

**San José State University Research Foundation**

2005-2006



**1932-2007**

# San José State University Research Foundation

Annual Report 2005-2006

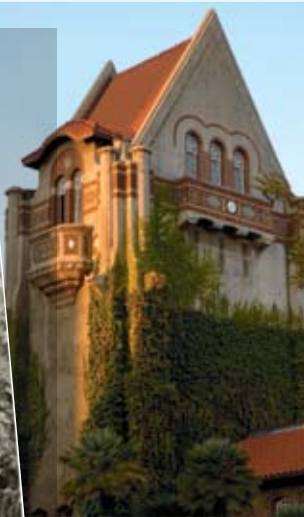


75 Years of Research, Service and Enterprise 1932-2007

## President's Message



San José State College, 1935



Tower Hall and  
Dr. Martin Luther King, Jr.  
Library, today

**C**ongratulations to the San José State University Research Foundation on its 75th anniversary! As the University celebrates its sesquicentennial anniversary, it is important to recognize SJSU Research Foundation's substantial contributions to our growth and success for half of those one hundred and fifty years.

The SJSU Research Foundation can look back with pride on major accomplishments across a broad spectrum of basic and applied research. From teacher training to space exploration, our sponsors have provided more than \$614 million over the last twenty years alone that not only enable the work of hundreds of SJSU faculty and employ thousands of students, but also allow reinvestment in university facilities and infrastructure. Under the direction of SJSU faculty, externally sponsored work has significantly enhanced the University's academic quality, while engaging faculty and students in the creation and application of new knowledge.



Don W. Kassing

*Together, we have built an organization that, in partnership with the university, has effectively leveraged our intellectual capabilities.*

Let me also acknowledge the contributions made by the Research Foundation professional staff and the significant commitments made year after year by the Board of Directors, comprising university faculty, administrators and community leaders. Together, we have built an organization that, in

partnership with the University, has effectively leveraged our intellectual capabilities. The stories in this annual report show the many ways in which the SJSU Research Foundation has impacted the University, the local community, and the Northern California region.

The Research Foundation has lived up to its motto of being Silicon Valley's university partner for research and innovative solutions. As we celebrate this important milestone, I look forward to the strong relationships that will be forged between the San José State University Research Foundation and the community at large in the next 75 years. Here's to solving real-world problems and making new ideas happen!

Don W. Kassing  
President  
San José State University

## From the Chief Operating Officer

When the “San José State Teachers College” voted to establish the San José Corporation in 1932, their goal was simple: create an organization that could manage external funds on behalf of the university. Their first project was the construction of the original football stadium. Fast forward a quarter of a century and you’ll see San José Corporation transformed into the San José State University Research Foundation – an organization that has grown and diversified its activities to include research, training and public service programs that span every academic discipline at SJSU.

Today the SJSU Research Foundation has annual revenues of \$70 million, employs 1,300 full and part-time employees, and operates in twelve different states and five countries. Talented SJSU faculty experts direct the 700 individually-awarded programs that are sponsored by



Mary Sidney

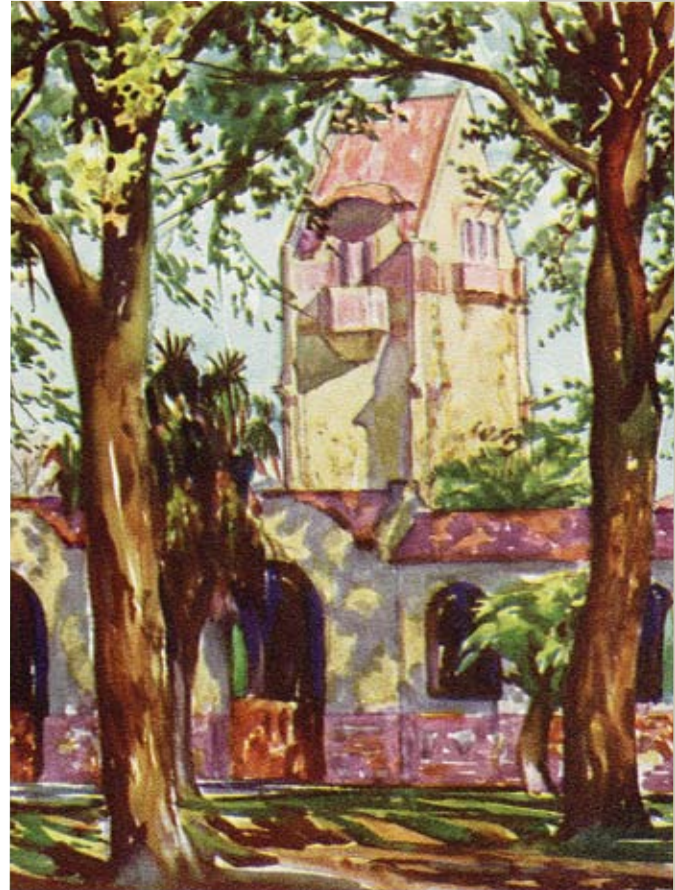
240 different federal, state, local government and non-profit organizations. An innovative partnership with the City of San José and the San Jose Re-development Agency resulted in the \$19 million public investment that has supported four different sector-specific business incubators since inception of the partnership in 1994. As a result of this innovative endeavor, approximately 240 companies have been launched creating over 4,000 jobs.

While the basic purpose of the organization remains the same as it was 75 years ago, today the Research Foundation enables

*San José State University Research Foundation is an organization that has grown and diversified its activities to include research, training and public service programs that span every academic discipline at SJSU.*

San José State’s externally-funded research and education-related activities that are so integral to the University’s mission. It is with great pleasure that I share with you this year’s case studies that illustrate the depth and breadth of our programs’ local and global impact. The entire campus community can take pride in our long and successful history, and we look forward to continued accomplishments of an even brighter and better future.

Mary Sidney  
Chief Operating Officer  
San José State University  
Research Foundation



Tower Hall illustration from the 1932 yearbook, *La Torre*



*Work that matters*

## Improving Health Treatments

**S**JSU Professor of Chemistry Joe Pesek is proving that long-term investment in the studies of complex chemical separations can yield significant returns. Among Pesek's recent accomplishments: important new and emerging applications for health treatment ranging from drug manufacturing to health diagnosis.

Pesek's expertise involves manipulating chemical separations, a process that divides mixtures into their component materials. According to the 20-year veteran of chemical studies, "when a chemist seeks to create a new mixture — a lifesaving drug, for example — the resulting materials often include impurities and other extraneous matter that can be difficult to remove." Now, he is able to use his understanding to help medical device manufacturers produce specialized equipment that increase the speed and efficacy of chemical separation and, consequently, reduce manufacturing costs.



Joe Pesek, professor, Chemistry Department (above), Maria Matyska-Pesek, senior researcher, Chemistry Department (facing page)

Results reported by biotechnology and pharmaceutical companies include not only purer drugs, but significantly increased potential for innovative research using Pesek's

separation techniques to experiment with more chemical combinations.

Another emerging application of Pesek's work involves the creation of biomarkers — compounds that determine the presence of disease or other metabolic malfunction. His goal is to create inexpensive



*You can't get new plastics, you can't get new microchips, you can't get new anything unless you've done a lot of fundamental research*

chemical "chips" that a lab worker can insert into a machine to study patient samples. "A clinical laboratory can inject the sample into the system and get a yes or no answer as to whether this compound is present," Pesek says. "I think this is the wave of the future

for clinical laboratories, that there will be a lot of these chip-type devices that assist in diagnosis."

Joe Pesek's chemical separations research was recently recognized by the National Science Foundation as one of fifty projects that have had a broad impact nationwide. He has given lectures on his research in China, Sweden and Germany, as well as at pharmaceutical companies including Abbott, Pfizer and Roche.

Even though Pesek's research is being applied to produce useful devices today, he emphasizes the importance of fundamental research that explores chemistry without requiring an immediate payoff. "You can't get new plastics, you can't get new microchips," Pesek says. You can't get new anything unless you've done a lot of fundamental research."

**For more information about the SJSU Department of Chemistry, visit [www.chemistry.sjsu.edu/](http://www.chemistry.sjsu.edu/).**

**COMMITTED**

## Lights, Camera, Action!

As one of only a handful of university-based film production houses in the country, the founders of SJSU-based South Bay Film Studios imagine their enterprise as a baseball team whose every game brings home field advantage. Residing within the Television, Radio, Film and Theatre Department, South Bay Films gives students training and work experience both in front of the camera and behind the scenes. And while the students may be the rookies, the training provides “major league” experience.

Their first feature length drama, *Drifting Elegant* is set in San Francisco, although careful observers will spot some San José landmarks. Directed by SJSU Professor Amy Glazer, the film has already generated critical buzz, including garnering a coveted slot in the Mill Valley Film Festival and landing a laudatory review in *Variety*. And more films are currently in production.

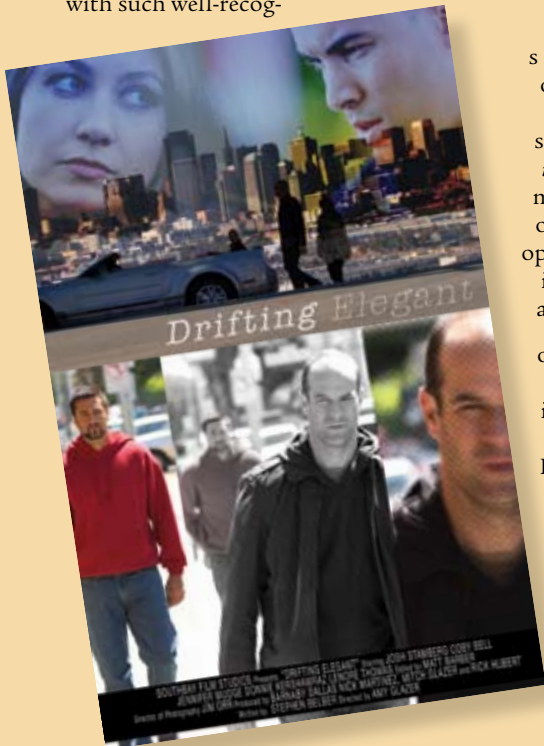
*Drifting Elegant* showcases South Bay Films’ twin goals of producing great projects and training a new generation



Faculty/Student production crew preparing for filming on SJSU campus



of film production students. For co-production head Nick Martinez the goal is to place students in each phase of production, to “give them as much of a real world experience as possible, from raising money to hiring talent and production staff, to final editing and distribution.” Part of this experience includes working not only with university faculty, but Hollywood industry professionals who have worked with such well-recog-



alents as George S and Francis Ford oia. One of those try professionals s a lead role in *ing Elegant*, SJSU mnus Coby Bell, o starred in the opular weekly tele- ion series “Third atch.”

outh Bay Films’ cond co-production head and facul- y member Barnaby Dallas emphasizes that South Bay Films does not try to build a multi-million dollar studio produc-

South Bay Films students/crew production activities

ing films with huge special ef- fects. Instead, the company shoots many of its interiors inside SJSU’s Hugh Gillis Hall. According to Dallas, “We don’t blow up cars, we can’t make the X-Men. What we can do is make intelligent dramas and comedies with a lot of realism... and we can do that very well.” With that approach SJSU students working at South Bay Film Studios have a chance to advance from being rookies in the game of filmmaking to becoming big league superstars.

**For more research on South Bay Film Studios, visit [www.tvradiofilmtheatre.com](http://www.tvradiofilmtheatre.com)**

*“Give them real world experience, from raising money to hiring talent and production staff”*



VERSATILE



## Educating Innovators

*McMullin and Nelson have departed from the traditionally passive way in which K-8 science is taught to stress inquiry-based teaching and learning.*

As the alarm continues to sound concerning the shrinking number of U.S.-born students heading into science and math fields, Kurt McMullin, SJSU associate professor of engineering, and Carolyn Nelson, SJSU professor and chair of the Department of Elementary Education (K-8) have teamed up with the Partnership for Student Success in Science (“PS<sup>3</sup>”) to help stem the tide. PS<sup>3</sup>, a coalition of university professors, school teachers, and industry leaders from Synopsys and Agilent Technologies, is working to transform science education for 26,000 K-8 students and teachers throughout nine South Bay Area school districts.

McMullin and Nelson have departed from the traditionally passive way in which K-8 science is taught to stress inquiry-based teaching and learning. According to the co-principal investigators, many math and science teachers



focus their efforts on chalkboard lectures, limiting their students’ learning to the rote memorization of abstract facts. In contrast, Nelson says: “Inquiry based teaching/learning gives students a chance to engage science problems and the opportunity to see how real science works, as much as possible in a classroom context. Moreover, educators are inspired to enhance their own teaching methods when they employ this approach.”

Agilent Technologies and Synopsys contribute to the project with funding and space, dem-



onstrating that Silicon Valley businesses are concerned about and are working to improve the pipeline of future engineers. But just as importantly, PS<sup>3</sup> is committed to ex-



Kurt McMullin, associate professor, Civil and Environmental Engineering (above), Carolyn Nelson, department chair, K-8 Elementary Education (below left)

panding the understanding of science beyond the professional community. The goal is to ensure that all graduates of regional schools can understand the impact of science on our everyday lives, and that they can participate in the debates about technological innovation that will only continue in coming years. McMullin states, “Science touches so many major facets of life and we need an educated populace.”

The Palo Alto Unified School District is lead partner for the collaborative’s total \$6,766,846 five-year Nation-



al Science Foundation grant award which is one of only seven Math Science Partnership grants funded throughout the country in 2006. From those funds, SJSU will be awarded \$670,000 to support the efforts of Professors McMullin and Nelson.

***For more information about PS<sup>3</sup>, visit [www.pscubed.org/](http://www.pscubed.org/).***

Science resource teacher leads workshop (right)



# INTERDISCIPLINARY

## CommUniverCity: Empowering Neighborhoods



CommUniverCity projects include urban planning workshops and voter registration drives in the Five Wounds-Brookwood Terrace Neighborhood.

In an era where neighbors often don't seem to know each other's names, one San José community is working with the city and university to significantly enhance its voice and its potential for positive impact on the lives of its members. The Five Wounds/Brookwood Terrace (FWBT) neighborhood has teamed up with CommUniverCity, a consortium that includes SJSU, the City of San José, AmeriCorps, The Health Trust, and other organizations dedicated to meeting the needs of many underserved communities.

Terry Christensen, SJSU professor of political science and executive director of CommUniverCity, explains how FWBT, working with the City of San José Strong Neighborhood Initiative Project, has identified education, health, and neighborhood environment as three community priorities. "This is a neighborhood that hadn't had this kind of focus from as many non-profit groups, the university, or other projects,"



Christensen says. "So there was a need, there was proximity, and there was an eager partner."

One example of CommUniverCity supporting empowerment for FWBT is in helping the community develop a Town Square Plan, including crafting a professional proposal for a high-density, mixed use, pedestrian oriented center as an alternative to the parking lot and BART station being planned. Working with CommUniverCity, the neighborhood will ensure that its voice is well-articulated in the planning process.

SJSU students leading chemistry class at McKinley Elementary School

Susan Meyers, dean of the College of Education and SJSU Research Foundation Board Member, is co-chair of the CommUniverCity Steering Committee. She adds that, beyond the community engagement, "It's about planting seeds. One of the most important long-term goals is to inspire a college-going culture among FWBT children."

Other CommUniverCity partnership areas include voter registration drives, health fairs and solar power projects. SJSU

*It's about planting seeds. It's about helping families recognize that San José State University is their university*

students participate in all projects, gaining valuable insights through community-based experiential "service learning" linked to their academic programs. FWBT is just one of 19 communities identified in the City of San José Strong Neighborhood Initiative and other neighborhoods are looking to form similar alliances and apply lessons learned from CommUniverCity. Meyers advises, "It's about helping families recognize that San José State University is *their* university. This concept is something that will become a part of the way we do business at the university in partnership with the city, the school districts, local agencies and the communities."

**For more information about CommUniverCity, visit [www.communivercitysanjose.org/](http://www.communivercitysanjose.org/).**

## Child Welfare Services: Differences Matter

# DYNAMIC

**D**irector of SJSU's School of Social Work, Dr. Alice Hines, and her colleagues train the largest group of child health and mental health care workers in Santa Clara and surrounding counties. That's why when Santa Clara County wanted to understand how better to provide services to its neediest children and their families it turned to Hines to study the gaps within the county's child welfare case management procedures and to recommend improvements. Hines and her research team found inadequate accounting for the numbers of children from different cultural and ethnic groups entering the system, despite the fact that the county's child welfare system includes a disproportionate amount of persons of color. Based on study findings, the county is now working to transform a one-size-fits-all approach into one that meets the specific needs of individu-



al children and their families. Hines explains, "Santa Clara County is pioneering in this area in trying to offer more culturally specific interventions."

Beyond the county project, Hines and her colleagues pursued research on another population of young people whose needs require special attention. Hines received a report of some SJSU students who were also foster youth sleeping in cars during winter break because the dorms were closed and they

Olivia Pelayo, graduate student research assistant (left) and Kathy Lemon Osterling, assistant professor, School of Social Work

had nowhere else to go. The incident was one of a number of foster youth student experiences and special needs examined by the School of Social Work, whose researchers examined the characteristics of such students when they successfully complete their degrees, despite

*This was the first research in the nation that really looked at positive outcomes for foster youth*

the odds. "This was the first research in the nation that really looked at positive outcomes for foster youth," Hines explains.

Following the pilot study at SJSU, the research was expanded to include ten other California State University sites and their neighboring counties from San Diego to Humboldt. Their work helped the counties and university campuses make important changes in addressing the practical needs of vulnerable youth populations.

***For more information about child welfare research, visit [www.sjsu.edu/cwrt/](http://www.sjsu.edu/cwrt/).***



*Hines and her research team found inadequate accounting for the numbers of children from different cultural and ethnic groups entering the system*

Reviewing research findings, Alice Hines, professor and director, School of Social Work (middle row), Becky Fewel and David Kadel, graduate student research assistants (above) and Peter A. Lee, associate professor, School of Social Work (right)



## Driving Transportation Policy

PROVEN

**S**an José State University's Norman Y. Mineta International Institute for Surface Transportation Policy Studies (MTI) brings together top leaders and industry experts to assess critical policy issues ranging from transportation finance to homeland security. Now in its 15th year, MTI recently competed successfully against 35 of the nation's premier research universities to be named one of ten Tier One "National University Transportation Centers of Excellence."

MTI's hands-on approach to transportation research links SJSU faculty/student teams with experts from around the world to answer questions that cannot be addressed by local specialists. According to Executive Director Rod Diridon, "Faculty/student teams are essential to our research. These teams bring state-of-the-art knowledge back to SJSU where it is made available not only to students but also to national policy makers."



Rod Diridon, executive director, MTI, Trixie Johnson, research director (left) and Leslee Hamilton, communications director (right)

*MTI's hands-on approach to transportation research pairs SJSU faculty/students teams with experts often recruited from around the world*

MTI has also been designated the "National Transportation Security Center" based on comprehensive counter-terrorism and emergency response research begun in 1996. The MTI-NTSC network of international transportation security contacts has produced sophisticated security reports for both internal and external use. Indeed, soon after 9/11, MTI was asked by the U.S. Department of Transportation and others to host the National Transportation Security Summit. The Institute will host another such summit again in 2007 in Washington, D.C.

Security is only one of the many focus areas for MTI. The Institute also researches state and national transportation finance policy. The challenge is to create



new funding sources for transportation system construction and maintenance as traditional financing, based on gas taxes, becomes less viable. MTI has taken the lead in creating innovative finance alternatives such as public-private partnerships.

Additionally, MTI produces land-use research promoting clustering of development near transit stations, as is found in Europe and Asia, to avoid urban sprawl.

Diridon explains: "Our emphasis is not on theoretical research, but on specific deliverables that can be used at both the state and national level to solve current problems. Our congressionally assigned objective is to promote the nation's geoeconomic competitiveness."

Beyond campus-based instruction, MTI uses state-of-the-art videoconferencing to offer the Master of Science in Transportation Management from within SJSU Lucas Graduate School of Business to students at 24 sites across California.

***For more information about MTI, visit [www.transweb.sjsu.edu](http://www.transweb.sjsu.edu).***





## Faculty Awards 2005-06

### College of Applied Sciences and Arts

#### Dean's Office

##### Inger Sagatun-Edwards

Stanford Geriatric Education Center Consortium  
Stanford University  
\$33,746

#### Journalism and Mass Communications

##### Scott Fosdick

Profiles in Classroom Innovation  
Hewlett-Packard Company  
\$6,500

##### Diana Stover

Grade the News  
Ford Foundation  
\$75,000

#### Justice Studies

##### Steven Lee

San José State University Undergraduate Forensic Science Scholarships  
California Department of Justice  
\$4,200

##### Jackye McClure

Peace Officer Standards and Training (POST) Institute of Criminal Investigation Courses  
Commission on Peace Officer Standards and Training  
\$607,957

Peace Officer Standards and Training (POST) Command College Workshops

Commission on Peace Officer Standards and Training  
\$420,333

Peace Officer Standards and Training (POST) Management Course

Commission on Peace Officer Standards and Training  
\$216,363

Peace Officer Standards and Training (POST) Detective Symposium

Commission on Peace Officer Standards and Training  
\$170,000

Peace Officer Standards and Training (POST) Job Aid Prototypes

Commission on Peace Officer Standards and Training  
\$39,600

#### Kinesiology

##### Stan Butler

Kaiser Youth Sports Program  
Kaiser Permanente  
\$10,000

##### V. Gregory Payne

##### Stan Butler

National Youth Sports Program (NYSP) 2005-06  
National Youth Sports Corporation  
\$1,800

##### Susan Wilkinson

California Physical Education – Health Project  
The Regents of the University of California  
\$117,000

#### Nutrition and Food Science

##### Lucy McProud

Cal-Pro-NET Center  
California Department of Education  
\$173,907



#### BUSINESS AND COMMUNITY PARTNERSHIPS

In partnership with the City of San José Redevelopment Agency, the SJSU Foundation manages and operates four business incubators providing facilities, world class business development services, and access to faculty experts and student interns to high-potential, early-stage companies. Activities also include business development advice for international companies planning to establish and grow their U.S. market reach. Shown here, left to right, are business incubator directors Melinda Richter, San José BioCenter; Chuck Erickson, U.S. Market Access Center and Software Business Cluster; and Jim Robbins, Environmental Business Cluster

## School of Nursing

### Jayne Cohen

*Increasing Nursing Student Enrollment*

The Valley Foundation  
\$518,544

*The Health Place*

Town of Los Gatos  
\$16,892

### Phyllis Connolly

*Professional Nurse Traineeships*

U.S. Department of Health and Human Services  
\$43,596

## School of Social Work

### Amy D'Andrade

*Foster Youth Transition Initiative*

The Regents of the University of California  
\$18,227

### Alice Hines

*Title IV-E Child Welfare Training Program*

The Regents of the University of California  
\$1,465,663

*California Department of Mental Health Educational Stipend Program*

The Regents of the University of California  
\$269,688

**Total: \$4,209,017**

## College of Business

### Dean's Office

#### Bruce Magid Rod Diridon

*Mineta Transportation Institute*

U.S. Department of Transportation  
\$780,000

*Mineta Transportation Institute*

California Department of Transportation  
\$780,000

*Transportation Financing Opportunities for State of California Project*

California Department of Transportation  
\$159,950

#### Peter Haas

*2006 Summer Transportation Institute*  
University of South Carolina

\$38,800

**Total: \$1,758,750**

## College of Education

### Child and Adolescent Development

#### Kathryn Lindholm-Leary

*Evaluation of Developmental Bilingual Education Programs*

Sweetwater Union School District  
\$18,000

*Evaluation of Developmental Bilingual Education Programs*

South Bay Union School District  
\$14,000

#### Amy Strage

*Preparing High Quality Teachers to Achieve in Highly Qualified Schools*

Foundation of California State University Monterey Bay  
\$350,000

### Communicative Disorders and Sciences

#### Gloria Weddington

*Project Horizonte*  
U.S. Department of Education  
\$189,180

*Project Fo'na (Move Ahead!) Master's Degree Program in Communicative Disorders*  
University of Guam  
\$144,852

## Counselor Education

### Andrew Hughey

*Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)*

U.S. Department of Education  
\$1,237,818

*Enhancing the Teaching and Learning Functions Through the Use of Instructional Technologies in GEAR UP Classrooms: A Capacity Building Program for Teachers*

National Council for Community and Education Partnerships  
\$50,000

## Elementary Education

### Sandra Hollingsworth

*The California Reading and Literature Project – No Child Left Behind Technical Assistance and Support Program*

The Regents of the University of California  
\$108,530

*The California Reading and Literature Project*

The Regents of the University of California  
\$22,500

### Carolyn Nelson

*Quality Higher Education for Students with Disabilities*  
Bank Street College  
\$60,000

### Katharine Davies Samway

*Vocabulary Development through Writing: A Key to Academic Success*  
The Regents of the University of California  
\$325,179

### Andrea Whittaker Carolyn Nelson

*SJSU/Bank Street College Teachers for a New Era Partnership*  
Bank Street College  
\$93,022

## Special Education

### Gilbert Guerin

*High School Teacher Preparation High Stake Testing and Dropout Reduction*  
U.S. Department of Education  
\$400,000

*Program to Reduce Critical Teacher Shortage and Improve Literacy for Minority Children with Disabilities*  
U.S. Department of Education  
\$200,000

*Preparation of Teachers for Special Education Minority Youth in High-Risk Urban and Alternative Settings*  
U.S. Department of Education  
\$200,000



## 2006 EARLY CAREER INVESTIGATOR AWARD RECIPIENT

John Clapp, assistant professor, Animation and Illustration Department, is the illustrator of five published picture books for children, and dozens of bookjackets for almost every major American publishing house. Pages from his sketchbook were recently included in a book about creative journals, as well as a textbook about the use of color in visual art. He is currently working on an instructional art textbook intended for a general audience.

**Hyun-Sook Park**  
*Safe Life*  
Sacramento Unified  
School District  
\$28,472

**Total: \$3,441,553**

---

## College of Engineering

### Dean's Office

#### Ping Hsu

*MESA Engineering Program – NSF Scholarship*  
The Regents of the  
University of California  
\$104,688

*SJSU MESA Engineering Program – Continuance of HP Scholars*  
Hewlett-Packard  
Company  
\$39,840

*Engineering Projects in Community Service (EPICS) Program at SJSU*  
Purdue University  
\$20,490

### Chemical and Materials Engineering

#### Emily Allen

*Investigation of Alternative Heat Sink Materials*  
Jabil Circuit, Inc.  
\$16,265

**Emily Allen**  
**Kiumars Parvin**  
*(Physics)*  
**Gregory Young**  
**Roger Terrill** *(Chemistry)*  
**Richard Chung**  
**Melanie McNeil**  
**David Bruck** *(Biological Sciences)*

*Nanoscale Materials and Device Characterization Program*  
U.S. Department of  
Defense  
\$500,000

### Civil and Environmental Engineering

**Akthem Al-Manaseer**  
*Determining Methods to Control the Effects of Heat of Hydration and Other Concerns Associated with the Placement of Mass Concrete for Cast-in-Place Piling*

California Department of  
Transportation  
\$112,932

**Kurt McMullin**  
**Carolyn Nelson**  
*(Elementary Education)*  
*Partnership for Student Success in Science*

Palo Alto Unified School  
District  
\$136,864

**Rameshwar Singh**  
*Analysis of Soil Samples*  
Santa Clara Valley Water  
District  
\$18,200

*Bollinger Bridge Model*  
Multech Engineering  
Consultants, Inc.  
\$4,766

### Computer Engineering

**Ahmed Hambaba**  
*Multi-Agents System Applications*  
BAE Systems  
\$50,000

#### Sigurd Meldal

*Team for Research in Ubiquitous Secure Technology (TRUST): An NSF Science and Technology Center*

The Regents of the  
University of California  
\$40,000

#### Sigurd Meldal Dan Harkey

*Quality Assurance Internships*  
RingThree Technologies,  
Inc.  
\$11,693

#### Haluk Ozemek

*Technical Services for IBM*  
IBM Corporation  
\$300,563

#### Xiao Su

*CAREER: Integrated Coding and Content Delivery for Secure Media Streaming on P2P Networks*  
National Science  
Foundation  
\$79,191

**Xiao Su**  
**Sigurd Meldal**  
**David Hayes** *(Computer Science)*

*Information Assurance and Network Security: Curriculum and Infrastructure Enhancement*  
Intel Corporation  
\$12,848

### Electrical Engineering

#### Chang Choo

*Mobile Voice Over IP: Technology, Market and Regulatory Regimes*  
Electrical and  
Telecommunications  
Research Institute  
\$20,000

#### Essam Marouf

*Investigation of Saturn's Rings by Cassini Radio Occultation*  
Jet Propulsion Laboratory  
\$239,700

### Industrial and Systems Engineering

#### Kevin Corker

*Post Hoc Human Factors Analysis of Fast Time Simulation Results in Assessment of Operational Concepts in Next Generation Air Transportation System (NGATS)*  
NASA  
\$361,946

*Virtual Airspace Modeling Program*  
NASA  
\$100,039

*Model Deployment for Providing Risk Assessment in the Computational Models of Human System Performance*  
NASA  
\$75,000

*Investigation of Single Pilot Operation with Synthetic Vision System (SVS) and Preliminary Research in Pilot/Controller Situation Awareness*  
NASA  
\$42,171

#### David Engelbert

*Space-Based Testing Environments*  
NASA  
\$179,866

### Mechanical and Aerospace Engineering

#### John Lee

**Stacy Gleixner**  
*(Chemical and Materials Engineering)*

#### Tai-Ran Hsu

*Interdepartmental Joint Development of Hands-On MEMS Using Semi-Custom Design Flow*  
National Science  
Foundation  
\$99,676

**Total: \$2,566,737**

---

## College of Humanities and the Arts

### School of Art and Design

**Pamela Sharp El Shayeb**  
*The Bay Area California Arts Project 2005-06 Leadership Support*  
Flora Family Foundation  
\$40,000

#### Pamela Sharp El Shayeb Kathie Kratochvil

*The Bay Area California Arts Project*  
The Regents of the  
University of California  
\$160,000

### English and Comparative Literature

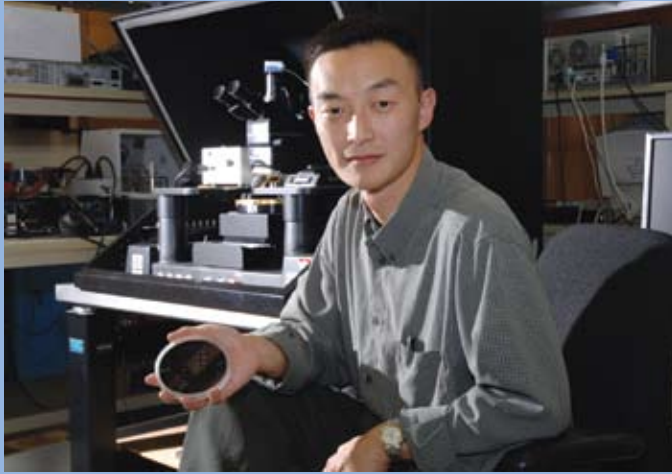
#### Mitch Berman

*Center for Literary Arts*  
City of San José  
\$18,000

*Center for Literary Arts*  
Arts Council Silicon  
Valley  
\$5,500

#### Jonathan Lovell

*San José Area Writing Project – No Child Left Behind*  
The Regents of the  
University of California  
\$51,000



**2006 EARLY CAREER INVESTIGATOR AWARD RECIPIENT**

As Principal Investigator, John Lee, assistant professor, Mechanical and Aerospace Engineering pulled together two interdisciplinary teams of investigators across mechanical engineering, materials engineering, and electrical engineering to win two National Science Foundation awards.

One project (further benefited by seed support from Intel Corporation) has established a new laboratory course and enhanced research capabilities in microelectromechanical systems (MEMS), and the other has introduced nanotechnology content to modernize existing engineering.

*San José Area National Writing Project*  
The Regents of the University of California  
**\$45,000**

*San José Area Writing Project*  
The Regents of the University of California  
**\$35,000**

**Total: \$354,500**

**Moss Landing Marine Laboratories**

**Simona Bartl**  
*Incorporation of Marine Research and Resource Issues into Public Education*  
U.S. Department of Commerce  
**\$49,910**

**Simona Bartl**  
**Robertta Barba**  
*(Instructional Technology)*  
*Marine Biotechnology and Bioinformatics for Teachers*  
National Science Foundation  
**\$996,955**

**Laurence Breaker**  
*The Response of the Upper Ocean to Varying Meteorological Conditions Using Ocean Models and Satellite Imagery*  
NASA  
**\$85,506**

*Using the 83-Year Record of Sea Surface Temperature at Pacific Grove, California as a Proxy for Selected Offshore Chemical and Biological Parameters*  
The Regents of the University of California  
**\$52,764**

**Gregor M. Cailliet**  
**Allen Andrews**  
*Age Validation of New Zealand Deepwater Fish*  
National Institute of Water and Atmospheric Research  
**\$66,050**

*Bamboo Coral of Davidson Seamount: Age and Growth Investigations*  
U.S. Department of Commerce  
**\$39,000**

**Gregor M. Cailliet**  
**David Ebert**  
*Studies of Life History, Population Structure, Habitat Utilization, and Fishery Biology of Pacific Sharks and Rays*  
Mote Marine Laboratory  
**\$429,607**

**Kenneth Coale**  
*The California State University Center for Integrative Coastal Ocean Research*  
U.S. Department of Commerce  
**\$4,744,639**

*MLML/MBARI Act Partnership at SJSU*  
University of Maryland Center for Environmental Science  
**\$278,268**

*Bioaccumulation Factors for California's Enclosed Bays and Estuaries*  
California State Water Resources Control Board  
**\$200,000**

**Kenneth Coale**  
**Russell Fairey**  
*Technical Support of Bay/Delta and Tributaries Project (BDAT) and the California Environmental Data Exchange Network (CEDEN) Projects*  
California Department of Water Resources  
**\$499,999**

*Contaminant Levels in Fish Tissues in San Francisco Bay – 2006*  
San Francisco Estuary Institute  
**\$92,644**

*SWAMP Database and Application Training “On the Job” at Regional Boards*  
The Regents of the University of California  
**\$25,000**

*Database Development, Training and Outreach for Ag Waiver Program – Modesto, Turlock, Oakdale, Merced and South San José Irrigation Districts*  
The Regents of the University of California  
**\$23,800**

*Database Development, Training and Outreach for Ag Waiver Program – Ducks Unlimited*  
The Regents of the University of California  
**\$15,246**

*Database Development, Training and Outreach for Ag Waiver Program – Westside San José River Watershed Coalition*  
The Regents of the University of California  
**\$12,070**

*SWAMP Database and Applications Training at State Board and Other Venues*

The Regents of the University of California  
\$5,728

**Kenneth Coale**  
**Stewart Lamerdin**  
**Richard Muller**

*Oceanographic Technical Services*

National Science Foundation  
\$164,600

**Kenneth Coale**  
**Stewart Lamerdin**  
**Richard Muller**

**Doug Conlin**  
*Oceanographic Instrumentation*  
National Science Foundation  
\$46,700

**Kenneth Coale**  
**Richard Muller**

*Ship Operations*  
National Science Foundation  
\$785,903

*Office of Naval Research Ship Operations*  
U.S. Department of Defense  
\$490,178

*Shipboard Scientific Support Equipment*  
National Science Foundation  
\$26,147

**Kenneth Coale**  
**Mark Stephenson**

*California Bay-Delta Authority Ecosystem Restoration Program – Sport Fish Sampling and Laboratory Analysis*  
San Francisco Estuary Institute  
\$1,211,781

*Source and Loading Studies for Mercury Total Maximum Daily Loads in the Central Valley*  
California State Water Resources Control Board  
\$300,000

*Pesticide Analyses for Mosquito Adulticide Study*  
U.S. Fish and Wildlife Service  
\$42,750

*Testing/Analytical Services for the Sacramento River Watershed Program*  
Pacific EcoRisk, Inc.  
\$41,710

*Regional Monitoring Program Status and Trends 2005*  
San Francisco Estuary Institute  
\$41,437

*Spenceville Mine Environmental Samples*  
California Department of Conservation  
\$39,607

*Program to Monitor the Level of Trace Elements in Mussels at Naval Weapons Station Seal Beach, California*  
U.S. Department of Defense  
\$26,136

*SFEI Invasive Spartina Project*  
San Francisco Estuary Institute  
\$16,940

*Water Sample Analysis*  
California Department of Food and Agriculture  
\$13,250

*Aquatic Weed Control*  
California Department of Boating and Waterways  
\$10,416

*Guadalupe Small Tributaries Loadings Study*  
San Francisco Estuary Institute  
\$8,640

*Exposure and Effects Pilot Study: Avian Analyses Caspian Terns*  
San Francisco Estuary Institute  
\$4,120

**Kenneth Coale**  
**Mark Stephenson**  
**Dave Crane**

*Exposure and Effects Pilot Study: Diving Duck Muscle Analysis*  
San Francisco Estuary Institute  
\$20,448

**David Ebert**  
**Gregor M. Cailliet**

*Diet and Trophic Ecology of Skates in the Gulf of Alaska (Raja and Bathyraja spp.): Foundational Ecological Information for Ecosystem-Based Management of Demersal Resources*  
North Pacific Research Board  
\$149,995

*Life History Studies of California Chondrichthyans: Determining Essential Biological Information for Effective Management of Bycatch and Emerging Fisheries*  
The Regents of the University of California  
\$78,500

**Russell Fairey**  
**Kenneth Coale**

*Surface Water Ambient Monitoring Program (SWAMP)*  
California State Water Resources Control Board  
\$2,200,000

**H. Gary Greene**

*Fairweather Mapping Project*

Alaska Department of Fish and Game  
\$50,500

*Southern California Habitat Mapping*  
U.S. Department of the Interior  
\$50,000

*Distribution of Deep-Water Corals and Associated Communities in the Aleutian Islands*  
University of Alaska  
\$45,797

*Geology, Sediment, and Habitat Mapping of the Offshore Big Sur Coast*  
California Department of Conservation  
\$42,000

*Recruitment Pathways, Interspersion of Critical Habitats, and the Design of Effective MPA Networks*  
The Regents of the University of California  
\$17,940

*Center for Habitat Studies*  
U.S. Department of the Interior  
\$2,500

**James Harvey**

*The Ecology of Seabirds, Waterbirds, and Marine Mammals of California*  
U.S. Department of the Interior  
\$119,443

*Body Burden Assessments of Total Mercury in Stranded Pacific Harbor Seal, Phoca vitulina richardii, in Central California*  
U.S. Department of Commerce  
\$98,814

*Capture and Tagging of Harbor Seals in Southern California*  
Pacific States Marine Fisheries  
\$73,530

*Central Coast Marine Bird Health Study*  
California Department of Fish and Game  
\$55,976

*Prey Species Distribution in the Monterey Bay National Marine Sanctuary*  
Monterey Bay Sanctuary Foundation  
\$53,050

*Tracking Sooty Shearwater Habitat Use throughout Dynamic Upwelling Ecosystems in the California Current*  
Monterey Bay Sanctuary Foundation  
\$28,600

*Diet of California Sea Lion (Zalophus californianus) at Año Nuevo Island, California*

Pacific States Marine Fisheries

\$15,000

**Stacy Kim**

*Collaborative Research Site Evaluations and Background Studies of Interactions among Fluid Chemistry, Physiology, and Community Ecology for Ridge 2000 Lau Basin Integrated Studies*

National Science Foundation

\$38,419

**Valerie Loeb**

*Krill Demography and Zooplankton Composition of the Antarctic Marine Living Resource Program Study*

U.S. Department of Commerce

\$175,000

**John Oliver**

**James Oakden**

*Taxonomic Identification of Continental Shelf Benthic Samples*

U.S. Department of Commerce

\$145,530

**Mike Prince**

*University-National Oceanographic Laboratory System (UNOLS)*

National Science Foundation

\$642,202



**RESEARCH BRIEF**

**Project Director:**

Natalie Batalha, assistant professor, Physics and Astronomy Department and Director, UARC Systems Teaching Institute

**Partners:**

University of California, Santa Cruz and NASA Ames Research Center

**Objectives:**

The Systems Teaching Institute brings together curriculum and practice by offering programs that support students pursuing careers in fields relevant to the mission of NASA Ames Research Center

**Funding:** \$240,739

*University-National Oceanographic Laboratory System (UNOLS)*

U.S. Department of Defense

\$141,443

**Richard Starr**

*Determining Abundance, Movements, and Mortality of Important Nearshore Fish Species along the North*

*Central California Coast*

Pacific States Marine Fisheries

\$20,000

**Total: \$15,152,188**

**College of Science**

**Dean's Office**

**Stephen Branz**

*2005-2006 Mathematics Engineering and Science Achievement (MESA)*

The Regents of the University of California

\$220,000

*2006-2007 Mathematics Engineering and Science Achievement (MESA)*

The Regents of the University of California

\$86,890

**George Castro**

*Title V Evergreen Valley College and San José State University Partnership*

San José/Evergreen Community College District

\$188,650

**Biological Sciences**

**Chris Brinegar**

*Application of DNA Sequencing to the Identification of Listed Spineflower Species in Overlapping Populations*

U.S. Fish and Wildlife Service

\$5,000

**Sabine Rech**

**Monika Kress (Physics)**

*Soil Microbial Diversity and Distribution in the Bristlecone Pine Forest, White Mountains, California*

NASA

\$26,728

**Adrian Rodriguez**

*SJSU Bridges to the Baccalaureate Degree*

U.S. Department of Health and Human Services

\$213,067

**Julio Soto**

*MBRS-SCORE: Function of Anchorage and Localization Sequences in Leech mRNA*

U.S. Department of Health and Human Services

\$68,240

**Mara Williams**

*Clinical Laboratory Scientists Test Preparation Program*

California Health Foundation and Trust

\$11,339

**Chemistry**

**Elaine Collins**

*Santa Clara County Biotechnology Education Partnership*

Genentech Foundation for Biomedical Sciences

\$120,000

*Bridges to Education*

Johnson & Johnson

\$10,000

**Daryl Eggers**

*MBRS-SCORE:*

*Intermediate States of Aggregation-Prone Polypeptides*

U.S. Department of Health and Human Services

\$181,944

**Gilles Muller**

*MBRS-SCORE: Using CPL for Enantioselective Recognition of Amino Acids*

U.S. Department of Health and Human Services

\$187,395

*The Design and Photophysics of Lanthanide Complex-Based Luminescent Probes*

Research Corporation

\$45,000

**Joseph Pesek**

*REU Site: Analysis, Fabrication, and Engineering of Surfaces and Materials in Information Technology*

National Science Foundation

\$91,077

**Maureen Scharberg**

*NSEE: Nanoscale Science and Engineering Education*

SRI International

\$28,000

**Herbert Silber**

*MBRS-SCORE Program at San José State University*  
U.S. Department of Health and Human Services  
\$49,814

**Karen Singmaster**

*CSU: Louis Stokes Alliance for Minority Participation-LSAMP*  
University Enterprises, Inc.  
\$80,000

**Geology****Ellen Metzger**

*Hindcasting Ecosystems II*  
NASA  
\$25,507

**Ellen Metzger****Cindy Schmidt**

*(Geography)*  
*NASA Earth Science for Teachers*  
NASA  
\$187,677

**Ellen Metzger****Richard Sedlock**

*CAMSP: Ravenswood School District, Palo Alto*  
Ravenswood School District  
\$77,167  
*The South Bay Geo-Diversity Project: Phase II*  
National Science Foundation  
\$58,584

**Robert Miller**

*Collaborative Research: Linking Deep and Shallow Crustal Processes, North Cascades, Washington*  
National Science Foundation  
\$74,960

**Mathematics****Joanne Rossi Becker**

*Santa Clara Valley Mathematics Project – Silicon Valley Mathematics Initiative, Mathematics Assessment Collaborative*  
Noyce Foundation  
\$310,000

*Santa Clara Valley Mathematics Project – Silicon Valley Mathematics Initiative, Professional Development Institutes*  
Noyce Foundation  
\$130,000

*Santa Clara Valley Mathematics Project – Silicon Valley Mathematics Initiative, Director of Professional Development*  
Noyce Foundation  
\$98,106

*Santa Clara Valley Mathematics Project*  
The Regents of the University of California  
\$32,400

*Santa Clara Valley Mathematics Project – No Child Left Behind*  
The Regents of the University of California  
\$25,600

*Mathematics and Its Assessment*  
Institute for Advanced Study  
\$5,000

**Steven Crunk**

*JRI: Intelligent Instruments on Robotic Helicopters*  
NASA  
\$15,765

**Daniel Goldston**

*RUI: Moments of Short Divisor Sums and the Distribution of Primes*  
National Science Foundation  
\$78,804

**Tim Hsu**

*Analysis of Heat Pipe Performance Tailored for MEROM/Santa Rosa in Mobile Computers*  
Intel Corporation  
\$19,330

**Ferdinand Rivera**

*CAREER: Developing a Mathematical Knowledge Base for Teaching and Learning Generalization in Basic Algebra at the Middle School Level in Urban Context*  
National Science Foundation  
\$97,830

**Meteorology****Alison Bridger**

*The Dynamical Evolution of the 2001 Martian Global Dust Storm*  
NASA  
\$34,669

**Alison Bridger**

**Jeffrey Hollingsworth**  
*Extrasolar Planets: Atmosphere and Habitable Climates*  
NASA  
\$190,000

**Eugene Cordero**

*CAREER: Connections between Stratospheric Perturbations and Climate Change – Research and Teaching Integration*  
National Science Foundation  
\$128,513

*Modeling the Response of the Climate System to the 11-Year Solar Cycle*  
The Regents of the University of California  
\$88,645

**RESEARCH BRIEF****Project Director:**

Shishir Mathur, director, The Institute for Metropolitan Studies, and Assistant professor Urban and Regional Planning

**Partner:** Lincoln Institute of Land Policy

**Objective:** In-depth review of the City of San José's Neighborhood Parks and Recreation Bond Measure, including critical examination of the usage of bond proceeds.

**Funding:** \$12,000

**Nuclear Science**

**Herbert Silber**  
*MARC U\*Star at SJSU*  
U.S. Department of Health and Human Services  
\$527,067

*Undergraduate Summer Schools in Nuclear and Radiochemistry*  
American Chemical Society  
\$117,000

**Physics and Astronomy**

**Natalie Batalha**  
*UARC Systems Teaching Institute*  
The Regents of the University of California  
\$240,739

**Friedemann Freund**

Postdoctoral Research  
Fellowship: Pulsating Electric  
Currents in the Crust  
National Geospatial-  
Intelligence Agency  
\$54,192

**Patrick Hamill**

Transfer of Impact Ejecta  
from Io to Europa  
NASA  
\$50,000

Theoretical Studies  
Combined with Satellite  
Observations of Aerosol  
Formation Processes  
NASA

\$27,000

Analysis of Airborne  
and Satellite Aerosol  
Measurements  
NASA  
\$9,106

**Michael Kaufman**

Multidimensional  
Transport and Chemistry in  
Protoplanetary Nebulae  
NASA  
\$134,485

Oxygen Chemistry in Diffuse  
and Dense Interstellar  
Clouds: Modeling SWAS  
Observations  
NASA  
\$52,894

Tracking Warm H<sub>2</sub> in  
Photodissociation Regions  
Jet Propulsion Laboratory  
\$20,900

Photodissociation

Regions: Laboratories for  
Astrochemistry  
University of Maryland  
\$17,166

**Michael Kaufman****Patrick Hamill**

Research Experiences for  
Undergraduates (REU) Site  
for Research in Physics  
National Science  
Foundation  
\$85,000

**Kiumars Parvin****David Bruck (Biological Sciences)****Gregory Young****(Chemical and Materials Engineering)**

RUI: Synthesis, Structure,  
and Magnetic Studies of  
High Anisotropy Magnetic  
Nanocrystals  
National Science  
Foundation

\$220,000

**Ken Wharton**

K-Alpha X-Ray Source  
Development  
Lawrence Livermore  
National Laboratories  
\$10,632

**Total: \$4,857,882**

## College of Social Sciences

**Dean's Office****Kathleen Connell**

Space Biology: Feasibility  
Analysis  
NASA  
\$150,000

**Anthropology****Jennifer Anderson**

An Integrated Approach to  
Japanese Culture and Values  
National Endowment for  
the Humanities  
\$81,373

**Jan English-Lueck**

Curation Services for  
Archaeological Materials  
Santa Clara Valley  
Transportation Agency  
\$10,125

**Environmental Studies****Bruce Olszewski**

Recycling Telephone Hotline  
Information  
Santa Clara County  
\$60,000

**Geography****Lee Johnson**

Vegetation Remote Sensing  
NASA  
\$70,000

**RESEARCH BRIEF**

**Director:** Jennifer Anderson,  
lecturer in Anthropology

**Partner:** National Endowment  
for the Humanities

**Objective:** Increasing global  
awareness by giving 15 high  
school teachers from across  
the United States and from  
Department of Defense schools  
in Japan an intensive introduc-  
tion to Japanese culture and  
values.

**Funding:** \$81,331

**Cindy Schmidt**

Strengthening Tribal College  
and University Earth Science  
Curriculum with Mentoring  
Partnerships and Innovative  
Geospatial Technologies  
Salish Kootenai College  
\$36,564

**Cindy Schmidt**

**L. Jean Palmer-Moloney**  
Education and Outreach/  
DEVELOP: Use of Remote  
Sensing for Ecosystem  
Science, Modeling,  
Application and Education  
NASA  
\$68,126

**Richard Taketa**

The Land Use Portfolio  
Model (LUPM) Project  
U.S. Department of  
the Interior  
\$35,000

**History****E. Bruce Reynolds**

East Asia Regional Materials  
and Resources Center  
(EARMARC)  
The Regents of the  
University of California  
\$5,000

East Asia Regional Materials  
and Resources Center  
(EARMARC)  
Stanford University  
\$4,999

**Psychology****Kevin Jordan**

Human Interaction with  
Automation  
NASA  
\$1,435,216  
Flight Control and  
Autonomous Vehicle  
Research  
NASA  
\$1,334,878



*Systems Safety Research*  
NASA  
\$853,642

*Human Performance  
Modeling and Simulation*  
NASA  
\$670,607

*Airspace Management  
and Terminal Air-Traffic  
Modeling*  
NASA  
\$630,986

*Human-Systems Integration  
Technologies*  
NASA  
\$341,905

*Human Information  
Management*  
NASA  
\$265,000

**Kevin Jordan**  
**Shu-Chieh Wu**  
*Model-Based Principles for  
Information Architecture*  
DePaul University  
\$38,812

*Human Resource Scheduling  
in Performing a Sequence of  
Discrete Responses*  
The Johns Hopkins  
University Applied  
Physics Laboratory  
\$29,638



**RESEARCH BRIEF:**

**Project Team:**

Richard Keady, professor, Humanities; Bob Cooper, associate vice president Undergraduate Studies; Eloise Stiglitz, associate vice president, Student Services; Shawn Spano, professor, Communication Studies; Debra David, director, Center for Service Learning; and Connie Hernandez, Special Programs, Student Affairs. (left to right)

**Partner:** Ford Foundation

**Objective:** Promote academic freedom and constructive dialogue at San José State University by increasing capacity to support open discussion of controversial issues.

**Funding:** \$100,000

**Urban and Regional  
Planning**

**Shishir Mathur**  
*Santa Clara Housing Study*  
Local Initiatives Support  
Corporation  
\$55,222

*Teaching the On-Line Course  
Titled: "Strategic Planning  
Practicum II" for the Masters  
in Strategic Planning  
for Critical Infrastructures  
Program*  
University of Washington  
\$12,716

*City of San José  
Neighborhood Park and  
Recreation Bond Measure:  
Linking Planning with  
Finance*  
Lincoln Institute of  
Land Policy  
\$12,000

**Dayana Salazar**  
*CommUniverCity – Five  
Wounds/Brookwood Terrace:  
Renewing the Action Agenda*  
San José Redevelopment  
Agency  
\$62,885

*King Ocala Neighborhood  
Area Community Services  
Network*  
San José Redevelopment  
Agency  
\$41,133

**Total: \$6,305,827**

**University  
Programs**

**Academic Services**

**Frank Castillo**  
*Educational Talent Search*  
U.S. Department of  
Education  
\$204,000

*TRIO Dissemination  
Partnership Program:  
Teachers and Parents  
Helping Students (TPHS)*  
U.S. Department of  
Education  
\$195,931

**Jeannine Slater**  
*The Ronald E. McNair  
Postbaccalaureate  
Achievement Program*  
U.S. Department of  
Education  
\$480,086

**Associated Students**

**Frances Roth**  
*Child Care Access  
Means Parents in School  
(CCAMPIS) Program*  
U.S. Department of  
Education  
\$176,504

## Career Center

### Cheryl Allmen-Vinnedge

**Julie Sedlemeyer**  
*SJSU Workability IV  
Program 2006-2007*

California Department of  
Rehabilitation

**\$140,400**

*SJSU Workability IV  
Program 2005-2006*

California Department of  
Rehabilitation

**\$130,400**

## Curriculum and Assessment

### Robert Cooper

*Difficult Dialogues Initiative*  
Ford Foundation

**\$100,000**

### Debra David

*Bridging Borders  
AmeriCorps Program*  
California Service Corps

**\$295,414**

*Realizing the Civic Mission  
of Education in the  
California State University:  
A Learn and Serve America  
Grant Program*

Trustees of the California  
State University

**\$17,285**

*Project SHINE: Multiple  
Pathways*

Temple University

**\$15,000**

*Bridging Borders  
AmeriCorps Program*  
Alum Rock Union  
Elementary School  
District

**\$1,200**

### Ashley Raggio

*Spring Into Action*  
Notre Dame Da Namur  
University

**\$1,000**

## Graduate Studies and Research

### Edward Landesman

*NASA Explorer Schools  
Pre-Algebra (NESPA): A  
Conceptual Understanding of  
Mathematics Using Inquiry-  
Based Technology Tools and  
Solar System Data*

NASA

**\$194,348**

### Guna Selvaduray

*Metropolitan Medical Task  
Force (MMTF) Exercise*  
City of San José

**\$23,433**

*Homeowner's Guide  
Translation to Spanish*  
Seismic Safety  
Commission

**\$10,000**

### Pamela Stacks

*Collaborative Teacher  
Institute*  
House Family  
Foundation

**\$95,577**

*Smart Skies: E-Learn  
Computer Workstation  
Project*

NASA

**\$92,068**

### Philip Trounstine

*CommUniverCity  
Neighborhood Perception  
Study*

San José Redevelopment  
Agency

**\$26,000**

### James Wayman

*Consultancy Support to  
the CESG Biometrics Test  
Programme*

Communications-  
Electronics Security  
Group

**\$145,000**

*Evaluating Fingerprint  
Identification Technology*

California Office of  
Systems Integration

**\$50,000**

## SJSU Research Foundation

### Jerri Carmo

*Research Administrative  
Resources for the Space  
Research Directorate*

Lockheed Martin  
Corporation

**\$177,591**

### James Robbins

*Mary Sidney  
Business Assistance Program  
for PIER Companies*

The Regents of the  
University of California

**\$94,500**

## Student Services

### Connie Hernandez-Robbins

*Safer California Universities:  
A Multi-Campus Alcohol  
Problem Prevention Study*

Prevention Research  
Center

**\$60,000**

*Connect, Motivate and  
Educate (CME) Society  
Planning Grant*

Walter S. Johnson  
Foundation

**\$25,000**

*Connect, Motivate and  
Educate (CME) Society  
Greenhouse Program*

College Board

**\$10,000**

## University Advancement

### Nancy Bussani

*Collaborative K-12 STEM  
Support*

The David and Lucille  
Packard Foundation

**\$150,000**

**Total: \$2,910,737**

**San José State University  
Research Foundation  
Board of Directors**

**FROM THE ADMINISTRATION**

**Don W. Kassing**  
*President, SJSU and  
SJSU Research Foundation*

**Carmen Sigler**  
*Provost, SJSU and Vice President  
SJSU Research Foundation*

**Rose Lee**  
*Vice President for Administration  
and Finance, SJSU and Treasurer  
SJSU Research Foundation*

**Pamela Stacks**  
*Associate Vice President for  
Graduate Studies & Research*

**FROM THE FACULTY**

**Susan Meyers**  
*Dean, College of Education*

**Roy Okuda**  
*Professor, Chemistry*

**Michael Solt**  
*Associate Dean  
Lucas Graduate School of Business*

**Sally Veregge**  
*Professor, Biology*

**James Harvey**  
*Professor  
Moss Landing Marine Laboratories*

**Kathleen Roe**  
*Professor, Health Sciences*

**FROM THE STUDENT BODY**

**Francis Howard**  
*Graduate Student*

**FROM THE COMMUNITY**

**Terry L. Austen**  
*Senior Vice President and  
San José Area Manager  
Kaiser Permanente*

**Karen Dunlap**  
*Executive Vice President  
Wells Fargo Bank*

**James J. Eller**  
*Attorney  
Eller & Associates*

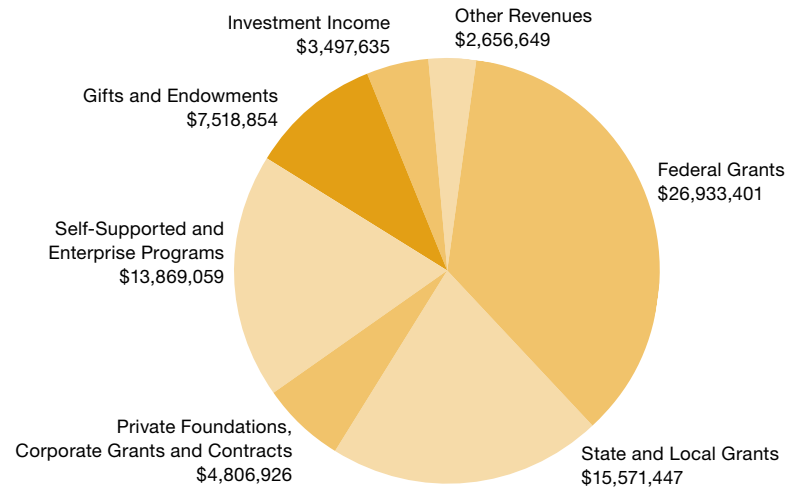
**NON-VOTING MEMBERS**

**Mary Sidney**  
*Chief Operating Officer  
and Secretary  
SJSU Research Foundation*

**William L. Gates**  
*Legal Counsel  
Mesirow, Fink, Rosenblatt  
and Dawson*

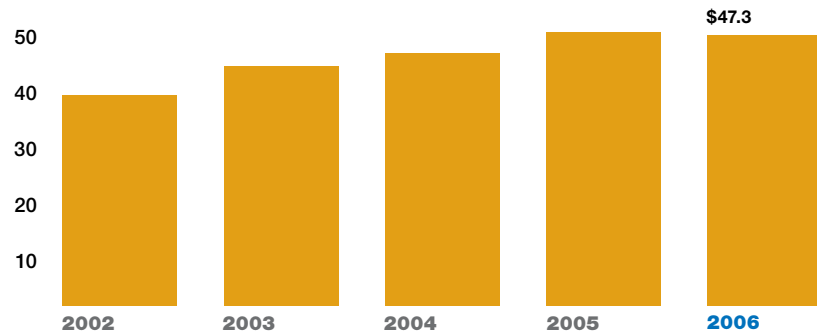
**Summary of Financial Activities 2005-2006**

**Revenues: \$74,853,971**



**Research Grants and Contracts Expenditures**

(in millions)



# San José State University Research Foundation

## Statement of Activities

Fiscal Year ending June 30, 2006 (Unaudited)

### Revenue and Support

Federal Contracts and Grants	\$22,905,054
State Contracts and Grants	12,156,628
Other Contracts and Grants	5,846,722
Indirect Cost Recovery-C&G	6,403,370
Administrative and Program Fees	1,025,791
Gifts and Pledges	889,594
Investment Income-Endowment	2,812,369
Investment Income-Other	756,206
Change in Annuity Obligations	(70,940)
Other Revenue and Support	2,656,649
Campus Organization Gifts and Pledges	6,629,260
Campus Organization Other Revenue and Support	12,843,268

**Total Revenue** **\$74,853,971**

### Expenses

Program Activities	
Sponsored Programs	40,957,139
Board Designated Programs	2,651,215
Enterprise Activities	3,346,085
Campus Organization Expenditures	14,770,495
Support Activities-Management and General	7,726,139
Transfers to San José State University	4,995,012

**Total Expenses** **\$74,446,085**

Change in Net Assets	407,886
Net Assets-beginning of Year	52,763,333
Transfer of Assets to Tower Foundation	(36,244,095)

**Net Assets-end of Year** **\$16,927,124**

## San José State University Research Foundation, your trusted partner:



Dr. Martin Luther King, Jr.  
Library on the SJSU campus

### Access to expertise

**F**aculty members at San José State University conduct research and public service activities across a broad spectrum of areas and disciplines, ranging from air traffic safety to the preservation of California's wetlands to the improvement of K-12 classroom instruction. Think of the San José State University Research Foundation as a channel that delivers the skills and talents of SJSU faculty into the workplaces of Silicon Valley businesses, government agencies, and community service providers.

### Hands-on service delivery

What differentiates SJSU from its Bay Area university counterparts is its emphasis on applied rather than basic research. While the work of our faculty members is grounded in basic research (our own and that of others), our deliverables make a difference in the lives of those who live and work in our communities today.

### Diversity

One of the nation's most diverse campuses, San José State is headquartered in the heart of Silicon Valley—arguably the most entrepreneurial region in the world. Fueling the region's economic engine and supporting its educational and social services needs, SJSU supplies a considerable portion of the Bay Area's workforce.

### Accountability

Research administration and program management is a highly regulated enterprise. With over \$48 million in assets and \$75 million in total annual revenues, the Research Foundation maintains the highest ethical standards for business and program operations, strictly adhering to sponsoring partner requirements, Generally Accepted Accounting Principles (GAAP), California State University policies, and all applicable laws and regulations. The Research Foundation's financial operations are audited annually by the international accounting firm of Deloitte and Touche LLP.

### Experienced leadership

Guided by a Board of Directors with expertise across a range of disciplines, and representing the campus and business communities, the SJSU Research Foundation provides superior service to its partnering organizations. The combined resources, reputation, and entrepreneurial profile of the Research Foundation provide an exceptional framework for successful business and community partnerships.

*For more information about our programs or to learn how you might partner with San José State, visit our Web site at [www.sjsufoundation.org](http://www.sjsufoundation.org) or call 408-924-7395.*

### Photo credits:

Principal photography:  
Sharon Hall, '80 & '93

Additional photos:  
Robert Bain, portrait  
of President Kassing, page 2  
Mike Adams, pages 6-7  
Various, page 10