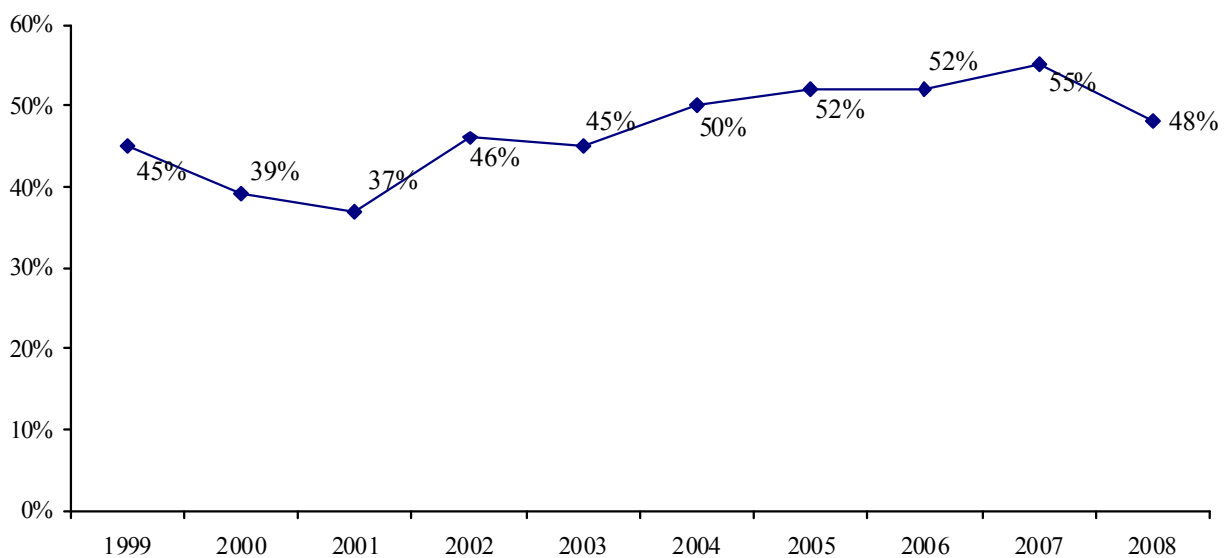


College of Physical & Mathematical Sciences

Summary of Sponsored Research (Grants & Contracts)

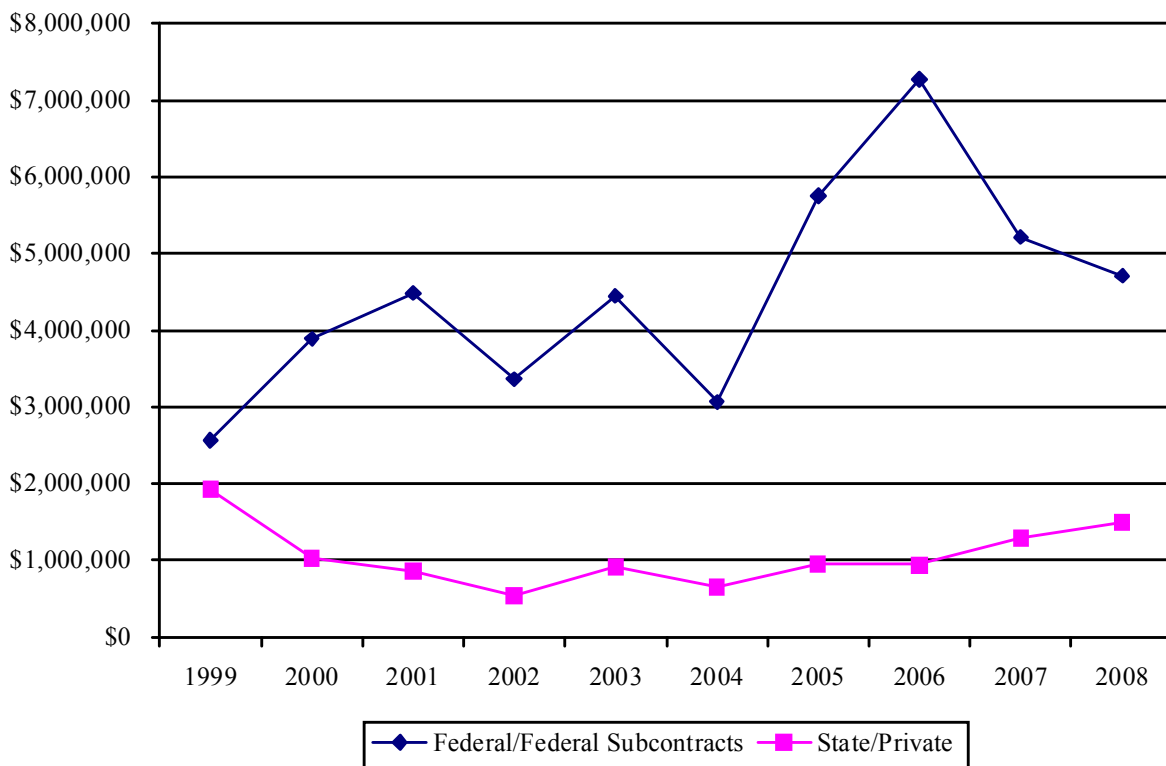
Department	# of Faculty	# of Faculty Submitting	# of Proposals Submitted	# of Awards	Dollars Awarded
Chemistry & Biochemistry	38	32	62	36	\$3,587,237
Computer Science	27	16	21	4	\$754,883
Earth Science Museum		1	0	0	\$0
Geology	18	7	13	5	\$211,631
Mathematics	33	16	18	3	\$401,105
Mathematics Education	16	3	4	0	\$0
Physics & Astronomy	30	20	24	23	\$1,258,485
Statistics	17	2	1	0	\$0
TOTALS	179	86	143	71	\$6,213,341

Proposal Submission Activity



External Research Funding (All Sources)

Year	Grants/Contracts		Total
	Federal/Federal Subcontracts	State/Private	
1999	\$2,561,770	\$1,928,464	\$4,490,234
2000	\$3,892,327	\$1,032,159	\$4,924,486
2001	\$4,485,814	\$865,015	\$5,350,829
2002	\$3,368,967	\$547,133	\$3,916,100
2003	\$4,447,192	\$915,462	\$5,362,654
2004	\$3,065,799	\$653,585	\$3,719,384
2005	\$5,752,653	\$956,651	\$6,709,304
2006	\$7,272,491	\$945,392	\$8,217,883
2007	\$5,218,139	\$1,294,580	\$6,512,719
2008	\$4,711,505	\$1,501,836	\$6,213,341



Physical & Mathematical Sciences 2008 Awards

<u>PI</u>	<u>Co-PI</u>	<u>Sponsor</u>	<u>Title</u>	<u>Beg Date</u>	<u>End Date</u>	<u>Amount</u>	<u>Type</u>
<i>Chemistry & Biochemistry</i>							
Asplund, Matthew	w/Barry Lunt	Millenniata Inc	Long Term Digital Data Storage	2/1/2008	12/31/2008	\$25,965	4
Asplund, Matthew	w/Lunt, Barry	Millenniata	Long term Digital Data Storage	5/1/2008	12/31/2009	\$19,602	4
Austin, Daniel		American Society of Mass Spectrometry (Thermo)	Quantitative Detection of Large Biomolecules Using Ion Trap Mass Analysis	7/1/2008	8/31/2010	\$25,000	4
Austin, Daniel		NASA	Ring Mass Spectrometer for Characterization of Planetary Atmospheres and Evolved Gases	6/4/2008	6/3/2010	\$228,192	1
Belnap, David		NIH	Determine the Three-Dimensional Structure of Icosahedral Virus Genomes	1/1/2009	12/31/2009	\$186,500	1
Boerio-Goates, Julie	w/Woodfield, Brian	Dept of Energy	Energetics of Nanomaterials	8/15/2008	8/14/2010	\$165,000	1
Boerio-Goates, Julie	w/Woodfield, Brian	Cosmas (NSF SBIR)	Synthesis of Metal and Metal Alloy Nanoparticles	1/1/2009	6/30/2009	\$15,000	2
Boerio-Goates, Julie	w/Woodfield, Brian	Cosmas (NSF)	Synthesis of Metal, Alloy, Metal Oxide, and Mixed-Metal Oxide Nonparticles	1/1/2009	6/30/2009	\$3,826	2
Burton, Greg	w/ Crandall, Keith	NIH (John Hopkins)	Tiss & Cell Reservoirs for HIV	1/1/2008	12/31/2008	\$25,450	2
Buskirk, Allen		NIH	Genetic Studies on Bacterial Trans-translation	5/1/2008	4/30/2009	\$218,475	1
Castle, Steven		NIH	New Methods for the Synthesis of Unusual Peptides	4/1/2008	3/31/2009	\$213,341	1
Dearden, David		NSF	Supramolecular Characterization Via Mass Spectrometry	8/1/2006	7/31/2008	\$8,300	1
Dearden, David		NSF	Supramolecular Characterization via Mass Spectrometry	8/1/2006	7/31/2009	\$100,000	1
Eatough, Delbert	w/Hansen, Jaron	Utah Division of Air Quality	Air Quality Sampling Campaign in the Salt Lake Valley: Winter 2009	1/1/2009	2/15/2009	\$11,719	3
Farnsworth, Paul		DOE	Ion Production and Transport in Atmospheric Pressure	9/1/2003	10/31/2008	\$87,500	1
Farnsworth, Paul		DOE	Ion Production and Transport in Atmospheric Pressure Ion Source Mass Spectrometers	11/1/2008	10/31/2009	\$65,000	1
Graves, Steven		Protherics, Inc.	A Comparison of DigiFab to Digibind	1/1/2008	12/31/2008	\$63,750	4
Graves, Steven		Sera (COE)	Development of Predictive Biomarkers for Preterm Birth, Preeclampsia, and other Pregnancy Complications	7/1/2008	6/30/2009	\$50,000	3
Graves, Steven		Glenveigh Research	Digiband for the Treatment of Severe Preeclampsia	9/1/2007	8/31/2008	\$55,886	4
Hansen, Jaron C.		Utah Division of Air Quality	Air Quality Sampling Campaign in the Salt Lake Valley: Winter 2009	1/1/2009	2/15/2009	\$11,720	3
Harrison, Roger G.	w/Lamb, John	Dionex Corporation	Report and Proposal to Dionex Corporation	7/1/2008	6/30/2009	\$15,000	4
Lamb, John		Dionex Corporation	Report and Proposal to Dionex Corporation	7/1/2008	6/30/2009	\$15,000	4
Lee, Milton		Torion Technologies	Chemical and Biological Agent Detector	5/8/2003	6/30/2008	\$87,000	1
Lee, Milton		Torion Technologies	Chemical and Biological Agent Detector	7/1/2008	12/30/2008	\$87,125	4
Lee, Milton		Torion Technologies	DTRA Supplies, Travel, Machinist	7/1/2008	12/30/2008	\$43,000	4
Lee, Milton		NIH	Electromobility Focusing for Separation of Proteins	5/5/2008	11/5/2008	\$58,326	1
Lee, Milton		Torion Technologies	High Throughput Chemical Analyzer	1/1/2008	6/30/2008	\$60,000	4
Lee, Milton		Torion Tech (COE)	Instrumentation Optimization and Application Development	9/1/2008	4/30/2009	\$25,000	3
Linford, Matthew		BioMicro Systems	BioMicro Slide Surface Modification	10/19/2007	10/15/2008	\$2,000	4

Linford, Matthew		Yield Engineering	Characterization of Silane Modified Surfaces	5/1/2008	4/30/2009	\$48,500	4
Linford, Matthew	w/ Lunt, Barry	Millenniata Inc	Long Term Data Storage	4/15/2007	12/31/2008	\$5,000	4
Linford, Matthew	w/Lunt, Barry	Millenniata Inc	Long term Digital Data Storage	5/1/2008	12/31/2009	\$19,602	4
Linford, Matthew	w/Barry Lunt	Millenniata Inc	Long Term Digital Data Storage	2/1/2008	12/31/2008	\$25,965	4
Linford, Matthew		Millenniata Inc	Long term Digital Data Storage	5/1/2008	12/31/2009	\$83,296	4
Linford, Matthew	w/ Lunt, Barry	Millenniata Inc.	Long Term Digital Data Storage	4/15/2007	12/31/2008	\$10,000	4
Linford, Matthew	w/Lunt, Barry	Millenniata Inc	Long-term Digital Data Storage	2/1/2008	12/31/2008	\$74,650	4
Linford, Matthew	w/Harb, John	NSF	NIRT: Chemically Directed Surfaced Alignment and wiring of Self-assembled Nanoelectrical circuits students supplement	7/1/2007	6/30/2011	\$4,000	1
Linford, Matthew		Philotek	Research Collaboration with Philotek	1/20/2008	12/31/2008	\$20,000	4
Linford, Matthew	w/ Harb, John	NSF	REU: Chemically Directed Surface Wiring of Nanoelectrical Circuits	7/1/2007	6/30/2011	\$2,400	1
Savage, Paul		Sandia National Lab	Ceragenins for RO Membranes	4/24/2008	9/15/2008	\$15,000	4
Savage, Paul		Sandia Nat'l Lab	Ceragenins for RO Membranes	9/16/2008	9/15/2009	\$60,000	2
Savage, Paul		University of Chicago (NIH)	Glycolipid Presentation by CDId	4/1/2008	3/31/2009	\$282,958	2
Savage, Paul		Scripps (NIH)	Using Lipids for Vaccination	8/1/2008	7/31/2009	\$92,112	2
Savage, Paul		Scripps (NIH)	Using Lipids for Vaccination	8/1/2008	7/31/2009	\$90,362	2
Tolley, Dennis	w/Lee, Milton	NIH	Electromobility Focusing for Separation of Proteins	5/5/2008	11/5/2008	\$58,326	1
Watt, Gary	w/ Wheeler, Dean	NASA Langley Research Center	Electrocatalysis Research	6/4/2008	6/3/2009	\$42,000	1
Willardson, Barry		NIH	Co-chaperone Role of Phosducin-like Protein in G Protein Subunit Assembly	7/1/2008	6/30/2009	\$270,524	1
Woodfield, Brian		COSMAS (UT COE)	Center for production of nanometer sized metals	11/21/2008	4/1/2009	\$50,000	3
Woodfield, Brian		Dept of Energy	Energetics of Nanomaterials	8/15/2008	8/14/2010	\$165,000	1
Woodfield, Brian		NIH	Microfluidics for Enhanced Protein Analysis	2/1/2008	1/31/2009	\$256,926	1
Woodfield, Brian	w/Harb, John	NSF	NIRT: Chemically Directed Surfaced Alignment and wiring of Self-assembled Nanoelectrical circuits students supplement	7/1/2007	6/30/2011	\$4,000	1
Woodfield, Brian	w/ Harb, John	NSF	REU: Chemically Directed Surface Wiring of Nanoelectrical Circuits	7/1/2007	6/30/2011	\$2,400	1
Woodfield, Brian		Cosmas (NSF SBIR)	Synthesis of Metal and Metal Alloy Nanoparticles	1/1/2009	6/30/2009	\$15,000	2
Woodfield, Brian		Cosmas (NSF)	Synthesis of Metal, Alloy, Metal Oxide, and Mixed-Metal Oxide Nonparticles	1/1/2009	6/30/2009	\$3,827	2
Computer Science							
Goodrich, Michael	w/ Colton, Mark	Honda	Assistive Robotics for Children with Learning and Social Disabilities	11/1/2008	12/31/2009	\$12,500	4
Goodrich, Michael	w/Morse, Bryan	NSF	Technology supporting Wilderness Search & Rescue	11/1/2008	10/31/2009	\$70,657	1
Morse, Bryan		LLNL	Mosaics and Super-resolution of UAV	2/4/2008	9/30/2008	\$60,000	2
Morse, Bryan	w/Beard, Randy	Mosaic ATM (Army)	Persistent Tactical Seeability Thru Sensor Guidance	10/27/2008	4/23/2009	\$7,720	2
Morse, Bryan		NSF	Technology supporting Wilderness Search & Rescue	11/1/2008	10/31/2009	\$70,657	1
Olsen, Dan		Move Networks	Interactive Internet Television	1/1/2008	12/31/2010	\$449,842	4
Ventura, Dan		NSF CISE IIS	Learning to develop insight: A sub-symbolic Approach	9/1/2008	8/31/2010	\$103,727	1
Geology							

Britt, Brooks B.		USDI-Nat Forest Sv	Paleontological Excavation and Isotopic Dating	9/29/2008	8/30/2011	\$20,506	1
Christiansen, Eric		USGS	Geologic Mapping of Allen Ranch	7/1/2008	6/30/2009	\$7,441	1
Kowallis, Bart	w/Christiansen, Eric	USGS	Geologic Mapping of Allen Ranch	7/1/2008	6/30/2009	\$7,440	1
McBride, John		U of IL (DOE)	Integrated Study of Geophysical Data for the ADM Site and for the Regional Framework of the Illinois Basin	12/18/2007	12/17/2009	\$32,880	2
Radebaugh, Jani		NASA	Dunes on Titan: Dune Properties, Global Winds and Climate	10/1/2008	9/30/2011	\$71,694	1
Radebaugh, Jani		NASA	Temp & Eruptions styles of Io's volcanoes from Cassini	6/26/2008	6/25/2010	\$51,164	1
Scheetz, Rodney	w/Britt, Brooks	USDI-Nat Forest Sv	Paleontological Excavation and Isotopic Dating	9/29/2008	8/30/2011	\$20,506	1
Mathematics							
Anderson, Matthew	w/ Neilsen, David	NSF	Semantic Constructs for Highly Scalable Scientific Computing	9/1/2008	8/31/2009	\$17,500	1
Dorff, Michael		NSF	2008 Conference on Several Variables	3/15/2008	2/28/2009	\$4,867	1
Dorff, Michael		NSF	BYU REU	5/15/2008	4/30/2010	\$168,252	1
Halverson, Denise	w/Dorff, Michael	NSF	BYU REU	5/15/2008	4/30/2010	\$168,252	1
Lewis, John	w/Dorff, Michael	NSF	2008 Conference on Several Variables	3/15/2008	2/28/2009	\$4,867	1
Lu, Kening		Mich St U (NSF)	Topics in Infinite and Finite Random.....	12/1/2007	9/30/2008	\$50,001	2
Muir, Stacey	w/Dorff, Michael	NSF	2008 Conference on Several Variables	3/15/2008	2/28/2009	\$4,866	1
Physics & Astronomy							
Bergeson, Scott		NSF	Ultracold Neutral Plasmas	6/15/2006	5/31/2009	\$113,755	1
Blotter, Jonathan	w/Gee, Kent	Blue Ridge Research	Development of a Near-field Acoustical Holography System for Aircraft	4/4/2007	3/25/2009	\$24,970	2
Blotter, Jonathan	w/Sommerfeldt, Scott	NSF	Structural and Acoustic energy Based Control	9/15/2008	8/31/2010	\$73,231	1
Davis, Robert		NSF(Cornell)	Center for Nanoscale Systems in Information Tech	10/1/2006	9/30/2009	\$30,000	2
Davis, Robert	w/Vanfleet, Richard	Moxtek	CNT Templated X-ray Windows	4/15/2008	8/30/2008	\$13,376	4
Davis, Robert	w/Lunt, Barry	Millenniata	Long term Digital Data Storage	5/1/2008	12/31/2009	\$19,602	4
Davis, Robert	w/Barry Lunt	Millenniata Inc	Long Term Digital Data Storage	2/1/2008	12/31/2008	\$25,965	4
Davis, Robert	w/Harb, John	NSF	NIRT: Chemically Directed Surfaced Alignment and wiring of Self-assembled Nanoelectrical circuits students supplement	7/1/2007	6/30/2011	\$4,000	1
Davis, Robert	w/ Harb, John	NSF	REU: Chemically Directed Surface Wiring of Nanoelectrical Circuits	7/1/2007	6/30/2011	\$2,400	1
Durfee, Dallin		NIST	Testing Coulomb's Law with Cold-Ion Matter wave	10/1/2008	9/30/2009	\$50,000	1
Gee, Kent		HHI Corp.	Design & Measurements of Absorptive Treatments for an Indoor Firing Range at Hill AFB	5/22/2008	8/31/2010	\$8,400	4
Gee, Kent		Blue Ridge Research	Development of a Near-field Acoustical Holography System for Aircraft	4/4/2007	3/25/2009	\$24,970	2
Gee, Kent	w/Sommerfeldt, Scott	TechnoFirst	Development of a New Active Control Concept	1/1/2008	12/31/2008	\$6,237	4
Gee, Kent		STI Technologies	Energy Based Acoustic Measurement Sensors	8/1/2005	6/30/2008	\$22,500	2
Gee, Kent		STI (NASA)	Energy-Based Acoustic Measurement Sensors	6/2/2006	6/30/2008	\$14,995	2
Gee, Kent	w/Sommerfeldt, Scott	NSF	Structural and Acoustic energy Based Control	9/15/2008	8/31/2010	\$73,231	1
Hart, Gus		NSF	Materials World Transfer	8/1/2006	7/31/2009	\$78,000	1
Hintz, Eric		NSF	Upgrade at West Mtn Observatory	6/15/2006	5/31/2009	\$14,465	1

Hirschmann, Eric	w/Neilsen, David	Decisive Analytics	Phase II Response to Topic TO4.2	2/1/2008	12/31/2008	\$4,523	2
Hirschmann, Eric	w/ Neilsen, David	NSF	Semantic Constructs for Highly Scalable Scientific Computing	9/1/2008	8/31/2009	\$17,500	1
Hirschmann, Eric		NSF	Simulating Neutron Star	9/1/2008	8/31/2009	\$40,000	1
Joner, Michael		NSF	Upgrade at West Mtn Observatory	6/15/2006	5/31/2009	\$14,465	1
Leishman, Tim	w/Sommerfeldt, Scott	Caterpillar Inc	Acoustic Modeling of Complex Enclosures	8/1/2008	7/31/2009	\$35,073	4
Leishman, Tim		Telex Communication	Acoustical Analysis of Compression Drivers & Horns	9/1/2008	8/31/2010	\$58,328	4
Leishman, Tim		Institute for Scientific Research in Music	Anechoic Recordings	11/30/2008	12/31/2009	\$75,000	4
Leishman, Tim	w/ Gee, Kent	STI (NASA)	Energy-Based Acoustic Measurement Sensors	6/2/2006	6/30/2008	\$14,995	2
Moody, Ward		NSF	Upgrade at West Mtn Observatory	6/15/2006	5/31/2009	\$14,465	1
Neilsen, David		Decisive Analytics	Phase II Response to Topic TO4.2	2/1/2008	12/31/2008	\$4,523	2
Neilsen, David		NSF	Semantic Constructs for Highly Scalable Scientific Computing	9/1/2008	8/31/2009	\$17,500	1
Neilsen, David	w/Hirschmann, E.	NSF	Simulating Neutron Star	9/1/2008	8/31/2009	\$40,000	1
Peatross, Justin		NSF	Bright Light High-Order Harmonic Generation	7/10/2008	6/30/2009	\$15,000	1
Peatross, Justin		NSF	Laser High Order Harmonic ...	5/1/2008	6/30/2009	\$5,000	1
Sommerfeldt, Scott		Caterpillar Inc	Acoustic Modeling of Complex Enclosures	8/1/2008	7/31/2009	\$35,073	4
Sommerfeldt, Scott	w/Gee, Kent	Blue Ridge Research	Development of a Near-field Acoustical Holography System for Aircraft	4/4/2007	3/25/2009	\$24,970	2
Sommerfeldt, Scott		TechnoFirst	Development of a New Active Control Concept	1/1/2008	12/31/2008	\$6,238	4
Sommerfeldt, Scott		TechnoFirst	Development of Active Noise	8/22/2007	4/30/2008	\$12,500	4
Sommerfeldt, Scott	w/Gee, Kent	STI Technologies	Energy Based Acoustic Measurement Sensors	8/1/2005	6/30/2008	\$22,500	2
Sommerfeldt, Scott	w/ Gee, Kent	STI (NASA)	Energy-Based Acoustic Measurement Sensors	6/2/2006	6/30/2008	\$14,995	2
Sommerfeldt, Scott		NSF	Structural and Acoustic energy Based Control	9/15/2008	8/31/2010	\$73,231	1
Spencer, Ross L.	w/Farnsworth, Paul	DOE	Ion Production and Transport in Atmospheric Pressure Ion Source Mass Spectrometers	11/1/2008	10/31/2009	\$65,000	1
Turley, Steve		NSF	REU: Physics Research	5/1/2006	4/30/2009	\$78,000	1
Vanfleet, Richard		Moxtek	CNT Templated X-ray Windows	4/15/2008	8/30/2008	\$13,377	4
Vanfleet, Richard		Moxtek	Process development and test of CNT templated x-ray window - Phase2	9/1/2008	12/31/2008	\$23,130	4
Ware, Michael J.	w/Peatross, J.	NSF	Bright Light High-Order Harmonic Generation	7/10/2008	6/30/2009	\$15,000	1

Type: 1=Federal; 2=Federal Subcontract; 3=State; 4=Private

Department Totals

Chemistry & Biochemistry	\$3,674,525
Computer Science	\$775,103
Geology	\$211,631
Mathematics	\$418,605
Mathematics Education	\$0
Physics & Astronomy	\$1,340,453
Statistics	\$0

College Total: \$6,420,317

Physical & Mathematical Sciences

Source Breakdown of Grants and Contracts

Sponsor	No. Awarded	Amount
Federal Sponsors		
Dept of Energy	3	\$547,500
NASA	3	\$351,050
NIH	6	\$1,262,418
NIST	1	\$50,000
NSF	14	\$1,318,560
NSF CISE IIS	1	\$103,727
Torion Technologies	1	\$87,000
USDI-Nat Forest Sv	1	\$41,012
USGS	1	\$14,881
<i>Total</i>	31	\$3,776,148
Federal Subcontract Sponsors		
Blue Ridge Research	1	\$74,910
Cosmas (NSF SBIR)	1	\$30,000
Cosmas (NSF)	1	\$7,653
Decisive Analytics	1	\$9,046
LLNL	1	\$60,000
Mich St U (NSF)	1	\$50,001
John Hopkins (NIH)	1	\$25,450
Cornell (NSF)	1	\$30,000
Sandia Nat'l Lab	1	\$60,000
Scripps (NIH)	2	\$182,474
STI (NASA)	1	\$44,985
STI Technologies	1	\$45,000
U of IL (DOE)	1	\$32,880
University of Chicago (NIH)	1	\$282,958
<i>Total</i>	15	\$935,357
State Sponsors		
COSMAS (UT COE)	1	\$50,000
Sera (COE)	1	\$50,000
Torion Tech (COE)	1	\$25,000
Utah Division of Air Quality	1	\$23,439
<i>Total</i>	4	\$148,439

Physical & Mathematical Sciences

Source Breakdown of Grants and Contracts

Private Sponsors

American Society of Mass Spectrometry (Thermo)	1	\$25,000
BioMicro Systems	1	\$2,000
Caterpillar Inc	1	\$70,146
Dionex Corporation	1	\$30,000
Glenveigh Research	1	\$55,886
HHI Corp.	1	\$8,400
Institute for Scientific Research in Music	1	\$75,000
Millenniata	1	\$166,592
Move Networks	1	\$449,842
Moxtek	2	\$49,853
Philotek	1	\$20,000
Protherics, Inc.	1	\$63,750
Sandia National Lab	1	\$15,000
TechnoFirst	2	\$24,975
Telex Communication	1	\$58,328
Torion Tech.	3	\$190,125
Yield Engineering	1	\$48,500
<i>Total</i>	21	\$1,353,397