

CCIS’s main intellectual agenda is to systematically compare the U.S. immigration experience with that of other immigrant-receiving countries in the Asia-Pacific, Latin American, and West European regions.

The center devotes most of its resources to supporting the research of graduate students and young postdoctoral scholars, through a visiting fellowship program open to scholars from any university working in the social sciences, law, history, literature, and a variety of interdisciplinary fields. Last year, CCIS attracted visiting fellows from the United Kingdom, Germany, Spain, Japan, Mexico, and the United States.

CCIS has built a global electronic network of more than 200 immigration scholars, based at eighty universities and research institutes in fifteen different countries. It has also established working relationships with twenty other university-based research centers around the world.

And CCIS conducts field research in immigrant-receiving and sending countries. A major project recently begun with funding from the University of California’s Pacific Rim Research Program, will compare the development of immigration policies in Japan, Korea, Spain, and Germany.
The curriculum of the UCSD Graduate School of International Relations and Pacific Studies (IR/PS) integrates international management, international relations, applied economics, comparative public policy, environmental policy, and nonprofit-sector management. This interdisciplinary approach prepares IR/PS students for management positions in business, government, and nonprofit organizations, at home and abroad.

IR/PS students are highly valued in the work force. For example, they score an exceptionally high acceptance rate to the post-graduation Presidential Management Intern (PMI) program for graduate students planning a career in the federal government. Nine out of every ten students nominated by the dean of IR/PS for the program are invited for interviews, and a majority of these interviewees are offered positions. More than eighty students from IR/PS’s fifteen graduating classes have used the PMI program as a stepping-stone to government careers.

Graduating students benefit from the reputation of the alumni who went before them. Recruiters value their diverse work and internship experience and skills ranging from quantitative methods and management to policy analysis and language skills.

Increasingly, recruiters from companies like Andersen Consulting (now Accenture), Hewlett Packard, and Kyocera, as well as nonprofit organizations, look to IR/PS for outstanding prospects.
Biology as a discipline is in the midst of a revolution that will have major ramifications for progress in this century and the UCSD Division of Biology is well positioned to be a leader in its many and varied fields.

For instance, an exciting new field of medical research was opened up this year when scientists in the UCSD Division of Biology identified 548 genes in the common fruit fly that are the likely counterparts of genes responsible for more than 700 different genetic diseases in humans.

“Scientists have long known that humans share many similar genes with fruit flies,” Ethan Bier, the professor of biology who headed the research, says. “The surprise is how deep these similarities really are. Basically, every category of human genetic disease is well represented with a counterpart in the fly.”

Fruit flies offer an ideal, simple, and well-understood model system for studying genes: they are inexpensive to rear, and because they have a short generation time, mutations are more easily identifiable. By using flies instead of humans as their research subjects, geneticists may now be able to identify the genes responsible for particular human genetic diseases and understand their underlying biochemical mechanisms in order to develop effective treatments.

Bier anticipates that 200 to 300 of the fruit-fly genes will turn out to be functionally equivalent to their human counterparts and that fly genes could ultimately play an important role in the investigation of at least 1,000 of the 5,000 known human genetic diseases.
Composed of three academic departments—chemistry and biochemistry, mathematics, and physics—and the Center for Astrophysics and Space Sciences, the Division of Physical Sciences is a top-ranked center of excellence. Research in the division ranges from investigations of the most elusive subatomic particles that exist for less than a billion-billionths of a second to issues concerning the age and scale of the universe.

Chemists in the division have developed a variety of new high-tech devices using the same sorts of silicon wafers that are found in ordinary, run-of-the-mill computers.

With a silicon wafer and a laser from an inexpensive CD player, researchers in the laboratories of chemistry professors Michael J. Sailor and William C. Trogler developed an inexpensive sensor that can detect nerve-gas agents such as sarin at very low concentrations.

The same teams have developed a silicon “nanowire” capable of detecting trace amounts of TNT and picric acid, an explosive commonly used in terrorist bombs. The nanowires, which are some 2,000 times smaller than the diameter of a human hair, have attracted the interest of the FBI and U.S. military.

Researchers from Sailor’s laboratory, working with bioengineering professor Sangeeta Bhatia and her students at UCSD’s Jacobs School of Engineering, have created dime-sized, porous silicon “liver bioreactors” with wells that look like muffin trays where liver cells are kept alive for studies of artificial livers.
Engineering Tissue that Replaces Nature

As a premier institution undergoing vibrant growth, the Irwin and Joan Jacobs School of Engineering at UCSD is committed to leading the nation in selected areas of research and education critical to our quality of life and economic prosperity.

One such area is bioengineering, a field in which UCSD excels. In fact, the school’s Department of Bioengineering is widely regarded as a place where one of the nation’s top three bioengineering programs is conducted. The department’s faculty operate on the assumption that advances in health care will be made by developing novel ways to diagnose, treat, and prevent human disease with the help of engineering principles and technologies.

For instance, Jacobs School bioengineering professor Robert Sah and his colleagues recently engineered tissue that, for the first time, mimics the multi-layered structure and functions of natural cartilage. The researchers—engineers collaborating with orthopedists from the UCSD School of Medicine—hope this tissue will be used as an implant for the millions of people who suffer from knee injuries, congenital defects, or arthritic or aging-related cartilage degeneration.

The research will find a new home in the Powell-Focht Bioengineering Hall which, when completed next year, will foster interdisciplinary collaboration and provide space for state-of-the-art teaching.

The building will also accommodate the new William J. von Liebig Center for Entrepreneurism and Technology Advancement where new discoveries will be moved more readily from the laboratory to the marketplace for the benefit of society at large.
Overfishing, habitat destruction, disease, pollution, and global warming are threatening marine life and ecosystems as never before in Earth’s history. But surprisingly, the threats are not fully understood because, across the vast expanses of the oceans, most marine organisms have not yet been scientifically described. Identifying the number of marine species and investigating how they interact with each other and with their physical environment present enormous problems.

Thus research in marine “biodiversity” (biological diversity in an environment, including the numbers of different species of plants and animals) and its conservation constitute a global challenge of paramount importance.

As part of its mission, Scripps Institution of Oceanography has established a Center for Marine Biodiversity and Conservation (CMBC) dedicated to understanding, protecting, managing, and restoring biodiversity in the oceans. The new center will:

• conduct world-class research on marine biodiversity and conservation;
• prepare future biodiversity and conservation scientists;
• act as a think tank; and
• promote effective communication between researchers.

CMBC will build and expand on Scripps’s research on kelp forests, coral reefs, wetlands, the California Current, the Sea of Cortez, Antarctic wildlife, the tropics, and other marine biodiversity “hot spots” around the world.

Since no other educational institution offers curricular programs in marine biodiversity and conservation, Scripps will be the first to prepare future leaders in the field.

CMBC is also being developed as a vehicle for translating science into policy and to play a role in decision making and managing marine ecosystems for the future.
Among these programs is the Institute of Molecular Medicine, which brings together UCSD and other biomedical researchers and clinicians from a range of specialties that include cardiology, neurology, immunology, and genetics.

A team led by Dr. Ken Chien, director of the institute, has developed a gene-based therapy that may reverse the progress of heart failure, a steady weakening of the heart muscle that affects nearly 5 million Americans.

The team found that failing hearts in mice and hamsters can be restored by introducing into their bloodstream a modified form of a single gene that short-circuits the destructive effects of the normal gene and promotes recovery. It has been patented and a La Jolla-based company, Celladon, is already poised to help develop human clinical trials of the procedure over the next few years.

The team has also isolated the gene that activates a component of the heart’s electrical current. This gene is rapidly turned off during heart failure, disrupting the heart’s rhythm and often resulting in sudden cardiac death. Therapeutic strategies to block the signals that shut down this gene are now being pursued.
The San Diego Supercomputer Center (SDSC) develops and applies high-performance information technologies to advance scientific research. With a staff of more than 300, SDSC is a world leader in high-performance and data-intensive computing, biological and environmental informatics, networking, and other areas that are critical to the nation’s future.

The center leads the National Partnership for Advanced Computational Infrastructure, a fifty-institution partnership funded by the National Science Foundation (NSF) to create computational environments that will enable tomorrow’s scientific discoveries. Recently, SDSC and partners in California and Illinois were awarded $53 million for TeraGrid, the most powerful computing infrastructure ever built for scientific research.

In bioinformatics, SDSC, Rutgers University, and the National Institute for Standards and Technology operate the Protein Data Bank, the single international repository of protein-structure data, funded by NSF, the Department of Energy, and the National Institutes of Health. SDSC also plays key bioinformatics roles for the National Institutes of Health (NIH) funded Alliance for Cellular Signaling, led by the University of Texas, Southwestern, and the Joint Center for Structural Genomics.

SDSC’s Data-Intensive Computing group leads an NSF Digital Government Project to develop an Information Integration Testbed that provides a single access point to data sets from government agencies.

The center is a connection point for most of California’s and the nation’s high-performance networks and is home to the Southern California Next Generation Internet Application Center, a state-sponsored facility to foster the development of applications to take advantage of the Next Generation Internet.
Extension Expands with Worldwide Outreach

Responding to vital economic development and policy-analysis and civic-education needs, UCSD Extended Studies and Public Programs (Extension) provides dynamic, postbaccalaureate educational opportunities throughout the San Diego region. More than 40,000 executives enroll in UCSD Extension programs and courses annually.

Last year, UCSD CONNECT, a program that networks technology entrepreneurs with smart capital, management know-how, and strategic global partners, assisted more than 180 high-tech companies, which collectively raised more than $150 million in seed capital.

Extension’s Executive Education Programs serve a variety of sectors with the leading-edge knowledge needed for today’s changing business environment.

Examples include the Executive Program for Scientists and Engineers; the Healthcare Leadership Program; a Principals Executive Program (PEP) for school leaders; and a new Medicinal Chemistry Institute for drug-development companies.

Through programs such as San Diego Dialogue, which most recently focused on issues such as “Smart Growth” and K-12 education, informative and enriching opportunities are provided to citizens and decision makers.

As San Diego becomes an increasingly important player in the global high-technology marketplace, UCSD Extended Studies and Public Programs is contributing to linking local academics, civic leadership, and corporate management with leaders from around the globe. Programs for Korean business executives and Swedish, Finnish, and Scottish high-technology entrepreneurs, as well as a variety of cross-border health-education, international-language, and culture-studies programs are an increasingly significant component of Extension’s work.
As an institution of higher learning with an international reputation for the excellence of its research and teaching, the University of California, San Diego takes pride in the impact that the campus makes on the economy.

Starting with a relatively modest investment of $347 million from the state of California last year, UCSD raised a total of $1.6 billion and created a nationwide economic impact of $2.6 billion.

But that’s nowhere near the total impact. The impact of a UCSD medical breakthrough on the health of the nation, for instance, or the changes that a new UCSD technology makes to an industry, or the mark that UCSD graduates leave on society when they start a new venture, are immeasurable. Yet examples of such contributions abound.

UCSD has reached a point where its economic impact on San Diego alone is counted in billions of dollars. UCSD research is the mainstay of the telecommunications and health-science research industries of San Diego. Through its research, teaching, and public service, UCSD provides the energy that drives and continually renews these dynamic economies in California and across the nation. The UCSD Office of Technology Transfer and Intellectual Property Services markets and promotes the development of the campus’s research.

**The Ripple Effect**

UCSD makes a $2.6 billion economic impact, which is more than seven times the state’s initial investment of $346.7 million and creates 68,000 local and 78,000 national jobs for a total of 148,000 jobs.
UCSD is gearing up to spend at least $792 million on capital plant improvements—new construction and equipment—over the next five years.
The Value of UCSD Research to the Economy

UCSD was awarded more than $509.6 million to conduct research last year. This number represents a 45 percent increase over FY 1997 ($351.4 million) and an 84 percent increase over FY 1992 ($276.5 million).

UCSD Research Keeps Excellent Company

Awards and Research

UCSD was sixth in the nation and ahead of all other University of California campuses in terms of federal agency awards for research and development in FY 1999, the most recent year for which figures are available.

<table>
<thead>
<tr>
<th>RANK</th>
<th>UNIVERSITY</th>
<th>AMOUNT (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Johns Hopkins University</td>
<td>$777.9</td>
</tr>
<tr>
<td>2</td>
<td>University of Washington</td>
<td>$385.7</td>
</tr>
<tr>
<td>3</td>
<td>Stanford University</td>
<td>$321.3</td>
</tr>
<tr>
<td>4</td>
<td>University of Pennsylvania</td>
<td>$319.6</td>
</tr>
<tr>
<td>5</td>
<td>University of Michigan</td>
<td>$315.9</td>
</tr>
<tr>
<td>6</td>
<td>UCSD</td>
<td>$296.4</td>
</tr>
<tr>
<td>7</td>
<td>UCLA</td>
<td>$275.2</td>
</tr>
<tr>
<td>8</td>
<td>Harvard University</td>
<td>$265.6</td>
</tr>
<tr>
<td>9</td>
<td>Washington University</td>
<td>$258.5</td>
</tr>
<tr>
<td>10</td>
<td>MIT</td>
<td>$253.4</td>
</tr>
</tbody>
</table>

In terms of federal expenditures on research, UCSD ranked sixth in the nation in FY 1999, with $292.0 million; and in terms of total expenditures on research, UCSD also ranked sixth with $461.6 million.

UCSD consistently ranks among the top universities in the nation and remains first in the University of Californian system of campuses in terms of federal awards and expenditures for research and development.
New Schools to Educate Future Leaders

A new School of Pharmacy and Pharmaceutical Sciences to train practicing pharmacists to work in clinical settings and pharmaceutical scientists to work in drug discovery and development will receive its first students in fall 2002.

A Graduate School of Management offering degrees in conjunction with the Jacobs School of Engineering, the School of Medicine, and the Graduate School of International Relations and Pacific Studies, will open its doors in 2003.

Productive Members of the Workforce

To date, UCSD has graduated 85,000 students, more than 30,000 of whom are employed in San Diego. More than 3,000 new graduates are added every year.

A survey of recent bachelor’s degree alumni, taken six months after graduation, found that they were earning an average of $39,000 per annum; new alumni employed in engineering and technical fields were earning between $50,000 and $55,000 per annum. Students who had graduated five years previously were earning on average $57,000 per annum.
The Economic Impact of UCSD’s Technology Transfer Program

The UCSD Technology Transfer and Intellectual Property Services Office (TTIPS) manages and markets all new intellectual property developed on campus and owned by the university. It also acts as a catalyst for transforming early-stage academic research into marketable products and processes. This property includes inventions, discoveries, technologies, patents, copyrightable works such as computer software, and selected trademarks.

To encourage timely commercialization of this intellectual capital, TTIPS files patent applications, registers trademarks, negotiates licenses, and markets proprietary access to entrepreneurial companies. By doing so, the office generates new jobs, promotes entrepreneurial start-ups, and promotes cutting-edge industries.

A license agreement gives a company access to a UCSD invention that is protected by a university patent. In exchange for this access, the licensee agrees to commercialize the invention, pay the university for the rights, and provide royalty payments once the products and processes reach the marketplace.

TTIPS responds to requests for research assistance and publicizes available intellectual property on a Web site and in industry directories. For cash-strapped smaller companies, including entrepreneurial start-ups, the challenges of commercialization are particularly daunting. To help these enterprises succeed, the TTIPS License and Entrepreneur Assistance Program (LEAP) provides referrals to legal, financial, and business service providers with a knowledge of current UC policies. Some of these vendors may accept stock in lieu of cash.
Research with Worldwide Benefits

During FY 2001, two San Diego-based licensees successfully commercialized UCSD innovations. AirFiber, which raised an additional $53.5 million in equity financing, brought to market OptiMesh™, a wireless optical networking technology for voice, data, and multimedia services. Caimis, Inc. launched Skitter™, traffic-engineering software that monitors complex computer networks, and IPMapper™, a subscription-based data service for mapping Internet protocol (IP) addresses to geographic locations.

Nereus Pharmaceuticals, Inc., which received $23.6 million in second-round venture financing, is hoping to culture resistance-free antibiotics based on a novel method developed by Scripps Institution of Oceanography professor William Fenical for discovering antibiotics in deep-ocean sediments.

GlySens, Inc., a San Diego start-up company, is developing a system to enable people with diabetes to monitor their glucose levels without having to stick their fingers. The company has a licensing agreement to commercialize the technology, which is based on recent advances in the field of implantable sensors developed by UCSD bioengineering professor David Gough.

Aventis CropScience, a company that develops sustainable agriculture worldwide, is using the inventions of UCSD biology professor Martin Yanofsky to improve crop yields. The technology prevents the loss of canola oil seeds from the pods.

Royalties Support Further Research

In FY 2001, technology transfer activities at UCSD generated over $8.9 million in royalties and other revenues and attracted over $5.7 million to support further research.

Complements UCSD Mission

Technology transfer complements the university’s education, research, and public service mission. Licensing income provides funds for classroom and laboratory use.

High-Tech Clusters that Depend on Technology Transfer

The San Diego region is home to 216 biotech companies, 161 medical device companies, 32,000 employees in the life science sector, and an annual life science payroll of $2 billion. The success of these clusters depends on the availability of basic research from institutions such as UCSD and the ability to transfer discoveries to the private sector.
UCSD’s Track Record on Technology Transfer

Since 1995, TTIPS has supported the creation of thirty-eight start-up companies with UCSD inventions and technologies, and has granted 63 private-sector licenses in the Greater San Diego/Southern California region, another 81 in Northern California, 115 in the United States, and 133 worldwide.

In FY 2001 TTIPS granted 46 licenses for commercial development. Invention disclosures, which have been trending upward since 1995, reached a record 265. The campus also reported record highs in the number of U.S. patents filed (177), U.S. patents issued (60), and confidentiality agreements (570).

With help from TTIPS, nine new start-up companies were created last year.

To date, some 150 San Diego companies, with revenues well in excess of $2 billion, have been founded by faculty and graduates of UCSD or on technology that was developed on campus. At least 63 of those 150 are biomedical companies.

Tech Transfer: A Campuswide Partnership

To bring discoveries to market, TTIPS is eager to work with other UCSD programs including:

- California Institute for Telecommunications and Information Technology—Cal-(IT)²—a massive undertaking by researchers from more than fifty top California, national, and international companies, and some 220 UCSD and UC Irvine faculty to support California’s worldwide leadership in telecommunications and information technology.

- UCSD CONNECT, a network of almost 700 companies that links UCSD scientists and engineers with the business community.

- The San Diego Science and Technology Council, a regional network of leading research organizations, that enhances the region’s visibility and global competitiveness.

- The Von Liebig Center for Entrepreneurism and Technology Advancement, a new program that assists with the transfer of discoveries from the laboratory to the marketplace.

A recent survey conducted by the Southern Technology Council and funded by the National Science Foundation ranked UCSD and its technology transfer practices among the top 10 percent of national universities with exemplary programs for nurturing state and local economic development.
## Current Funds Revenues by Source (Dollars in Thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuition and fees</th>
<th>Federal government</th>
<th>State government</th>
<th>Local government</th>
<th>Private gifts, grants, &amp; contracts</th>
<th>Educational activities</th>
<th>Auxiliary enterprises</th>
<th>Medical Center</th>
<th>Other sources</th>
<th>TOTAL REVENUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>$63,015</td>
<td>$208,333</td>
<td>$223,851</td>
<td>$2,760</td>
<td>$52,010</td>
<td>$72,943</td>
<td>$56,532</td>
<td>$271,834</td>
<td>$12,661</td>
<td>$963,939</td>
</tr>
<tr>
<td>1993</td>
<td>$67,576</td>
<td>$235,837</td>
<td>$203,528</td>
<td>$2,833</td>
<td>$54,568</td>
<td>$74,704</td>
<td>$60,048</td>
<td>$292,590</td>
<td>$11,900</td>
<td>$1,010,584</td>
</tr>
<tr>
<td>1994</td>
<td>$83,014</td>
<td>$253,700</td>
<td>$199,428</td>
<td>$2,007</td>
<td>$54,953</td>
<td>$93,135</td>
<td>$63,873</td>
<td>$286,530</td>
<td>$11,983</td>
<td>$1,042,656</td>
</tr>
<tr>
<td>1995</td>
<td>$92,919</td>
<td>$268,825</td>
<td>$198,380</td>
<td>$3,215</td>
<td>$57,311</td>
<td>$105,380</td>
<td>$67,097</td>
<td>$283,618</td>
<td>$11,851</td>
<td>$1,107,579</td>
</tr>
<tr>
<td>1996</td>
<td>$100,170</td>
<td>$281,404</td>
<td>$210,395</td>
<td>$4,608</td>
<td>$67,665</td>
<td>$127,783</td>
<td>$67,907</td>
<td>$286,893</td>
<td>$11,283</td>
<td>$1,155,263</td>
</tr>
<tr>
<td>1997</td>
<td>$100,193</td>
<td>$270,571</td>
<td>$225,091</td>
<td>$768</td>
<td>$84,106</td>
<td>$93,572</td>
<td>$66,337</td>
<td>$294,893</td>
<td>$12,245</td>
<td>$1,150,649</td>
</tr>
<tr>
<td>1998</td>
<td>$106,060</td>
<td>$307,205</td>
<td>$244,377</td>
<td>$1,365</td>
<td>$89,042</td>
<td>$88,979</td>
<td>$69,665</td>
<td>$302,387</td>
<td>$15,636</td>
<td>$1,123,860</td>
</tr>
<tr>
<td>1999</td>
<td>$110,802</td>
<td>$335,614</td>
<td>$283,504</td>
<td>$1,470</td>
<td>$105,739</td>
<td>$112,762</td>
<td>$72,745</td>
<td>$304,804</td>
<td>$17,730</td>
<td>$1,130,705</td>
</tr>
<tr>
<td>2000</td>
<td>$114,194</td>
<td>$358,617</td>
<td>$298,970</td>
<td>$2,097</td>
<td>$102,376</td>
<td>$132,425</td>
<td>$74,860</td>
<td>$313,604</td>
<td>$19,122</td>
<td>$1,147,914</td>
</tr>
<tr>
<td>2001</td>
<td>$121,556</td>
<td>$385,281</td>
<td>$346,721</td>
<td>$3,430</td>
<td>$111,257</td>
<td>$140,496</td>
<td>$78,668</td>
<td>$320,721</td>
<td>$18,122</td>
<td>$1,162,231</td>
</tr>
</tbody>
</table>

## Current Funds Operating Expenditures by Program (Dollars in Thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>$182,612</td>
<td>$187,217</td>
<td>$177,516</td>
<td>$193,642</td>
<td>$208,918</td>
<td>$216,113</td>
<td>$230,238</td>
<td>$248,741</td>
<td>$267,879</td>
<td>$284,386</td>
</tr>
<tr>
<td>Research</td>
<td>$206,257</td>
<td>$222,972</td>
<td>$238,526</td>
<td>$257,335</td>
<td>$270,241</td>
<td>$278,273</td>
<td>$311,881</td>
<td>$345,919</td>
<td>$387,912</td>
<td>$411,334</td>
</tr>
<tr>
<td>Public service</td>
<td>$3,421</td>
<td>$3,435</td>
<td>$3,535</td>
<td>$3,985</td>
<td>$3,917</td>
<td>$3,444</td>
<td>$3,646</td>
<td>$7,054</td>
<td>$8,441</td>
<td>$9,543</td>
</tr>
<tr>
<td>Academic support</td>
<td>$68,009</td>
<td>$67,912</td>
<td>$90,873</td>
<td>$100,285</td>
<td>$149,229</td>
<td>$104,821</td>
<td>$92,587</td>
<td>$114,295</td>
<td>$142,863</td>
<td>$156,296</td>
</tr>
<tr>
<td>Medical Center</td>
<td>$263,196</td>
<td>$286,127</td>
<td>$272,440</td>
<td>$277,685</td>
<td>$284,414</td>
<td>$263,472</td>
<td>$267,615</td>
<td>$313,108</td>
<td>$333,836</td>
<td>$364,980</td>
</tr>
<tr>
<td>Student services</td>
<td>$24,440</td>
<td>$23,215</td>
<td>$21,972</td>
<td>$24,624</td>
<td>$26,314</td>
<td>$27,919</td>
<td>$29,835</td>
<td>$28,569</td>
<td>$31,614</td>
<td>$35,414</td>
</tr>
<tr>
<td>Institutional support</td>
<td>$34,738</td>
<td>$33,902</td>
<td>$32,678</td>
<td>$39,465</td>
<td>$43,711</td>
<td>$43,593</td>
<td>$45,719</td>
<td>$48,135</td>
<td>$54,071</td>
<td>$69,090</td>
</tr>
<tr>
<td>Student financial aid</td>
<td>$32,084</td>
<td>$36,896</td>
<td>$38,766</td>
<td>$44,463</td>
<td>$48,389</td>
<td>$46,910</td>
<td>$48,888</td>
<td>$49,976</td>
<td>$53,755</td>
<td>$56,236</td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td>$42,596</td>
<td>$43,750</td>
<td>$47,036</td>
<td>$50,798</td>
<td>$51,315</td>
<td>$52,516</td>
<td>$50,429</td>
<td>$52,170</td>
<td>$55,933</td>
<td>$57,951</td>
</tr>
</tbody>
</table>

Total Expenditures: $886,462 $935,148 $951,956 $1,022,928 $1,116,202 $1,112,471 $1,243,504 $1,376,787 $1,493,270

Revenues include indirect cost recovery (FY 2001, $90 million) that is not available for current operating expenditures.
The following is a list of contracts and grants over $3 million awarded to UCSD in FY 2001.

<table>
<thead>
<tr>
<th>Project</th>
<th>Campus/Department</th>
<th>Awarding Agency</th>
<th>Amount (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPACI¹</td>
<td>SDSC²</td>
<td>NSF³</td>
<td>$40.8</td>
</tr>
<tr>
<td>Ship Operations</td>
<td>SIO/OMTS⁴</td>
<td>NSF</td>
<td>$10.6</td>
</tr>
<tr>
<td>Joint Institutes for Marine Observations</td>
<td>SIO/MPL⁵</td>
<td>NASA⁶</td>
<td>$6.0</td>
</tr>
<tr>
<td>General Clinical Research Center</td>
<td>Medicine</td>
<td>NIH⁷</td>
<td>$5.6</td>
</tr>
<tr>
<td>California Sea Grant College</td>
<td>Sea Grant</td>
<td>NOAA⁸</td>
<td>$5.6</td>
</tr>
<tr>
<td>Selenium and Vitamin E Chemopreventive Trial</td>
<td>FPM⁹</td>
<td>SOG¹⁰</td>
<td>$4.6</td>
</tr>
<tr>
<td>Triana Earth Radiometry and Imaging</td>
<td>CASS¹¹</td>
<td>NASA</td>
<td>$4.6</td>
</tr>
<tr>
<td>Specialized Cancer Center Core Support Grant</td>
<td>Cancer Center</td>
<td>NIH</td>
<td>$4.6</td>
</tr>
<tr>
<td>ONR Ship Time and Administrative Fee</td>
<td>SIO/SOMTS</td>
<td>DOD¹²</td>
<td>$4.5</td>
</tr>
<tr>
<td>Alzheimer's Disease Cooperative Study Unit</td>
<td>Neurosciences</td>
<td>NIH</td>
<td>$4.4</td>
</tr>
<tr>
<td>Genetic and Receptor Mechanisms in Hypertension</td>
<td>Pharmacology</td>
<td>NIH</td>
<td>$3.7</td>
</tr>
<tr>
<td>Signaling Pathways for Cardiac Growth and Hypertrophy</td>
<td>Medicine</td>
<td>NIH</td>
<td>$3.7</td>
</tr>
<tr>
<td>Center for Chips with Heterogeneously Integrated Photonics</td>
<td>ECE¹¹</td>
<td>DOD</td>
<td>$3.6</td>
</tr>
<tr>
<td>Caltrans Post Retrofit: Problem Focused Seismic Research Program</td>
<td>Structural Engineering</td>
<td>State of California</td>
<td>$3.5</td>
</tr>
<tr>
<td>IVEM and Image Analysis Resource</td>
<td>CRBS/Med¹⁴</td>
<td>NIH</td>
<td>$3.3</td>
</tr>
<tr>
<td>Neuroaids: Effects of Methamphetamine</td>
<td>Psychiatry</td>
<td>NIH</td>
<td>$3.3</td>
</tr>
</tbody>
</table>

Notes
1. National Partnership for Advanced Computer Infrastructure
2. San Diego Supercomputer Center
3. National Science Foundation
5. Scripps Institution of Oceanography/Marine Physical Laboratory
6. National Aeronautics and Space Administration
7. National Institutes of Health
8. National Oceanic and Atmospheric Administration
9. Family and Preventive Medicine
10. Southwest Oncology Group
11. Center for Astrophysics and Space Science
12. Department of Defense
13. Electrical and Computer Engineering
14. Center for Research in Biological Structure/Medical

Over the past ten years, awards for research grew by 84 percent to $509.6 million in FY 2001.
UCSD awarded another $50 million in federally insured student loans through private lending institutions in FY 2001. Over 50 percent of UCSD students now receive some form of financial aid.

Student Financial Aid
UCSD expended $56.2 million for student financial aid from federal, state, private, and university sources.

Student Loans
UCSD disbursed $3.2 million in student loans last year. As of June 30, 2001, $26.2 million were outstanding in student loans.
Capital Projects

UCSD expects to spend $792 million on capital plant improvements—mainly construction—over the next five years. Projected capital projects costing over $20 million, with estimated costs and dates of occupancy, are listed.

<table>
<thead>
<tr>
<th>State Funded</th>
<th>Cost</th>
<th>Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Center Seismic Compliance</td>
<td>$48.3 million</td>
<td>To be determined</td>
</tr>
<tr>
<td>Student Academic Services Facility</td>
<td>$30.5 million</td>
<td>September 2006</td>
</tr>
<tr>
<td>California Institute for Telecommunications and Information Technology Facility</td>
<td>$102.5 million</td>
<td>June 2004</td>
</tr>
<tr>
<td>Pharmaceutical Sciences Building</td>
<td>$40.9 million</td>
<td>September 2005</td>
</tr>
<tr>
<td>Engineering Building Unit 3B</td>
<td>$41.2 million</td>
<td>June 2004</td>
</tr>
<tr>
<td>Computer Science and Engineering</td>
<td>$60.1 million</td>
<td>November 2002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-state Funded</th>
<th>Cost</th>
<th>Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Management</td>
<td>$50.0 million</td>
<td>September 2004</td>
</tr>
<tr>
<td>Cancer Center Facility</td>
<td>$87.1 million</td>
<td>November 2003</td>
</tr>
<tr>
<td>School of Medicine Research Facility</td>
<td>$61.6 million</td>
<td>October 2003</td>
</tr>
<tr>
<td>Powell-Focht Bioengineering Building</td>
<td>$36.2 million</td>
<td>September 2002</td>
</tr>
<tr>
<td>Eleanor Roosevelt College Housing and Dining Facility</td>
<td>$106.0 million</td>
<td>September 2003</td>
</tr>
</tbody>
</table>

As UCSD prepares for a period of unprecedented growth, the value of its physical plant, which grew by almost $1 billion over the past ten years, will increase significantly.

Ten Years of Annual Capital Expenditures

(Dollars in Millions)

Ten Years of Plant Asset Growth

(Dollars in Millions)
Facts about UCSD

The University of California, San Diego, one of the ten campuses that constitute the University of California, has developed into one of the nation’s premier institutions for higher education and scientific exploration since it was founded in 1960. The campus is a powerful magnet for students and faculty seeking a fresh, next-generation approach to education, research, and community service.

<table>
<thead>
<tr>
<th>Revenue/Fiscal Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues Fiscal 2001</td>
<td>$1.6 billion</td>
</tr>
<tr>
<td>Expenditures Fiscal 2001</td>
<td>$1.5 billion</td>
</tr>
<tr>
<td>Research Awards 2001</td>
<td>$509.6 million</td>
</tr>
<tr>
<td>Revenue from State of California</td>
<td>$346.7 million</td>
</tr>
<tr>
<td>Average Monthly Payroll</td>
<td>$63.9 million</td>
</tr>
</tbody>
</table>

**Economic Impact**

UCSD made a local economic impact of $1.4 billion and an overall national economic impact of $2.6 billion, more than seven times the initial state of California contribution of $346.7 million. This $2.6 billion created 146,000 jobs nationally and locally.

**Number of Full- and Part-time Employees**

UCSD is the third largest employer in San Diego, following the federal government and the state of California.

**Average Monthly Number of Employees, FY 2001**

- Academic: 5,648
- Staff: 14,708
- Total: 20,356

**Student Statistics, Fall 2001**

- Total Number of Students: 21,568
  - Undergraduate Students: 17,505
    - Women: 9,105 (52 percent)
    - Men: 8,400 (48 percent)

**Total Advanced Degree Enrollment**: 4,063

- Number of Graduate Students on General Campus and Scripps Institution of Oceanography: 2,755
- School of Medicine Enrollment: 1,308
- Average High School GPA for Entering Freshmen: 3.95
- Average SAT Score for Entering Freshmen: 1,263

**Number of Undergraduate Students in Chosen Fields of Study, Fall 2001**

- Arts: 931
- Engineering: 3,732
- Humanities: 740
- Science/Mathematics: 4,377
- Social Science: 5,830
- Special/Undeclared: 1,895

**Student Fees, 2001–2002**

- Full-time Undergraduate: $3,863
- Nonresident Supplement: $11,074
- Graduate Students: $4,943
- Nonresident Supplement: $10,894

**Private Support**

- Total Amount Raised in Fiscal 2001: $121 million
- UC San Diego Foundation Total Assets (market value June 30, 2001): $277.6 million
- Number of Endowed Chairs: 86

**Rankings**

In a National Research Council study of the quality of faculty in graduate programs in universities in the United States, UCSD was ranked tenth.

UCSD was sixth in the nation and first in the UC system of universities in terms of federal agency awards for research in FY 1999 (the most recent year for which figures are available). The other nine are Johns Hopkins University, University of Washington, Stanford University, University of Pennsylvania, University of Michigan, (UCSD), UCLA, Harvard University, Washington University, and MIT.

Ten Nobel Prize winners, in categories as diverse as medicine, chemistry, and economics, have been UCSD faculty members. Five are currently on the faculty.

UCSD ranks seventh in the nation in the number of faculty elected to the National Academy of Sciences (NAS). Within the academic community, NAS membership is the universally accepted gauge of leadership in research and scholarship. The top ten universities are: Harvard, UC Berkeley, Stanford, MIT, Yale, CalTech, (UCSD), Princeton, Chicago, and Cornell. UCSD also ranks seventh in the nation in terms of the number of faculty elected to all national academies.

Nature magazine’s Yearbook of Science and Technology 2001 chose MIT, UCSD, and Columbia University to exemplify the strength of U.S. research universities. The description cites UCSD as “one of the ten most powerful research universities in the United States.”

ScienceWatch 2000 ranks UCSD fifth in the world in terms of the most cited molecular biology and genetic research papers published in prestigious journals. UCSD pharmacology professor Michael Karin ranked first worldwide.

U.S. News and World Report rated UCSD seventh in excellence among all state-supported colleges and universities in the United States.

In a listing that placed greater weight on quality rather than cost, UCSD was ranked tenth “Best Buy” among 100 of the top public universities and colleges in the nation by Kiplinger’s Personal Finance.

U.S. News and World Report’s 2001 graduate education survey ranks the following UCSD programs among the nation’s top ten: theatre and dance (third); bioengineering (third); cellular and developmental biology (eighth); biochemistry (ninth); molecular biology (ninth); political science (tenth); and neurosciences (tenth).
### Regents and Officers

#### Regents Ex Officio
- Governor of California and President of the Board of Regents: **Gray Davis**
- Lieutenant Governor of California: **Cruz Bustamante**
- Speaker of the Assembly: **Robert M. Hertzberg**
- Superintendent of Public Instruction: **Delaine Eastin**
- President of the Alumni Associations of the University of California: **Jeffrey A. Seymour**
- Vice President of the Alumni Associations of the University of California: **Robert Morrison**
- President of the University of California: **Richard C. Atkinson**

#### Appointed Regents

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>William T. Bagley</td>
<td>2002</td>
</tr>
<tr>
<td>Ward Connerly</td>
<td>2005</td>
</tr>
<tr>
<td>John G. Davies</td>
<td>2004</td>
</tr>
<tr>
<td>Judith L. Hopkinson</td>
<td>2009</td>
</tr>
<tr>
<td>Odessa Johnson</td>
<td>2012</td>
</tr>
<tr>
<td>S. Sue Johnson, Chair</td>
<td>2002</td>
</tr>
<tr>
<td>Joanne C. Kozberg</td>
<td>2010</td>
</tr>
<tr>
<td>Sherry L. Lansing</td>
<td>2010</td>
</tr>
<tr>
<td>David S. Lee</td>
<td>2006</td>
</tr>
<tr>
<td>Monica Lozano</td>
<td>2013</td>
</tr>
<tr>
<td>George M. Marcus</td>
<td>2012</td>
</tr>
<tr>
<td>Velma Montoya</td>
<td>2005</td>
</tr>
<tr>
<td>John J. Moores, Vice Chair</td>
<td>2009</td>
</tr>
<tr>
<td>Gerald L. Parisky</td>
<td>2008</td>
</tr>
<tr>
<td>Norman J. Pattiz</td>
<td>2004</td>
</tr>
<tr>
<td>Peter Preuss</td>
<td>2008</td>
</tr>
<tr>
<td>Tom Sayles</td>
<td>2006</td>
</tr>
</tbody>
</table>

- Student Regent: **Tracy M. Davis** (2002)
- Faculty Representatives (nonvoting):
  - Michael Cowan
  - Chand Viswanathan

\(^1\) Year appointment ends in parentheses

#### Officers of the University

- **President**: **Richard C. Atkinson**
- **Senior Vice President for University and External Relations**: **Bruce B. Darling**
- **Provost and Senior Vice President for Academic Affairs**: **C. Judson King**
- **Senior Vice President for Business and Finance**: **Joseph P. Mullinix**
- **Vice President for Financial Management**: **Anne Broome**
- **Vice President for Health Affairs**: **Michael V. Drake**
- **Vice President for Agriculture and Natural Resources**: **W.R. "Reg" Gomes**
- **Interim Vice President for Educational Outreach**: **Manuel Gomez**
- **Vice President for Clinical Services Development**: **William H. Gurtner**
- **Vice President for Budget**: **Lawrence C. Hershman**
- **Vice President for Laboratory Management**: **John P. McTagus**

#### UCSD Academic and Administrative Officers

- **Chancellor**: **Robert C. Dynes**
- **Senior Vice Chancellor for Academic Affairs**: **Marsha Chandler**
- **Vice Chancellor for Research, and Dean of Graduate Studies**: **Richard Attiyeh**
- **Vice Chancellor for Health Sciences and Dean, School of Medicine**: **Edward W. Holmes, M.D.**
- **Vice Chancellor for Marine Sciences**: **Charles Kennel**
- **Vice Chancellor for External Relations**: **James Langley**
- **Vice Chancellor for Business Affairs**: **Steven W. Relyea**
- **Vice Chancellor for Student Affairs**: **Joseph W. Watson**
- **Vice Chancellor for Resource Management and Planning**: **John A. Woods**
- **Assistant Vice Chancellor for Business and Financial Services**: **Don Larson**

The 2001 Annual Financial Report was published by the University of California, San Diego Communications Office for Steven W. Relyea, Vice Chancellor for Business Affairs.

- **Associate Vice Chancellor for University Communications**: **Winifred Cox**
- **Director of Editorial Services**: **Denys Horgan**
- **Publications Coordinator**: **Yvonne Muzzy**
- **Creative Director**: **Michele Humphrey**
- **Art Direction**: **Brian Madlangbayan**
- **Editorial Assistance**: **Ned Fousek, Karen Lusby**
- **Printing**: **Neyenesch Printers**

**Contributors**
- Ann Briggs Addo: Denine Hagen
- Mario Aguilara: David Hart
- Paula Cichocka: Sarah Huyett
- Dolores Davies: Kim McDonald
- Leslie Franz: Sylvia Tiersten

www.ucop.edu/ucophome/pres
www.ucop.edu/regents