Contracts & Grants Q315 Award Report

Is stability sufficient?

Summary

UC's award funding for the third quarter of FY 2014-2015 amounted to nearly \$1.1 billion, about 2.6% above Q3 of the previous year. The year-to-date total is about \$4.04 billion—a fraction of one percent higher than the total for the first three quarters of last year.

Key findings for Q315 and the year-to-date are as follows:

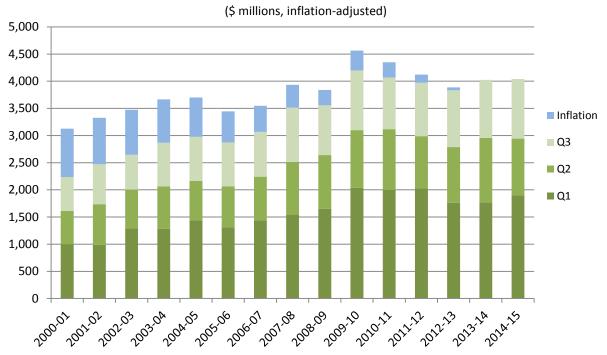
- Corporate funding for the fiscal-year-to-date totals about \$401 million. This is some \$86 million below last year's total at this point, a difference mainly attributable to several large Alzheimer's research awards to UC San Diego that were received last year.
- Funding from nonprofit organizations are about \$556 million so far this year, \$108 million above last year's total. This increase is partly due to a grant of about \$50 million from the Gordon and Betty Moore Foundation to UC Davis, to help establish the Betty Irene Moore School of Nursing.
- Federal funding for the fiscal-year-to-date, for awards of all types, totals \$2.3 billion, essentially the same as last year at this point.

The current federal budget keeps R&D appropriations to UC's two largest external sponsors, the National Institutes of Health and the National Science Foundation, at about the levels they were last year. So unless federal agencies, anticipating a budget impasse, curtailed funding during Q4, the full-year total could come close to the record \$5.7 billion UC received during 2013-14.

Overall, extramural funding levels (after adjusting for inflation) have been fairly consistent for the past four years—with the notable exception of 2012-13, when the Congressional budget impasse and the Sequester pushed federal funding to pre-recessionary levels and resulted in nationwide cutbacks in academic research. While this stability is good news, funding levels are still well below the high water marks reached when federal Recovery Act stimulus funds were available. Whether the current "stable" funding is sufficient to spark the innovations that promote economic growth and improve general well-being is an open question.

I. Quarterly Performance Metrics

Extramural awards for Q315 totaled about \$1.095 billion, \$27 million (2.6%) above the amount reported for Q314 last year. Year-to-date totals are even closer separated by only \$14 million (0.35%). These small differences are due partly to variable funding and reporting patterns for National Institutes of Health awards, and partly to several very large awards from non-government sponsors.



Q1 - Q3 Extramural Awards

Quarterly Extramural Awards

(\$ millions, inflation-adjusted)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Q1	1,396	1,328	1,693	1,639	1,794	1,565	1,665	1,729	1,782	2,212	2,137	2,107	1,789	1,766	1,896
Q2	855	1,009	936	997	901	912	927	1,089	1,069	1,154	1,198	995	1,038	1,191	1,047
Q3	874	991	845	1,029	1,006	969	955	1,116	987	1,194	1,015	1,020	1,060	1,068	1,095
YTD	2,236	2,474	2,647	2,867	2,975	2,873	3,069	3,514	3,556	4,199	4,067	3,971	3,832	4,024	4,038
Q4	1,049	1,202	1,315	1,222	1,464	1,467	1,504	1,561	1,493	1,493	1,416	1,421	1,393	1,683	
FY	4,173	4,529	4,789	4,888	5,164	4,912	5,050	5,495	5,331	6,054	5,765	5,542	5,280	5,708	

Award totals for UC's third fiscal quarters are always well below first-quarter amounts. This is a function of the federal funding cycle, which awards the largest amounts in the final quarter of the federal fiscal year (corresponding to UC's Q1). With direct federal sponsorship providing about two-thirds of all UC's awards, this produces sharp quarterly spikes in funding.

II. Award Trends by Sponsor Category

The award total of \$1.095 billion for Q315 is slightly higher than the Q314 total of nearly \$1.07 billion. As the table below indicates, sponsorship by corporations and nonprofit organizations experience significant quarterly variations.

SPONSOR	Q305	Q306	Q307	Q308	Q309	Q310	Q311	Q312	Q313	Q314	Q315
Federal	628	597	505	584	505	702	549	570	446	559	561
State	81	69	58	66	104	71	103	64	150	52	79
Other Gov't*	16	40	18	33	45	33	38	27	22	42	22
Corporate	82	69	124	142	87	114	102	126	138	170	126
Non-Profit	115	106	134	179	139	136	123	106	184	129	177
Academia**	83	88	116	113	108	137	101	125	121	116	131
TOTAL	1,006	969	955	1,116	987	1,194	1,015	1,020	1,060	1,068	1,095

Q3 Awards by Sponsor Category, FY 2004-05 to 2014-15 (\$ millions, inflation-adjusted)

* Other Gov't includes Agricultural Market Order Boards

**Academia includes the categories of Higher Education, DOE Labs, Campuses and UCOP

Fiscal-year-to-date comparisons provide a better sense of funding prospects for the year than just a single quarter mid-way through the federal funding cycle. The table below shows the large increases in federal funding during 2010-11 and 2011-12 provided by the Recovery Act, which added about one billion dollars to UC's award total. This was followed in 2012-13 by a year of federal agency austerity, at which time federal and total funding dropped to pre-recessionary levels (with inflation taken into account).

Q1- Q3 Awards by	y Sponsor	Category,	FY 2005-06 t	o 2014-15

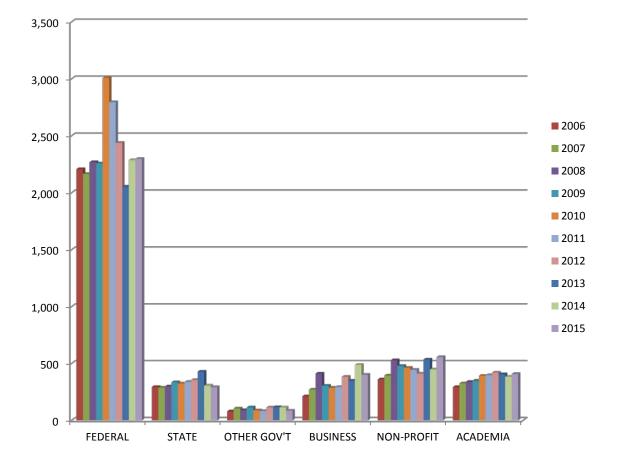
(\$ millions, inflation-adjusted)

SPONSOR	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Federal	2,208	2,165	2,269	2,258	3,008	2,795	2,439	2,054	2,287	2,297
State	294	287	297	335	325	338	355	428	305	292
Other Gov't*	79	105	90	114	88	83	113	115	114	86
Corporate	212	270	411	304	286	293	382	348	487	401
Non-Profit	360	394	529	479	462	444	412	535	448	556
Academia**	293	325	339	349	392	396	420	406	383	407
TOTAL	3,446	3,546	3,934	3,838	4,561	4,349	4,121	3,887	4,024	4,038

* Other Gov't includes Agricultural Market Order Boards

**Academia includes the categories of Higher Education, DOE Labs, Campuses and UCOP

4



Q1-Q3 Awards by Sponsor Category, FY 2006 - 2015 (\$ millions, inflation-adjusted)

III. Award Trends by Project Type

Research awards during Q315 amounted to \$921 million, including \$59 million in clinical trial sponsorship. Training, service, and other awards came to about \$175 million. Research award totals during Q314 were quite similar, at \$926 million.

Q3 Award Amounts by Project Type, FY 2006-2015

PROJECT TYPE	Q306	Q307	Q308	Q309	Q310	Q311	Q312	Q313	Q314	Q315
Research	732	789	881	755	937	800	818	797	849	862
Clinical Trials	36	47	45	40	53	34	61	128	77	59
Training	55	31	61	37	54	66	49	36	43	42
Service	98	46	66	92	63	74	47	47	58	87
Other	48	42	63	63	88	41	44	52	40	46
TOTAL	969	955	1,116	987	1,194	1,015	1,020	1,060	1,068	1,095

(\$ millions, inflation-adjusted)

IV. Significant Awards by Location

During Q315, UC received about 6,300 contracts and grants from over 1,300 different sponsors (in addition to more than 1,000 Material Transfer Agreements). Listed below are the large or significant awards reported this quarter by campuses, Agriculture & Natural Resources, and Lawrence Berkeley National Lab.

LOCATION	SPONSOR CATEGORY	SPONSOR	PROJECT TITLE	AMOUNT
Agriculture & Natural Resource	Federal	U.S. Geological Survey	Identification of Seasonal and Decadal Drought Through Monitoring and Modeling	1,839,288
Berkeley	Nonprofit	William and Flora Hewlett Foundation	Cybersecurity and Internet Policy	15,000,000
Davis	Federal	U.S. Agency for International Development	Emerging Pandemic Threats Program, Predict-2 Project	13,600,000
Irvine	Nonprofit	William M. Keck Foundation	Optical Frequency Magnetic Nanoprobes - A New Dimension in Spintronics, Microscopy and Spectroscopy	2,000,000
Lawrence Berkeley National Lab	Nonprofit	Howard Hughes Medical Institute	Operation of HHMI Biological Crystallography Beamline at the Advanced Light Source	1,348,382
Los Angeles	Business	Biomarin Pharmaceuticals	Novel Approaches to Gene Therapy for Sickle Cell Disease	5,239,893
Merced	Federal	National Science Foundation	Dimensions: Taxonomic, Genetic and Functional Biodiversity of Above-Ground Bacterial Endophytes in Subalpine Conifers	1,623,886
Office of the President	Nonprofit	Gordon And Betty Moore Foundation	Thirty Meter Telescope - Start of On-Site Construction on Mauna Kea	10,000,000
Riverside	Federal	National Institute for Food and Agriculture	Reducing Losses to Potato and Tomato Late Blight by Monitoring Pathogen Populations, Improved Resistant Plants, Education and Extension	1,820,000
San Diego	Federal	National Institutes Of Health, National Institute on Aging	Alzheimer's Disease Cooperative Study	10,571,118
San Francisco	State	California Emergency Medical Services Authority	California Poison Control System 2014 - 2016	21,853,142
Santa Barbara	State	California Department of Water Resources	Microbial Source Tracking in the Santa Barbara Region	1,987,869
Santa Cruz	Federal	National Institutes Of Health, Office Of The Director	Equipment grant of 800 MHz Nuclear Magnetic Resonance Spectrometer And Helium Cryoprobe	2,000,000

V. Award Trends by Recipient Location

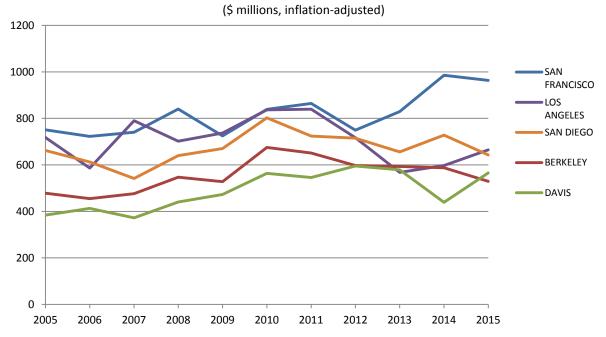
Award totals for the first three quarters of FY 2014-15 were virtually the same as last year, despite some quarter-over-quarter variations. This increase was not evenly divided across reporting locations.

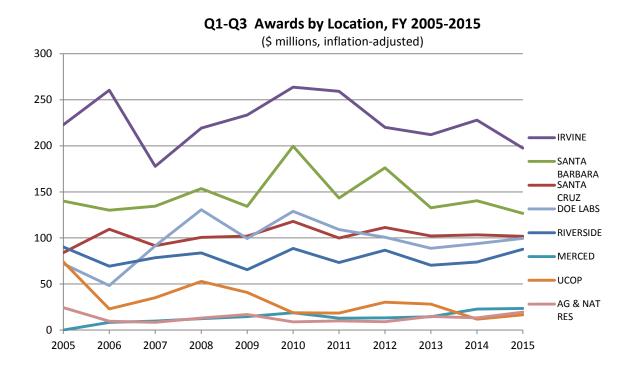
Q1-Q3 Award Amounts by Location

UC Location	FYTD 2013	FYTD 2014	FYTD 2015	14-15 Change
Berkeley	593	588	529	-9.97%
San Francisco	829	985	963	-2.24%
Davis	578	439	566	28.86%
Los Angeles	568	597	665	11.32%
San Diego	656	728	643	-11.69%
Irvine	212	228	198	-13.36%
Santa Barbara	133	140	127	-9.79%
Santa Cruz	102	103	102	-1.39%
Riverside	70	74	88	18.78%
Merced	14	23	23	2.63%
UCOP	28	12	17	39.68%
LBNL	89	94	100	6.20%
Ag & Nat Res	15	13	19	47.53%
Total	3,887	4,024	4,038	0.35%

(\$ millions, inflation-adjusted)

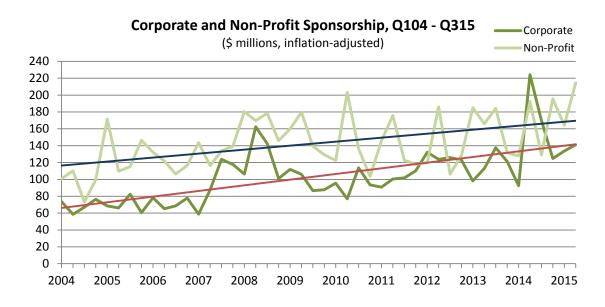
Q1-Q3 Awards by Location, FY 2005-2015





VI. Private Funding

Awards from both corporate and non-profit sponsors display much variation quarter by quarter, but both categories show long-term increases. Several of the specific projects contributing to the Q315 totals are noted above, in the list of major awards.



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