

# Sponsored Projects Annual Report Fiscal Year 2002



University of California, Berkeley

**The University of California, Berkeley**

**Chancellor  
Robert M. Berdahl**

**Executive Vice Chancellor and Provost  
Paul R. Gray**

**Vice Chancellor for Research  
Beth Burnside**

**University of California, Berkeley  
Sponsored Projects Annual Report, Fiscal Year 2002**

published by the  
Sponsored Projects Office  
336 Sproul Hall  
University of California, Berkeley  
Berkeley, CA 94720-5940  
510/642-0120  
[www.spo.berkeley.edu](http://www.spo.berkeley.edu)

Director: Joyce Freedman  
Assistant Director, Information Systems: Neil Maxwell  
Editor: Shelley Sprandel  
Cover Photo Credit: Professor Chris Benton  
© 2002 The Regents of the University of California



**Sponsored Projects Annual Report, Fiscal Year 2002**  
**Table of Contents**

Award Overview .....	1
Comparison of Project Period & Budget Period Funding by Sponsor .....	2
Comparison of Project Period & Budget Period Funding by Discipline .....	4
Project Period Funding in Fiscal Year 2002 .....	7
Major Corporate Sponsors, Fiscal Year 2002 .....	8
Future Budget Period Funding, Fiscal Years 2003 – 2007 .....	9
Twenty Largest Awards in Fiscal Year 2002 .....	10
Honors to Individual Berkeley Faculty, Fiscal Year 2002 .....	11
Appendices .....	13
Appendix A Funding by Sponsor Category, FY 1998 – 2002 .....	15
Appendix B Funding by Discipline, FY 1998 – 2002 Campus Overview .....	16
Appendix C Funding by Discipline, FY 1998 – 2002 Social Sciences and the Humanities .....	17
Appendix D Funding by Discipline, FY 1998 – 2002 Physical Sciences .....	18
Appendix E Funding by Discipline, FY 1998 – 2002 Engineering and Computer Sciences .....	19
Appendix F Funding by Discipline, FY 1998 – 2002 Biological Sciences .....	19



The University of California, Berkeley is one of the world's leading universities in research, teaching, and public service, with an enrollment of nearly 23,000 undergraduates and 8,600 graduate students. The campus employs 1,500 faculty in more than 100 academic departments and interdepartmental groups, and more than 40 interdisciplinary research units contribute to this dynamic and vital research and teaching environment.

The Sponsored Projects Office is pleased to present this annual report of Berkeley's sponsored research, teaching, and public service for fiscal year 2002, from July 1, 2001 through June 30, 2002.

### Award Overview

In fiscal year 2002 the Berkeley campus received more than \$443 million in contract and grant awards, the highest total in its history. This year's record award total resulted from 2,137 proposals requesting \$1.57 billion, surpassing the \$1.21 billion requested last year.

Overall, project funding increased by 4% over FY 2001's total. Awards from federal agencies increased by 14%, while nonprofit funding increased by 19%, industry funding declined by 43%, and nonfederal governmental funding dropped 28%. Basic research again topped the list of funded activities, with more than \$323 million in funding. Applied research, where discoveries and advances made in basic research are expanded to practical application, was second with \$41.7 million, down from \$58.2 million in FY 2001.

### Project Funding, FY 1998 – 2002 (dollars in millions)

#### By Sponsor

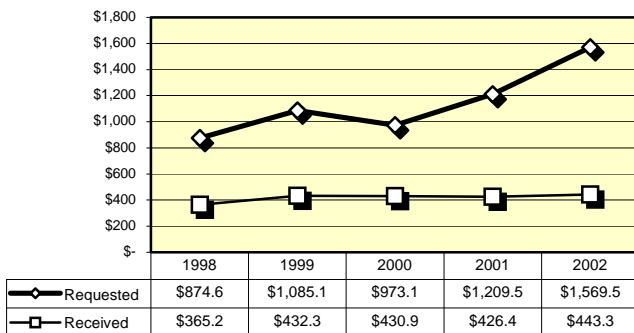
	1998	1999	2000	2001	2002
Federal	\$233.7	296.0	260.8	249.4	284.4
Industry	15.9	35.0	14.2	15.3	8.8
Nonfederal					
Governmental	50.5	36.0	82.1	79.5	57.3
Not for Profit	50.5	56.1	60.6	64.5	76.6
University of California	14.6	9.2	13.2	17.7	16.2
<b>TOTAL</b>	<b>\$365.2</b>	<b>\$432.3</b>	<b>\$430.9</b>	<b>\$426.4</b>	<b>\$443.3</b>

#### By Activity

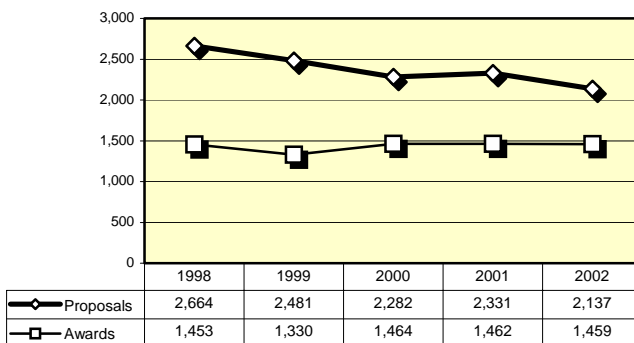
	1998	1999	2000	2001	2002
Basic Research	\$237.4	314.4	261.8	293.6	323.5
Applied Research	48.2	44.2	101.5	58.2	41.7
Instruction	0	1.3	22.1	26.2	3.2
Other	39.3	23.6	25.5	25.0	25.6
Training	22.6	36.5	11.1	19.3	36.0
Services	17.7	12.3	9.0	19.3	13.3
<b>TOTAL</b>	<b>\$365.2</b>	<b>\$432.3</b>	<b>\$430.9</b>	<b>\$426.4</b>	<b>\$443.3</b>

#### By Discipline

	1998	1999	2000	2001	2002
Biological Sciences	\$41.3	78.1	50.2	65.9	49.6
Business/Professional	5.2	8.1	7.2	4.7	13.7
Education	17.9	32.5	24.5	27.0	33.5
Engineering/ Computer Sciences	101.3	74.6	117.5	133.9	106.0
Health Sciences	23.5	53.3	57.7	25.8	41.9
Libraries/Museums	5.8	5.4	8.6	6.7	6.5
Natural Resources	16.4	49.3	29.0	29.9	36.5
Physical Sciences	103.6	84.3	85.1	80.3	107.0
Social Sciences/ Humanities	44.3	40.9	46.1	51.0	46.7
Others	6.0	5.7	4.9	1.2	2.0
<b>TOTAL</b>	<b>\$365.2</b>	<b>\$432.3</b>	<b>\$430.9</b>	<b>\$426.4</b>	<b>\$443.3</b>



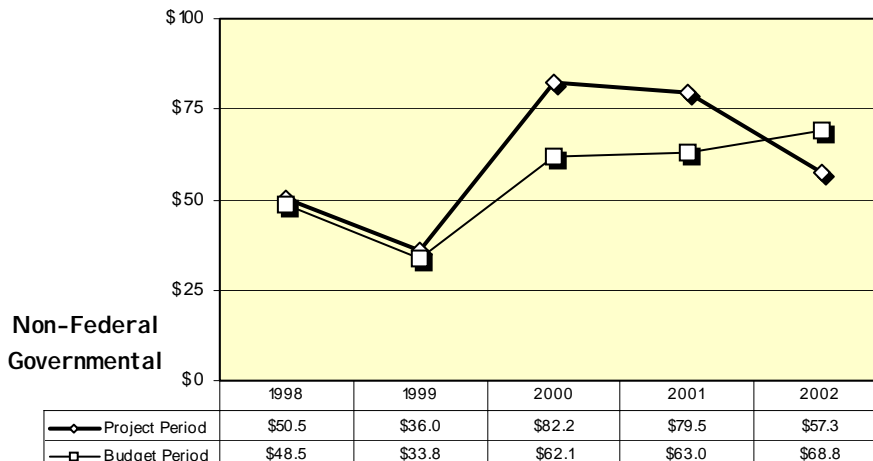
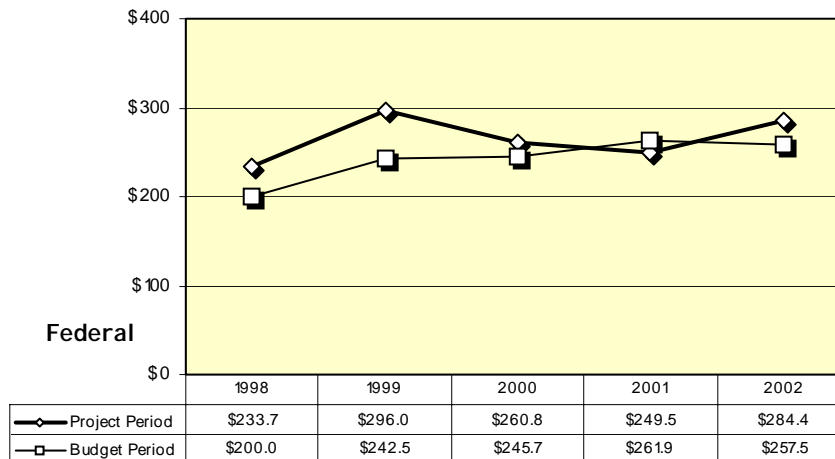
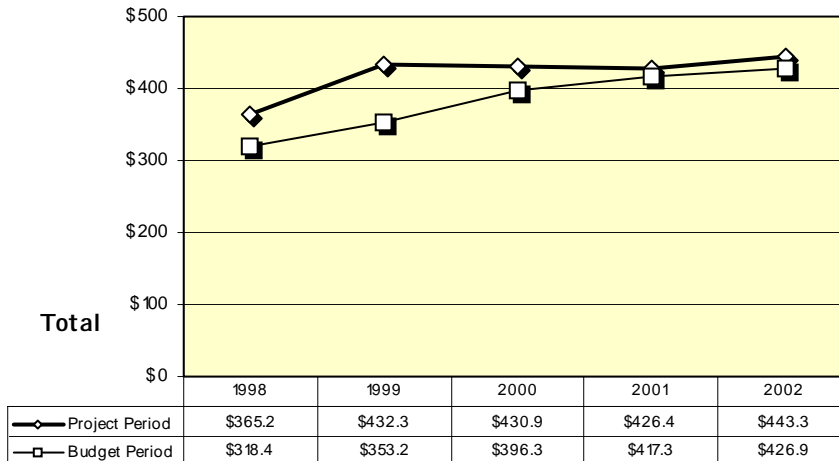
Funding Requested Compared with Funding Received,  
FY 1998 - 2002



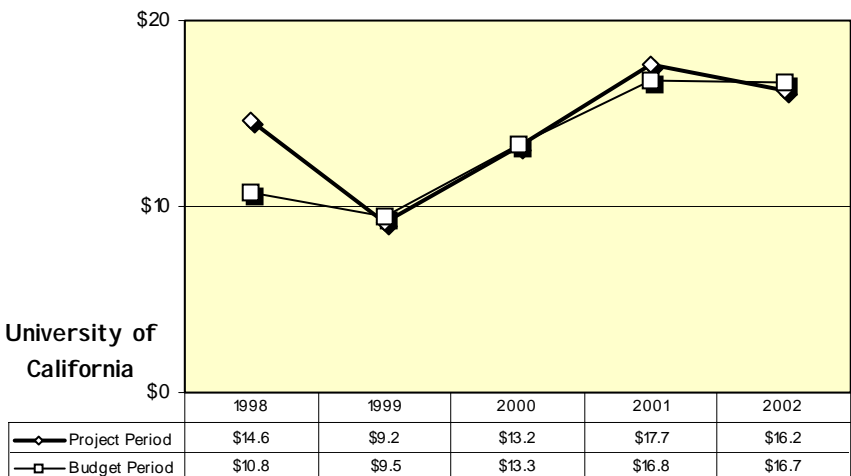
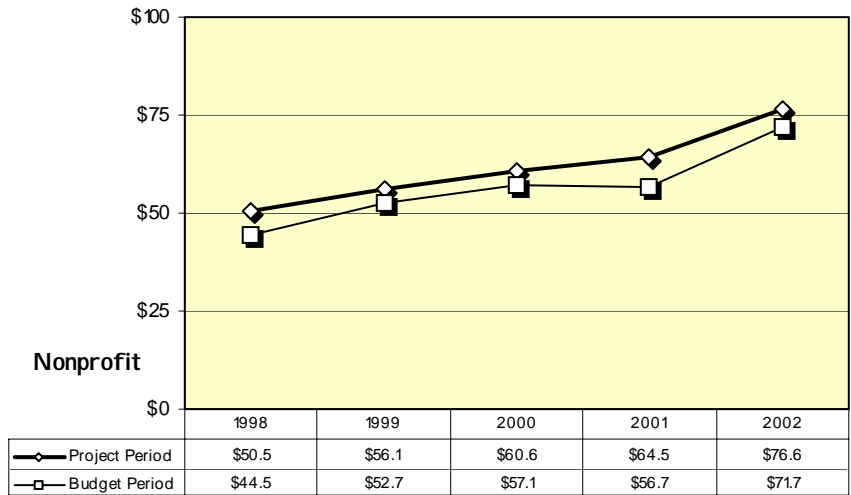
Proposals Submitted Compared with Awards Received,  
FY 1998 - 2002

**A**ward information is captured in two ways; by project periods (the total amount of the award) and by budget periods (the amounts of the individual budget periods). Budget period funding data is captured for all years of an award, which includes future years. Budget period funding also saw a record high in FY 2002, and at \$426.9 million exceeded FY 2001's project period total. Federal budget period funding at \$257.5 million declined slightly this year.

### Comparison of Project Period and Budget Period Funding, by Sponsor FY 1998 – 2002 (dollars in millions)

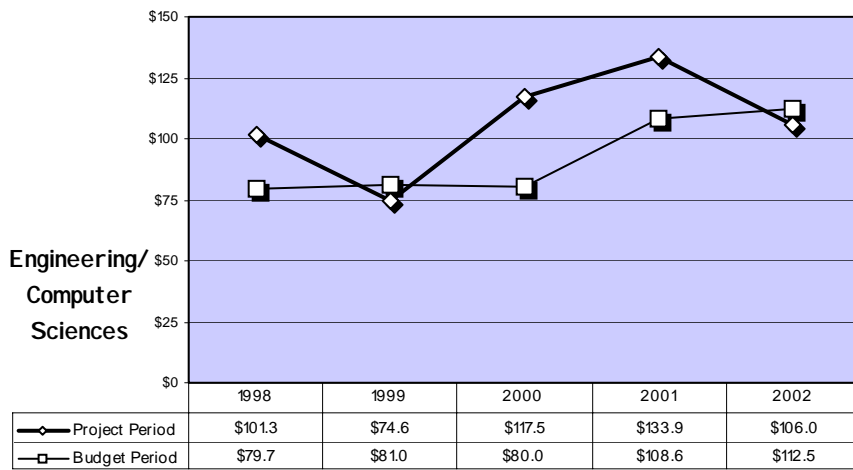


**Comparison of Project Period and Budget Period Funding, by Sponsor  
Continued  
FY 1998 – 2002 (dollars in millions)**

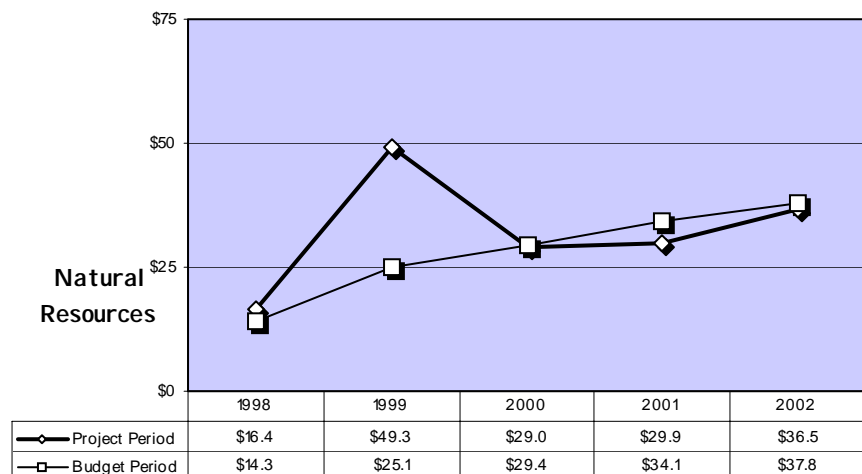
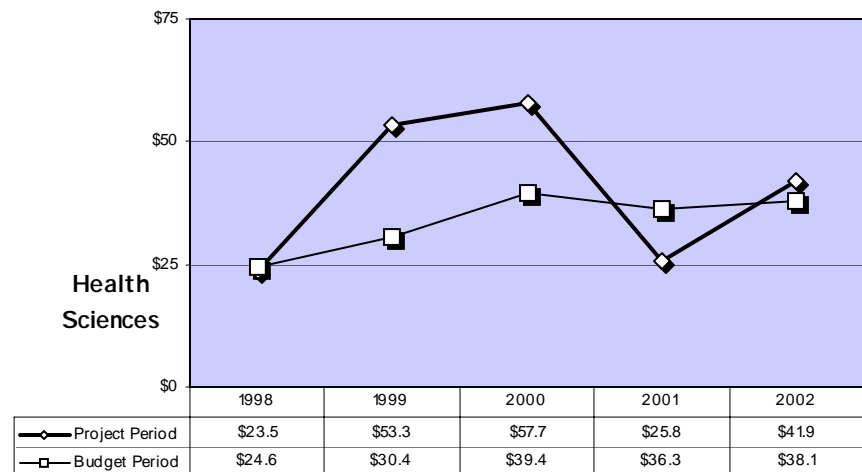
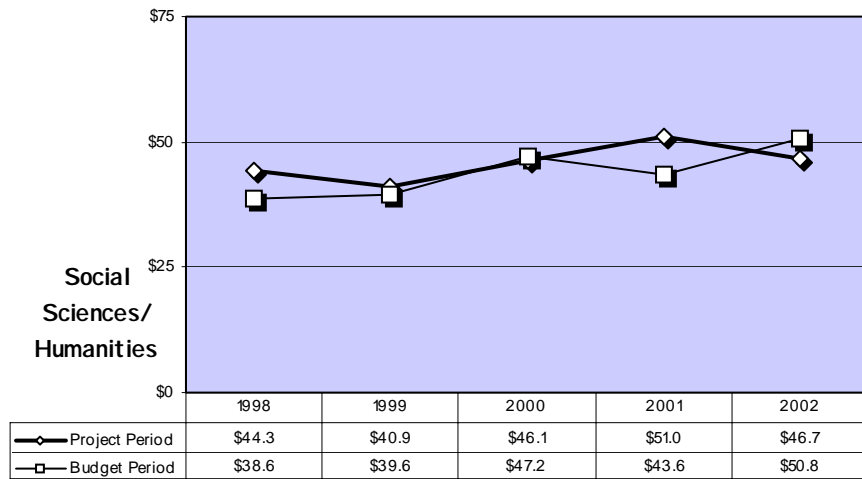




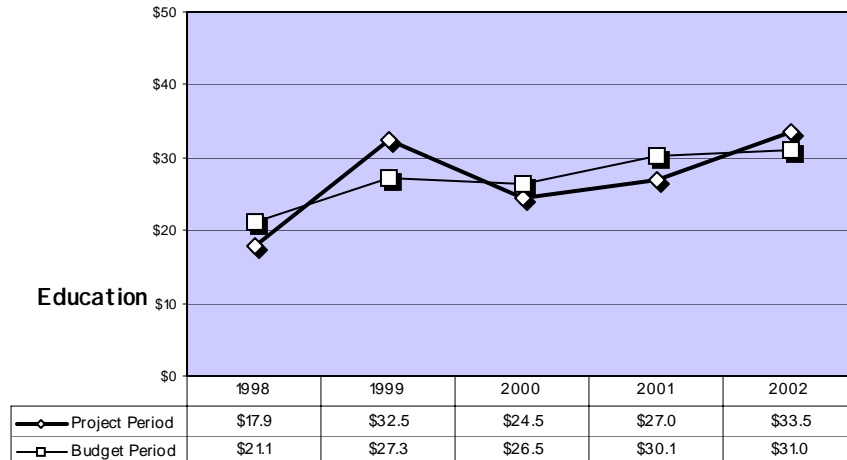
## Comparison of Project Period and Budget Period Funding, by Discipline FY 1998 – 2002 (dollars in millions)



**Comparison of Project Period and Budget Period Funding, by Discipline  
Continued  
FY 1998 – 2002 (dollars in millions)**

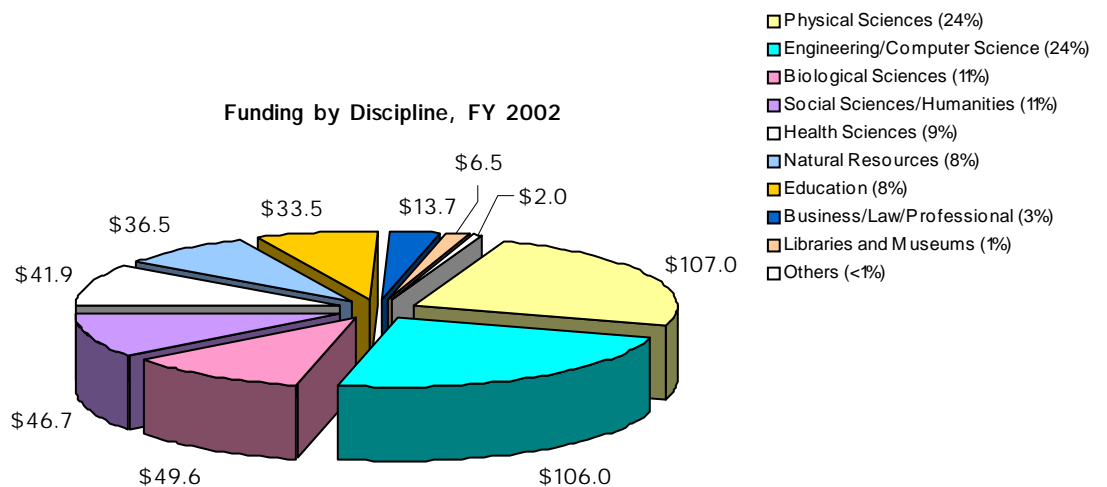
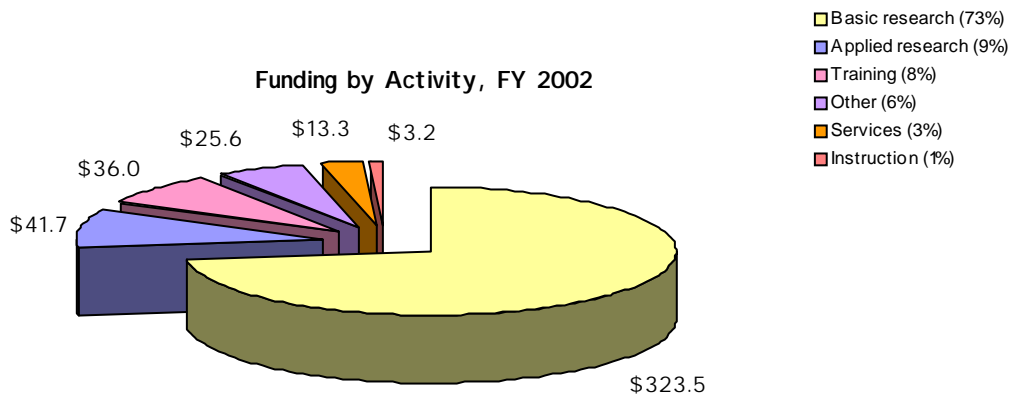
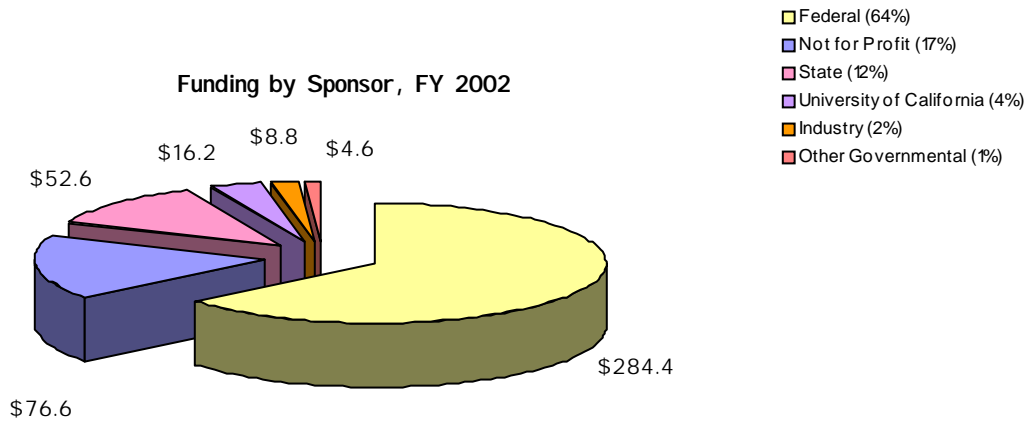


**Comparison of Project Period and Budget Period Funding, by Discipline  
Continued  
FY 1998 – 2002 (dollars in millions)**

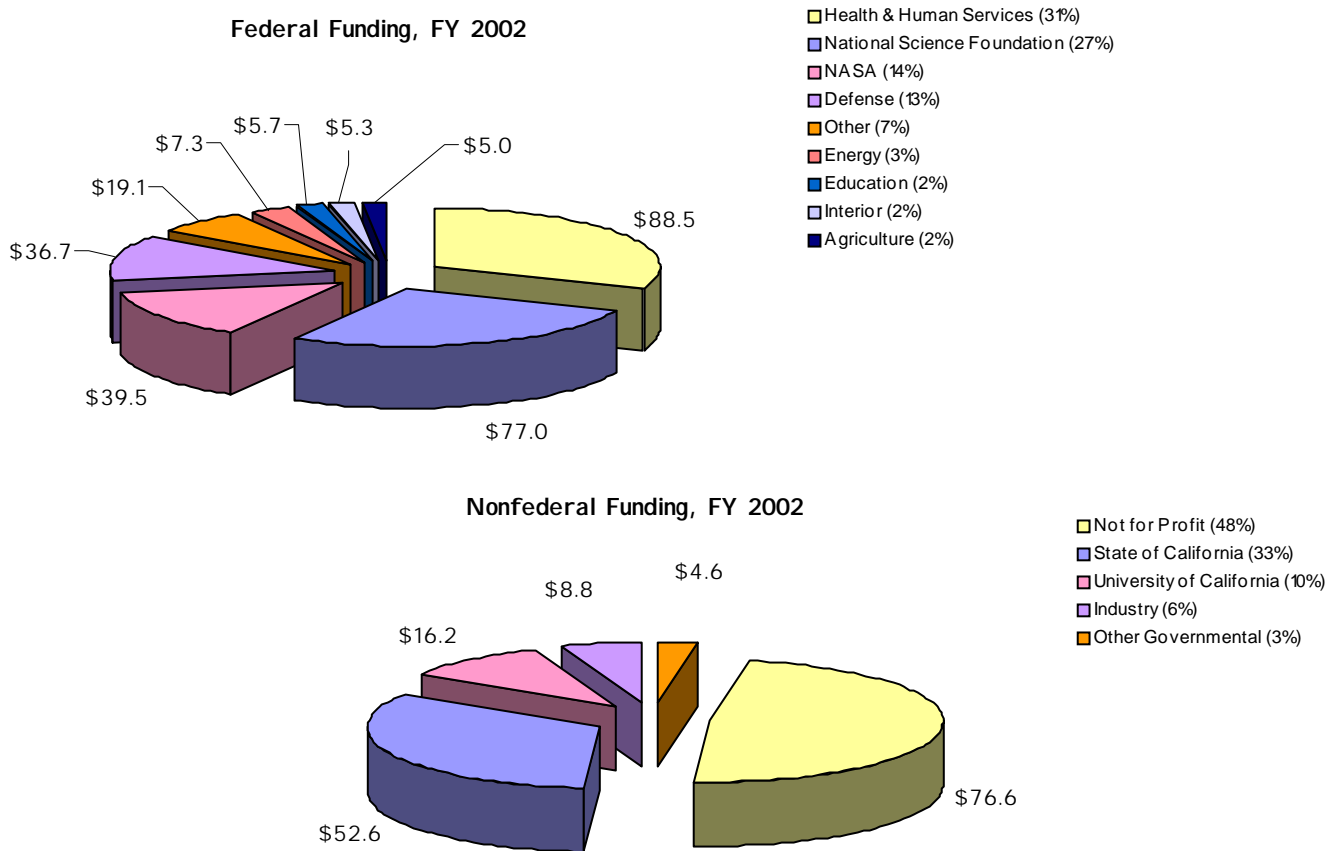


## Project Period Funding in Fiscal Year 2002

Federal funding is the largest share of Berkeley's funding, at 64% of the project period total. Funding from nonprofit agencies made up 17%, followed by State of California at 12% and University of California with 4% of the total. Funding from corporate entities made up 2% of the total. The National Institutes of Health remained the largest single source of funds to the campus in FY 2001, with \$83.6 million in new projects.



**A**mong federal agencies, the Department of Health and Human Services awarded the campus nearly \$89 million this year. The National Science Foundation awarded more to Berkeley in FY 2002 than in any prior year, providing almost \$77 million, followed by the National Aeronautics and Space Administration, the Department of Defense, and the departments of Energy, Education, Interior, and Agriculture. Of the \$159 million received from nonfederal sources, nonprofit agencies awarded more than \$76 million, and nearly \$53 million was awarded by State of California agencies. Corporate agencies awarded 6% of nonfederal funding with a total of \$8.8 million.



### Major Corporate Sponsors, FY 2002

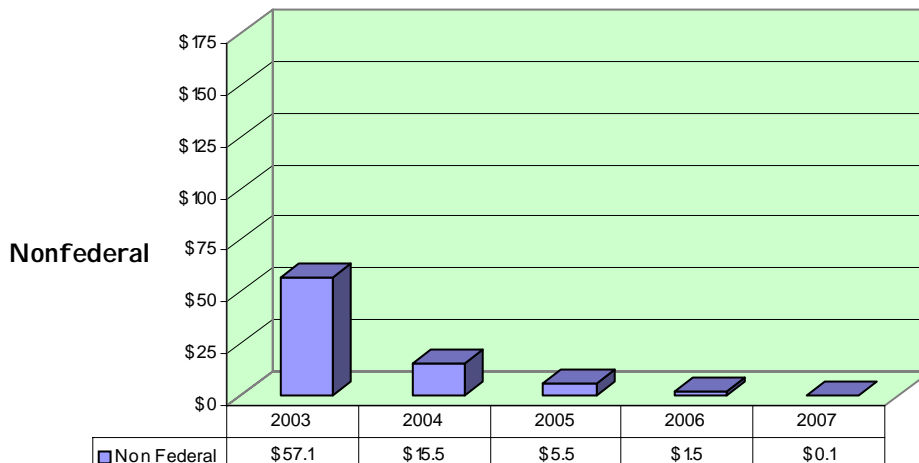
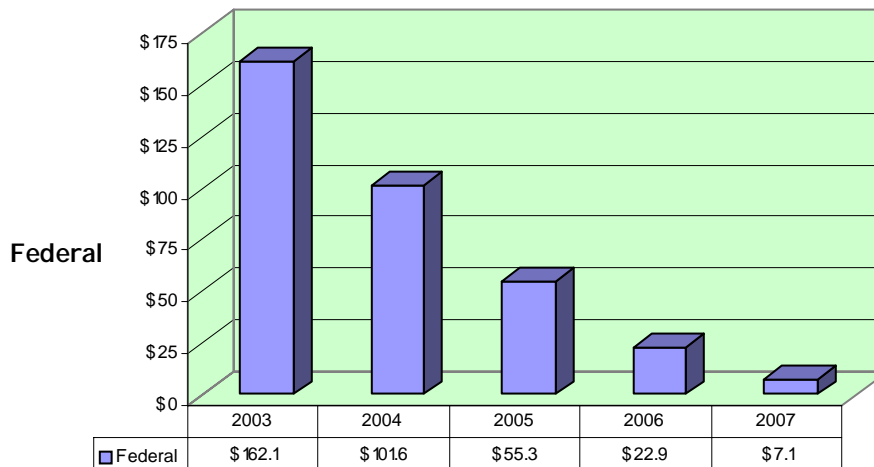
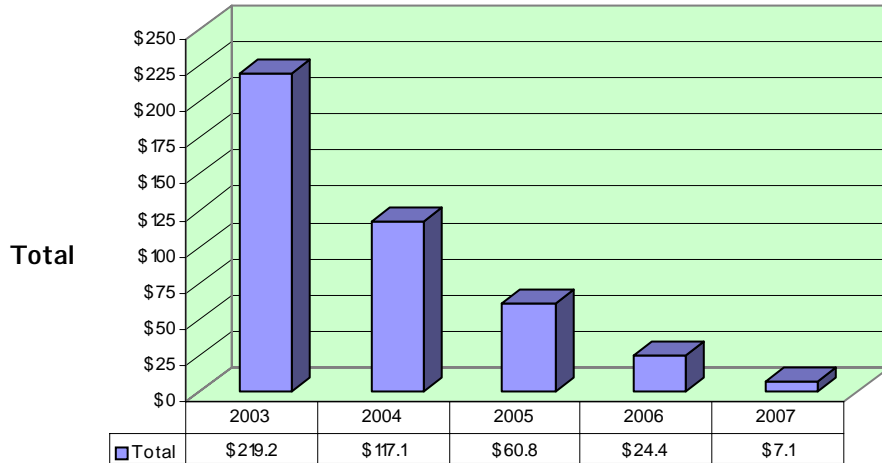
SRI International  
 ChevronTexaco Corporation  
 Polymer Technology Group, Inc  
 Intel Corporation  
 Exxon Mobile Corporation  
 BioSTAR, Inc  
 iRobot Corp  
 Amersham Healthcare  
 Lockheed  
 Johnson & Johnson

BMW Bayerische Motoren Werke AG  
 Science Applications International Corporation  
 Taylor Devices  
 Phantoms by Design Inc  
 Meyer Sound Laboratories, Inc  
 GlaxoSmithKline  
 Reaction Engineering International  
 Malcolm Pirnie  
 Robert Bosch Corporation GMBH  
 Epicyte Pharmaceutical, Inc

Sonoma Technology Inc  
 Terragenomics, Inc  
 Alza Corporation  
 Western Mining Corporation, Ltd  
 Nicolet Minerals Company  
 American Standard Companies  
 British Telecommunications  
 Battelle Memorial Institute  
 Elf Aquitaine  
 Ciba-Geigy Corporation

**W**hen a project period award is received, all budget period funding is recorded, including the current year and any future years that are essentially guaranteed. This method allows forecasting of anticipated budget period funding that will be available to spend several years into the future. The charts below illustrate expected budget period funding for fiscal years 2003 through 2007.

### Future Budget Period Funding, FY 2003 – 2007 (dollars in millions)



## The Twenty Largest Research Awards Received by Berkeley Faculty, FY 2002

James W. Demmel, Electronics Research Laboratory  
ITR: Center for Information Technology Research in the  
Interest of Society  
National Science Foundation  
\$7,500,000

A. Richard Newton, Electronics Research Laboratory  
Research Center for Design and Test of Gigascale Integrated  
Systems  
DOD Advanced Research Projects Agency  
\$6,617,747

Sarah Hake, Plant & Microbial Biology  
Regulation of Inflorescence Architecture in Maize  
National Science Foundation  
\$5,394,524

Roger T. Howe, Electronics Research Laboratory  
Integrated Microwatt Transceivers  
DOD Advanced Research Projects Agency  
\$4,600,000

Albert P. Pisano, Electronics Research Laboratory  
MEMS Rotary Engine Power System  
US Department of the Interior  
\$4,186,000

Robert W. Brodersen, Electronics Research Laboratory  
60 GHz CMOS Radio Systems  
Army Electronics Command  
\$3,720,509

Forrest S. Mozer, Space Sciences Laboratory  
Proposal for Operation of the EFW Instruments on the  
Cluster Satellites and for Data Analyses  
National Aeronautics & Space Administration  
\$3,656,900

Pravin P. Varaiya, Electronics Research Laboratory  
Hierarchical Control of Semi-Autonomous Teams  
Uncertainty  
DOD Advanced Research Projects Agency  
\$3,500,000

Adam Arkin, Engineering Systems Research Center  
An Experimental Test Suite for Development of the BioSpice  
Kernel  
Lawrence Berkeley National Laboratory  
\$3,287,280

Alistair J. Sinclair, Electronics Research Laboratory  
ITR: Discrete Models & Algorithms in the Sciences  
National Science Foundation  
\$2,899,392

Ralph D. Freeman, School of Optometry  
Core Grant for Vision Research  
National Eye Institute  
\$2,415,644

Brenda Eskenazi, School of Public Health  
Endocrine Disruptors and Neurodevelopmental Outcomes  
Centers for Disease Control & Prevention  
\$2,390,185

Bruce C. Fuller, School of Education  
Evaluation of Child-Care Retention Incentive Programs  
California Children & Families Commission  
\$2,300,000

Cheryl J. Briggs, Integrative Biology  
Amphibian Disease Dynamics in a Fragmented Landscape  
National Institute of Environmental Health Sciences  
\$2,250,000

Sydney G. Kustu, Plant & Microbial Biology  
Genetic Studies of Glutamine Synthetase in Bacteria  
National Institute of General Medical Sciences  
\$2,215,993

Hitoshi Murayama, Physics  
Physics: Theory of Elementary Particles  
National Science Foundation  
\$2,012,047

Bonnie C. Wade, International & Area Studies  
Asian Studies at the University of California, Berkeley  
Freeman Foundation  
\$2,000,000

Herbert Thier, Lawrence Hall of Science  
Issue-Oriented 6th Grade Earth and Physical Science  
National Science Foundation  
\$1,991,304

Peter H. Quail, Plant & Microbial Biology  
Enhancing Agricultural Crops through Molecular Research  
on Plant Response to the Environment  
USDA Agricultural Research Service  
\$1,935,357

Albert P. Pisano, Electronics Research Laboratory  
MEMS Strain Sensors for Roller Bearings  
Army Research Office  
\$1,932,000

## Honors to Individual Berkeley Faculty, FY 2002

### **Nobel Prize in Economic Science**

George A. Akerlof, Economics

### **National Medal of Science**

Marvin L. Cohen, Physics  
Gabor A. Somorjai, Chemistry

### **National Academy of Sciences**

Carlos J. Bustamante, Molecular & Cell Biology,  
Physics  
Charles B. Harris, Chemistry  
Geoffrey W. Marcy, Astronomy

### **National Academy of Engineering**

Adib Kanafani, Civil & Environmental Engineering  
Christos Papadimitriou,  
Electrical Engineering & Computer Sciences

### **American Academy of Arts and Sciences**

Philip P. Frickey, Law  
Catherine Gallagher, English  
Randy Katz,  
Electrical Engineering & Computer Sciences  
Mimi R. Koehl, Integrative Biology  
Matthew Rabin, Economics  
Tim D. White, Integrative Biology  
Laura D'Andrea Tyson, Business

### **American Academy of Arts and Letters**

Robert Hass, English

### **Royal Society of London Foreign Member**

Alexander Pines, Chemistry

### **John D. and Catherine T. MacArthur Foundation Fellow**

Michael H. Dickinson, Integrative Biology

### **Searle Scholars**

David Bilder, Molecular & Cell Biology  
Jay T. Groves, Chemistry

### **David and Lucile Packard Foundation Fellowships**

Andrei Okounkov, Mathematics

### **Pew Scholar in the Biomedical Sciences**

Sharon L. Amacher, Molecular & Cell Biology

### **John Simon Guggenheim Memorial Foundation Fellowships**

Sam Davis, Architecture  
Michael Lucey, French, Comparative Literature

### **Alfred P. Sloan Research Fellows**

Thomas Scanlon, Mathematics  
Eliot Quataert, Astronomy

### **Carnegie Scholar**

James A. Robinson, Political Science

### **Lomonosov Gold Medal, Russian Academy of Science**

Charles Townes, Physics

### **National Academy of Sciences Lifetime National Associate**

Martin Wachs, Civil & Environmental Engineering,  
City & Regional Planning





## **Appendices**

**Appendix A**  
**Funding by Sponsor Category, FY 1998 – 2002**

**Appendix B**  
**Funding by Discipline, FY 1998 – 2002**  
**Campus Overview**

**Appendix C**  
**Funding by Discipline, FY 1998 – 2002**  
**Social Sciences and the Humanities**

**Appendix D**  
**Funding by Discipline, FY 1998 – 2002**  
**Physical Sciences**

**Appendix E**  
**Funding by Discipline, FY 1998 – 2002**  
**Engineering and Computer Sciences**

**Appendix F**  
**Funding by Discipline, FY 1998 – 2002**  
**Biological Sciences**



**Appendix A: Project Period Funding by Sponsor Category, FY 1998 – 2002**  
(dollars in millions)

	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	
<b>Federal</b>						
Agriculture	\$1.2	3.1	2.7	5.3	5	
Commerce	0.1	1.3	0.8	0.3	0.6	
Defense	28.6	25.1	39.8	48.3	36.7	
Education	10	12.1	7.5	8.2	5.7	
Energy	8.6	3.8	8.1	5.5	7.3	
Environmental Protection Agency	1.2	4.6	2.5	-1.5	3.1	
Health & Human Services	65.5	129.5	103.5	90.9	88.5	
Interior	0.7	2	0.8	1.9	5.3	
National Aeronautics & Space Administration	58.1	32.2	14.9	9.5	39.5	
National Science Foundation	43.2	65.2	63.8	66.4	77	
NEA/NEH/IMS	0.9	1.5	1.8	0.2	0.4	
Transportation	5.2	2.9	5.8	3.7	2.7	
Other	10.3	12.6	8.8	10.9	12.7	
<b>Subtotal</b>	<b>\$233.7</b>	<b>\$296</b>	<b>\$260.8</b>	<b>\$249.5</b>	<b>\$284.4</b>	
<b>Industry</b>						
Foreign Industry	2.4	26.7	1	1.4	0.9	
U.S. Industry	13.4	8.3	13.2	13.9	7.9	
<b>Subtotal</b>	<b>\$15.9</b>	<b>\$35</b>	<b>\$14.2</b>	<b>\$15.3</b>	<b>\$8.8</b>	
<b>Nonfederal Government</b>						
Foreign Government Agencies	0.4	0.7	6.3	1.1	1.4	
Local Agencies & Schools	1.2	0.7	3.1	1.4	3.2	
State Agencies	48.6	34.6	72.6	75.9	52.6	
Other U.S. Government Agencies	0.3	0	0.1	1.1	0	
<b>Subtotal</b>	<b>\$50.5</b>	<b>\$36</b>	<b>\$82.1</b>	<b>\$79.5</b>	<b>\$57.3</b>	
<b>Nonprofit</b>						
U.S. Foundations & Charities	25.1	26.2	31.9	22.8	29.7	
Other U.S. Organizations	23.3	29.1	28	40.6	45.1	
Foreign Organizations	2	0.8	0.7	1.2	1.8	
<b>Subtotal</b>	<b>\$50.5</b>	<b>\$56.1</b>	<b>\$60.6</b>	<b>\$64.5</b>	<b>\$76.6</b>	
<b>University of California</b>	<b>Subtotal</b>	<b>\$14.6</b>	<b>\$9.2</b>	<b>\$13.2</b>	<b>\$17.7</b>	<b>\$16.2</b>
<b>Total</b>	<b>\$365.2</b>	<b>\$432.3</b>	<b>\$430.9</b>	<b>\$426.4</b>	<b>\$443.3</b>	

## Appendix B: Funding by Discipline

The research community on the Berkeley campus is made up of more than 140 academic departments and organized research units. Physical Sciences disciplines brought in \$107 million in FY 2002, with Engineering and Computer Science second at \$106 million, followed by Biological Sciences (\$49.6 million), Social Sciences and the Humanities (\$46.7 million), and Natural Resources (\$36.5 million).

Among the top units receiving funding this year were the Electronics Research Laboratory with nearly \$66 million, the Space Sciences Laboratory with more than \$42 million, Molecular & Cell Biology with more than \$38 million, and the School of Public Health with \$31 million. The Chemistry department received over \$28 million, and the School of Social Welfare was awarded almost \$21 million. The tables in the following appendices show awards by campus department within each selected discipline.

### Campus Overview

	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Biological Sciences	\$41.3	78.1	50.2	65.9	49.6
Business/Law/Professional	5.2	8.1	7.2	4.7	13.7
Education	17.9	32.5	24.5	27.0	33.5
Engineering/Computer Sciences	101.3	74.6	117.5	133.9	106.0
Health Sciences	23.5	53.3	57.7	25.8	41.9
Libraries/Museums	5.8	5.4	8.6	6.7	6.5
Natural Resources	16.4	49.3	29.0	29.9	36.5
Physical Sciences	103.6	84.3	85.1	80.3	107.0
Social Sciences/Humanities	44.3	40.9	46.1	51.0	46.7
Others	6.0	5.7	4.9	1.2	2.0
<b>Total</b>	<b>\$365.2</b>	<b>\$432.3</b>	<b>\$430.9</b>	<b>\$426.4</b>	<b>\$443.3</b>

Project Period Funding by Discipline  
FY 1998 - 2002 (dollars in millions)

## Appendix C: Funding by Discipline Social Sciences and the Humanities

<b>Department</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Africa Center	\$1.43	\$0.15	\$0.03	\$0.99	\$0.01
African American Studies	\$0.03		\$0.35	\$0.04	
Anthropology	\$0.11	\$0.07	\$0.09	\$0.09	\$0.02
ARF Archaeological Research Facility	\$0.28	\$0.54	\$0.10	\$0.05	\$1.41
Art History		\$0.03		\$0.04	
Center for the Study of Race and Gender					\$0.06
CLAS Center for Latin American Studies		\$0.00	\$0.34	\$1.38	\$0.20
CSAS Center for South Asian Studies	\$0.89	\$0.19	\$0.02	\$1.08	\$0.29
CSEAS Center for Southeast Asian Studies	\$0.23	\$0.09	\$0.46	\$0.14	\$0.14
CSP Canadian Studies Program	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
CWES Center for Western European Studies	\$0.76		\$0.04	\$0.00	
Demography	\$0.23	\$0.53	\$1.08	\$0.04	\$0.02
Dramatic Art		\$0.23			\$0.00
East Asian Languages			\$0.04		\$0.01
Economics	\$0.19	\$0.10	\$0.07	\$0.29	\$0.08
EGP Emma Goldman Papers Project		\$0.13	\$0.14	\$0.10	
Ethnic Studies - Asian American Studies			\$0.01	\$0.00	
Ethnic Studies - Chicano Studies		\$0.02	\$0.01		
Ethnic Studies - Native American Studies					\$0.09
Geography	\$0.22	\$0.16	\$0.21	\$0.24	\$0.06
Graduate School of Public Policy			\$0.00		
History	\$0.22	\$0.17	\$0.18	\$0.18	\$0.24
History of Science & Technology	\$0.12	\$0.07		\$0.21	\$0.00
Human Rights Center				\$0.01	
IAS International & Area Studies	\$0.07	\$1.02	\$1.26	\$0.00	\$2.10
ICS Institute of Cognitive Studies		\$0.00	\$0.00	\$0.00	\$0.59
IEAS Institute of East Asian Studies	\$1.14	\$0.10	\$0.19	\$1.21	\$0.09
IGS Institute of Governmental Studies	\$0.03	\$0.01	\$0.30	\$0.03	\$1.86
IHD Institute of Human Development	\$1.80	\$0.87	\$1.93	\$5.02	\$2.20
IIR Institute of Industrial Relations	\$0.16	\$0.05	\$0.60	\$0.41	\$0.73
IIS Institute of International Studies	\$2.02	\$3.08	\$6.41	\$1.17	\$1.58
Institute of European Studies				\$0.74	\$0.04
Institute of Slavic, East European, and Eurasian Studies	\$1.52	\$0.10	\$0.36	\$1.03	\$0.62
IPSR Institute for Personality & Social Research	\$2.35	\$1.42	\$0.32	\$7.56	\$3.35
ISSC Institute for the Study of Social Change	\$1.00	\$0.23	\$0.90	\$0.35	\$0.40
Italian					\$0.01
IURD Institute of Urban & Regional Development	\$0.81	\$1.29	\$0.76	\$1.12	\$1.43
Linguistics		\$0.62	\$0.80	\$0.34	\$0.00
MEC Middle East Center	\$0.90		\$0.01	\$0.94	\$0.14
Music	\$0.00	\$0.01	\$0.00		\$0.01
NE Near Eastern Studies			\$0.10	\$0.13	\$0.11
Philosophy			\$0.12		
Political Science	\$0.07	\$0.10	\$0.25	\$0.21	\$0.31
Psychology	\$2.34	\$2.74	\$4.89	\$0.65	\$1.35
Public Policy	\$0.18	\$0.48	\$0.20	\$0.11	\$0.40
Rhetoric		\$0.00	\$0.10	\$0.04	
Scandinavian					\$0.01
School of Social Welfare	\$0.08	\$0.21	\$0.34	\$1.35	\$1.58
Slavic	\$0.04				
Social Welfare	\$22.94	\$24.07	\$21.13	\$21.98	\$20.95
Sociology	\$0.01	\$0.42	\$0.02	\$0.23	\$0.17
Spanish & Portuguese		\$0.01	\$0.06	\$0.00	\$0.04
SRC Survey Research Center	\$1.56	\$1.63	\$1.25	\$1.48	\$3.84
Townsend Center for the Humanities			\$0.03	\$0.03	\$0.01
<b>Total</b>	<b>\$44.34</b>	<b>\$40.94</b>	<b>\$46.10</b>	<b>\$51.01</b>	<b>\$46.55</b>

## Appendix D: Funding by Discipline Physical Sciences

<b>Department</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY2002</b>
Astronomy	\$2.59	\$1.62	\$1.06	\$1.82	\$2.30
Berkeley Seismological Laboratory	\$1.56	\$1.46	\$2.44	\$2.43	\$2.19
Center for Particle Astrophysics	\$2.31	\$1.81	\$9.19	\$0.11	-\$0.20
Chemical Engineering	\$2.29	\$6.98	\$3.41	\$8.01	\$5.79
Chemistry	\$17.95	\$22.57	\$20.61	\$21.67	\$28.38
CPAM Center for Pure & Applied Mathematics	\$2.60	\$3.38	\$8.10	\$2.53	\$4.43
Dean, Physical Sciences		\$0.08	\$0.17		\$0.04
Earth & Planetary Science	\$1.92	\$1.66	\$3.38	\$3.75	\$5.50
ERC Earth Resources Center			\$0.15	\$0.05	\$0.10
Geographic Information Science Center		\$0.05	\$0.00	\$0.00	\$0.00
Mathematics	\$0.14	\$0.82	\$0.52	\$0.19	\$0.45
Physics	\$6.08	\$6.93	\$10.15	\$8.58	\$9.30
RAL Radio Astronomy Laboratory	\$0.47	\$2.52	\$1.40	\$5.87	\$2.77
SSL Space Sciences Lab	\$64.35	\$30.08	\$21.73	\$22.50	\$42.14
Statistics	\$1.09	\$1.80	\$2.39	\$1.10	\$2.63
TAC Theoretical Astrophysics Center	\$0.23	\$2.55	\$0.43	\$1.64	\$1.13
<b>Total</b>	<b>\$103.57</b>	<b>\$84.30</b>	<b>\$85.14</b>	<b>\$80.25</b>	<b>\$106.95</b>

### Appendix E: Funding by Discipline Engineering & Computer Sciences

<b>Department</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
BMRC Berkeley Multimedia Research Center			\$0.42		
College of Engineering	\$0.49	\$0.55	\$0.26	\$0.07	\$0.53
EERC Earthquake Engineering Research Center	\$13.81	\$2.63	\$10.65	\$6.69	\$4.02
Engineering Academic Departments	\$0.39	\$0.36	\$1.40	\$0.18	\$0.52
ERL Electronics Research Laboratory	\$50.04	\$47.78	\$49.53	\$67.33	\$65.97
ESRC Engineering Systems Research Center	\$6.86	\$10.75	\$12.45	\$13.23	\$20.67
IESE Institute for Environmental Science & Engineering	\$3.26	\$3.73	\$2.45	\$4.00	\$5.59
ITS Institute of Transportation Studies	\$25.40	\$7.83	\$39.42	\$41.55	\$7.83
UC Transportation Center	\$1.00	\$1.00	\$0.89	\$0.86	\$0.87
<b>Total</b>	<b>\$101.25</b>	<b>\$74.64</b>	<b>\$117.47</b>	<b>\$133.93</b>	<b>\$105.99</b>

### Appendix F: Funding by Discipline Biological Sciences

<b>Department</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>
Cancer Research Laboratory	\$0.14	\$1.28	\$0.54	\$2.63	\$1.49
Helen Wills Neuroscience Institute					\$1.96
IB Integrative Biology	\$4.45	\$4.98	\$3.97	\$3.65	\$8.13
Molecular & Cell Biology	\$35.05	\$71.45	\$44.78	\$57.84	\$38.10
Virus Laboratory	\$1.68	\$0.42	\$0.90	\$1.79	-\$0.04
<b>Total</b>	<b>\$41.32</b>	<b>\$78.12</b>	<b>\$50.18</b>	<b>\$65.91</b>	<b>\$49.63</b>



