

College of Science
Report on Use of 2014-16 RSCA Infusion Funds
4/18/16

Under the visionary leadership of Provost Andrew Hale Feinstein and Associate Vice President for research Pamela Stacks, the Academic Affairs division at SJSU invested a total of \$2.2M to stimulate research and creative activity campus-wide over the period of 2014-16. Of this total, \$1M was earmarked for college-specific projects, distributed in proportion to full time equivalent regular faculty. The College of Science (CoS) share of this college-specific pool was \$167,851. CoS Dean J. Michael Parrish supplemented this with an additional \$34,302 bringing the total for the CoS research stimulation program to \$202,153. We report here how the CoS invested these funds.

Supported Activities

Information accumulated over the last several years at SJSU, expressed in a Sense of the Senate resolution ([SS S11-6](#)) suggests that the greatest impediment to expanding research, scholarship, and creative activity (RSCA) at SJSU is the high teaching load for research-active faculty arising from the absence of time allocated for RSCA in the base SJSU workload calculation. Accordingly, the CoS has invested the bulk (\$142,623, 71%) of the combined infusion and College RSCA funds to provide reassigned time for the most research active faculty, as determined by sponsored research and publication activity (see Research Activity Metric 2.0 below). The remaining funds (\$59,530, 29%) were used for a “Just-in-Time” grant program to help faculty with one-time modest research needs.

In May 2015, all CoS faculty were asked to submit data related to their research activity for each of the last five years to the College. Only tenured or tenure-track, non-FERP faculty who submitted data were eligible to receive any of the CoS research stimulation program funds.

Reassigned Time Program

The average annual research activity for a five-year period, as measured by the CoS research activity metric (excluding the student mentoring component, which was compensated in a different way), was calculated for each faculty member who submitted data. The CoS metric, version 2.0 is attached.

The eligible faculty who had the 24 highest five-year average research activity were offered 0.2 FTE of release to be taken in either the F15 or S16 semester at their choice, with their department chair’s consent. A few faculty members requested the equivalent in research funds (\$6,000) rather than reassigned time. For this year, all such requests were approved.

Just-in-Time Grant Program

Faculty are free to request funds from this program for any research-related need at any time during the 2015-16 academic year. The request need only be a brief

description of what is needed and how the funds will advance the research agenda of the requester, and a brief budget. All such requests are reviewed by the CoS Research committee, which evaluates the merit of the request, and the evaluations are forwarded to Dean Parrish for a final funding decision. We endeavor to release Just-in-Time funds according to the following schedule: $\frac{1}{2}$ in the first quarter, $\frac{1}{4}$ in the second quarter, $\frac{1}{8}$ in the third quarter, and $\frac{1}{8}$ in the final quarter. This method balances providing funds early to maximally stimulate research with retaining some funds to meet unforeseen needs. As of this writing 17 Just-in-Time grants have been awarded ranging in amount but averaging \$2,450.

Outcomes

Stimulatory funds for research are by their nature a long-term investment, so assessing outcomes too soon is unwise. Nevertheless, the infusion of funds for research this year has already had several noticeable positive effects. First, the culture of our College, while always embracing research and scholarly activity, has moved decidedly toward expanding research activity, thus providing additional research opportunities for our students. Second, both applications for extramural grants and awards for the main campus portion of the College of Science are on track to exceed last year's numbers, with the totals in both categories already matching last year's numbers with four months remaining in the fiscal year. The grant applications and awards for the Moss Landing Marine Laboratories already far exceed last year's totals.

We will continue to assess the scholarly activity from our College annually using the metric we have developed (below) and we are confident that with continued support, the research activity will continue its impressive expansion. This investment in research better enables us to achieve our dual missions of providing a state-of-the-art science education to our students and creating new knowledge while also generating a sustainable pool for future stimulus funding.

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College of Science Research Activity Metric, v. 2.0

A point total is calculated for each faculty member's annual research activity for each of the past five years at SJSU. The mean of these five annual averages is then calculated to produce a five-year average. If a faculty member has been at SJSU for fewer than five years, then only their time at SJSU is considered.

Points are assigned as follows:

- 1 point for each \$50,000 in annual direct research funding with full overhead. Lower overhead reduces points and co-PI's divide points per agreement at submission. If no agreement exists, then points are divided evenly between PIs.
- 1 point times a normalization factor* for each published paper in a journal with impact factor of 0.5 or higher (0.5 points if more than one PI author, internally or extramurally).
- 1 point for each FPPRCP** (0.5 points if more than one PI author, internally or extramurally).
- 0.2 point for each non-FPPRCP published conference paper up to a total of 1 point (must be national or international; regional does not count).
- 0.1 point for each extramural invited talk or conference presentation.
- 0.022 point per enrolled UG mentored, 0.033 per grad in 298, and 0.066 per grad in 299, 0.1 point per postdoc (mentoring points not counted toward release time).

*normalization factor = 2.04 for mathematics and statistics publications and 1 for all other disciplines. A pilot study looking at several research-intensive universities showed that a lower rate of publication among mathematicians, related to the nature of inquiry and publication in that field, is consistent relative to other disciplines in the institutions measured.

**FPPRCP = Full-Paper, Peer-Reviewed Conference Proceeding. To qualify as a FPPRCP, the following criteria must be met:

- 1) The full paper (not an abstract or a summary) must be submitted to the conference for review and appear in its entirety in the archived conference proceedings.
- 2) The paper must be reviewed by at least two expert peer reviewers for acceptance to the conference.
- 3) Acceptance of the paper for presentation at the conference must not be automatic, i.e. the acceptance rate must not be 100%.