

Section II

Schedule of Expenditures of Federal Awards

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster			
Direct Funds			
Department of Commerce			
National Oceanic & Atmospheric Administration	11.431		\$ 178,939
Department of Defense			
Air Force	12.630		580,143
Air Force	12.800		5,660,862
Army	12.431		2,729,984
Army	12.910		214,006
Defense Advanced Research Project Agency	12.UNKNOWN	W30950	(2,840)
Defense Threat Reduction Agency	12.351		370,214
Defense Advanced Research Project Agency	12.431		239,655
Defense Advanced Research Projects Agency	12.910		6,428,942
Navy	12.300		2,201,638
Navy	12.910		524,344
Total Department of Defense			18,946,948
Department of Energy			
Department of Energy	81.UNKNOWN	IPA CHANNING AHN	127,504
Department of Energy	81.049		21,038,841
Department of Energy	81.064		250,246
Department of Energy	81.086		186,661
Department of Energy	81.087		12,851
Department of Energy	81.112		988,502
Department of Energy	81.135		1,422,080
Total Department of Energy			24,026,685

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Direct Funds (Continued)			
Department of Health and Human Services			
National Institutes of Health	93.077		\$ 289,003
National Institutes of Health	93.121		618,816
National Institutes of Health	93.172		3,078,836
National Institutes of Health	93.173		268,956
National Institutes of Health	93.242		4,882,556
National Institutes of Health	93.279		2,866,126
National Institutes of Health	93.286		1,680,892
National Institutes of Health	93.310		5,023,022
National Institutes of Health	93.351		402,312
National Institutes of Health	93.389		39,279
National Institutes of Health	93.395		3,572,908
National Institutes of Health	93.396		495,122
National Institutes of Health	93.397		2,256,803
National Institutes of Health	93.398		145,356
National Institutes of Health	93.837		89,955
National Institutes of Health	93.838		420,813
National Institutes of Health	93.839		501,264
National Institutes of Health	93.846		53,204
National Institutes of Health	93.847		1,359,237
National Institutes of Health	93.853		5,602,798
National Institutes of Health	93.855		5,291,671
National Institutes of Health	93.859		16,447,251
National Institutes of Health	93.865		5,092,817
National Institutes of Health	93.866		340,049
National Institutes of Health	93.867		1,200,017
Total Department of Health and Human Services			62,019,063

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Direct Funds (Continued)			
Department of the Interior			
United States Geological Survey	15.UNKNOWN	4500072148	\$ 73,530
United States Geological Survey	15.UNKNOWN	4500047679	118,388
United States Geological Survey	15.807		1,499,768
United States Geological Survey	15.808		663,952
Total Department of the Interior			2,355,638
Environmental Protection Agency			
United States Environmental Protection Agency (EPA)	66.514		855
General Services Administration			
General Services Administration	39.UNKNOWN	GP0478497	47,437
National Aeronautics and Space Administration (NASA)			
NASA	43.UNKNOWN	JSCNNJ13ZA01P	156,076
NASA	43.UNKNOWN	NNH15IA26P	105,308
NASA	43.UNKNOWN	NNG08FD60C	3,336,870
NASA	43.UNKNOWN	JSCNNJ13ZA02P	(703)
NASA	43.UNKNOWN	NAS5-98034	(18,283)
NASA	43.UNKNOWN	NNH11IA02P	5,763
NASA	43.UNKNOWN	NNH08IA03P	(1,197)
NASA	43.UNKNOWN	NNH14IA13P	226,387
NASA	43.001		6,346,341
NASA	43.002		9,148
NASA	43.007		4,869
NASA	43.008		183,431
NASA	43.009		570,500
NASA	43.012		6,487
Total NASA			10,930,997

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Direct Funds (Continued)			
National Endowment for the Humanities			
National Endowment for the Humanities	45.161		\$ 33,347
National Science of Foundation			
National Science Foundation	47.UNKNOWN	1501208	1,753
National Science Foundation	47.UNKNOWN	1400366	240,270
National Science Foundation	47.UNKNOWN	1158655	(1,574)
National Science Foundation	47.041		4,087,886
National Science Foundation	47.049		68,209,528
National Science Foundation	47.050		4,439,225
National Science Foundation	47.070		3,442,475
National Science Foundation	47.074		746,535
National Science Foundation	47.075		1,052,719
National Science Foundation	47.076		4,622,798
National Science Foundation	47.080		256,333
ARRA - National Science Foundation	47.082		7,884
Total National Science Foundation			87,105,832
Total Research and Development - Direct Funds			205,645,741
Pass-Through Funds			
Agency for International Development			
Development Alternatives, Inc.	98.UNKNOWN	1001624-13S-19790	209,191
Department of Agriculture			
Citrus Research and Development Foundation, Inc.	10.309	13-009NU-788	372,645

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Department of Defense			
Air Force			
Brown University	12.800	00000271	\$ 156,325
Brown University	12.800	00000553	103,638
Carnegie Mellon University	12.800	1150119-294707	118,305
IBM Corporation	12.910	AH3.IBMH	59,739
Massachusetts Institute of Technology	12.800	5710003606	254,920
Northrop Corporation	12.800	2876556	221,839
Northwestern University	12.800	PROJ0003600	72,641
Ohio State University	12.800	RF01220513	221,507
Ohio State University	12.800	60035093/GRT00027335	48,228
Princeton University	12.800	00002050	136,507
Stanford University	12.800	29018150-51649-C	409,469
University of California Berkeley	12.800	00007817	153,158
University of California Los Angeles	12.800	0160 G QA874	79,039
University of California Los Angeles	12.800	0205GSA600	136,983
University of California San Diego	12.800	10312818	166,798
University of California Santa Barbara	12.800	KK1224	386,874
University of Chicago	12.800	RF01220513	264,795
University of Colorado at Boulder	12.800	1552227	243,370
University of Missouri	12.800	C00043936-2	166,002
University of Notre Dame	12.800	201943	132,525
University of Southern California	12.800	34278403	63,219
University of Southern California	12.UNKNOWN	Y85620	40,952
Total Air Force Pass-Through			3,636,833
Department of Defense (Continued)			
Army			
Cornell University	12.910	63222-9803	200,045
Johns Hopkins University	12.630	2001515018	854,322
Rutgers University	12.910	5654	56,611
Telaris Genesis, Inc.	12.400	1 0-2014	60,000

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Department of Defense (Continued)			
Army			
Tissue Genesis, Inc.	12.420	20150721-01	\$ 946
University of California Davis	12.431	201301077-01	237,198
University of California Santa Barbara	12.UNKNOWN	KK1502	66,629
University of California Santa Barbara	12.UNKNOWN	KK9150	1,924,042
University of Illinois	12.420	2009-03197-01	38,241
University of Illinois	12.420	2010-04699-03	14,151
University of Pennsylvania	12.910	561587	191,126
University of Utah	12.630	10028801-CAL-BPP	22,888
Total Army Pass-Through			3,666,199
Navy			
BAE Systems, Inc.	12.UNKNOWN	739533	16,690
Massachusetts Institute of Technology	12.300	5710003358	206,230
University of California Los Angeles	12.300	0980 G RE457	148,997
University of California Los Angeles	12.300	0980 G SB033	288,737
University of California Los Angeles	12.300	0980 G PK234	57,929
University of California Los Angeles	12.300	1015 G NA127	155,435
Total Navy Pass-Through			874,018
Defense Advanced Research Projects Agency			
Department of the Interior	12.910	D14AP00050	355,065
HRL Laboratories, LLC	12.910	10008-002329	73,388
Hughes Research Laboratory	12.910	9085-303500-DS	11,535
Northrop Corporation	12.431	10296067	75,315
Ohio State University	12.351	60047783	96,166
Purdue University	12.910	4104-65926	64,784
University of California Berkeley	12.910	00008161/BB00143380	294,813

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Defense Advanced Research Projects Agency (Continued)			
University of California Los Angeles	12.UNKNOWN	0142SQA028	\$ 181,489
University of California Los Angeles	12.910	Sub 0157 G PA105	(4)
University of California Santa Barbara	12.910	KK1540	118,964
Total Defense Advanced Research Projects Agency Pass-Through			1,271,515
Total Department of Defense Pass- Through			9,448,565
Department of Energy			
Aerosol Dynamics, Inc.	81.049	3519	48,041
Amerigon, Inc.	81.086	AMERGN.DOE	88,847
Argonne National Laboratory	81.UNKNOWN	3F-30421	42,973
Arizona State University	81.087	14-377	367,893
Battelle	81.UNKNOWN	251198	94,940
Brookhaven National Laboratory	81.UNKNOWN	284849	29
Carnegie Institute	81.049	4-10114-02 B	189,240
Carnegie Institute	81.112	4-10469-02	141,163
Fermilab National Accelerator Laboratory	81.UNKNOWN	554897	57,744
Fermilab National Accelerator Laboratory	81.UNKNOWN	570788	47,853
Fermilab National Accelerator Laboratory	81.UNKNOWN	608666	678,090
Fermilab National Accelerator Laboratory	81.UNKNOWN	610159	53,792
Fermilab National Accelerator Laboratory	81.UNKNOWN	612044	116,911
Fermilab National Accelerator Laboratory	81.UNKNOWN	613639	91,981
Fermilab National Accelerator Laboratory	81.UNKNOWN	615210	212,490
Fermilab National Accelerator Laboratory	81.UNKNOWN	620106	55,824
Fermilab National Accelerator Laboratory	81.UNKNOWN	620353	50,860
Fermilab National Accelerator Laboratory	81.UNKNOWN	622268	47,198

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Department of Energy (Continued)			
Krell Institute	81.UNKNOWN	KRELL.GRADPT	\$ 311
Krell Institute	81.UNKNOWN	KRELL.KLEISER	873
Lawrence Berkeley National Laboratory	81.UNKNOWN	7038034	830
Lawrence Berkeley National Laboratory	81.UNKNOWN	7080503	(1,505)
Lawrence Livermore National Laboratory	81.UNKNOWN	B602077	2,632
Lawrence Livermore National Laboratory	81.UNKNOWN	B609604	192,509
Lawrence Livermore National Laboratory	81.UNKNOWN	B611977	58,415
Liox Power	81.086	102679	132,029
Los Alamos National Laboratory	81.UNKNOWN	259078	252,391
Los Alamos National Laboratory	81.UNKNOWN	273448	170,211
Los Alamos National Laboratory	81.UNKNOWN	305963	102,000
Los Alamos National Laboratory	81.UNKNOWN	217155-1/74372-001-09	60,791
National Security Technologies, LLC	81.UNKNOWN	146428 SP0024973- PROJ0007275	41,200
Northwestern University	81.135	4000115818	173,109
Oak Ridge National Laboratory	81.UNKNOWN	P-0011396	152,132
Protabit LLC	81.049	C14-23	20,061
Radiation Monitoring Devices, Inc.	81.049	C2014.0025	10,000
Safcell, Inc.	81.135	1263763	356,035
Sandia National Laboratories	81.UNKNOWN	1416776	(92)
Sandia National Laboratories	81.UNKNOWN	DOE DE-AC02- 76SF00515	78,644
Stanford University	81.UNKNOWN	60212342-51077-I	230
Stanford University	81.087	60962301-51077	91,922
Stanford University	81.087	11404	4,586
Telescent, Inc.	81.049	2603180	27,103
United Technologies Corporation	81.135	37733	169,846
University of Delaware	81.049	A002601001	132,994
University of Minnesota	81.135	GQ10044-134466	295,448
University of Virginia	81.049		(14,217)
Total Department of Energy Pass-Through			4,896,357

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Department of Health and Human Services			
National Institutes of Health			
Academyhealth	93.226	CIT2017.731.001SGD	\$ 28,943
Allen Institute for Brain Science	93.242	14-215	296,947
Brandeis University	93.242	402473	59,802
Children's Hospital Los Angeles	93.855	000480	2,528
Children's Hospital Los Angeles	93.855	512	87,446
City of Hope	93.701	51013.914960.6692	139,721
Harvard University	93.310	138062-5061610	335,962
Hudsonalpha Institute for Biotechnology	93.172	2013-01	1,606,562
Jackson Laboratory	93.172	202909	122,936
Jackson Laboratory	93.172	JACKSON.GOCON15	177,289
Massachusetts Institute of Technology	93.279	5710002669	8,632
Mount Sinai School of Medicine	93.UNKNOWN	0258-3615 / HHSN272201000054C	70,146
Princeton University	93.853	SUB0000038	240,709
Science Applications International Corporation	93.UNKNOWN	11XS287	527,690
Symbiotix Biotherapies, Inc.	93.847	SBI-003	124,190
The Scripps Research Institute	93.279	5-50657	49,754
The Scripps Research Institute	93.279	5-52172	10,719
The Scripps Research Institute	93.853	5-52423	145,216
University of California Los Angeles	93.286	0845 G KB564	14,796
University of California Los Angeles	93.286	0845 G SB495	135,140
University of California Los Angeles	93.837	1564GRA556	168,435
University of California Los Angeles	93.837	1564GSA123	168,568
University of California Los Angeles	93.286	1713 G RA348	40,215
University of California San Francisco	93.394	8849sc	17,133
University of California Santa Cruz	93.172	S0184278	175,958
University of Georgia	93.855	RR182-434/4708841	83,250
University of Kansas Center for Research, Inc	93.310	FY2014-061	114,370
University of Miami	93.395	660215/MR82521	18,979
University of New Mexico	93.242	3RJ60	152,875

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
Department of Health and Human Services (Continued)			
National Institutes of Health (Continued)			
University of Southern California	93.859	159431	\$ 27,072
University of Southern California	93.000	56294097	671,429
University of Southern California	93.866	64259929	11,452
University of Southern California	93.853	65883161	104,626
University of Utah	93.859	10027535-05	295,039
University of Utah	93.859	10027535-06	356,343
University of Washington	93.847	UWSC7927	200,032
University of Washington	93.173	UWSC8030	64,007
University of Wisconsin	93.859	348K434	<u>67,372</u>
Total National Institutes of Health Pass-Through			<u>6,922,283</u>
Total Department of Health and Human Services Pass-Through			<u>6,922,283</u>
 Department of the Interior			
United States Geological Survey (USGS)			
University of Southern California	15.808	Y80804	203,732
University of Southern California	15.808	Y86581	<u>219,783</u>
Total Department of the Interior Pass- Through			<u>423,515</u>

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
National Aeronautics and Space Administration (NASA)			
Analytical Mechanics Associates, Inc.	43.001	1601-TEAMS2-CAL	\$ (41,000)
Carnegie Institution of Washington	43.001	7-10349-01	6,862
Center for the Advancement of Science in Space	43.001	GA-2013-101	50,226
Chromologic LLC	43.UNKNOWN	MSA-150622 - PO 2015CL2395	408
Harvard University	43.001	131299-5039010	14,517
Harvard University	43.001	131396-5071107	38,251
Johns Hopkins University	43.001	108898	23,555
Johns Hopkins University	43.001	2002128886	44,008
Massachusetts Institute of Technology	43.001	5710003277	992
Massachusetts Institute of Technology	43.001	5710003373	28,028
New Mexico State University	43.UNKNOWN	P0144736	43,935
Orbital Science Corporation	43.UNKNOWN	25P0144736	98,405
Pennsylvania State University	43.001	4984-CIT-NASA-D22G	2,293
Princeton University	43.001	00002046	228,240
Smithsonian Astrophysical Observatory	43.001	AR4-15001X	36,938
Smithsonian Astrophysical Observatory	43.001	DD3-14069X	8,736
Smithsonian Astrophysical Observatory	43.001	GO3-14052X	9,473
Smithsonian Astrophysical Observatory	43.000	GO3-14087X	17,451
Smithsonian Astrophysical Observatory	43.001	GO3-14091A	32,298
Smithsonian Astrophysical Observatory	43.001	GO5-16149X	10,262
Smithsonian Astrophysical Observatory	43.001	PF1-120089	(7,484)
Smithsonian Astrophysical Observatory	43.001	PF2-130099	81,924
Smithsonian Astrophysical Observatory	43.001	PF3-140114	89,047
Smithsonian Astrophysical Observatory	43.001	PF4-150124	69,294
Smithsonian Astrophysical Observatory	43.001	PF5-160136	15,417
Southwestern Research Institute	43.001	1415GC0042	65,419
Southwestern Research Institute	43.001	699047X	114,349
Southwestern Research Institute	43.001	699048X	108,067
Southwestern Research Institute	43.001	699049X	21,946
Southwestern Research Institute	43.001	D99029L	1,914,442

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
National Aeronautics and Space Administration (NASA)			
(Continued)			
Space Telescope Science Institute	43.UNKNOWN	HST-AR-13345.01-A	\$ 679
Space Telescope Science Institute	43.001	HST-AR-13917.007-A	22,142
Space Telescope Science Institute	43.UNKNOWN	HST-GO-12549.013-A	2,957
Space Telescope Science Institute	43.UNKNOWN	HST-GO-12888.01-A	14,247
Space Telescope Science Institute	43.UNKNOWN	HST-GO-12902.08-A	9,553
Space Telescope Science Institute	43.UNKNOWN	HST-GO-12930.001-A	59,067
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13178.01-A	150,471
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13341.001-A	22,751
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13352.010-A	62,165
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13364.40-A	1,828
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13431-001-A	3,628
Space Telescope Science Institute	43.001	HST-GO-13501.01-A	9,554
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13621.002-A	7,698
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13665.005-A	99,064
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13683.001-A	716
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13826.004-A	12,265
Space Telescope Science Institute	43.UNKNOWN	HST-GO-13867.014-A	9,999
Space Telescope Science Institute	43.UNKNOWN	HST-HF2-51334.001-A	102,694
Space Telescope Science Institute	43.UNKNOWN	HST-HF2-51365.001-A	26,303
Space Telescope Science Institute	43.UNKNOWN	STI-506645 / T047844	369,788
Space Telescope Science Institute	43.UNKNOWN	STI-506645/T049036	164,778
Space Telescope Science Institute	43.UNKNOWN	STSCI-49296	42,407
Space Telescope Science Institute	43.001	HST GO-12286.04-A	18,797
Space Telescope Science Institute	43.001	HST-GO-11702.04-A	(1,008)
Space Telescope Science Institute	43.000	HST-GO-12568.08-A	24,892
Space Telescope Science Institute	43.000	HST-GO-11622.01-A	29,292
Space Telescope Science Institute	43.001	HST-GO-12060.49-A	15,561
Space Telescope Science Institute	43.000	HST-GO-12181.13-A	26,374
Space Telescope Science Institute	43.000	HST-GO-12234.02-A	1,565
Space Telescope Science Institute	43.001	HST-GO-12283.08-A	1,003

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
National Aeronautics and Space Administration (NASA)			
(Continued)			
Space Telescope Science Institute	43.000	HST-GO-12473.11-A	\$ 18,878
Space Telescope Science Institute	43.000	HST-GO-12481.001-A	30,938
Space Telescope Science Institute	43.000	HST-GO-12490.03-A	805
Space Telescope Science Institute	43.000	HST-GO-12498.01-A	17,250
Space Telescope Science Institute	43.000	HST-GO-12524.04-A	164
Space Telescope Science Institute	43.000	HST-GO-12534.001-A	9,410
Space Telescope Science Institute	43.000	HST-GO-12949.01-A	4,321
Space Telescope Science Institute	43.000	HST-HF-51296.01-A	225
Space Telescope Science Institute	43.000	HST-HF-51313.01-A	91,889
Universities Space Research Association	43.001	02212-01	54,051
Universities Space Research Association	43.UNKNOWN	03-0151	881
Universities Space Research Association	43.UNKNOWN	08521-017	2,740
Universities Space Research Association	43.UNKNOWN	SOF 03-0098 Morris	8,105
Universities Space Research Association	43.UNKNOWN	SOF-0084	(4)
Universities Space Research Association	43.UNKNOWN	USRA.000964	2,000
University of California Berkeley	43.001	00008864	42,571
University of California Berkeley	43.001	SA2715-26309	133,291
University of California Los Angeles	43.001	0995 G SA431	12,731
University of California San Diego	43.001	32377315	60,937
University of Colorado Boulder	43.001	1551484	22,455
University of Houston	43.001	R-13-0027	32,915
University of Southern California	43.001	38485892	125,344
University of Wisconsin-Milwaukee	43.001	474K961	23,541
Total NASA Pass-Through			5,132,967

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
National Science Foundation			
Arizona State University	47.041	12-729	\$ 344,757
Assoc. of Universities for Research In Astronomy	47.UNKNOWN	N506723	54,036
Assoc. of Universities for Research In Astronomy	47.049	N51608C	1,546,773
Carnegie Mellon University	47.079	1121550-259731	169,276
Carnegie Mellon University	47.050	1122215-343879	86,865
Columbia University	47.050	9(GG009393)	25,907
Consortium for Ocean Leadership	47.050	T337A89	3,568
Cornell University	47.049	63433-10071	140
Emory University	47.049	T443838	141,741
Harvard University	47.078	5064956-131340	459,750
Incorporated Research Institute for Seismology	47.050	90-CalTech-ECBB	95,699
Large Synoptic Survey Telescope Corporation	47.049	C44040L	24,490
Michigan State University	47.049	RC105065CIT	775
National Bureau of Economic Research, Inc.	47.075	343586010799817700	2,392
National Radio Astronomy Observatory	47.UNKNOWN	339998	(54)
National Radio Astronomy Observatory	47.049	340516	14,892
National Radio Astronomy Observatory	47.049	346351	182,365
National Radio Astronomy Observatory	47.049	346844	3,000
National Radio Astronomy Observatory	47.049	347299	12,501
National Radio Astronomy Observatory	47.049	347359	18,089
National Radio Astronomy Observatory	47.049	350315	10,000
Princeton University	47.049	00002009	494,681
Protabit LLC	47.041	1332185	28,980
Stanford University	47.049	60078899-105579-C	173,527
University of Arizona	47.041	Y502628	114,300
University of Chicago	47.041	FP057790-A	8,972
University of California Berkeley	47.041	00008795	24,604
University of California San Francisco	47.041	7726sc	7,801
University of Connecticut	47.041	7150	17,929
University of Michigan	47.049	3002828221	37,512

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Research and Development Cluster (Continued)			
Pass-Through Funds (Continued)			
National Science Foundation (Continued)			
University of Minnesota	47.050	A003176705	\$ 20,352
University of Minnesota	47.049	A003778901	18,239
University of Southern California	47.050	51822192	44,345
University of Southern California	47.050	51920235	52,183
University of Southern California	47.041	55096262	101,229
University of Southern California	47.041	59997380	3,996
University of Southern California	47.041	H31068	(3,420)
University of Wisconsin-Milwaukee	47.049	123405532	45,045
University of Wisconsin-Milwaukee	47.049	153405540	13,683
Virtual Astronomical Observatory, Inc.	47.049	2010-08-1	(11,124)
W.M. Keck Observatory	47.049	11523	1,450,694
Washington University	47.041	120239 G003227	24,159
Total National Science Foundation Pass-Through			5,864,649
Total Research and Development - Pass-Through Funds			33,270,172
Total Research and Development Cluster			238,915,913

The accompanying notes are an integral part of this Schedule.

California Institute of Technology
Schedule of Expenditures of Federal Awards
(exclusive of the Jet Propulsion Laboratory)
For the Year Ended September 30, 2015

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Grant/Contract or Pass-Through Number	Federal Expenditures
Student Financial Aid Cluster			
Direct Funds			
Department of Education			
Federal Work Study Program	84.033		\$ 337,781
Federal Supplemental Educational Opportunity Grant	84.007		323,991
Federal Pell Grant Program	84.063		<u>536,331</u>
		Total Student Financial Aid Cluster	<u>1,198,103</u>
		Total Expenditures of Federal Awards	<u><u>\$ 240,114,016</u></u>

The accompanying notes are an integral part of this Schedule.

California Institute of Technology

Notes to Schedule of Expenditures of Federal Awards

For the Year Ended September 30, 2015

1. Summary of Significant Accounting Policies

General

The California Institute of Technology (the "Institute") is a private, not-for-profit institution of higher education based in Pasadena, California. The Institute provides education and training services, primarily for students at the undergraduate, graduate, and postdoctoral levels, and performs research, training, and other services under grants, contracts, and similar agreements with sponsoring organizations, primarily departments and agencies of the United States government. The awards set forth in this Schedule do not include amounts related to the Jet Propulsion Laboratory ("JPL") which is a National Aeronautics and Space Administration ("NASA") Federally Funded Research and Development Center ("FFRDC") managed by the Institute. Please refer to the separate audited financial statements and related OMB Circular A-133 reports for JPL.

Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (the "Schedule") has been prepared on the cash basis of accounting and in accordance with the Office of Management and Budget ("OMB") Circular A-133, *Audits of States, Local Governments and Not-for-Profit Organizations*. The Schedule summarizes the expenditures of the Institute under programs of the federal government for the year ended September 30, 2015, except those related to JPL. Because the Schedule presents only a selected portion of the operations of the Institute, and is prepared on the cash basis of accounting, it is not intended to and does not present the financial position, changes in net assets or cash flows of the Institute in accordance with accounting principles generally accepted in the United States of America.

Expenditures for direct costs are recognized as incurred using the cash basis of accounting and the cost accounting principles contained in OMB Circular A-21, *Cost Principles for Educational Institutions* and, effective December 26, 2014, OMB 2 CFR 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, as applicable. Under those cost principles, certain types of expenditures are not allowable or are limited as to reimbursements. Moreover, expenditures include a portion of costs associated with general institution activities (facilities and administrative costs) which are allocated to awards under negotiated formulas commonly referred to as indirect cost rates.

Negative balances reflected in the Schedule represent adjustments to expenditures under awards made in prior years.

The Institute receives funding or reimbursement from Federal Government agencies primarily for research under government grants and contracts. Grants and contracts provide for reimbursement of indirect costs based on rates negotiated with the Department of Defense's Office of Naval Research ("ONR"), the Institute's cognizant federal agency. ONR has approved predetermined rates for FY2008, FY2011, FY2012, and FY2013 and fixed with carry forward rates for FY2009, FY2010, FY2014 and FY2015. ONR engages the Defense Contract Audit Agency ("DCAA") to audit indirect charges to the Institute's grants and contracts. Actual incurred costs for the year ended September 30, 2007 have been audited by DCAA but not yet finalized and, in the opinion of management, the results of such audit will not have a material impact on the Schedule. Actual incurred costs for FY2009, FY2010, and FY2014 have been submitted to ONR pending audits by DCAA and, in the opinion of management, the results of such audits will not have a material impact on the Schedule. An incurred cost rate audit will not be required for FY 2008, FY2011, FY2012, or FY2013 because those rates are predetermined.

California Institute of Technology

Notes to Schedule of Expenditures of Federal Awards

For the Year Ended September 30, 2015

1. Summary of Significant Accounting Policies (Continued)

The Institute discloses its accounting policies for the purposes of direct costs and facilities and administrative costs in a Disclosure Statement in accordance with Cost Accounting Standards. All amendments and updates through Revision 11 have been approved by ONR. Revision 12, effective October 1, 2014, was submitted to ONR on July 31, 2014 and is pending audit by DCAA. When 2 CFR 200 became effective, ONR instructed Caltech not to submit administrative changes that were only necessary due to the promulgation of 2 CFR 200. They requested that Caltech incorporate these administrative changes into the next DS-2 revision for cost accounting changes consistent with the guidance in 2 CFR 200 FAQ .110-3. Revision 13, effective October 1, 2015, was submitted to ONR on March 31, 2016. Revision 13 includes these administrative changes in addition to other changes and is pending audit by DCAA.

For purposes of the Schedule, federal awards include all grants, contracts and similar agreements entered into directly between the Institute and agencies and departments of the federal government and all subawards to the Institute by nonfederal organizations pursuant to federal grants, contracts and similar agreements.

2. Loan Advances

During the year ended September 30, 2015, the Institute advanced loans totaling \$834,425 for the Federal Perkins Loan Program (CFDA Number 84.038). The outstanding balance at September 30, 2015 was \$5,174,541. The Federal Perkins Loan Program is administered directly by the Institute. Balances and transactions related to this program are included in the Institute's financial statements. The Institute charged \$11,606 of administrative cost allowance to the Federal Perkins Loan Program for the year ended September 30, 2015.

3. Federal Direct Loan Program

During the year ended September 30, 2015, the Institute processed \$640,087 of new loans under the Federal Direct Loan Program (CFDA Number 84.268), (which includes Subsidized Stafford Loans, Parent Loans for Undergraduate Students and Unsubsidized Stafford Loans). The amount disbursed to students (excluding origination fees) was \$622,955. There are no outstanding balances under these loan programs.

4. Transfers

During the year ended September 30, 2015, the Institute transferred \$137,697 from the Federal Work Study Program ("FWS") to the Federal Supplemental Educational Opportunity Grant Program ("FSEOG"). The transferred amounts are reflected as revenues/expenditures recognized in the program in which the funds were expended.

5. Federal Work Study Carry-forwards

During the year ended September 30, 2015, there were no FWS carry-forwards from the year ended September 30, 2014. The Institute carried back no funds from the year ended September 30, 2015 that were spent in the year ended September 30, 2014. The Institute charged \$74,301 of administrative cost allowance to the Federal Work Study Program for the year ended September 30, 2015.

California Institute of Technology
Notes to Schedule of Expenditures of Federal Awards
For the Year Ended September 30, 2015

6. Subrecipient Pass-Through

Of the federal expenditures presented in the Schedule, the Institute provided federal awards to subrecipients from the Institute's Research and Development Cluster as follows:

<u>Program Title</u>	<u>Amount Provided to Subrecipients</u>
Department of Defense	
Air Force Office of Scientific Research	\$ 1,651,267
Army Research Office	776,416
Defense Advanced Research Projects Agency	3,571,432
US Navy	306,187
	<u>6,305,302</u>
Department of Energy	<u>2,819,919</u>
National Institutes of Health	<u>11,338,766</u>
National Aeronautics & Space Administration	<u>2,223,211</u>
National Science Foundation	<u>8,122,344</u>
United States Geological Survey	<u>1,475</u>
Total Amount Provided to Subrecipients	<u>\$ 30,811,016</u>