SJSU's RSCA Plan: Faculty and Student Intellectual Engagement and Performance

Preface

San José State University (SJSU) is committed to providing research, scholarship and creative activity (RSCA) opportunities to both faculty and students. The outcomes of our RSCA engagements move disciplines forward, improve quality of life on local and global levels, provide experiences for students that support retention, build the reputation of our institution and bring in resources from outside agencies. We are especially dedicated to enhancing the connection between RSCA and classroom activities to provide context and relevance to our curriculum while also engaging and inspiring students. RSCA allows us to combine learning with discovery, mentoring with teaching and knowledge with application.

SJSU provides exceptional and affordable education to all of our students so they find success in their careers and become engaged citizens of California. Our RSCA-engaged faculty bring vitality to the classroom and provide opportunities for students that increase their professional potential as they launch their careers or continue their higher education.

Our university is situated in a region known for innovation, with extensive global connections, that leads the United States and the world in many industries. SJSU's goal of engagement and intellectual contributions offer ample occasions to inform and sustain Silicon Valley's reach. We plan to build on our significant and varied relationships within our region,

and our status as a destination campus for students from around the world. We will expand our opportunities to be on the cutting edge of technology and cultural developments, while also tackling the social challenges of wealth and health disparities as partners with our communities.

Each year, faculty and students pursue varied projects at SJSU that contribute to the campus community, our local region, and the world. Recent contributions include the discovery of new hypercompact clusters (dense galaxies); more than two dozen books or chapters from children's fiction to texts on United States politics to information archiving; faculty and student design work that led to the creation of an SJSU typeface; and grants to support education development and enhancement in Pakistan and Vietnam. to name a few. Undergraduate and graduate student RSCA accomplishments are showcased annually in the SJSU and the California State University Student Research competitions (SISU Students Excel at CSU-wide Research Competition). Faculty have captured a number of federal RSCA-training grants including Maximizing Access to Research Careers (MARC), NIH Research Initiative for Scientific Enhancement, and Department of Education McNair's Scholar that provide resources for student RSCA with faculty mentors, especially for underrepresented minority (URM - Black or African American, Hispanic/Latino and Native American) and first-generation students.

A Campus Priority

The Academic Affairs division selected RSCA and professional development as one of its three top priorities for 2014-16, to reinforce RSCA as a tenet of the SJSU experience for both students and faculty. A priority group working team that included student, faculty members and administrator representatives met biweekly to support the development of programs in partnership with the Office of Research, the Research Foundation and the Center for Faculty Development. The activities included university-wide and college-wide RSCA supports such as workshops, training and grants. Base funding from SJSU and the CSU system has been established to support ongoing internal grants, such as a program that pairs students and faculty for mentoring and RSCA. In the future, we will create a new working/advisory group to continue the efforts.

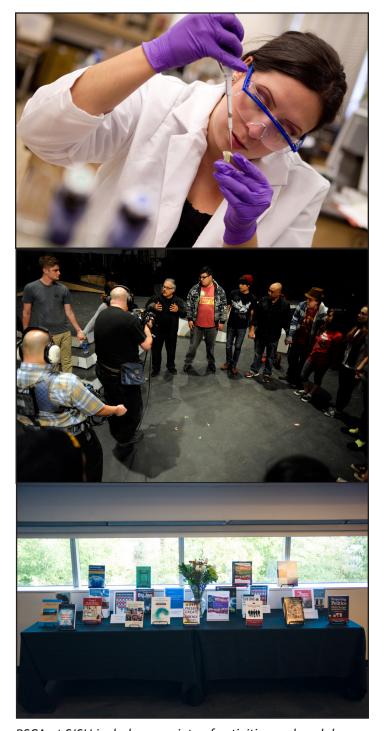
Provost Feinstein charged Associate Vice President for the Office of Research Pamela Stacks, who led the priority group working team on RSCA, with creating a strategic plan to address issues that were raised around supporting a thriving culture of RSCA at SJSU. Strategic goals for RSCA have been informed by discussions with key campus constituents throughout 2015-2016.

The plan is informed by the priority group; seven academic college deans; associate deans of research or other faculty selected by the deans of each college and the library; the University Council of Chairs and Directors (UCCD); Office of Research discussions at college-level meetings with faculty in the College of Engineering and the College of Science; department and school-level meetings with faculty in the College of Applied Sciences and Arts; two university-wide town hall meetings; and a survey distributed to faculty to evaluate the impact of one-time, centralized RSCA support programs. In addition to these meetings, the Senate Program Planning Committee and the Curriculum and Research Committee deliberated on the inclusion of RSCA as a specific element of the program planning process.

From these extensive conversations, we have established four goals with recommended objectives and action plans that were finalized as we gathered additional input from the campus community. These goals establish RSCA as a campus-wide priority while enhancing resources that allow us to foster RSCA opportunities for students and faculty in a systematic way.

The four goals include:

Creating new knowledge, practices and creative



RSCA at SJSU includes a variety of activities such as laboratory research, theater productions, and publications, among other pursuits. From top, photos by Bruce Kramer, Neal Waters and Bob Bains.

works that build and impact regional resources and community.

- Engaging and supporting faculty and students, resulting in faculty currency and high-quality student experience.
- Expanding recognition and reputation for the institution and faculty.
- Maintaining a thriving enterprise that benefits from external funding.

Goal 1. Create new knowledge, practices and creative works that build and impact regional resources and community.

- Objective A: Acknowledge tenured and probationary faculty's RSCA activity by building RSCA assignments into the workload designations for RSCA-active faculty members.
- Objective B: Provide at least 0.2 assignment per year to RSCA for RSCA-active tenured and probationary faculty members.
- Objective C: Increase tenure density by enhanced recruitments.
- Objective D: Engage and expand RSCA relations with industrial, governmental and residential communities.

To foster an atmosphere of RSCA at SJSU, it is critical to recognize that it is part of the tenured and probationary faculty workload. Determining the assigned workload for each faculty member has challenges as the current CSU accounting system lacks a RSCA assigned time category. We will establish an accounting mechanism for RSCA workload at SJSU. We understand that resources available to RSCA-active faculty have been uneven across campus in part due to the range of needs, including access to specialized facilities and equipment for some disciplines, and in part due to differential availability of funds, including philanthropic endowments, external sponsored program opportunities, and program savings based on class sizes and use of assigned time.

In order to recognize and promote RSCA at SJSU, we propose that RSCA-active faculty be assigned 0.2 of their annual assignment to accommodate their RSCA work. The cost of this proposal depends, in part, on how many faculty are considered RSCA active. It is noted that two CSU campuses that provide RSCA assigned time to faculty have employed increases in class sizes as well as using indi-



Photo by Neal Waters

The Charles W. Davidson College of Engineering hosted the 7th Annual Biomedical Device Conference in March as a way to connect students and faculty with industry professionals. One objective of the RSCA Strategic Plan is to expand RSCA relations with industrial, governmental and residential communities.

rect revenues from external grant funding.

The uneven recognition of RSCA is exacerbated by the additional service demands imposed by a low tenure density. We will continue to hire tenure-track faculty to offset retirements and build the tenure density of our faculty.

SJSU has strong engagement with our communities and we seek to expand our engagement and

our RSCA impact. We see natural partnerships between different disciplines with different sectors, including Santa Clara County, the City of San José, and with the industrial sector. The faculty and student interest is strong in this area but we could benefit from involvement by the Research and Tower Foundations to develop robust models to facilitate these RSCA partnerships with our communities.

Goal 2. Engage and support faculty and students in RSCA, resulting in faculty currency and a high-quality student experience.

- Objective A: Increase student involvement in RSCA activities.
- Objective B: Attract, retain and support faculty who seek student engagement in their RSCA programs.

We seek partnerships between faculty and their students to enhance the RSCA environment and opportunities for students. SJSU has an institutional membership in the Council of Undergraduate Research that provides strategies and resources to encourage undergraduate research across the range of disciplines. Their number-one strategy is to integrate and build undergraduate research into curriculum and course work. We see opportunities to expand RSCA-oriented curriculum across the disciplines. For instance, some programs may involve students in RSCA activities in supervision courses that count

toward degree requirements and provide WTU credit for the faculty. The approach positively impacts the students, through engagement with a high-impact practice, and has the potential to advance the faculty member's RSCA activity when done strategically. Conversations about the role of RSCA in capstone courses can also advance faculty-student RSCA partnerships. It is important to ensure that our graduate students continue to have RSCA opportunities. RSCA development opportunities for inactive or less RSCA-active faculty will continue to be provided via workshops and internal grant activities to support currency.

Goal 3. Expand recognition and reputation for the institution and faculty.

- Objective A: Acknowledge and celebrate our range of RSCA.
- Objective B: Enhance communications regarding RSCA achievements of the SJSU community to the campus and the world.

It is critical to capture the array of RSCA efforts our faculty and students undertake, and especially to share the outcomes of their RSCA in a variety of media outlets. We will work closely with University Advancement's Strategic Communications and Public Affairs team to share stories with on and off campus audiences, and to leverage the "Experts" program that connects knowledgeable faculty with news outlets. If we ensure RSCA stories and achievements are provided to University Advancement this will enhance donor giving to faculty and student research, scholarship, and creative activities.

We will also improve the Office of Research website to publicize our faculty and student RSCA achievements. Due to the decentralized nature of SJSU, we will seek information from the colleges, the University Library and ScholarWorks, the Research Foundation and Tower Foundation, as well as the accomplishments from SJSU Organized Research Units.

We need to capitalize on RSCA strengths at SJSU using Organized Research Units, cluster hiring (e.g.



Photo by Christina Olivas

Lucas College and Graduate School of Business students use Bloomberg Terminals to manage the Spartan Fund and have used the knowledge they gained to compete in the CFA Institute Investment Research Challenge for the Northern California region.

Cybersecurity and Big Data faculty hires) and Centers of Excellence. We need to enhance the presence and support of theme-based RSCA faculty groups by connecting research teams, providing grant proposal writing assistance and shared administrative support where warranted.

Goal 4. Maintain a thriving enterprise that benefits from external funding.

- Objective A: Improve RSCA support/infrastructure by bringing SJSU administrative and support structures into alignment with our mission of transmission and creation of new knowledge.
- Objective B: Increase the level of external funding generated by RSCA.

We will align SJSU administrative and support structures to support RSCA priorities. Working with the Academic Senate, we want to consider updating policies and aligning operating committee structures to reflect a RSCA focus. We will improve related procedures to ensure, for instance, that RSCA needs are considered when facility improvements or new construction occur. In addition, we will develop our technology transfer capabilities by using CSU tools available to us.

There are a number of issues to tackle to increase the level of extramural sponsored program funding and create best practices to use these resources optimally. An analysis of our current grants will yield data on grant "direct" funding impact on campus and determine the levels of "indirect" funding we receive (Facilities and Administration, or F&A revenue) that can be used to invest in future RSCA. The university will consider additional financial investments such as moving pre-award expenses incurred by the Research Foundation to stateside funding. This would be a long-term investment that is built into base funding and makes available F&A returns that could be used to support RSCA, as well as future proposal and grant activities. In spring 2016, we seek to create and evaluate an F&A distribution model that will enhance investments that sustain proposal and grant activity on campus.



Above, K-12 teachers participate in "The California Immigrant Experience through Literature and Theatre" during summer 2014. Matthew Spangler, a professor of Performance and Communication Studies, and David Kahn, professor and chair of TV, Radio, Film, and Theatre, received a \$168,000 grant from the National Endowment for the Humanities to host the session again in July 2016. Below, members of the Social Work Education Enhancement Project pose for a photo after hosting visiting faculty members from Vietnam. The team received a grant from the the United States Agency for International Development to create social work curriculum with eight partner universities in Vietnam.



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