



CALIFORNIA STATE UNIVERSITY, LONG BEACH

Office of Research & Economic Development

August 11, 2021

To: Jane C. Conoley, President
Karyn Scissum Gunn, Provost and Senior Vice President, Academic Affairs
Scott Apel, Vice President, Administration and Finance
Beth Lesen, Vice President, Student Affairs
Michele Cesca, Vice President, University Relations and Development
Min Yao, Vice President, Chief Information Officer
Brian Nowlin, Chief Operating Officer, Research Foundation
Robin Bargar, Dean, College of the Arts
Michael E. Solt, Dean, College of Business
Shireen Pavri, Dean, College of Education
Jinny Rhee, Dean, College of Engineering
Monica Lounsbery, Dean, College of Health and Human Services
David Wallace, Dean, College of Liberal Arts
Curtis Bennett, Dean, College of Natural Sciences and Mathematics
Jeet Joshee, Dean, College of Professional and International Education
Roman Kochan, Dean, University Library

From: Simon Kim, Associate Vice President for Office of Research and Economic Development (ORED)

RE: Sponsored Programs and Research Compliance - Year-End Report

I am pleased to provide the FY 2020-2021 Year-End Report of Sponsored Programs and Research Compliance. With a primary emphasis on faculty-student research engagement, ORED has provided administrative support services, including proposal development and submission, grant and contract administration, reporting, and regulatory compliance. This report captures the research accomplishments of our faculty, staff, students, and administrators.

I. Proposal Preparation and Submission

Despite the ongoing COVID-19 pandemic, grant writing productivity continued. We are pleased to report that 211 faculty, staff, and administrators submitted 301 new proposals, totaling \$128.6 million (See Table 1). The number of proposals submitted, and total new research funds requested increased from FY 2019-20. While we were unable to invite program officers from various federal funding agencies to our campus for professional development workshops, we continued to offer virtual workshops for faculty to share best practices in grant writing and information about their upcoming grant opportunities. The COVID-19 pandemic provided opportunities for the ORED Pre-Award team to transition all services to an electronic format. Moving forward with minimal interruption of services, all internal routing and submission procedures were updated to support on-line interactions and most paper-based processes have been eliminated.

Table 1: Overview of New Proposals Submitted

Division/College	2021 Total New Proposals Submitted	2021 Total New Research Funds Requested	2020 Total New Proposals Submitted	2020 Total New Research Funds Requested	Total Proposals Submitted (% Change)	Total Research Funds Requested (% Change)
COB	2	11,501.00	2	53,668	0.00	-78.57
CPIE/CITT	12	4,220,859	7	1,067,300	71.43	295.47
CED	17	29,267,093	17	13,632,769	0.00	114.68
CHHS	46	21,331,731	45	20,552,836	2.22	3.79
CLA	63	6,600,155	38	13,887,119	65.79	-52.47
CNSM	54	33,843,129	54	19,579,089	0.00	72.85
COE	74	16,677,134	75	42,749,288	-1.33	-60.99
COTA	13	1,269,070	11	246,540	18.18	414.75
Other Units (Pres, AA, SS, URD)	20	15,428,087	17	12,568,325	17.65	22.75
TOTAL	301	128,648,759	266	124,336,934	13.16	3.47

II. New Awards

We are also delighted to report that 98 Principal Investigators received 151 new external awards, totaling \$32.1 million (See Table 2). Sponsors included 68 federal, 30 state, and 9 local agencies, as well as 44 private corporations and foundations. Our faculty has had a remarkable year for securing new external awards during the COVID-19 pandemic. In spite of the challenges, we had in the reduction of research activities, the faculty in the Colleges of Health & Human Services, for example, had 37 proposals awarded for a total of \$16.2 million which is nearly triple the amount of the previous year.

Table 2: Overview of New Awards Received

Division/College	2021 Total New Proposals Awarded	2021 Total New Research Funds Awarded	2020 Total New Proposals Awarded	2020 Total New Research Funds Awarded	Total Proposals Awarded (% Change)	Total Research Funds Awarded (% Change)
COB	2	11,500.00	2	53,668	0.00	-78.57
CPIE/CITT	8	896,414	9	673,009	-11.11	33.20
CED	7	3,415,941	10	1,610,061	-30.00	112.16
CHHS	37	16,255,558	24	5,921,556	54.17	174.51
CLA	29	2,360,322	21	1,817,963	38.10	29.83
CNSM	34	3,113,267	29	3,675,893	17.24	-15.31
COE	17	2,237,338	37	8,135,068	-54.05	-72.50
COTA	6	161,429	11	101,090	-45.45	59.69
Other Units (Pres, AA, SS, URD, AF, IT)	11	3,690,642	14	21,000,609	-21.43	-82.43
TOTAL	151	32,142,410	157	42,988,917	-3.82	-25.23

III. Research Expenditures

The campus generated \$33.8 million in research expenditures, \$29.6 in direct and \$4.2 in indirect expenditures, during the year with reduced research activities, including restricted on-campus lab openings, research training programs, and travel. (See Table 3). Ongoing post-award administration activities include award negotiation and acceptance, fund establishment, coordination of employment, expenditure compliance and processing, financial reporting, sponsor invoicing, and project close out. The ORED Post-Award team has also transitioned all services to an on-line format and is continuously working with campus partners to streamline timely award execution, award set up, expenditure approvals, financial reporting, and close out requirements. Over the course of the Covid-19 pandemic, the ORED Post-Award team has 1) established online signature approval processes working with multiple colleges, divisions, and the Research Foundation; 2) reviewed and implemented multiple OMB and sponsor specific Covid-19 grant guidance regulations; 3) eliminated paper-based post award tracking systems; and 4) provided online training presentations to help Principal Investigators adapt to Covid-19 modifications.

Table 3: Overview of Research Expenditures and F&A Rates

Division/College	2021 Research Expenditures	2021 F&A Revenue	2021 Effective F&A Rate	2020 Research Expenditures	2020 F&A Revenue	2020 Effective F&A Rate	Total Research Expenditures (% Change)	Total F&A Revenue (% Change)	Total Effective F&A Rate (% Change)
COB	6,292	1,588	13.8%	12,490	2,872	23.0%	-49.62	-44.73	-39.97
CPIE/CITT	940,005	229,970	25.7%	1,152,525	223,359	19.4%	-18.44	2.96	32.38
CED	3,166,370	121,485	3.6%	2,936,974	127,472	4.3%	7.81	-4.70	-18.06
CHHS	8,561,491	1,049,354	6.5%	9,715,468	1,091,781	11.2%	-11.88	-3.89	-42.56
CLA	985,444	260,068	11.0%	963,623	214,607	22.3%	2.26	21.18	-50.53
CNSM	4,505,446	733,982	23.6%	5,593,552	1,049,180	18.8%	-19.45	-30.04	25.69
COE	3,350,542	457,494	20.4%	2,499,976	485,302	19.4%	34.02	-5.73	5.34
COTA	120,949	7,508	4.7%	169,555	5,288	3.1%	-28.67	41.98	49.13
Other Units (Pres, AA, SS, URD, AF, IT)	8,037,062	1,291,350	35.0%	9,000,978	1,339,729	14.9%	-10.71	-3.61	135.08
TOTAL	29,673,601	4,152,799	14.0%	32,045,140	4,539,589	14.2%	-7.40	-8.52	-1.21

Our campus participates in the Annual NSF Higher Education Research and Development (HERD) Survey. In FY 2019-20, the campus generated \$18.6 million in funding of research and development, according to data from the NSF (HERD) survey. The campus ranks 7th among 23 CSU campuses and 42nd out of 88 high Hispanic enrollment institutions in the U.S. for research expenditures.

Table 4: NSF Higher Education Research and Development (HERD) Data for FY 2019-20

Institution	All R&D expenditures	Computer and information sciences	Geosciences, atmospheric sciences, and ocean sciences	Life sciences	Mathematics and statistics	Physical sciences	Psychology	Social sciences	Sciences nec	Engineering	All non-S&E fields
San Diego State U.	92,964	1,563	2,582	28,629	4,061	6,333	14,071	5,054	4,243	8,197	18,231
San Jose State U.	44,309	8	12,777	1,133	0	2,041	20,152	247	1,596	1,864	4,491
San Francisco State U.	31,888	840	4,297	12,886	1,023	3,088	1,329	3,629	1,291	1,284	2,221
California Polytechnic State U., San Luis Obispo	30,923	850	1,362	11,743	1,711	10,500	90	256	0	4,116	295
California State U., Sacramento	23,544	123	909	1,324	41	344	298	7,331	2,402	7,507	3,265
California State U., Northridge	21,095	189	1,832	10,053	786	3,225	419	695	845	714	2,337
California State U., Long Beach	18,664	74	125	5,335	621	4,363	1,660	723	335	4,223	1,205
California State U., San Bernardino	16,062	1,831	118	2,115	681	1,219	2,708	534	779	2,434	3,643
California State U., Los Angeles	12,476	46	0	3,023	35	6,351	76	1,629	0	1,009	307

IV. Internal Research Funding

The campus continues to invest heavily in the research infrastructure to revitalize Research, Scholarly, and Creative Activity (RSCA) and the competitiveness for external funding opportunities that align with our mission and with faculty interests and expertise. This effort has included the investment of approximately \$1.7 million allocated to colleges toward RSCA; \$200,000 from the Chancellor's Office for mini-grants and summer stipends; \$100,000 for the Office of Research and Economic Development Multidisciplinary Research Award; and \$200,000 for the Summer Student Research Assistantship. Other ongoing investments and incentives made by Academic Affairs and ORED to RSCA on campus include: the Responsible Conduct of Research training for faculty and students in compliance with the NIH and NSF regulations; and faculty professional development workshops in grant development.

Open-access (OA) publishing for research articles is growing in popularity; OA publications have more than doubled in the past 5 years as more faculty wish to maximize the accessibility of their work. Many OA journals are highly regarded by researchers and have high impact factors. At CSULB, OA publications currently account for 10% of annual faculty publications, and the proportion aligns with the global trend: 13% of all 2017 publications on Web of Science were OA. OA publishing, thus, represents a small but growing proportion of our university's publications. As more and more faculty choose OA publishing, it has become an important means of promotion for CSULB. ORED has allocated \$20,000 starting FY2019 to support research publications by CSULB faculty. All tenured and probationary faculty and full-time lecturers are eligible to apply to fund publication of their work. At the end of FY 2020-2021, there were a total of 25 OA awardees for a total of more than \$20,000.

V. Research Compliance

Continuous collective efforts have been made to overcome ongoing challenges of the COVID-19 pandemic, and significant progress was made toward the improvement of CSULB research compliance programs, including: 1) refined and enhanced RCR training using Microsoft Teams to better communicate with presenters and students; 2) completed Compliance Reviews of 339 grant/contract applications with a focus on RCR training, FCOI disclosures, and promptly followed up to adequately address issues in the areas of IACUC, IRB, Export Control and/or IP; 3) updated registrations with federal regulation agencies, such as FWA/IRB registration with HHS-OHRP, IBC registration with NIH-IBC-RMS, IACUC Annual Report to NIH-OLAW and USDA, and Annual Report on Possible Research Misconduct to HHS-ORI; 4) coordinated more activities regarding Intellectual Property management with improvements toward tech-transfer and commercialization of innovations; 5) conducted reviews of Material Transfer Agreements and Non-disclosure agreements to support inter-institution collaborations; 6) finalized the draft of the new version of Policy on Use of Unmanned Aircraft Systems (UASs); 7) worked with Academic

Senate to update the list of academic centers and institutes and completed the 5-year continuation review for five ACIs and annual reports for 23 ACIs; 8) provided cross-training and streamlined the work-flow in order to keep uninterrupted, high quality services when staff turnover occurred; and 9) represented CSULB Research Compliance by serving as the meeting host and communication committee member at ARIO.

The Institutional Review Board (IRB) reviewed a total of 511 protocol submissions in AY 2020-2021, including 336 new protocols, 23 renewals/Continuing Reviews/Annual Check-Ins, and 152 requests for modifications. Among the 336 new protocols, the number of protocols processed via Full Board Review, Expedited Review, and Administrative/Limited Review were 3, 49 and 284, respectively, and the percentages from student, faculty/staff and external investigators were 51%, 47%, and 2%, respectively. The numbers of new protocols were led by College of Health and Human Services (112), College of Liberal Arts (109), and College of Education (56). The most submissions were from the Department of Psychology, followed by Educational Leadership, Family and Consumer Sciences, and University Centers, with 43, 31, 24 and 24, respectively. CSULB IRB continued to serve as the designated IRB for the CSU Chancellor Office. During the pandemic the IRB Office had to pivot to provide ongoing support to faculty. More than six department/discipline specific out-reaching workshops were provided. Increased number of one-on-one consultation sessions via Zoom were provided to investigators with flexible schedules so that their questions/issues were addressed without delay. One poster was presented at the 2020 PRIMR AER Conference to share the experience on how to tackle the COVID-19 challenges with a phase-wise strategy to continue more online recruitments and data collections while limiting in-person data collection projects with essential and time-sensitive nature and sufficient measures to minimize potential risks. Progress was made to improve IRB regulations regarding University Honors Program by providing more proactive outreaching and engaging training sessions to all stakeholders, i.e., directors, thesis advisors, course instructors and students. In collaboration with CSU CO, successfully hosted AY 2020-21 CSU system IRB Forum to streamline IRB collaborations across 23 campuses.

The Institutional Animal Care and Use Committee (IACUC) reviewed and approved 8 new protocols, 2 major modifications, 4 minor protocol modifications, and 23 annual reports. The total number of active protocols was 45, among which 39 were from Biological Sciences and 6 were from Psychology. There were 40 research protocol, 3 teaching/observation protocols, and 2 protocols involving collaboration with external institutions. Animal research projects were funded from various resources, most notably the BUILD grant, but also including awards from NIH, NOAA, US Department of Education, California State University COAST Grant Development Program, Orange County Water District, Orange County Sanitation District, etc. There were 21 faculty/staff, 1 post-doctoral fellow, 32 graduate, 32 undergraduates, and 3 volunteers working on active IACUC protocols. Volunteers were typically CSULB alumni continuing to work on a protocol as part of their professional and educational development. IACUC was successful in completing biannual DEA regulated drug inspections. The Semi-Annual Programmatic Reviews

and Semi-Annual Facilities Inspections found no major deficiencies. We successfully passed the virtual USDA Annual Inspection in 2021. More progress was made to build up and implement the new electronic management system, IRBManager, in order to improve the efficiency of IACUC operations. In response to COVID-19 pandemic the IACUC emergency policy was promptly updated and enforced, and essential personnel at Vivarium continued working onsite with flexible schedule to provide uninterrupted services to maintain the essential operations. Research activity was temporarily suspended for lab-based protocols during the pandemic. Field Protocols were also affected. IACUC monthly meetings continued via Zoom so that policy updates and protocol submissions were reviewed and approved without a delay. Efforts were made to maintain and update IACUC membership during personnel turnover. Ongoing trainings were provided for IACUC office staff, vivarium personnel, and IACUC members regarding animal research regulations updates.

VI. Goals for FY 2021-22

1. Foster a campus environment that is conducive to promoting research, scholarly, and creative activities that contribute to the BEACH 2030 Strategic Priorities.
2. Continue to seek external funding to support research, innovation, and problem solving in response to the grand challenges in society.
3. Promote and encourage faculty researchers to seek federal R&D grants.
4. Promote and encourage collaborative and interdisciplinary/multidisciplinary research, scholarly, and creative activities.
5. Continue to streamline the administrative process, including compliance with federal research regulations, by developing and adopting a more innovative and flexible strategy to overcome the ongoing challenges caused by the COVID-19 pandemic.
6. Create an infrastructure that supports licensing of intellectual property, with increased number of startup businesses, and expanded external revenue streams for campus research, scholarly, and creative activities.