

Research Working Group Impact Annual Report May 2014

The research working group has been an on-going collaboration between campus leadership, the members of the research working group includes the campus wide University Research Committee, as well as staff members in Research Foundation and Research Advancement.

Many different issues were originally identified by the Creative and Research Working infrastructures. The following goals were identified by the group (in bold) and the progress made to date and future plans are discussed below each goal.

- **Invest funds for tenured and tenure-track faculty to advance existing and future areas of scholarly excellence.**
 - Four areas of excellence were identified through a campus wide process that focused on faculty led initiatives, using on-campus peer and administrative review as well as external reviewers. The four areas included the 1) Clinical and Cognitive Neurosciences, 2) Viromics, 3) Climate Change and Sustainability Studies and 4) Human Dynamics in a Mobile Age. A total of 16 faculty lines were approved over 2 years. Eight faculty lines have been approved for hire in the current academic year with 7 faculty successfully hired whereas the other searches were either delayed until next year or still pending. Both Associate and Assistant Professors were hired into the areas depending on their level of performance and needs. Additional funding was allocated catalyze the four areas of excellence. More limited funds have also been distributed to areas of excellence not selected for the final four.
 - The residual eight new hires are planned for 2015-16 into the four areas of excellence.
- **Invest funds for improvements in facilities and equipment essential to sustaining scholarly activity and productivity.**
 - 2012/2013 and 2013/2014 investments provided funds for improvements in facilities and equipment, including targeted purchase of shared equipment for faculty research. After an open call to all colleges, \$875,000 in shared equipment and facilities were approved within six colleges that cut across a range of fields or disciplines. Investments in shared research facilities included items such as 1) upgrades and improvement to specific research facilities (e.g. digital video and sound recording for observational studies in the College of Education) 2) shared equipment (mass spectrophotometers; sequencers) or 3) access to electronic resources (e.g. database access for faculty in the College of Business). These investments have already been noted by outside reviewers of grants that were approved for funding as evidence of campus commitments to the project.
 - Additional investments in shared core equipment have made for ca. \$200,000.
 - Review of the vivarium facility has been completed and drawings are being developed to upgrade the facilities per the recommendation of the report.
 - Research has clearly risen as a priority for fund raising on campus including the new research endowment fund, direct funding of laboratories, or efforts to link the business community to faculty research.
 - New software solutions have been implemented or under-going implementation to increase the efficiency and ease of research activities on campus

- Electronic proposal routing (implemented)
 - Electronic time sheets (partially implemented)
 - Web based management of IRB review protocols by faculty and staff (purchased and under-going customization process based on feedback)
 - Major core facilities were considered for review for operational and physical performance issues. The Vivarium was reviewed in 2014 and recommendations made for upgrades in terms of services, management and facilities. Currently plans are being developed by physical plant for HVAC and related upgrades of the facility. Costs are expected to exceed \$600K.
 - Future plans include finalizing the implementation of new software solutions to campus research management (e.g. IRB) with new investments in areas such as IACUC to be reviewed.
 - Continued efforts on implementing improvements to the vivarium to be completed.
 - Development of a rotating review process for shared facilities will be completed next year.
 - Plans include the tracking of the impact of these additional resources on the success of our faculty in pursuit of their scholarship
- **Foster interdisciplinary collaborative research and projects.**
 - 2013/2014 investments provided additional support for multi-disciplinary research. For example, investments support for additional assigned time for faculty to write large, multi-disciplinary grants. A new program was developed and announced to all colleges that offers funds on a competitive basis to provide assigned time at replacement cost to faculty working on larger, collaborative efforts. Funds have been committed to both support faculty assigned time to develop large, cross-disciplinary grants as well as for matching funds required to be competitive for large training grants. To date, funding has been provided to faculty (Assistant to Full) with personnel from Research Advancement also providing grant writing support and budget development. Two areas of excellence, Climate Change and Sustainability and Human Dynamics in a Mobile Age, collaborated on a joint grant submitted to NSF for a climate change center.
 - Additional investments have been made to areas of excellence that were well reviewed, but were not selected in the first round for new faculty lines. Each group received up to \$50K after receipt of an accepted proposal. While groups varied in their responses, common approaches included the use of the funds to generate new collaborative efforts (support of grant writing by multiple participants in the non-selected areas of excellence or to develop a shared identity (web presence). Core areas supported included Advanced Energy Systems (CoE), LBGT program (CAL), Computational /Sciences (CoS), as well as a new Digital Humanities Initiative (CAL).
 - Institutional funding provided as suggested / required by reviewers and agencies to support large federal training grants across multiple colleges or group
 - **Invest funds to strengthen and build infrastructure essential to sustaining scholarly activity and productivity, including planned enhancements of research infrastructure envisioned in the National Council of University Research Administrators (NCURA) report.**
 - A working group has been formed, utilizing the extant URC committee, and adding additional members. Based on recommendations of the NCURA report, new software has

been purchased and implemented for on-line IRB submissions. Pilot testing is currently underway with a subset of faculty as part of the initial evaluation process before full on-campus implementation.

- A similar project included purchase and implementation of a new electronic proposal routing and time sheet submission by the Research Foundation.
 - A new export control position has been created to help faculty and colleges understand and comply with new federal export control regulations and procedures.
 - Issues raised in the NCURA report have included increased clarity of the relative roles of the VPR to include helping with the strategic planning for research on the campus and role of the Foundation Director to oversee the research grant administration and planning.
- **Invest funds for faculty career-long scholarly productivity, including peer-to-peer mentoring for junior and mid-career faculty, grant editing, external review of grants, and summer support programs.**
 - 2012/2013 and 2013/2014 investments provided funds to support external review of grants with a program funding review by reviewers in the disciplinary field at least 5 weeks prior to submission to the funding agency such that comments from the reviewer can still be incorporated into the modified grant application. A call describing the program has been made to all college Deans.
 - Plans have been initiated to develop a “Grant Academy” to provide support ranging from a single weekend workshop to a semester long grant intensive training for a cohort of faculty with broadly defined shared scholarship. Implementation of this plan is expected in 2014-2015.
 - **Invest funds in support of the University Grants Program.**
 - 2013/2014 investments provided base budget funding for the university grants program which was previously funded by one-time funds after funding from the Chancellor's Office was no longer available.
 - **Expand opportunities for undergraduate scholarship through innovative courses, experiences and engagement**
 - Under the leadership of Dean Chase, new funding has been provided to support undergraduate students and faculty with additional assigned time, who are participating in programs with high undergraduate involvement.
 - Additional funding provided to support the Student Research Symposium has been provided by the campus.
 - **Promote opportunities that connect SDSU’s student diversity with the institution’s scholarly endeavors and ambitions**
 - Research Advancement in the office of Graduate and Research Affairs is actively working with faculty on minority serving grant proposals. Grant writing expertise and experience is being developed in Research Advancement to respond rapidly to RFPs for Minority Serving Institutions.

- Cross institutional MOU signed with Univ. of Arkansas to provide undergraduate students from under-represented groups with new research opportunities to build portfolios for admission to graduate programs.
- New plans include development of a web site and associated data to support faculty developing grants that target enhanced opportunities to increase the diversity of graduate students at SDSU. Information such as student demographics and trends in student success, current faculty engaged in outreach efforts for graduate students (if faculty opt into the database), and campus research data (e.g. size and scope of our research portfolio) will be provided to faculty to support of their grant applications.
- **Strengthen graduate programs**
 - Investments have been made to develop a graduate IT program in support of software and efforts to 1) manage graduate enrollment 2) increase recruiting success and outreach 3) development of on-line graduate applications including supplemental materials such as letters of support (Hobsons) and 4) management of the graduate student database (GRADS II).
 - Preliminary pilot testing of on-line graduate applications completed in 2013-14 with increased scope of engagement with more departments expected in 2014-15.
 - Funds were provided to departments on a competitive basis to develop new recruiting tools or strategies that could be applied to their own program or to similar units on campus.
 - In consultation with Graduate Council, changes in NRTW allocation timing were made to increase our ability to response more rapidly to top students applying to all levels of graduate programs.