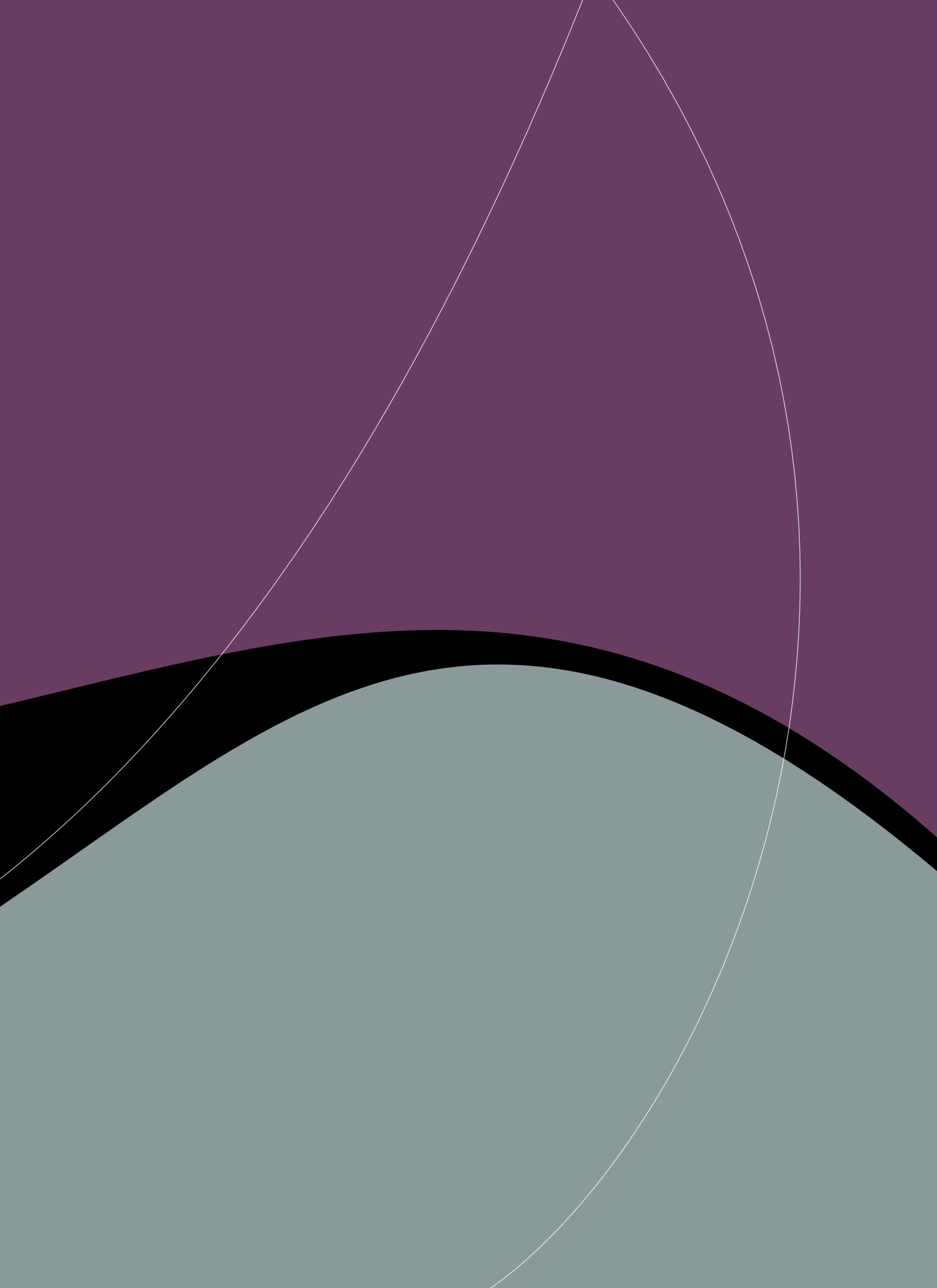


SDSU Research Foundation
Profile of Activities
1996-2011



**SAN DIEGO STATE
UNIVERSITY**
Research Foundation



SDSU Research Foundation

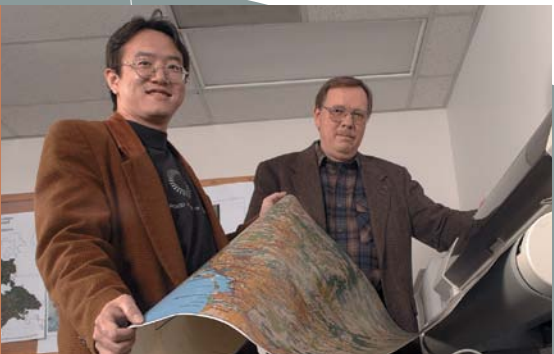
Profile of Activities

1996-2011



- 1996
- **Stephen L. Weber appointed 7th president of SDSU**
 - \$109M in revenue/\$74M in grants and contracts awarded
 - SDSU Carnegie Classification: “Doctoral II” institution

- 1998
- Technology Transfer Office established



- 1999
- First Hansen Institute for World Peace Award made to Senator George Mitchell for his work brokering the Northern Ireland peace accord
 - City Heights Educational Collaborative established
 - Former Lloyd's Furniture properties acquired in City Heights
 - California Salton Sea Research Consortium formed/President Weber testifies before congressional subcommittee
 - **Professors Helping Professors (PhP) program introduced**



- 2001
- U.S. Geological Survey signs cooperative research agreement with SDSU
 - Mission Valley Interwork Institute facility acquired
 - Sky Oaks Field Station – additional acreage acquired

- 2004
- Dede Alpert Center for Community Engagement dedicated



- 2006
- Grants and contracts awarded to SDSU faculty and staff exceed \$130M
 - **BioScience Center opens**
 - Coastal Waters Laboratory completed



- 2010
- Contracting & compliance department created
 - **6367 Alvarado Court acquired**
 - Grants and contracts awarded to SDSU faculty and staff exceed \$150M
 - American Recovery and Reinvestment Act boosts SDSU research

1996 1998 2000 2002 2004 2006 2008 2011



- 1997
- **President Weber attends inauguration of The Peres Center for Peace in Tel Aviv and is appointed to its board of governors**
 - Shimon Peres receives SDSU honorary degree
 - **Hansen Chair for Peace Studies created**
 - Additional Alvarado Medical Center building acquired (6386 Alvarado Court)



- 2000
- Revenues exceed \$150M
 - Grants and contracts awarded to SDSU faculty and staff exceed \$100M
 - “1000 in 2000” goal reached - 1000 proposals submitted!
 - Carnegie Foundation classifies SDSU as a “Doctoral/Research Intensive University”
 - The Campanile Foundation begins operation
 - Piedra del Sol, student apartment facility, wins Golden Nugget Merit Award for design excellence
 - **President Weber and USAID Administrator sign MOU to finalize “Desert Development Program” with Middle East partners**



- 2002
- Regional Network for Homeland Security established
 - **Fraternity Row completed**



- 2003
- 60th anniversary; **County of San Diego declares March 28th “SDSU Foundation Day”**
 - Shadow Bowl – SDSUF/SDSU and federal, local law enforcement collaborate to ensure security for the 2003 Super Bowl held in San Diego
 - Santa Margarita Ecological Reserve – additional acreage acquired

- 2005
- SDSU Foundation adds “Research” to its name
 - Revenues exceed \$160M

- 2007
- SDSU designated a “Research University with High Research Activity” by Carnegie Foundation
 - SDSU ranked #1 small research university in the nation*
 - Seawater system for Coastal Marine Institute completed

- 2008
- SDSU's first Student Research Symposium held
 - President Weber attends 10th anniversary of Peres Center & dedication of Peres Peace House in Israel



- 2009
- Immunologists join BioScience Center
 - Revenues exceed \$185M
 - **Student veterans group takes up residency at Fraternity Row**

- 2011
- President Weber retires

Message from the Executive Director

I am extremely pleased to present this brief profile of San Diego State University Research Foundation. While our auxiliary organization was established in 1943, this document focuses on the last 15 years of our history of serving San Diego State University. This has been a period of change, growth, problem resolution, listening to our constituencies and reacting in positive, constructive ways to meet the needs and challenges of a dynamic research program at a major university.

While reading the following pages, please keep in mind the responsibilities with which the research foundation has been charged. Our purpose is to further the vision and objectives of the university and to help faculty find, attract and administer research programs that will achieve this goal. Specific ways we support the university include:

- Identifying funding sources, offering grant-related workshops, and assisting with proposal development and submission
- Working closely with principal investigators in the management of awarded funds, complying with numerous federal, state and CSU rules and regulations
- Providing finance and accounting, financial systems, purchasing, human resources, payroll, computing services, and risk management support for research and project funds, scholarships, centers, institutes, KPBS, CES, and The Campanile Foundation
- Providing technology transfer services, protecting intellectual property, commercializing technology developed by the university, and assisting spin-out companies based on SDSU inventions
- Identifying, acquiring, and managing real property in support of sponsored programs not housed in university facilities.

Over the years, this work has been supported and facilitated by many good people:

SDSU researchers – they are teachers, scholars and experts in their fields. Their success in garnering funding for their work explains our success and is the primary reason we are able to contribute to the university's research infrastructure.

Sponsors – hundreds of sponsors support the many programs conducted by SDSU faculty and staff. Without sponsor resources, these programs and their significant contributions could not be realized. In addition to critical financial resources, our sponsors share a commitment and enthusiasm for the programs we all support.

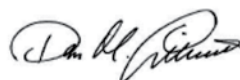
SDSU Research Foundation board of directors – active in its oversight and leadership of the research foundation, our board has worked diligently to support our mission of service and support to the university. They have encouraged the development of a dedicated and experi-

enced workforce. They have supported the acquisition and maintenance of valuable research facilities, the recruitment of research personnel and the support of research initiatives.

SDSU administrators – our work is a result of a strong and stable partnership between the university and research foundation. It is the vision and leadership provided by the president, provost, vice presidents, deans and chairs that allows us to better understand the needs of the university community, remain consistent to the mission of the research foundation, and ensure that the research foundation remains financially viable and operationally strong.

SDSU Research Foundation employees – a dedicated, talented group of people who share the values and goals of the university community. Many of our coworkers have been with the research foundation for many years, committing their careers to the betterment and support of San Diego State University.

The pages that follow describe the accomplishments, growth and the current stature of the research foundation. What is important in respect to the milestones you will read about in these pages is not the numbers – as impressive as they are. It is the scientific and service accomplishments behind the numbers. SDSU faculty and staff are improving the quality of life in our community, our nation and the world. SDSU Research Foundation is proud to assist them in their efforts.



Dan M. Gilbreath

June 30, 2010



San Diego State University has long sought to distinguish itself academically in terms of being a university where both teaching and research were highly valued and integral to the university's mission. Largely for this reason the research foundation was established in 1943. As is evident in terms of standards for promotion and tenure, the development of joint doctoral programs and research funding, research activity increased significantly over the past decades.

Under the leadership of President Weber, the research mission of San Diego State was unambiguously supported and became a point of great pride for the university. In 1997, President Weber established the first Vice President for Research position at SDSU. The number of doctoral programs grew from 10 to 18, and research funding from \$74 million to \$134 million. Applied research that directly benefited the region was a point of particular pride for President Weber. For example, the City Heights Educational Collaborative which he helped develop is a wonderful example of a privately and publicly supported partnership that has made a tremendous difference in our community. As president of the research foundation board, President Weber began personally to preside at all research foundation board meetings beginning in 2000.

As a result of these cumulative efforts, lead by President Weber, San Diego State began to garner national and international recognition for research. Many programs received national rankings, and for the last four years San Diego State University has been named the nation's Top Small Research University. The value of such research activity clearly redounds to the education of our students, as is evident in the annual Student Research Symposium, in which several hundred SDSU students present their research and scholarly work. And many point with pride that being classified by the Carnegie Foundation as a Doctoral/Research University with high research activity is evidence of the academic distinctiveness of San Diego State University.

Nancy Marlin, SDSU provost

It was clear from his first day that President Steve Weber understood the defining value of the university's research mission, and the invaluable role the SDSU Foundation played in advancing that mission. Overseeing a period of extraordinary growth in research funding, President Weber presided over dramatic changes in the foundation beginning with his decision to chair the meetings himself and culminating in a change in the name of the organization to SDSU Research Foundation. As a result of his leadership, the research foundation is unequivocally well known and well respected both locally and nationally.

Sally Roush, SDSU vice president for business and financial affairs

San Diego State University was in growth mode in the middle 1990's, recovering from the recession early in that decade, and resuming its hiring of research-oriented faculty. The research foundation both aided and benefitted from that process, providing research space and financial support for developing research programs, and being rewarded with increasing F&A income and the rising value of the properties it owned.

As these successes unfolded, the research foundation moved beyond the acquisition of real estate into its construction, building Piedra del Sol, Fraternity Row, and the Coastal Waters Lab, and coordinated with the university to build the BioScience Center.

Further advances were occasioned by a doubling of the budget of the National Institutes of Health (NIH) between 1998 to 2003. SDSU faculty continued their historical success rate of winning 0.1% of the NIH's resources, so this most important component of our research portfolio flourished, and with it, the total funds administered by the research foundation.

Reversals began with the California budget deficits of 2002-05. Faculty positions were lost, and with them, the number of proposals for extramural support. Those proposals were submitted into an increasingly harsh funding environment, as federal priorities shifted from support for research to homeland security and defense in the aftermath of 9/11 and the wars it engendered. The growth of the research foundation was curtailed.

The recovery in faculty hiring and the emphasis on original scholarship that SDSU reaffirmed in its 2007 self-study have permitted a renewed growth cycle in research and in the fortunes of the research foundation. Former records will be eclipsed in 2009-10, abetted by federal funds from the ARRA (stimulus package). Faculty have won awards that generate higher F&A rates, enhancing the research foundation's principal source of income. Properties have been liquidated, providing additional assets from which the research foundation derives revenue.

The recovery of research foundation resources coincides with yet another decline in state support for SDSU, one whose impact the research foundation has thus been in a position to mitigate. In the phase-shifted sine waves of success each

institution has experienced in the past decade, the research foundation is now helping SDSU faculty maintain their research momentum in the face of increased demands on fewer colleagues. It is a symbiotic relationship and yet another demonstration of how a well-developed program of research serves the multiple goals of the university.

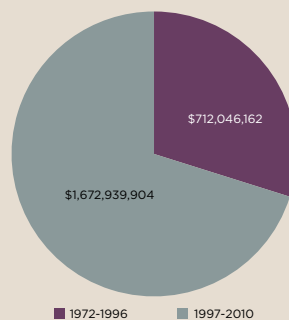
Thomas Scott, SDSU vice president for research

Impressive Growth During President Weber's Tenure

Since 1972, SDSU faculty and staff have garnered an impressive \$2.4 billion for their research programs. During the 25 years preceding President Weber's arrival at SDSU, faculty and staff received \$712 million in awards. Since his arrival in 1996, they have received \$1.7 billion.

Seventy percent of all award dollars received since 1972 were received during President Weber's tenure. SDSU faculty and staff were awarded \$960,894,000 more—nearly one billion more—during the last fifteen years than they received in the previous twenty five years.

Awards Received FY 1972 - FY 2010 \$2,384,986,066



When compared with the previous 25 years, the amount of research funding awarded to SDSU more than doubled during the Weber years.

"President Weber's tenure...clearly was one of the most expansive times for the foundation. I seriously doubt if the University could have maintained and nurtured its role as a research oriented CSU campus without the foundation and its hard working staff. I will say it was an exciting experience for me, as an officer of both institutions, to be part of the research growth of the university. And of course, the growth of the research oriented faculty is what made it all possible. Clearly President Weber believed strongly that it is possible to find faculty who excel at both teaching and research. They have made our reputation as a major university possible. The State of California and the San Diego region owe so much to the hard working efforts of the faculty, staff and administration of SDSU. I believe that the future of this fine institution, admired in all parts of the State, is secured by the past labors of all connected with the university.

James Cobble, former SDSU vice president for research

Assisting SDSU Faculty and Staff through Research Administration

The last fifteen years were marked by a tremendous increase in proposal and award activity despite the often unpredictable state and federal budget climates during those years. SDSU proposal submissions increased 68% and the number of awards received by SDSU faculty and staff rose 39%. Faculty and staff in all disciplines remained creative and focused and benefited from a research-driven philosophy. The research administration environment experienced many changes as well, making advances in technology, weathering administration and program/priority shifts, and responding to an increasingly stringent audit climate.

	# of Proposals	# of Awards	Amount of Awards
1996	737	594	\$73,660,169
2009	1239	823	\$133,794,378
Increase	68%	39%	81%

Cards to Computers/Paper to Online Systems

From modest attempts to track SDSU faculty research interests (handwritten on index cards!) the research foundation developed an electronic system of disseminating timely and relevant grant information to SDSU faculty and staff. Technology allowed us to turn our grants library into a conference room and to fully automate grant and sponsor searches. During the last ten years, more than 30,000 grant opportunity notices have been disseminated and over 200 grant-related workshops

“As a principal investigator since 1990, I have worked closely with the foundation as they supported my research projects. In the past decade, as the size of my research projects has grown, I have noted that the foundation, too, has grown to meet the needs of SDSU projects. I appreciate that the foundation has consistently provided the necessary support to meet my diverse project needs, thereby enabling me to successfully carry out my program of research.”

Randy Philipp, SDSU professor, School of Teacher Education & Center for Research in Mathematics and Science Education (CRMSE)

were hosted for more than 2,000 faculty and staff participants. Emphasis was placed on working with new faculty to develop their research

“San Diego State University Research Foundation has undergone a transformational change since President Weber took the helm of the university especially in the last four years. This has included a change in name to underscore our research function and a much higher standard of oversight in the management of our budgets. There has also been a record increase in the number of grants funded and the scope of those grants that represent every aspect of the minds that move the world.”

Cynthia Park, SDSU professor of teacher education

efforts. Over the last decade, approximately 600 new faculty joined SDSU; they have been awarded \$268 million to support their research.

Research foundation staff have worked closely with university staff during the last decade to streamline research administration procedures. These efforts include utilizing the research foundation website to complete forms; streamlining communications through the continued use of email and other electronic means; and providing proposal and award activity information via PI Profile. This real-time web-based interface with our accounting systems allows principal investigators to access their financial information and deans to review activity reports from any desktop with internet access. The focus on a paperless environment included transitioning to electronic grant files with the implementation of the Noliweb electronic imaging and workflow software.

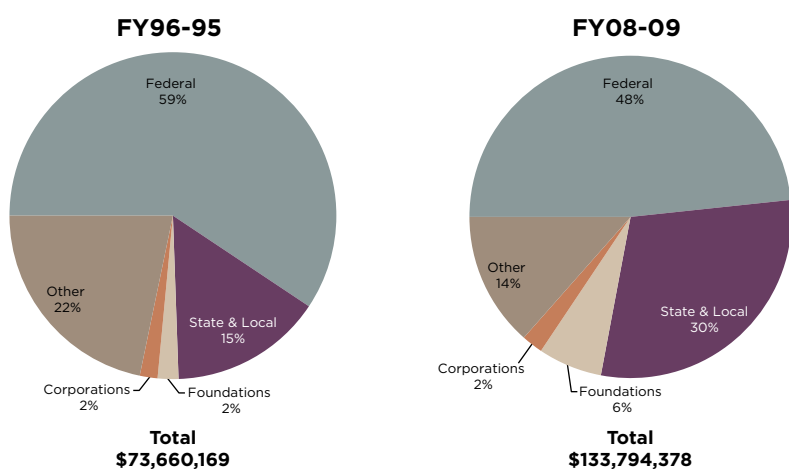
Electronic Proposal Submissions

Gone are the days of making 20 copies of a proposal and rushing it to the post office by the sponsor's deadline date. All proposals to federal agencies were required to be submitted electronically in 2007. SDSU Research Foundation has worked with Grants.gov, the federal portal that allows grantees to search for funding information, download application packages, and submit proposals electronically, and with InfoEd to ensure a smooth transition to electronic research administration. The following agencies have transitioned to electronic means of submission: National Science Foundation, U.S. Departments of Education, Defense, Commerce, and Justice, California Tobacco Related Disease Research Program, American Heart Association – and the list continues to grow.

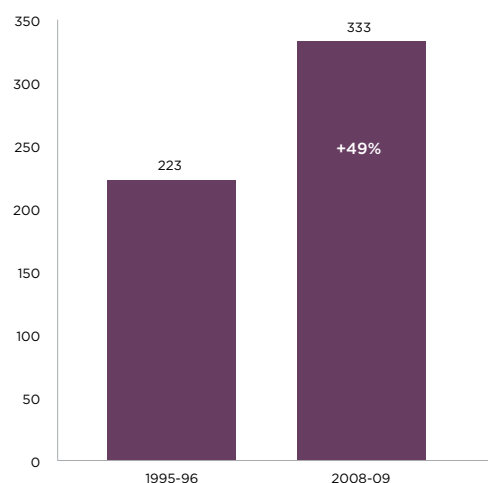
Professors Helping Professors (PhP) Program

This mentoring program encourages younger faculty to submit proposals by pairing experienced senior researchers with junior faculty to

Awards by Sponsor Type



Number of Sponsors



Assisting SDSU Faculty and Staff through Research Administration

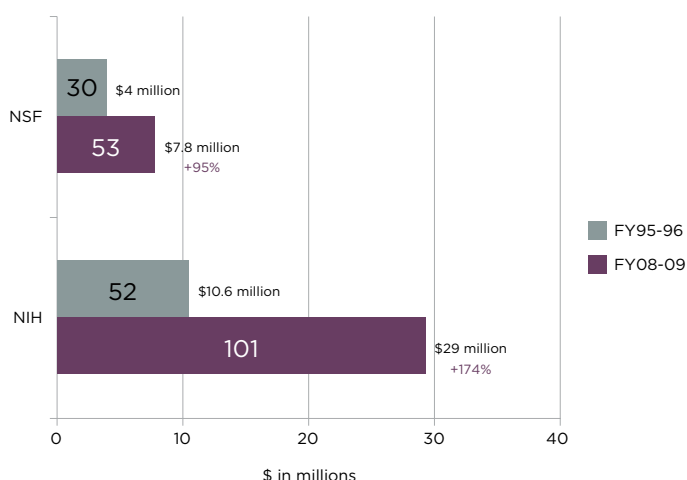
develop grant proposals. Since its inception in 1999, over 40 pairs of faculty have participated in the program. The junior faculty who participated in PhP have been involved in over 400 proposals. Faculty from the colleges of Sciences, Engineering, Education, and Arts and Letters have benefitted from this program.

Diverse Sponsors Invest in SDSU Research

During a period when federal and state sponsors took big hits, SDSU garnered support from a wide spectrum of organizations.

The National Institutes of Health are the single largest source of federal funds for university research. SDSU has been the recipient of more funding from NIH and its parent agency, the Department of Health and Human Services, than six U.S. states! SDSU has also benefited from the National Science Foundation's recent growth. Grants from these two critical federal agencies have increased dramatically in the last fifteen years.

NIH & NSF Awards



New Contracting and Compliance Department Handles Critical Negotiations and Compliance Tracking

Over the years, contracting and compliance issues have become a larger and more challenging part of SDSU Research Foundation business. As an example of this growth, in 1999 SDSU Research Foundation subcon-

tracted out more than \$6 million in federal funds to other institutions collaborating with SDSU. In 2009, this number nearly doubled to \$11.6 million. The new contracting and compliance department (Sponsored Research Contracting and Compliance – SRCC) was created to ensure timely and effective contract negotiations when working with government agencies, other universities, nonprofit organizations, and private industry. SRCC works closely with SDSU's division of research affairs and the other departments in the sponsored research services division to ensure that we adhere to sponsor, university, and SDSU Research Foundation policies, particularly in compliance areas such as human and animal subjects, conflict of interest, cost sharing, responsible conduct of research, environmental health and safety, and export controls. The department is implementing improvements to the subcontracting process to increase the timeliness of negotiating and issuing sub-agreements to other institutions whose faculty are collaborating with SDSU faculty on research and other initiatives.

ARRA – SDSU Responds to Federal Stimulus Initiative

The American Recovery and Reinvestment Act of 2009 (ARRA) authorized an injection of \$787 billion into the American economy. While most of this has been in the form of tax relief, entitlements and rebuilding American's infrastructure through job creation, \$21.5 billion has been distributed through federal agencies to support research. SDSU faculty and staff responded to these opportunities by submitting 173 ARRA proposals. Fifty-two principal investigators successfully competed for this funding bringing in more than \$20 million to support programs that meet national needs. SDSU researchers were the recipients of four prestigious NIH Challenge Grants, a Grand Opportunities award, and an equipment grant – all especially competitive components of the ARRA program.

The Act imposes strict reporting requirements detailing how ARRA funds are spent including precise data indicating the number of jobs created and retained. Each SDSU ARRA-funded program has or will add or retain students, researchers and/or other staff. More than two hundred employees have already been hired with SDSU's ARRA funding.



"I have been working continuously as an investigator with the SDSU Research Foundation since 1989, both in my capacity as a faculty member at SDSU and also as the Director of the Child and Adolescent Services Research Center (CASRC) a consortium of over 100 investigators and staff from SDSU, UCSD, USD and Rady Children's Hospital. From the beginning, the SDSU Research Foundation has given extraordinary support to my research program and the consortium. This support has substantially increased in both quantity and quality since President Weber began his leadership of SDSU in 1996. In over 25 years as a research investigator with two-thirds of my extramural support coming from the NIH, first at UCLA and then at SDSU, I have found the entrepreneurial vision and execution of contract and grant support from the SDSU Research Foundation to be without peer across the many institutions linked to my research program and my work with the CASRC consortium."

John Landsverk, SDSU professor emeritus, School of Social Work

Advancing the Research Agenda

The research foundation works with SDSU researchers and administrators, sponsors, and the community to develop innovative programs and partnerships that further the educational and research mission of SDSU.

Community Outreach and Innovative Programs

During the last fifteen years, SDSU and the research foundation initiated several innovative multi-disciplinary programs to address local, national, and international research and education priorities. These initiatives promoted the collaborative engagement of SDSU faculty, staff, students, and many com-

“During President Weber’s tenure, the Research Foundation and the biology faculty embarked upon a shared vision to create additional research space. Towards that goal, the BioScience Center was built, with the mission of addressing the microbial basis of cardiovascular disease. The BSC has grown to house ten faculty investigators and more than thirty students, postdoctoral fellows, and staff, with \$2.3M in annual NIH funding. The generosity of Darlene Shiley enabled the build-out of the third floor in 2009 as the Donald P. Shiley Cardiovascular Research Center. To meet the entrepreneurial needs of the faculty and the San Diego community, plans are underway to develop the second floor of the BSC as a bio-incubator.”

Roberta Gottlieb, SDSU professor of biology and BioScience Center director

munity partners. Collectively, they contributed significantly to SDSU’s reputation for academic excellence, research activity, and community service. The following are a few of the more significant programs and initiatives undertaken during this time:

Coastal Waters Laboratory: The research foundation joined forces with the City of San Diego Wastewater Department to secure an eight acre site located on San Diego Bay at the former Naval Training Center for Marine Research Laboratories. The site is now home to the 40,000 square-foot Coastal Waters Laboratory which houses over 100 researchers from SDSU and the U.S. Geological Survey under a cooperative scientific agreement. Last year, a partnership between SDSU, UCSD’s Scripps Institution of Oceanography, Hubbs-SeaWorld Research Institute and the Unified Port District of San Diego resulted in the creation of the Center for Bay and Coastal Dynamics, also housed at the Coastal Waters Laboratory.

“We have some of the best minds in biology and geophysics working to help us better understand how our bay, the watershed and the coastal waters all connect. I have a vision that through the Center for Bay and Coastal Dynamics, San Diego Bay will be transformed into a national science laboratory where we and others can be conducting cutting-edge research.”

Scott Peters, port commissioner

This center addresses fundamental scientific research questions needed to sustain a healthy San Diego Bay.

BioScience Center: Research foundation staff worked with SDSU faculty and senior administrators to develop a novel approach to finance and construct a 30,000 square-foot research facility dedicated to understanding and preventing cardiovascular and other diseases. To assist the university with the cost of the



BioScience Center, the research foundation has provided an annual lease payment of \$510,000, which allowed the construction of the building shell and build out of one floor of laboratory space and a seminar facility. With this state-of-the-art research facility, SDSU was able to attract Dr. Roberta Gottlieb, international heart research expert, to be the first director of the Center. Under her leadership, Donald and Darlene Shiley donated funds to build out an additional floor of laboratory space which now houses five new researchers specializing in immunology and aging. BioScience Center researchers and their colleagues are conducting over \$9 million of research and providing exceptional opportunities for SDSU graduate and undergraduate students to experience cutting edge research.

International Peace Programs: The activities of the Hansen Institute for Peace accelerated with the arrival of President Weber in 1996. A cooperative program among SDSU, Ben Gurion University of the Negev, and the Palestinian Authority was initiated and focused on improving the quality of life for Palestinians by improving water quality and agricultural products from the region. A signing ceremony with the Administrator of the U. S. Agency for International Development, President Weber, and Congressman Ron Packard in 2000 initiated the Middle East and Desert Development Program. This program resulted from the continuing cooperation between President Weber and former Israeli Prime Minister Shimon Perez who spoke at President Weber’s inauguration. President Weber continues to serve on the Peres Center for Peace Governing Board. With the continued support of the



university and a gift from the Hansen Estate, the Hansen Chair for Peace Studies was created and the first World Peace Week was held at SDSU during which former Senator George Mitchell was presented with the Hansen Peace Prize for his efforts in brokering the Northern Ireland Peace accord. President Weber and Professor Sandy Ehrlich, director of SDSU’s Entrepreneurial Management Center, initiated the Entrepreneurs for Peace program among Palestinians, Israelis, and U.S. entrepreneurs dedicated to furthering cooperative programs in the Middle East.

California Salton Sea University Research Consortium: In recognition of the importance of a healthy Salton Sea to the citizens of California, President Weber led the establishment of the Salton Sea University Research Consortium. Three universities - SDSU representing the CSU system; University of California – Riverside representing the UC system; and the University of Redlands joined together to provide expert scientific advice on the Salton Sea. In 1999, President Weber testified before Congress on the emerging Salton Sea Restoration Act which established the Salton Sea Science Committee. The efforts of SDSU scientists to characterize the sea provided the underpinnings for the sea’s restoration plans.

“Throughout the impressive growth of SDSU research during his presidency, Steve Weber was personally involved. He was always available to help present new projects to potential funders, whether he was needed locally for an inner city community project, in Washington to drum up support for a retraining program for displaced defense workers, or abroad to develop partnerships for peace projects.”

Frea Sladek, chief executive officer, SDSU Research Foundation (2000 -2006)

Homeland Security: In response to the 9/11 tragedy, SDSU took the lead in establishing the Regional Network for Homeland Security and initiated several novel research and education programs to address the emerging concern about terrorism. One of the more prominent and highly successful initiatives was the establishment of the SDSU Visualization Center, which has since 2002 processed and distributed critical information about major disasters including California wildfires, tsunami in Banda Aceh, Hurricane Katrina, Haiti earth-

"In the past five years, the Institute for Behavioral and Community Health (IBACH), first established in 1983, has nearly tripled in size due to an acceleration in NIH, CDC and foundation funding. Central to this growth was President Weber's and the research foundation board's decision to invest in the "Pilot Health Project," which allowed us to hire a promising young Latino researcher. She has since contributed to the breadth and size of our grant portfolio, helping make IBACH one of the nation's leaders in Latino health research. Even more fundamentally, this decision reflects President Weber's broader efforts to recruit faculty and students who are representative of San Diego's ethnic diversity."

John Elder, distinguished professor, Graduate School of Public Health

quake, etc. The time-critical information has helped numerous U.S. and international agencies respond more effectively to these disasters. The Center served as host to the Shadow Bowl, a collaborative effort of SDSU, federal, state and local law enforcement to demonstrate security technologies for the 2003 Super Bowl held in San Diego. Continued efforts have led to many offshoots including technology demonstrations in myriad exercises, scaling from small, localized security support to national events. As a result, SDSU has earned a key role in regional homeland security efforts to include formation of the Regional Technology Center, the Regional Technology Partnership, and the Regional Technology Clearinghouse. On a national level, SDSU is a lead partner in the Homeland Security Science and Technology Testbed, and coordinator for the Office of Secretary of Defense 1401 program, aimed at the transition of DOD-developed technologies to the first responder community. SDSU established one of the nation's first Homeland Security master's degree programs with more than 100 students participating to date.

Technology Transfer: With the rapid growth in SDSU research activities, a technology transfer program was established in 1998 in recognition of the importance of protecting and commercializing the intellectual property of SDSU faculty and staff. Since its inception, the office has facilitated the transition of technologies which help university students cope with alcohol and binge drinking; biological inventions which may lead to new antibiotics; software packages to increase the physical activity of school age children; and non-invasive software-based treatment programs for Post Traumatic Stress Disorder. SDSU currently has over 100 patentable inventions and copyrightable programs with several new IP disclosures provided monthly. Royalties have already reached the \$500,000 mark annually.

Center for Commercialization of Advanced Technology: To enhance the national security of the United States through the commercialization of advanced technology from university, government and industry laboratories, the research foundation spearheaded efforts with members of Congress to establish the Center for the Commercialization of Advanced Technologies (CCAT). This consortium of SDSU (College of Business Administration, Entrepreneurial Management Center, and SDSU Research Foundation), small business technology company Orincon, UCSD's Jacob School of

Engineering, CSU – San Bernardino, and the Space and Naval Warfare System Center – San Diego joined forces in 2000. To date, CCAT has facilitated the advancement of 179 technologies and helped more than 60 companies secure \$200 million in research and investment funding. The result has been the generation of new technologies that meet critical national defense and homeland security needs as well as the creation of hundreds of new jobs and the formation of new companies.

Critical Languages: Following the events of September 11, 2001 and the rise of extremists groups, SDSU recognized that the U.S. military and others must place a greater emphasis on improving language proficiency and regional cultural awareness of Iraq and Afghanistan. Working with members of Congress, SDSU established the Critical Language Training Program which to date has provided intensive language training in Iraqi Arabic dialect and Pashto (one of the major languages of Afghanistan) to over 2,000 Reserve Officer Training Candidates (ROTC) students, U.S. Marine Corps personnel and Navy SEALs. The programs offered through SDSU's Language Acquisition Resource Center under the leadership of Dr. Mary Ann Lyman-Hager show that using non-government academic resources is a highly successful approach to meeting the critical language needs of the Department of Defense and the nation. The program has been continuously praised as the best in the nation by the Marine Corps.

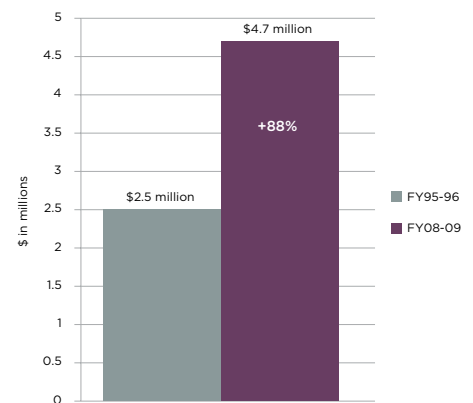
Enhancing Research

In addition to ongoing services provided to SDSU researchers, the research foundation provides other types of support to enhance SDSU research, including:

Research Support Funds are provided to support existing and develop new sponsored projects. This includes seed money for new projects, start-up funds for new researchers, matching funds for equipment, "proof of concept" studies, gap funding and financial support for joint doctoral programs and the university grants program.

BioPod: To maximize the scientific productivity of a group of highly successful NIH-supported researchers, the research foundation collaborated with the researchers and the College of Sciences to establish the Biological Sciences Administrative Support Group (BioPod) which provides specialized administrative

Direct University Allocations & Support



support. The BioPod staff, housed in the BioScience Center, supports more than 11 principal investigators with funding of \$9 million.

Pilot Health Project: The Pilot Health Project focused on recruiting new researchers in the area of health prevention. Through this investment, highly productive public health researchers Dr. John Elder and Dr. Melbourne Hovell have expanded their research programs which improve the health of minority communities in San Diego and the nation. Researchers in these centers have received more than \$24 million in grant awards during the past five years.

Biology Recruitment: In collaboration with SDSU's provost and College of Sciences, the research foundation has provided resources to attract nationally recognized faculty to the department of biology. These researchers are internationally recognized leaders in understanding heart disease, bacteria caused diseases and the ecology of coral reefs and the San Diego Bay.

Washington Representation: To help federal government decision makers find solutions to pressing national needs, SDSU Research Foundation works with a Washington-based firm to raise awareness of the unique capabilities of San Diego State University. The firm has helped secure special congressional appropriations for many of the programs described above, especially those related to national security. Since 1996, SDSU has received approximately \$80 million of congressionally appropriated funds to support high priority research, education, and national security programs.

"The major positive change for me and my group has been the institution of the BioPod, a set of administrators who track and aid with financial transactions, grant submissions, personnel matters, etc. Institution of this group, made possible through cost sharing (including high volume cost sharing), has immensely reduced the administrative burden of grants and personnel management."

Sandy Bernstein, SDSU professor of biology

Providing Space for SDSU Researchers and Students

Since the late 1970's, in an effort to supplement university space, the research foundation has acquired and managed real property to house SDSU's expanding research programs. Today, SDSU Research Foundation houses approximately two-thirds of the sponsored research activities conducted by university faculty and staff.

By 1996, the research foundation had a substantial portfolio of 450,000 square feet in 25 parcels with a market value of \$50 million. Since then research and university needs have seen tremendous growth, resulting in an expanded portfolio which now consists of nearly one million square feet of research and commercial space in 62 parcels valued at \$125 million.

The research foundation seeks to maximize efficiencies of its property by meeting the space needs of researchers first and leasing the balance to commercial tenants. Commercial rents have been instrumental in helping to cover operating costs while available space has facilitated the growth of SDSU's research programs. The research foundation works closely with SDSU colleges and their researchers to create unique environments in research foundation-owned properties and when needed leases off-site commercial space for projects with special location requirements.

Based at Alvarado Medical Center, Dr. Karen Emmorey directs **SDSU's Laboratory for Language & Cognitive Neuroscience**. This lab was occupied in 2006 within 4,495 square feet of space at 6495 Alvarado Road. Her research focuses on what sign languages reveal about the nature of human language, cognition, and the brain.

In 2001 **SDSU's Interwork Institute** was relocated to its current location – a 15,872 square foot building located at 3590 Camino del Rio North in the heart of San Diego's Mission Valley. The Interwork Institute's core mission is to enable individuals, organizations and communities to support, appreciate and engage diverse members in community integration through education, research, and advocacy. Prior to 2001 the Institute was housed in a modified apartment building on Hardy Avenue adjacent to Aztec Walk. Research foundation staff worked with SDSU and the San Diego Metropolitan Transit Development Board (MTDB) to craft a unique arrangement which allowed MTDB to use the modified apartment complex and associated parking facilities as a base for their trolley construction, and SDSU Research Foundation to purchase the Mission Valley building.

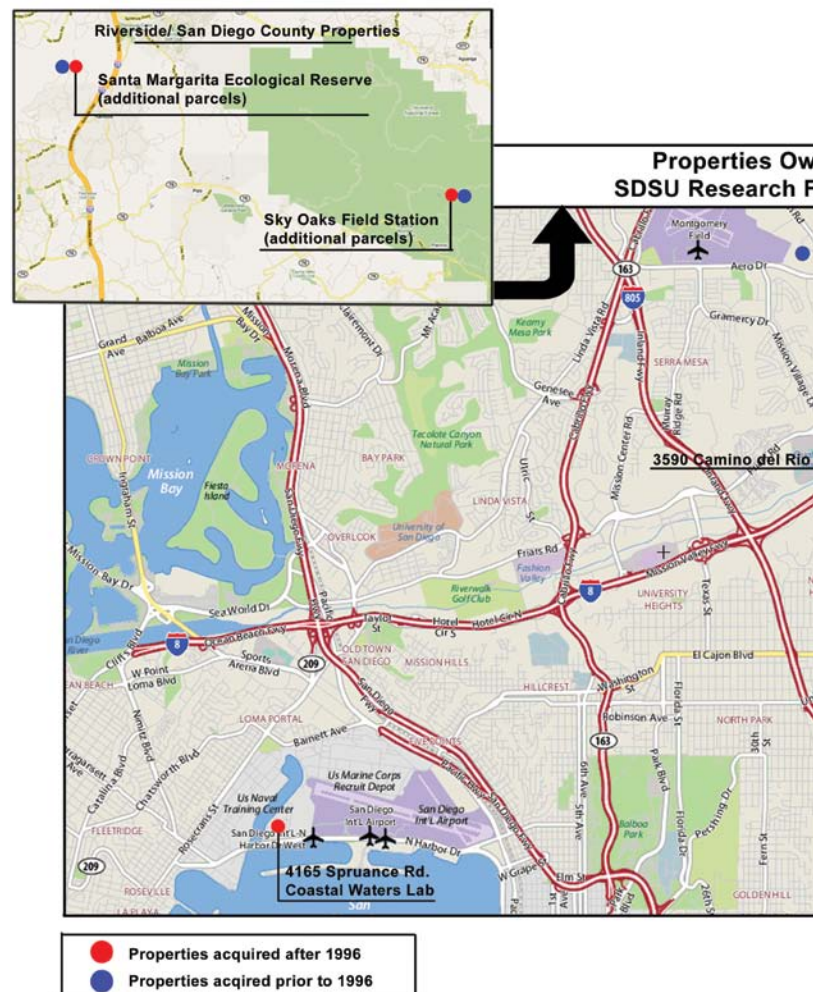
City Heights

In 1999 SDSU Research Foundation purchased 75,000 square feet in two buildings located in mid-city San Diego at 4275 and 4283 El Cajon Blvd. In 2005 the research foundation added two adjacent lots and built a 25,300 square foot parking structure to support the properties. Today this former furniture store at City Heights is totally remodeled and occupied by a mixture of university faculty, SDSU researchers and non-profit centers and is a mecca of service providers for mid-city schools

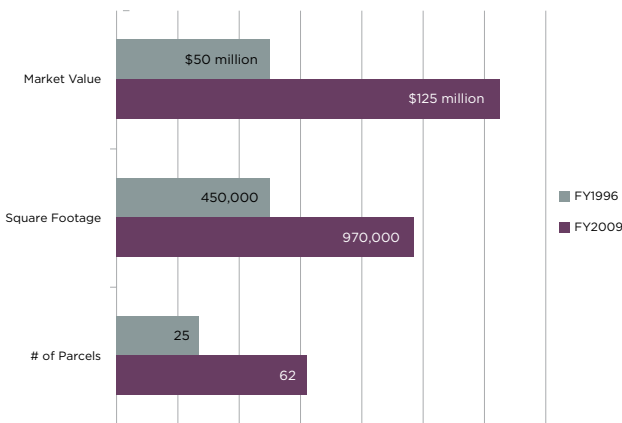


and residents. Tenants include the City Heights Educational Collaborative, a partnership between SDSU, Price Charities, San Diego Unified School District and the San Diego Teacher's Union; SDSU Educational Group; Resource and Literacy Center; SAY San Diego - a social advocacy organization for youth; Sharp Healthcare; and San Diego Futures Foundation which provides opportunities to use technology as a tool to develop job and life skills and has donated more than 20,000 computers and 18,000 hours of technical support to San Diego nonprofits, community-based organizations, schools and families. The Dede Alpert Center for Community Engagement was dedicated in 2004 in honor of Senator Alpert for her support of the project.

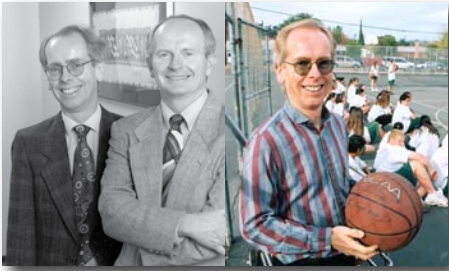
When a research grant is awarded and research foundation-owned space is unavailable, leased space is identified and rent negotiated by the research foundation. For example, SDSU's Dr. Greg Talavera, a



Real Property



Providing Space for SDSU Researchers and Students

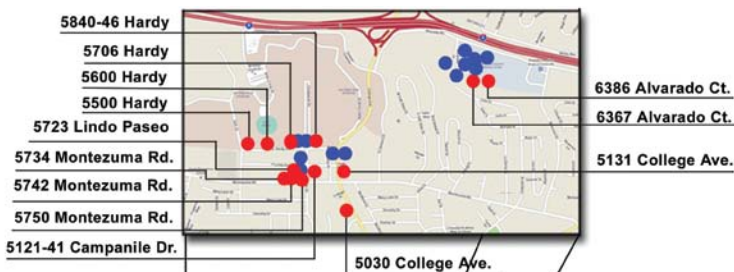


bilingual, bicultural physician trained in public health, directs the **Hispanic Community Health Study/ Study of Latinos** in two locations within 11,000 square feet of space. His research facilities are located within foundation-owned property at Sky

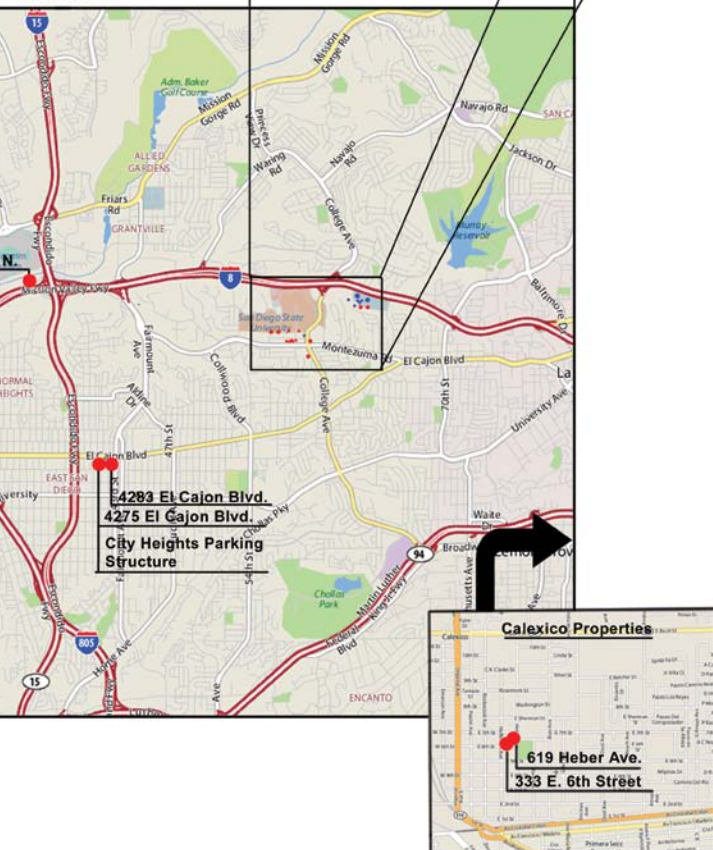
Park Court in Kearny Mesa and at his clinic in Chula Vista.

SDSU psychologist James Sallis' research promotes the value of physical activity for children, adults, and communities. His **"Walk San Diego"** program is dedicated to enhancing the livability of communities through promotion, education, and advocacy, by making walking a safe and viable choice for all people. His research program relocated from Alvarado Medical Center to office space in the very walkable community of Hillcrest in 2003.

Coastal Waters Laboratory



Owned By
Foundation



In addition to owning, managing and leasing properties on behalf of SDSU, the research foundation has played an important role in advancing SDSU's research mission by developing major state-of-the-art facilities, including the Coastal Waters Laboratory.

This \$11 million facility, located on land previously occupied by the Naval Training Center includes 10,500 square feet of indoor and 12,000 square feet of outdoor space utilized by SDSU's marine ecology faculty. Another 29,500 square feet houses 100 U.S. Geological Survey employees. 2007 saw the completion of a powerful flow-through seawater system, making the facility fully functional and allowing researchers to conduct their work at full potential.



Fraternity Row

Opened in 2002, Fraternity Row was planned as a Greek housing prototype. The project's unique design consists of eight, two-story fraternity chapter houses surrounding a four-story 62-unit apartment complex that houses 264 students. Housing challenges and student needs have changed over time. Fraternity Row still serves SDSU's Greek population, but has expanded to include new chapters and university student group affiliates. In 2009, the Student Veteran Organization leased a chapter house and apartment units, making this project the first in the nation to provide a dedicated center for student veterans.



Piedra del Sol

Designed and constructed by the research foundation, Piedra del Sol opened in 1999. This Gold Nugget Award-winning student housing complex of 66 units is owned by the research foundation and managed by SDSU. Located one step from campus along Hardy Avenue, Piedra del Sol has remained a popular choice for students.

Facilities Today and Tomorrow

The issues that face our facilities department today very often reflect what's happening in the larger world. Increasing focus is placed on energy conservation, environmental concerns (including regulatory requirements), security and changing technology. While energy and natural resource conservation issues have dominated headlines for the past few years, facility security is at the top of our current list of concerns. And beyond the brick and mortar, security issues include infrastructure systems, communication networks and equipment. Accommodating research data needs are also a priority – and these needs change at a fast pace. Even the furnishings we supply to researchers are more regulated for ergonomics and the physically challenged. Our challenge is to stay abreast of the issues and to balance our resources with needs.

"During my undergraduate work at SDSU in the late nineties, I was a student assistant with the research foundation and aware of the projects in which SDSU faculty and staff were involved. Coming back to the university as a full-time professional, the scope and volume of the projects have grown tremendously as has the reputation of the university as a research-intensive institution, while still maintaining its commitment to education. I am proud to be a part of this community."

Julie Seal, SDSURF grant information coordinator

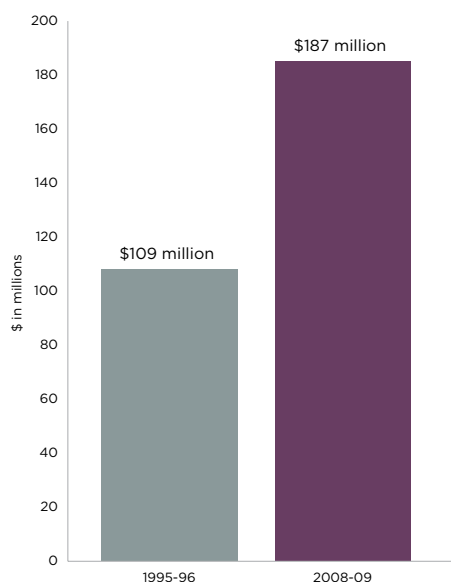
The Financial Picture

As one reads business journals, newspapers, and news magazines, it is clear that business organizations today are judged not only by what they do, or how well they do it, but by their financial strength. Over the last fifteen years, the research foundation has experienced financial challenges, financial successes, extraordinary growth, and a rebuilding of its mission. Several defining events during this period helped shape our profile.

Research Growth

Grants and contracts have grown significantly, from \$74 million in 1996 to \$150 million in 2010. Self support program fees have almost doubled. Total revenues of the research foundation

Total Revenue



have grown from \$109 million to \$187 million. The university recruited research-oriented faculty and administrators, initiated a student research symposium, and the number of doctoral programs grew from 10 to 18. SDSU Foundation added "Research" to its name to better reflect its mission of supporting the university research program. Working with university officials and faculty scientists, the research foundation built the BioScience Center and the Coastal Waters Laboratory – both facilities have retained faculty research "stars" and attracted new faculty scientists to SDSU, contributing to the university's research

reputation and attracting additional external funding.

The research foundation's major source of unrestricted revenue is Facilities & Administrative (F&A) cost recovery from grants and contracts. The rate of F&A recovery has remained steady for most of the last decade, but has shown an increase in the last two years. While most of the F&A is used to cover the administrative and facilities costs of the projects, during the current and a previous state financial crisis which resulted in reduced funding for various operations, the research foundation has been able to increase its support by sharing in additional university costs, moderating university leases of space, and providing staffing and other resources to allow critical student and research services to continue.

Investment in Research Space

Research growth has been supported in great degree by the research foundation's ability to provide the space needed for university research. For the past 40 years, the research foundation has been acquiring, renovating, constructing and managing real prop-

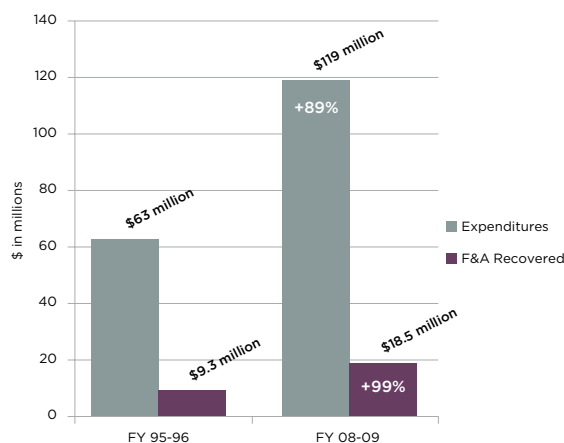


"Over the past 14 years the SDSU Research Foundation has grown tremendously because of its stellar leadership, which provided the support researchers needed to succeed. I have enjoyed working with the people at the foundation, and I appreciate all their work."

Terry Cronan, SDSU professor of psychology

"The research environment at SDSU has improved as a result of new research-active faculty colleagues, an expansion of the Cell & Molecular Biology PhD program and the construction of the BioSciences Center. Positive interactions with colleagues and students have remained a hallmark of creating an excellent atmosphere for research and funding success."

Grants & Contracts Expenditures & F&A Recovered



erty adjacent to the southern and eastern boundaries of the university to house SDSU's expanding research programs. Initially, property was purchased to satisfy university and research foundation space needs. Over the years, additional objectives of the property acquisition program became important: to manage the development of the land area adjacent to the university and to incorporate real property equity into the research foundation's unrestricted investment portfolio. See page 8 for further discussion of facilities and property.

Looking Ahead

We are proud of the accomplishments of our researchers and the services provided to the university. We also take pride in the sound financial leadership provided by our board of directors, the vice president for business affairs, and our management team. It's critical that we continue to provide uncompromising financial stability that is accepted, understood, and validated by audit scrutiny and supported by accurate and open budgetary and financial statement preparation and dissemination.

The research foundation remains fiscally strong. The FY 2010-11 budget recently approved by the board of directors reflects continued overall financial strength of the research foundation. SDSU faculty continue to be successful grant-seekers in all disciplines. The years ahead will find us continuing our support to SDSU and looking for new ways to enhance its research reputation.

Sandy Bernstein, SDSU professor of biology

SDSU Research Foundation Board of Directors

As a nonprofit corporation, SDSU Research Foundation is governed by a board of directors in accordance with its articles of incorporation and bylaws. The principal function of the board is to establish policies and guide the corporation in achieving research program objectives. As president of the board, Dr. Weber is charged with ensuring that the corporation's activities and functions are in conformity with the policies of The California State University Board of Trustees and San Diego State University. He also reviews and approves the corporation's annual operating budget. The research foundation executive director and four associate executive directors manage the organization and carry out all board policies and procedures, working closely with SDSU's vice president for business and financial affairs and vice president for research.

Board composition:

- Six ex-officio directors: The President; the Provost, the Vice President for Research; the Vice President for Business and Financial Affairs, the Vice President for Student Affairs, and the President of Associated Students of San Diego State University.
- Up to eleven directors elected by the board of directors: four SDSU faculty members recommended by the University Senate, nominated by the president, and elected for four-year terms;

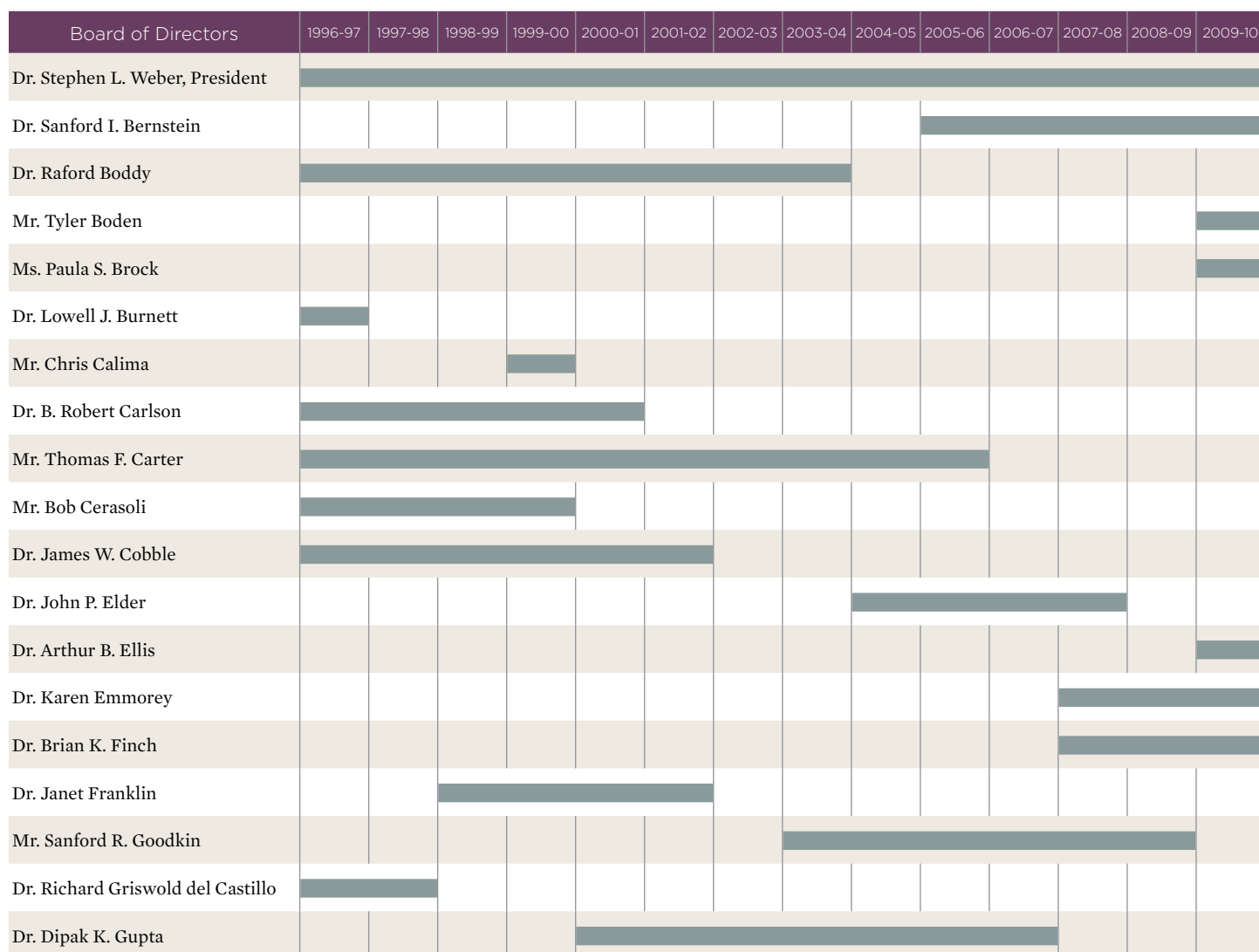
and up to seven individuals, at least five of whom are "public" members from the community, nominated by the president and elected for three-year terms.

The current board is composed of 16 members: six ex-officio, six faculty, and four community directors.

Research foundation bylaws also delineate that the president of the university shall serve as the president of the corporation; that SDSU's vice president for research shall serve as vice president of the corporation; that SDSU's vice president for business and financial affairs shall serve as treasurer of the corporation; and that the executive director, who serves at the pleasure of the president of the corporation and the board of directors, shall serve as associate secretary and associate treasurer of the corporation.

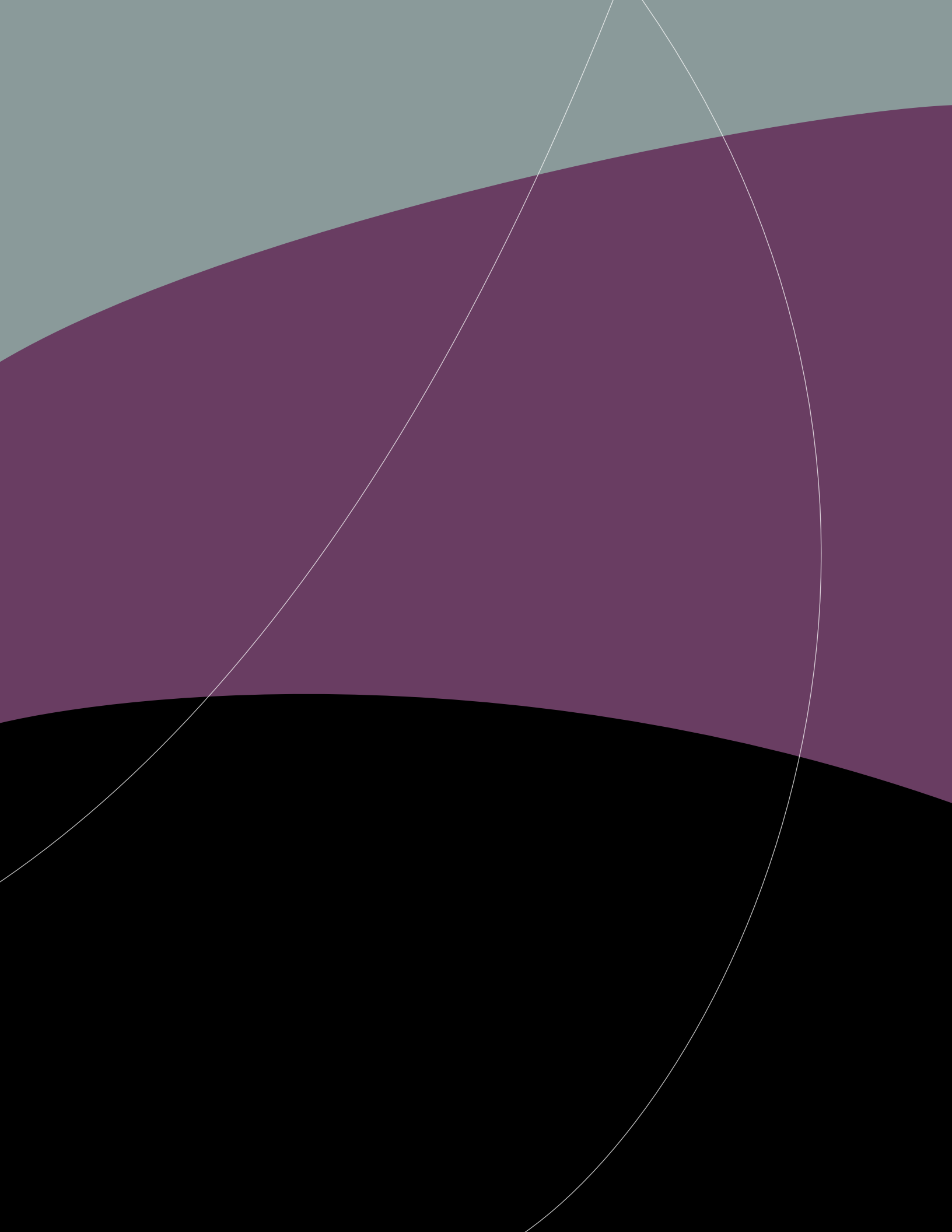
The research foundation has benefited greatly over the years by having board members who have made significant contributions to its goals and objectives. Faculty and community member participation has provided strong leadership during years of growth, both in stature and resources.

The following chart provides a glimpse of the many respected individuals who have served on our board over the last 15 years.



SDSU Research Foundation Board of Directors

Board of Directors	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Dr. Michael Hergert														
Dr. Ronald H. Hopkins														
Ms. Kelli Kedis														
Mr. Matthew P. Keipper														
Ms. Debra K. Kelley														
Dr. James R. Kitchen														
Mr. Gene Lamke														
Dr. Mary Ann Lyman-Hager														
Mr. Chris Manigault														
Dr. Nancy A. Marlin														
Mr. Guillermo Mayer														
Dr. Gail K. Naughton														
Dr. Marilyn Newhoff														
Dr. Daniel B. Nowak														
Ms Priscilla Ocen														
Dr. Mauro Pierucci														
Mr. James Poet														
Mr. Carlos Razo														
Mr. Jason Rollingson														
Ms. Sally F. Roush														
Ms. Juanita Salas														
Ms. Jena L. Saldaña														
Dr. Ethan Singer														
Dr. Thomas R. Scott														
Dr. Dan Sullivan														
Dr. Donna J. Thal														
Dr. Mark H. Thiemens														
Mr. Walter A. Turner, Jr.														
Ms. Celinda Vazquez														
Mr. Ron Williams														
Dr. Judith Zyskind														





SAN DIEGO STATE
UNIVERSITY

Research Foundation

5250 Campanile Drive
San Diego, CA 92182-1930
619-594-1900
www.foundation.sdsu.edu