

Contracts & Grants Q214 Award Report

Increases in Federal and Corporate Funding

Summary

UC's award funding for the second quarter of FY 2013-2014 totaled nearly \$1.2 billion, exceeding the amount reported for Q2 last fiscal year by about \$168 million, an increase of 16.3%. For the year to date, the current award total of \$2.96 billion is likewise about \$170 million above last year (6.1%), because the Q1 amounts for both years were nearly identical. Last fiscal year, however, was a low point in award funding, due mainly to steep declines in federal support. A better point of comparison for this year would be FY 2011-12, which is the period just prior to the major cutbacks in federal R&D appropriations. The year-to-date total for FY 2013-14 is only about 1.1% (\$31 million) less than the amount received for the same period of FY 2011-12.

One positive trend so far during FY 2013-14 is a return to some semblance of stability in federal agency funding—though this plateau is still well below peak levels. Federal contracts and grants to UC for Q214 amounted to \$558 million, which is relatively high for a second-quarter award total, but some of this total may be an artifact of reporting delays. Although federal funding patterns remain uncertain, the fiscal-year-to-date total suggests that federal awards for the year as a whole will certainly equal, and most likely exceed, last year's federal agency funding of \$2.9 billion, and could well reach the \$3 billion milestone once again.

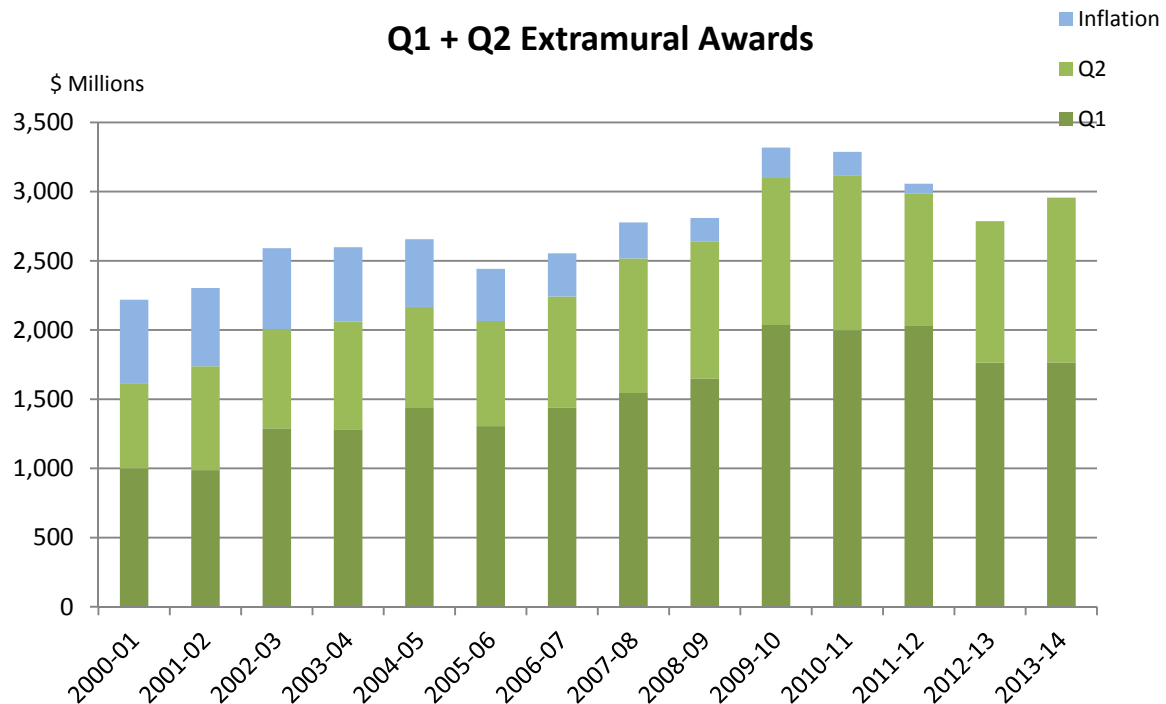
A second positive trend is a substantial increase in private sponsorship, most notably from the business community. The spike in corporate support is due almost entirely to two major research contracts totaling nearly \$111 million to UC San Diego's Department of Neurosciences for Alzheimer's disease studies. The Department also secured an \$11 million award for Alzheimer's research from the NIH's National Institute on Aging.

Key findings for Q214 and the year to date are as follows:

- Federal funding for the fiscal year to date, for awards of all types, totals \$1.7 billion, which is about \$144 million above last year, an increase of 8%.
- Corporate funding for Q214 totals about \$224 million. This is about \$113 million above Q2 of last year, thanks to several very large Alzheimer's research awards to UC San Diego.
- Of the \$1.2 billion UC received in extramural funding during Q214, research awards, including clinical trials, amounted to \$952M, or 79.9% of the award total. Federal research funding for the year to date totals about \$1.45 billion. This amount is \$121 million (9%) above last year, but still about \$100 million (6%) below the year-to-date amount for FY 2011-12.
- Most locations reported increases in overall funding for the fiscal year's first two quarters. The largest increases were at UC San Diego—thanks again to the major Alzheimer's research awards—and at UC San Francisco—reflecting an increase in reporting of awards from the National Institutes of Health.

I. Quarterly Performance Metrics

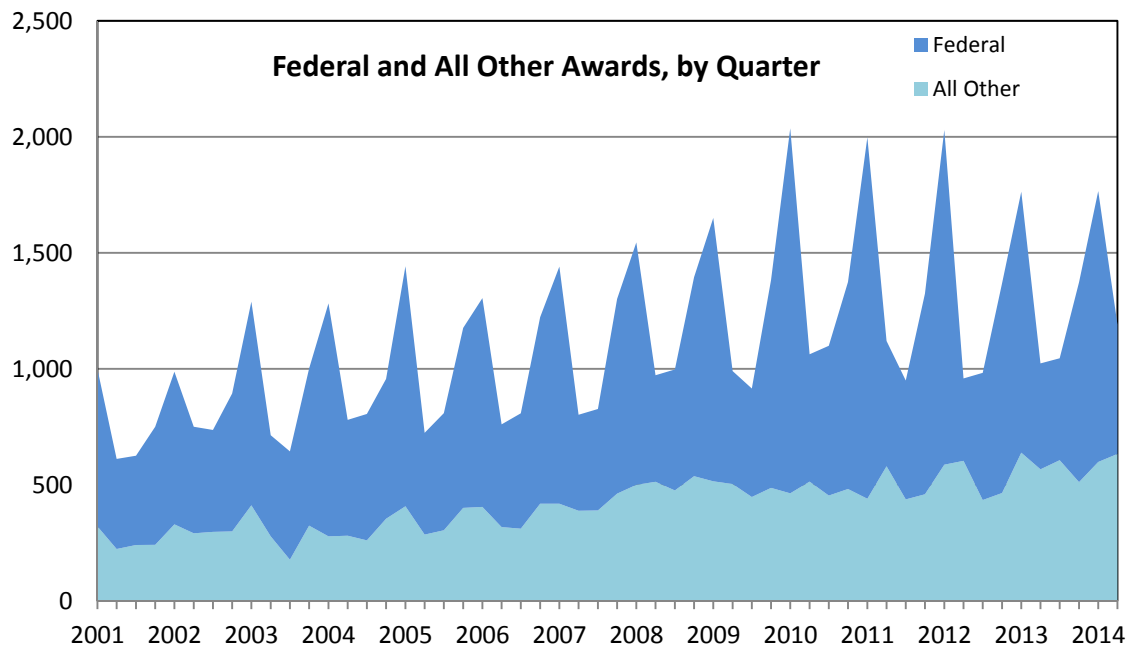
Extramural awards for Q214 totaled about \$1.2 billion, \$168 million (16.3%) above the amount reported last year for Q213. Quarter 1 totals for both years were nearly identical, so year-to-date funding for FY 2013-14 is now \$170 million (6.1%) above last year. The year-to-date total is running only slightly behind 2011-12 levels, adjusting for inflation.



Quarterly Extramural Awards, FY 2001 – 2013 (\$M)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Q1 | 999 | 987 | 1,290 | 1,282 | 1,442 | 1,305 | 1,440 | 1,545 | 1,650 | 2,037 | 1,998 | 2,030 | 1,763 | 1,766 |
| Q2 | 612 | 750 | 713 | 780 | 724 | 760 | 802 | 972 | 991 | 1,063 | 1,120 | 958 | 1,023 | 1,191 |
| Q1+Q2 | 1,611 | 1,737 | 2,003 | 2,062 | 2,166 | 2,065 | 2,242 | 2,517 | 2,641 | 3,099 | 3,118 | 2,988 | 2,787 | 2,957 |
| Q3 | 625 | 737 | 644 | 805 | 809 | 808 | 826 | 997 | 915 | 1,099 | 949 | 982 | 1,045 | |
| Q4 | 750 | 894 | 1,002 | 956 | 1,177 | 1,223 | 1,301 | 1,395 | 1,383 | 1,374 | 1,324 | 1,369 | 1,373 | |
| FY | 2,986 | 3,368 | 3,649 | 3,824 | 4,152 | 4,096 | 4,370 | 4,909 | 4,938 | 5,573 | 5,391 | 5,340 | 5,205 | |

Award totals for UC's second fiscal quarter are always well below the 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 for Q214 was close to \$1.2 billion, larger than any previous second quarter amount, thanks to increases in both corporate and federal sponsorship. The sharp spike in business sponsorship is due mainly to two Alzheimer's clinical trial research awards totaling about \$111 million, reported by UC San Diego. The increase in federal funding is partly attributable to a more favorable federal budgetary climate. But it may also reflect the fact that a change in conflict of interest requirements, instituted by the National Institutes of Health a year ago, delayed release of some funds and created a reporting backlog that was finally cleared during Q214.

Q2 Awards by Sponsor Category, FY 2006-2013

(\$ Millions)

| SPONSOR | Q206 | Q207 | Q208 | Q209 | Q210 | Q211 | Q212 | Q213 | Q214 |
|---------------------|------------|------------|------------|------------|--------------|--------------|------------|--------------|--------------|
| <i>Federal</i> | 443 | 414 | 460 | 487 | 549 | 540 | 355 | 457 | 558 |
| <i>State</i> | 67 | 89 | 99 | 94 | 96 | 139 | 97 | 103 | 57 |
| <i>Other Gov't*</i> | 13 | 24 | 17 | 24 | 24 | 23 | 55 | 33 | 23 |
| <i>Business</i> | 54 | 76 | 145 | 98 | 71 | 94 | 119 | 111 | 224 |
| <i>Non-Profit</i> | 101 | 101 | 152 | 167 | 187 | 164 | 179 | 164 | 192 |
| <i>Academia**</i> | 42 | 56 | 56 | 76 | 73 | 93 | 80 | 79 | 85 |
| TOTAL | 760 | 802 | 972 | 991 | 1,063 | 1,120 | 958 | 1,023 | 1,191 |

* 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 the current quarter, which is in some ways anomalous. So far, FY 2013-14 seems most comparable to FY 2011-12, the period just after the influx of Recovery Act awards, and just prior to the major cutbacks in federal agency R&D appropriations.

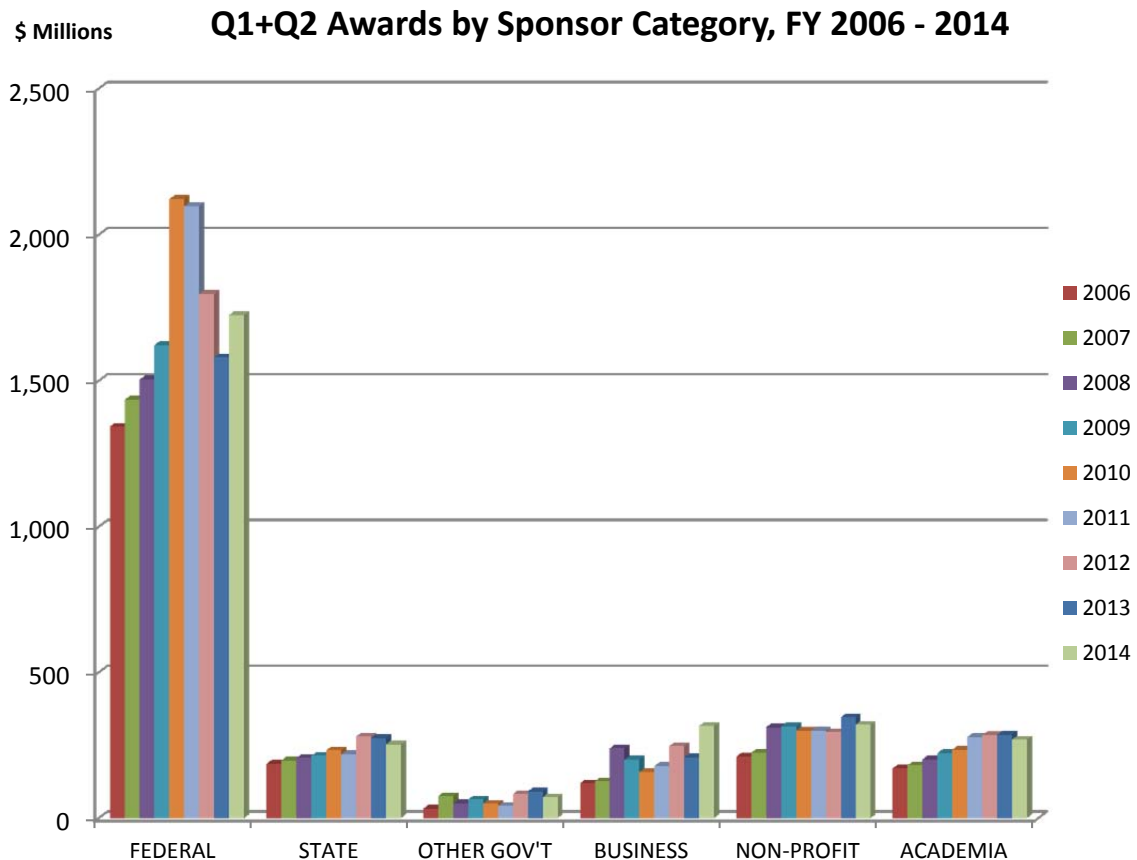
Q1-Q2 Awards by Sponsor Category, FY 2006-2013

(\$ Millions)

| SPONSOR | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2013 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Federal | 1,343 | 1,436 | 1,505 | 1,623 | 2,122 | 2,099 | 1,798 | 1,582 | 1,726 |
| State | 187 | 198 | 207 | 214 | 233 | 219 | 280 | 274 | 253 |
| Other Gov't* | 33 | 76 | 51 | 64 | 50 | 42 | 83 | 92 | 72 |
| Business | 120 | 127 | 240 | 202 | 159 | 179 | 248 | 208 | 317 |
| Non-Profit | 211 | 225 | 312 | 315 | 300 | 300 | 295 | 346 | 320 |
| Academia** | 171 | 181 | 202 | 224 | 236 | 279 | 285 | 286 | 270 |
| TOTAL | 2,065 | 2,242 | 2,517 | 2,641 | 3,099 | 3,118 | 2,988 | 2,787 | 2,957 |

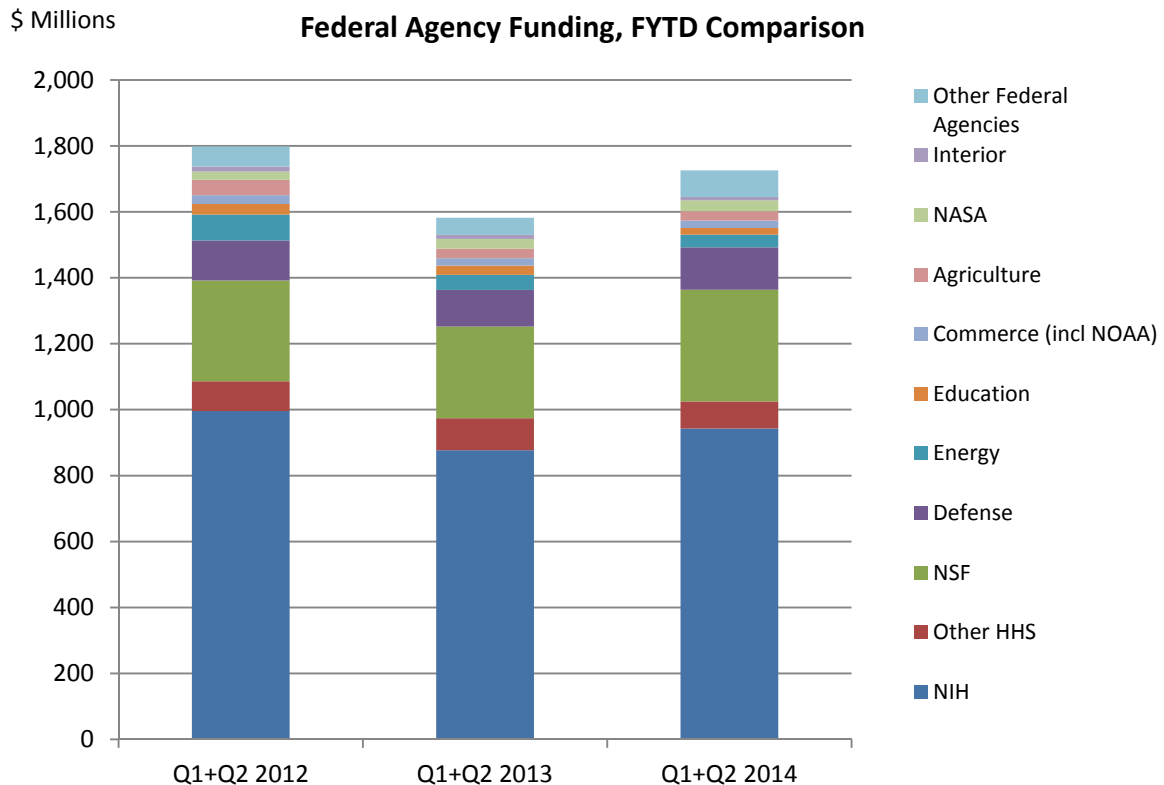
* Other Gov't includes Agricultural Market Order Boards.

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



III. Federal Agency Award Trends

The 8% increase in federal awards reported for the fiscal year to date, compared to last year, is attributable to UC's two largest sources of contract & grant funds, the National Institutes of Health and the National Science Foundation. NIH generally provides nearly 60% of UC's federal funding, and NSF 16%, so changes in their appropriations or funding practices will inevitably have a significant impact on UC.



| AGENCY | Q1+Q2 2012 | Q1+Q2 2013 | Q1+Q2 2014 | 14-13 DIFFERENCE | % CHANGE |
|------------------------|----------------------|----------------------|----------------------|--------------------|-------------|
| NIH | 995,869,706 | 876,978,648 | 942,973,590 | 65,994,942 | 7.5% |
| Other HHS | 90,187,623 | 97,144,286 | 82,015,744 | -15,128,542 | -15.6% |
| NSF | 305,838,101 | 277,812,794 | 338,885,579 | 61,072,785 | 22.0% |
| Defense | 121,284,128 | 111,118,020 | 128,242,452 | 17,124,432 | 15.4% |
| Energy | 78,405,780 | 45,885,418 | 38,685,816 | -7,199,602 | -15.7% |
| Education | 32,010,895 | 27,821,932 | 20,357,446 | -7,464,486 | -26.8% |
| Commerce (incl. NOAA) | 26,890,243 | 22,409,624 | 22,336,021 | -73,603 | -0.3% |
| Agriculture | 46,676,760 | 29,172,987 | 28,630,683 | -542,304 | -1.9% |
| NASA | 25,207,963 | 29,811,808 | 33,007,624 | 3,195,816 | 10.7% |
| Interior | 14,845,019 | 11,968,478 | 9,880,214 | -2,088,264 | -17.4% |
| Other Federal Agencies | 60,893,650 | 51,829,328 | 80,802,824 | 28,973,496 | 55.9% |
| TOTAL | 1,798,109,868 | 1,581,953,323 | 1,725,817,993 | 143,864,670 | 8.0% |

The difference column shown in the table above represents the change between 2012-13 and 2013-14; the 2011-12 numbers are included here as a significant point of comparison. The increase in federal funding to UC does not span all agencies, but the most substantial dollar amounts are linked to NIH and NSF. (The increase in funds from Other Federal Agencies is attributable to a \$20 million affiliation agreement between UCLA and the Veterans Administration for the provision of medical services.)

Funding from both NIH and NSF during FY 2013-14 appears to be returning to a plateau close to post-Recovery-Act FY 2011-12 levels—which in turn is close to the inflation-adjusted, pre-Recovery-Act levels of FY 2008-9. However, agency funding policies have been changing over the past few years, and these two agencies appear to be granting awards that are on average shorter in duration and smaller in total amount than in the past.

IV. Major Awards Over \$5M

During Q214, UC received 20 awards for amounts of \$5M or more. Three of these major awards, totaling about \$122 million, were received by the UC San Diego Medical School Department of Neurosciences, under Principal Investigator Dr. Paul Aisen. Most awards of this magnitude are intended to support ongoing programs, centers, or affiliation agreements rather than specific research projects, and may involve funding that extends over several fiscal years.

| LOCATION | SPONSOR CATEGORY | SPONSOR | PROJECT TITLE | AMOUNT |
|---------------|------------------|--|---|------------|
| San Diego | Business | Eli Lilly & Co. | Anti-Amyloid Treatment In Asymptomatic Alzheimer's Disease | 76,660,320 |
| San Diego | Business | Toyama Chemical Co., Ltd. | A Phase 2 Multi-Center Study to Evaluate the Efficacy and Safety of T-817 In Patients with Mild to Moderate Alzheimer's Disease | 33,268,709 |
| Los Angeles | Federal | Veterans Affairs | Affiliation Agreement: Agreement for House Staff Stipends & Fringe Benefits | 20,000,000 |
| San Francisco | Federal | NIH National Center For Advancing Translational Sciences | Clinical and Translational Science Institute | 17,672,486 |
| San Francisco | Non-Profit | Bill & Melinda Gates Foundation | Accelerating Progress Towards Malaria Eradication: Working Across Global, Regional, and National Levels, and Through Operational Research | 15,438,584 |
| San Francisco | State | California Dep't. of Public Health | HIV Surveillance | 13,252,718 |
| Los Angeles | Federal | National Cancer Institute | AIDS Malignancy Clinical Trials Consortium (AMC) | 12,077,537 |
| San Diego | Federal | National Science Foundation | Gateways to Discovery: Cyberinfrastructure for the Long Tail of Science | 12,000,000 |
| San Diego | Federal | National Institute on Aging | Alzheimer's Disease Cooperative Study | 11,232,268 |
| Berkeley | Non-Profit | Gordon and Betty Moore Foundation | Moore/Sloan Data Science Environment | 10,000,000 |
| Berkeley | Federal | NASA Goddard Space Flight Center | Time History of Events and Macroscale Interactions During Substorms (THEMIS) | 9,767,900 |

| | | | | |
|-------------------------|------------|--|--|-----------|
| Davis | Federal | U.S. Agency for International Development | Predict: USAID Avian and Pandemic Influenza and Zoonotic Disease Program - Wildlife S.M.A.R.T. Surveillance | 9,580,965 |
| San Francisco | Federal | Army Medical Research and Materiel Command | Integrated Risk Prediction Model and Decision Aid to Discern Aggressive Versus Indolent Prostate Cancer | 9,455,882 |
| Office of the President | Non-Profit | Gordon And Betty Moore Foundation | Completion of Early Construction Phase & Initial Start of On-Site Construction Phase - Thirty Meter Telescope (TMT) At Mauna Kea | 8,250,000 |
| San Francisco | Federal | National Institute of Allergy and Infectious Diseases | University of Zimbabwe-UCSF Clinical Trials Unit | 6,381,501 |
| San Francisco | Federal | National Institute of Allergy and Infectious Diseases | UCSF-Gladstone Institute of Virology and Immunology Center for Aids Research | 6,257,700 |
| San Diego | Non-Profit | Leukemia and Lymphoma Society | Specific Targets for Therapy of Patients with Chronic Lymphocytic Leukemia | 6,250,000 |
| San Francisco | Federal | National Institute of Neurological Disorders & Stroke, | Point: Platelet-Oriented Inhibition in New TIA and Minor Ischemic Stroke | 6,000,000 |
| Davis | State | California Department Of Social Services | Northern Regional Training Academy 2013-2015 | 5,257,750 |
| San Francisco | Business | Astrazeneca, Plc. | Socrates - Acute Stroke or Transient Ischemic Attack Treated With Aspirin or Ticagrelor And Patient Outcomes | 5,069,962 |

V. Award Trends by Project Type

Research awards during Q214 amounted to \$952 million. This includes \$177 million in clinical trial sponsorship, of which \$111 million represents the two large Alzheimer's research awards received by UC San Diego. Training, service and other awards came to about \$239 million. The increase in research funding, including clinical trial research, compared to last year is due to the previously described increases in federal and corporate funding sponsorship.

Q2 Award Amounts by Project Type, FY 2006-2014 (\$ millions)

| PROJECT TYPE | Q206 | Q207 | Q208 | Q209 | Q210 | Q211 | Q212 | Q213 | Q214 |
|------------------------|------------|------------|------------|------------|--------------|--------------|------------|--------------|--------------|
| <i>Research</i> | 613 | 556 | 691 | 724 | 848 | 814 | 683 | 747 | 773 |
| <i>Clinical Trials</i> | 27 | 35 | 66 | 38 | 39 | 40 | 55 | 68 | 179 |
| <i>Training</i> | 46 | 48 | 52 | 46 | 48 | 48 | 40 | 47 | 60 |
| <i>Service</i> | 36 | 95 | 64 | 94 | 77 | 100 | 90 | 89 | 97 |
| <i>Other</i> | 39 | 67 | 99 | 88 | 51 | 118 | 89 | 73 | 81 |
| TOTAL | 760 | 802 | 972 | 991 | 1,063 | 1,120 | 958 | 1,023 | 1,191 |

VI. Award Trends by Recipient Location

Award totals for the first two quarters of FY 2013-14 were about 6.1% above last year. This increase was unevenly divided across reporting locations; some portion of

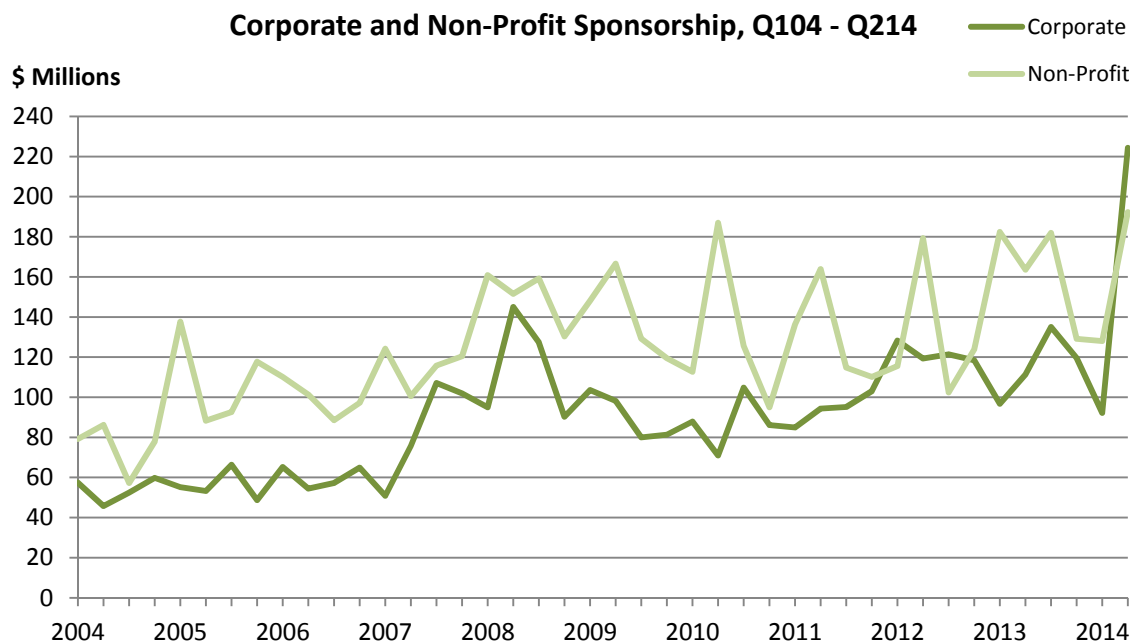
the increase in UCSF awards may reflect the end of the federal award backlog that was created when NIH changed conflict of interest requirements last year. UCSD's increase is largely attributable to the major Alzheimer's research awards.

Q1 + Q2 Awards by Location, \$ millions

| <i>UC Location</i> | <i>FYTD 2012</i> | <i>FYTD 2013</i> | <i>FYTD 2014</i> | <i>2014-13 Change</i> |
|-------------------------|------------------|------------------|------------------|---------------------------|
| <i>Berkeley</i> | 484 | 443 | 375 | -15.5% |
| <i>San Francisco</i> | 544 | 660 | 772 | 16.9% |
| <i>Davis</i> | 443 | 393 | 359 | -8.7% |
| <i>Los Angeles</i> | 500 | 377 | 413 | 9.5% |
| <i>Riverside</i> | 64 | 54 | 54 | 0.0% |
| <i>San Diego</i> | 489 | 454 | 543 | 19.5% |
| <i>Santa Cruz</i> | 80 | 72 | 72 | 0.6% |
| <i>Santa Barbara</i> | 111 | 86 | 110 | 27.3% |
| <i>Irvine</i> | 159 | 141 | 155 | 9.4% |
| <i>Merced</i> | 10 | 12 | 20 | 67.2% |
| <i>UCOP</i> | 28 | 25 | 12 | -51.5% |
| <i>LBNL</i> | 70 | 60 | 65 | 7.5% |
| <i>Ag & Nat Res</i> | 7 | 9 | 9 | -2.8% |
| Total | 2,988 | 2,787 | 2,957 | 6.1% |

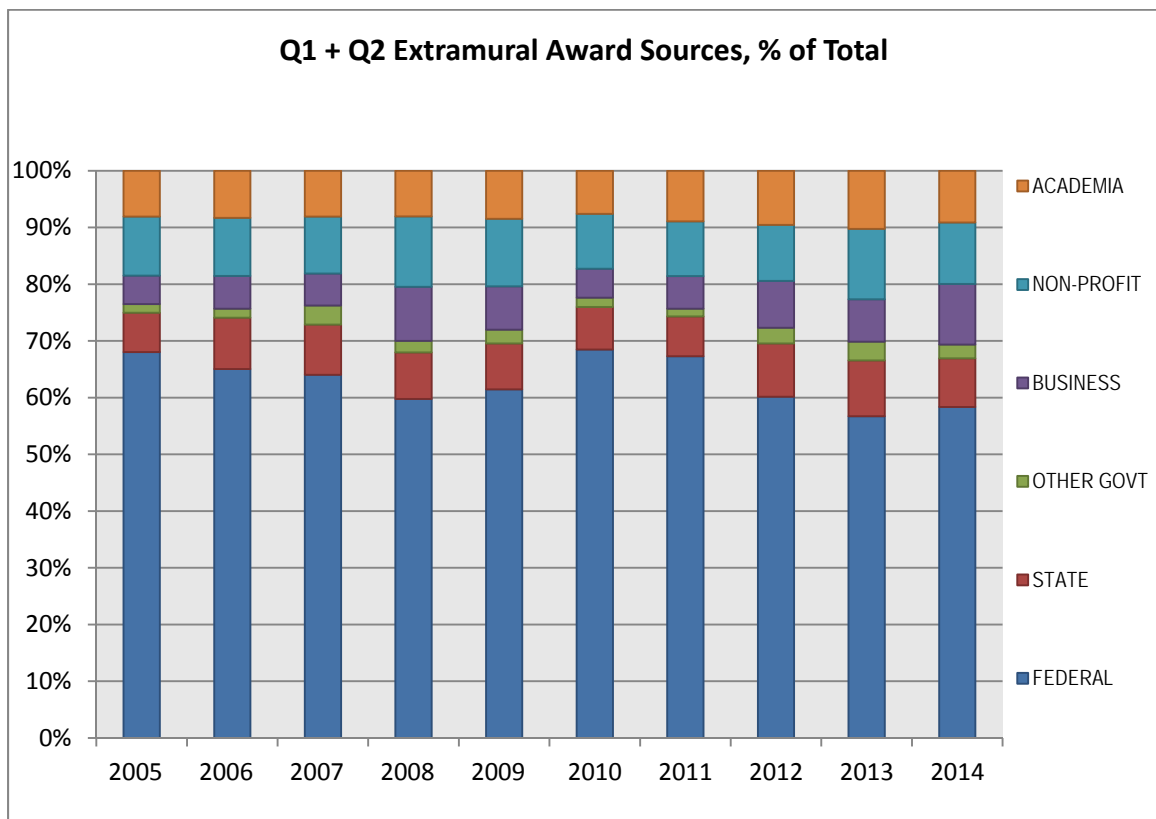
VII. Shifts in Funding

Awards from both corporate and non-profit sponsors showed dramatic increases during Q214. The specific awards responsible for these increases are noted in the list of major awards.



Q1+ Q2 Extramural Funding Sources, % of Total

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FEDERAL | 68.0% | 65.0% | 64.0% | 59.8% | 61.5% | 68.5% | 67.3% | 60.2% | 56.8% | 58.4% |
| STATE | 6.9% | 9.0% | 8.9% | 8.2% | 8.1% | 7.5% | 7.0% | 9.4% | 9.8% | 8.6% |
| OTHER GOV'T | 1.5% | 1.6% | 3.4% | 2.0% | 2.4% | 1.6% | 1.4% | 2.8% | 3.3% | 2.4% |
| BUSINESS | 5.0% | 5.8% | 5.6% | 9.5% | 7.6% | 5.1% | 5.7% | 8.3% | 7.5% | 10.7% |
| NON-PROFIT | 10.4% | 10.2% | 10.0% | 12.4% | 11.9% | 9.7% | 9.6% | 9.9% | 12.4% | 10.8% |
| ACADEMIA | 8.1% | 8.3% | 8.1% | 8.0% | 8.5% | 7.6% | 8.9% | 9.5% | 10.2% | 9.1% |



Award data are imperfect early indicators of future trends, and the federal funding picture for the remainder of this year and beyond is still unclear. However, with a federal budget finally in place, the next two fiscal years should see federal funding stabilize at least at the 2013 level of \$2.9 and, optimistically, perhaps several percentage points above that. At the same time, UC appears to be experiencing considerable success in attracting substantial funds from private sources.

*Charles Drucker
Institutional Research
April, 2014*