

NATIONAL SCIENCE FOUNDATION

4201 Wilson Boulevard, Arlington VA 22230

Division of Earth Sciences Instrumentation and Facilities Program

Summary of All FY-2001 Actions Leading to AWARDS

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY01 Funding by IF/months	Comments
Akron PECK, John A.	"Acquisition of Basic Environmental Magnetics Laboratory Equipment"	EAR0110840	106,107 /12	106,107 /24	standard grant for EA
Alaska FAUST-LARSEN, Jessica	"Experimental Study of Bubble Size Distribution in Rhyolitic and Phonolitic Melts: Implications for Vessicle Size Distribution in Pumice [supplement to EAR-0074127]"	EAR0104228	11,756 /0	11,756 /0	IF suppl to CH grant for EA
Appalachian State HAGEMAN, Steven J.	"RUI: Acquisition of an Environmental Scanning Electron Microscope (ESEM) and Energy Dispersive Spectrometer (EDS)"	EAR0111471	233,622 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 233,622
Arizona BUTLER, Robert F.	"Expanding Capabilities for the University of Arizona Paleomagnetics Laboratory"	EAR0105226	51,771 /12	51,771 /12	standard grant for EA
Arizona DOWNS, Robert T.	"ITR/IM: The Crystal Structure Database and Analysis Tools Project"	EAR0112782	450,111 /36	100,000 /36	standard grant for Other; split-funded w/ EAR/ITR-small = $250,\!000$
Arizona JULL, A. J. Timothy	"NSF Arizona AMS Laboratory: Research Programs and Operations"	EAR0115488	2,674,135 /60	289,957 /12	1st yr incr on 3-yr cont grant for FS; split-funded w/ SBE/AAS = 210,000
Arizona NEUMAN, Shlomo	"ITR/AP: Forward and Inverse Conditional Moment Algorithms for Flow and Transport in Multiscale, Randomly Heterogeneous Hydrogeologic Environments Under Uncertainty"	EAR0110289	491,914 /48	- 0 -	1st yr incr on 4-yr cont grant for Other; split- funded w/ EAR/ITR-small = 100,000
Arizona QUADE, Jay	"Technician Support: Gas-Source Mass Spectrometry Laboratories - Phase II"	EAR0002134	124,230 /24	63,630 /12	2nd yr incr on 2-yr cont grant for TS
Arizona State ARROWSMITH, Ramon	"ITR/IM+AP: Collaborative Research: Creation of a Geospatial Data System for the Transition Between the Colorado Plateau and Basin and Range Provinces (Geoinformatics in Action)"	EAR0112960	249,510 /36	- 0 -	1st yr incr on 3-yr cont grant for Other; split- funded w/ EAR/ITR-small = 68,688
Arizona State BUSECK, Peter R.	"Technician Support for Geoscience Research in Transmission Electron Microscopy [Phase I]"	EAR0113345	210,002 /36	70,000 /12	1st yr incr on 3-yr cont grant for TS
Arizona State GARNERO, Edward J.	"Technician Support: Geosciences Computing at Arizona State University (Phase I)"	EAR0092024	210,000 /36	70,000 /12	1st yr incr on 3-yr cont grant for TS
Arizona State GARVIE, Laurence A. J	"Development of Electron Energy-Loss Spectroscopy (EELS) as a Trace-Element Probe in the Geosciences"	EAR0087714	13,860 /12	13,860 /12	IF split-funding for EA on CH grant
Arizona State HERVIG, Richard L.	"Development of a Technique to Maximize the Useful Yield in SIMS Analyses of Minerals and Glasses"	EAR0091796	66,317 /24	34,661 /12	1st yr incr on 2-yr cont grant for ITD

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Arizona State TYBURCZY, James A.	"Technician Support for the Arizona State University Multiple Anvil High Pressure Laboratory (Phase I)"	EAR0114262	210,000 /36	70,000 /12	1st yr incr on 3-yr cont grant for TS
Arizona State TYBURCZY, James A.	"Acquisition of Electrical Impedance Analyzer for the ASU Geological Sciences Mineral and Rock Physics Laboratory"	EAR0092412	35,688 /24	35,688 /24	standard grant for EA
Arkansas JANSMA, Pamela E.	"Collaborative Research: Magma Reservoir-Conduit Dynamics as Revealed by a Borehole Geophysical Observatory and Continuous GPS"	EAR0116485	703,208 /36	- 0 -	on hold for FY '02 decision
Boston FITZGERALD, Duncan M.	"MRI: Acquisition of Near-Surface Geophysical and Sampling Equipment for Earth Surface Processes and Quaternary Stratigraphic Research [supplement to EAR-0079588]"	EAR0107201	4,182 /0	4,182 /0	IF suppl to OIA/MRI grant for EA
Boston MURRAY, Richard W.	"Sequential Extractions of Excess Metals in Biogenic Sediment: Examining Compositional Associations and Particle Flux Rate Influences [supplement to OCE-9818713]"	OCE0107931	10,037 /0	10,037 /0	IF suppl to OCE/MGG grant for EA
Brigham Young NELSON, Stephen T.	"Acquisition of 14C and 3H Counting Equipment to Support Hydrologic, Tectonic, and Paleoseismic Studies at Brigham Young"	EAR0111517	171,316 /12	102,786 /24	standard grant for EA
Brown HUANG, Yongsong	"Acquisition of a Bench-top Gas ChromatographMass Spectrometer"	EAR0106605	64,989 /12	32,495 /24	standard grant for EA; split-funded w/ OCE/ITS = 32,494
Brown RUTHERFORD, Malcolm J.	"Acquisition of a New Electron Microprobe"	EAR0111183	325,843 /12	325,843 /24	standard grant for EA
Brown TULLIS, Jan	"Deformation Mechanisms, Microstructures, and Flow Laws for Quartzo-Feldspathic Aggregates"	EAR0106859	4,000 /12	4,000 /12	IF split-funding for EA on PH grant
Brown TULLIS, Terry E.	"Laboratory Experiments on Rock Friction Focused on Understanding Earthquake Mechanics"	EAR0003543	12,311 /12	12,311 /12	IF split-funding for EA on PH grant
California - Berkeley BUKOWINSKI, Mark S.	"Structure and Thermoelastic Properties of Al and Fe-bearing High Pressure Silicate Minerals"	EAR0003456	6,000 /12	6,000 /12	IF split-funding for EA on CH grant
California - Berkeley BURGMANN, Roland	"Collaborative Research: Modeling of 3-D Viscoelastic Stress Transfer in the California Crust: Implication for Earthquake Triggering and Seismic Hazard Migration"	EAR0122868	4,500 /12	4,500 /12	IF split-funding for EA on PH grant
California - Berkeley INGRAM, Bonnye L.	"Acquisition of a Gas Source Mass Spectrometer for Earth Sciences Research, University of California, Berkeley"	EAR0112113	188,600 /12	188,600 /24	standard grant for EA
California - Berkeley JEANLOZ, Raymond	"CSEDI Collaborative Res.: Experimental Study of Trace- Element Partitioning Between the Core and Mantle"	EAR0112484	19,250 /12	19,250 /12	IF split-funding for EA on PH grant
California - Berkeley KIRCHNER, James W.	"Acquisition of Equipment for Cosmogenic Nuclide Sample Preparation"	EAR0004098	53,808 /12	53,808 /24	standard grant for EA
California - Berkeley RICHARDS, Mark A.	"Numerical Models of Mantle Convection and Plate Tectonics"	EAR0003553	6,000 /12	6,000 /12	IF split-funding for EA on PH grant

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California - Berkeley RUBIN, Yoram	"A Field Study on GPR for Non-Invasive Measurement of Soil Moisture and a Preliminary Investigation of GPR-Remote Sensing Imagery Correlations"	EAR0087802	4,200 /12	4,200 /12	IF split-funding for EA on HS grant
California - Davis SCHIFFMAN, Peter	"Acquisition of a New Electron Microprobe for the Department of Geology"	EAR0114641	460,328 /24	- 0 -	on hold for FY '02 decision
California - Los Angeles MANNING, Craig E.	"Acquisition of a New Electron Microprobe at UCLA"	EAR0004078	335,888 /24	335,888 /36	standard grant for EA
California - Los Angeles MCKEEGAN, Kevin D.	"Support of an Ion Microprobe Facility"	EAR0113563	721,304 /36	232,053 /12	1st yr incr on 3-yr cont grant for FS
California - Los Angeles PELTZER, Gilles F.	"Acquisition of a Multi-Processor Computer System for a SAR Interferometry Processing Facility"	EAR0091845	60,566 /24	60,566 /24	standard grant for EA
California - Los Angeles REID, Mary R.	"Magmachronology and the Chemical Dynamics of Rhyolites"	EAR0003601	1,700 /12	1,700 /12	IF split-funding for EA on CH grant
California - Riverside MEIXNER, Thomas	"Evaluation of Biogeochemical Watershed Models: How Do We Know When a Model is Wrong?"	EAR0094312	20,000 /12	20,000 /12	IF split-funding for EA on HS grant
California - Riverside SADLER, Peter M.	"Parsimony Trees, Best-Fit Fences, and Consensus Sequences: Integrating Cladistics and Biostratigraphy at High Resolution"	EAR9980372	3,500 /12	3,500 /12	IF split-funding for EA on GE grant
California - San Diego (SIO) BOCK, Yehuda	"Collaborative Research: Integration of Synthetic Aperture Radar Interferometry, Continuous GPS and GPS Meteorology for Crustal Deformation and Earthquake Modeling [REU supplement to EAR-9619201]"	EAR0113233	8,200 /0	8,200 /0	IF suppl to IF grant for ITD
California - San Diego (SIO) WERNER, Brad	"Collaborative Research: Complexity and Paleodynamics of Natural Sand Dune Fields"	EAR0106359	7,000 /12	7,000 /12	IF split-funding for EA on GE grant
California - Santa Barbara OLSEN, Kim B.	"ITR/IM+AP: Websim 3D - A Web-based System for Generation, Storage and Dissemination of Earthquake Ground Motion Simulations"	EAR0113377	142,055 /24	- 0 -	on hold for FY '02 decision
California - Santa Barbara SPERA, Frank J.	"Collaborative Research: Energy-constrained Geochemical Models for Open System Magma Bodies with Anatexis, Replenishment, Magma Mixing and Fractional Crystallization"	EAR0073932	4,000 /12	4,000 /12	IF split-funding for EA on CH grant
California - Santa Cruz KOCH, Paul L.	"The Evolution of Herbivorous Marine Mammals: Ecological and Evolutionary Transitions in the Sirenia and Desostylia"	EAR0087742	5,400 /12	5,400 /12	IF split-funding for EA on GE grant
Caltech EILER, John M.	"Technician Support for the Stable Isotope Geochemistry Laboratory at Caltech [Phase I]"	EAR0091842	168,244 /36	53,890 /12	1st yr incr on 3-yr cont grant for TS
Caltech FARLEY, Kenneth A.	"Technician Support for the (U-Th)/He Dating Facility at Caltech [Phase II]"	EAR0091837	140,000 /24	140,000 /24	standard grant for TS
Caltech KIRSCHVINK, Joseph L.	"Collaborative Research: Development of an Ultra High Resolution Scanning SQUID Microscope for Paleomagnetic and Rock Magnetic Studies"	EAR0004069	23,423 /24	23,423 /24	standard grant for ITD

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Caltech TROMP, Jeroen	"Equipment Proposal: Numerical Simulations of 3-D Seismic Wave Propagation"	EAR0003860	115,000 /12	115,000 /36	standard grant for EA
Central Washington MILLER, M. Meghan	"Upgrading of the Pacific Northwest Geodetic Array (PANGA): Infrastructure and Data Analysis Facility, Central Washington University"	EAR0002066	316,712 /36	105,530 /12	2nd yr incr on 3-yr cont grant for FS
Central Washington RUBIN, Charles M.	"Collaborative Research: Patterns of Serial Fault Rupture in Taiwan"	EAR0107114	10,000 /12	10,000 /12	IF split-funding for EA on PH grant
Charleston - West VA POSLUSNY, Matthew	"MRI: Acquisition of a Gas Chromatograph/Mass Spectrometer and Graphite Furnace Atomic Absorption Spectrophotometer to Facilitate the Kanawha River Project."	EAR0115918	147,960 /36	- 0 -	1st yr incr on 2-yr cont grant for EA; split-funded w/ OIA/MRI = 73,980 in FY '01 and EHR/EPSCoR = 73,980 in FY '02
Chicago ANDERSON, Alfred T.	"Collaborative Research: Origins of Phenocrysts and Xenocrysts in the Bishop Tuff Rhyolitic Magma [supplement to EAR-0001154]"	EAR0117035	14,896 /0	14,896 /0	IF suppl to CH grant for EA
Chicago HEINZ, Dion L.	"Experimental Determination of the Thermal Equations of State of Mantle and Core Materials [supplement to EAR- 9974373]"	EAR0109145	14,700 /0	14,700 /0	IF suppl to PH grant for EA
Chicago RIVERS, Mark L.	"GeoSoilEnviroCARS: A National Resource for Earth, Planetary, Soil and Environmental Science Research at the Advanced Photon Source"	EAR9906456	8,099,515 /60	1,400,000 /12	3rd yr incr on 3-yr cont grant for FS
CIW - DTM CARLSON, Richard W.	"ITR/IM: Collaborative Research: Development of a Western North American Volcanic and Intrusive Rock Database"	EAR0112602	33,628 /24	415 /24	standard grant for Other; split-funded w/ EAR/ITR-small = 9,432 and interagency transfer from DOD/NAVAIR = 9,017
CIW - DTM HAURI, Erik H.	"Development of a Large-Radius Multicollector SIMS"	EAR0114603	108,298 /12	108,298 /12	standard grant for ITD
CIW - DTM SACKS, I. Selwyn	"Deep Geophysical Observatory in Long Valley Caldera [supplement to EAR-0080841]"	EAR0121002	17,000 /0	17,000 /0	IF suppl to IF grant for ITD
CIW - GL HEMLEY, Russell J.	"U.SItaly Summer School: "High Pressure Phenomena" - A Summer School at the Enrico Fermi International School of Physics, Varenna, Italy, 3-13 July 2001"	INT0118576	26,250 /12	8,000 /12	IF split-funding for Other on INT grant
CIW - GL LINDE, Alan T.	"Collaborative Research: Magma Reservoir-Conduit Dynamics Revealed by Borehole Geophysical Observatory and Continuous GPS"	EAR0116067	354,681 /36	- 0 -	on hold for FY '02 decision
CIW - GL MAO, Ho-kwang	"High Pressure X-Ray Facility at National Synchrotron Light Source"	EAR0004084	775,143 /48	381,288 /24	standard grant for FS
Colby College GASTALDO, Robert A.	"RUI: Analysis of an Early-Middle Devonian Ecosystem: Trout Valley Formation, Maine"	EAR0087433	25,565 /12	25,565 /12	IF split-funding for EA on GE grant
Colby College KING, D. Whitney	"MRI: Integrated Sampling and Analysis Platform for the Investigation of Lake Geochemistry Over a Range of Temporal and Spatial Scales"	EAR0115900	99,716 /12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $99,716$
Colorado BILHAM, Roger G.	"GPS Constraints on Inter-Plate and Intra-Plate Deformation of the Indian Subcontinent"	EAR0003449	56,192 /12	56,192 /12	IF split-funding for Other on PH grant

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Colorado FARMER, G. Lang	"ITR/IM: Collaborative Research: Development of a Western North American Volcanic and Intrusive Rock Database"	EAR0112673	72,125 /24	1,459 /24	standard grant for Other; split-funded w/ EAR/ITR-small = 33,109 and interagency transfer from DOD/NAVAIR = 31,652
Colorado LARSON, Kristine	"Measurement-Based Multipath Corrections for GPS Sites"	EAR0003943	171,908 /24	94,775 /12	1st yr incr on 2-yr cont grant for ITD
Colorado ZHONG, Shijie	"Acquisition of a PC Cluster for Geodynamic Modeling"	EAR0111412	40,320 /12	40,320 /36	standard grant for EA
Colorado School of Mines HUMPHREY, John D.	"MRI: Acquisition of a New Stable Isotope Ratio Mass Spectrometer"	EAR0116334	277,198 /24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $165,000$
Colorado School of Mines MORRISEY, Meghan M.	"Seismic and Acoustic Signals Generated from Explosive Volcanic Eruptions: A Numerical Investigation of a Potential Monitoring Tool"	EAR0003470	3,000 /12	3,000 /12	IF split-funding for EA on CH grant
Colorado School of Mines SCALES, John A.	"Hardware Acquisition for Experimental Studies of Multiple Scattering of Elastic Waves in Geophysics"	EAR0111804	38,021 /12	38,021 /24	standard grant for EA
Colorado State HANNAH, Judith L.	"Re-Os Systematics in Proterozoic Anorthosite Complexes"	EAR0106874	3,800 /12	3,800 /12	IF split-funding for EA on CH grant
Colorado State STEIN, Holly J.	"187Re-187Os Calibration of Molybdenite from Henderson, Colorado: A New NIST Reference Material"	EAR0111876	144,995 /24	70,000 /12	1st yr incr on 2-yr cont grant for ITD
Colorado State STEIN, Holly J.	"Duration of Mineralization in Young Porphyry Systems Through Re-Os Dating"	EAR0087483	2,200 /12	2,200 /12	IF split-funding for EA on CH grant
Columbia - LDEO KAVNER, Abby	"CSEDI: Cooperative Studies of Electrochemistry at the Core- Mantle Boundary"	EAR0112448	6,025 /12	6,025 /12	IF split-funding for EA on PH grant
Columbia - LDEO OLSEN, Paul E.	"Upgrading of the Scanning Electron Microscope/X-Ray Microanalysis Facility at Lamont-Doherty Earth Observatory"	EAR0003529	277,865 /12	138,933 /24	standard grant for EA; split-funded w/ OCE/ITS = $108,932$ and OCE/MGG = $30,000$
Connecticut TORGERSEN, Thomas	"Systems Dynamics of Detention/Retention in Ponds"	EAR0003408	4,600 /12	4,600 /12	IF split-funding for EA on HS grant
Cornell BARAZANGI, Muawia	"Collaborative Research: Active Deformation of the Central and Northern Dead Sea Fault"	EAR0106238	35,000 /12	35,000 /12	IF split-funding for EA on TE grant
Cornell DERRY, Louis A.	"Research Technician Support [Phase II]"	EAR0091771	140,000 /24	70,000 /12	1st yr incr on 2-yr cont grant for TS
Cornell DERRY, Louis A.	"Collaborative Research: Geothermal Fluxes of Solutes, Heat and Carbon to the Narayani River System, Central Nepal"	EAR0087671	2,400 /12	2,400 /12	IF split-funding for EA on HS grant
Cornell SEBER, Dogan	"ITR/IM: A National Earth Science Knowledge Node for Research and Education"	EAR0112655	496,260 /36	- 0 -	1st yr incr on 3-yr cont grant for Other; split- funded w/ EAR/ITR-small = 100,000
Cornell College DENNISTON, Rhawn F.	"MRI: Acquisition of an Alpha Spectrometry System for Research and Undergraduate Training in Geology and Environmental Science"	EAR0115704	97,826 /3	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 97,826

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Dartmouth CHAMBERLAIN, C. Page	"Technician Support: Gas-Isotope Ratio Mass Spectrometer Laboratory at Dartmouth College [Phase I]"	EAR9903082	179,925 /36	59,975 /12	2nd yr incr on 3-yr cont grant for TS
Dartmouth FENG, Xiahong	"Technician Support: Watershed Studies at Dartmouth College [Phase I]"	EAR0111403	141,700 /36	45,046 /12	1st yr incr on 3-yr cont grant for TS
Delaware State GWANMESIA, Gabriel D.	"Elasticity of High Pressure Mantle Garnet Phases at High Pressures and High Temperatures"	EAR0106528	12,250 /12	12,250 /12	IF split-funding for EA on PH grant
DePauw MELCHIORRE, Erik B.	"MRI: Acquisition of Finnigan MAT DeltaPlus Stable Isotope Ratio Mass Spectrometer with Gasbench II for Environmental Hydrological Study of Acid Mine Drainage and Watershed Dynamics"	EAR0115884	170,000 /12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $150,000$
Duke MALIN, Peter E.	"SAFOD: Near-Surface Geophysics and Field Camp Project [supplement for International Workshop on Borehole Instrumentation and Near-Source Seismology]"	EAR0113635	12,847 /12	12,847 /12	IF suppl to CD grant for Other
Duke MALIN, Peter E.	"Collaborative Proposal: Magma Reservoir-Conduit Dynamics as Revealed by Borehole Geophysical Observatory and Continuous GPS"	EAR0115991	227,592 /36	- 0 -	on hold for FY '02 decision
Emory MARINO, Lori	"Computed Tomography of Endocranial Morphology in Fossil Cetaceans"	EAR0087698	4,000 /12	4,000 /12	IF split-funding for EA on GE grant
Florida MANCHESTER, Steven R.	"Eocene Floras of the Northern Hemisphere: Paleoclimate and Implications for Large Scale Floristic Interchange"	EAR0087780	24,135 /12	24,135 /12	IF split-funding for EA on GE grant
Florida MARTIN, Jonathan B.	"Assessment of the Importance of Matrix Flow in a Conduit- Dominated Karst Aquifer: Investigation of the Unconfined Floridan Aquifer"	EAR0003360	10,400 /12	10,400 /12	IF split-funding for EA on HS grant
Florida OPDYKE, Neil D.	"Paleomagnetic Databases - Update 2001-2004"	EAR0003374	4,800 /24	4,800 /24	IF split-funding for ITD on PH grant
Florida International SAXENA, Surendra K.	"Iron Phase Diagrams at Extreme Conditions"	EAR0074054	24,000 /12	24,000 /12	IF split-funding for EA on PH grant
Florida International SEN, Gautam	"Upgrade of Superconducting Rock Magnetometer"	EAR0004064	64,960 /12	64,960 /24	standard grant for EA
Franklin & Marshall DEWET, Carol B.	"MRI: Inductively Coupled Argon Plasma Spectrometer - Dept. of Geosciences, Franklin & Marshall College"	EAR0116484	123,695 /0	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 123,695
Furman ANDERSEN, C. Brannon	"MRI: Acquisition of Instrumentation for an Undergraduate Research Program in Fluvial Biogeochemistry"	EAR0116487	134,408 /12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 92,189
George Mason HARLAN, Stephen S.	"Acquisition of Equipment to Establish a Paleomagnetic Laboratory at George Mason University"	EAR0087556	50,112 /12	50,112 /24	standard grant for EA
Georgia CAI, Wei-Jun	"Collaborative Research: The Effects of Aquatic Photochemistry on the Proton and Metal Binding Properties of Dissolved Organic Matter in Freshwater Systems"	EAR0003680	5,000 /12	5,000 /12	IF split-funding for EA on HS grant

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Harvard JACOBSEN, Stein B.	"Acquisition of a Laser Ablation System for ICP-MS"	EAR0093645	75,000 /12	74,414 /24	standard grant for EA
Harvard JACOBSEN, Stein B.	"Technician Support: EPS TIMS Facility at Harvard (Phase II)"	' EAR0093652	80,635 /24	39,417 /12	1st yr incr on 2-yr cont grant for TS
Hawaii WESSEL, Paul	"Support for the Generic Mapping Tools (GMT)"	OCE0082552	40,000 /36	40,000 /36	IF split-funding for ITD on OCE/MGG grant
Hawaii - Hilo HON, Ken	"MRI: Development of an Electron Microprobe Teaching & Research Facility"	EAR0116904	143,901 /12	- 0 -	1st yr incr on 2-yr cont grant for EA; split-funded w/ OIA/MRI = 71,950 in FY '01 and EHR/EPSCoR = 75,951 in FY '02
Hobart & William Smith HALFMAN, John D.	"MRI: Acquisition of an Ion Chromatograph and X-ray Diffractometer to Support Watershed Modeling, Seneca Lake, New York"	EAR0116078	99,771 /24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 99,771
Humboldt State CASHMAN, Eileen M.	"MRI: Acquisition of Multiple Instruments for the College of Natural Resources, Humboldt State University, California for the Investigation of Fluvial Sediment Transport in a Watershed"	EAR0116726	94,200 /12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $55,000$
Idaho GEIST, Dennis J.	"Development of an Inexpensive Continuous GPS System for Remote Monitoring of Volcano Deformation"	EAR0004067	46,484 /12	46,484 /24	standard grant for ITD
Idaho WOOD, Scott A.	"Measurement of the Solubilities of Scheelite and Ferberite in Hydrothermal Solutions with in-situ pH Measurements"	EAR0087065	5,215 /12	5,215 /12	IF split-funding for EA on CH grant
Illinois BASS, Jay D.	"Development of Laser Heating for Sound Velocity Measurements at High P and T"	EAR0002021	279,273 /24	132,915 /12	2nd yr incr on 2-yr cont grant for ITD
Illinois BASS, Jay D.	"Development of Laser Heating for Sound Velocity Measurements at High P and T [supplement to EAR- 0002021]"	EAR0105425	20,468 /0	20,468 /0	IF suppl to IF grant for ITD
Illinois BASS, Jay D.	"Sound Velocities and Elastic Moduli of Minerals at Mantle Pressures and Temperatures with Laser Heating"	EAR0003383	13,329 /12	13,329 /12	IF split-funding for EA on PH grant
Illinois JOHNSON, Thomas M.	"Collaborative Research: Field Investigation of Se Oxyanion Reduction and Se Sources in Wetlands: Application of Se Isotopes"	EAR0003381	6,100 /12	6,100 /12	IF split-funding for EA on HS grant
Illinois LUNDSTROM, Craig C.	"Measuring Trace Element Partition Coefficients Between Minerals and Basaltic Melts [supplement to EAR-0000924]"	EAR0107391	19,889 /0	19,889 /0	IF suppl to CH grant for EA
Indiana Univ of PA PUTIRKA, Keith D.	"MRI: Development of an XRF Laboratory: Integrating Geology Undergraduate Coursework with Geochemical Research"	EAR0115647	265,704 /12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 198,106
IRIS SIMPSON, David W.	"Exploring the Earth at High Resolution: The IRIS 2005 Program Plan"	EAR0004370	76,291,841 /60	12,644,000 /12	1st yr incr on 5-yr CAGR EAR-0004370 for FS; split-funded w/ OPP/AGG = 66,000, EAR/ES = 398,000 and interagency transfer from DOE = 722,900

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IRIS SIMPSON, David W.	"IRIS 2000: A Science Facility for Studying the Dynamics of the Solid Earth [supplement to CAGR EAR-9529992 for PASSCAL instrument acquisition]"	EAR0126534	233,100 /0	- 0 -	suppl to IF grant for FS; split-funded w/interagency transfer from DOE = 233,100
Johns Hopkins FERRY, John M.	"Acquisition of a New Automation System for an Electron Microprobe"	EAR0107175	90,444 /12	90,444 /24	standard grant for EA
Johns Hopkins JAHREN, Hope	"Pilot Study: Carbon Isotope Composition of Aptian Plant Fossils from the Arundel Formation, Western Maryland"	EAR0106171	10,860 /12	10,860 /12	IF split-funding for EA on GE grant
Kansas WALKER, J. Douglas	"ITR/IM: Collaborative Research: Development of a Western North American Volcanic and Intrusive Rock Database"	EAR0112963	319,646 /24	2,125 /24	standard grant for Other; split-funded w/ EAR/ITR-small = 48,217 and interagency transfer from DOD/NAVAIR = 46,095
Lehigh KODAMA, Kenneth P.	"Developing an Inclination Correction for Red Bed Remanence and its Application to Anomalously Shallow Inclinations in Tertiary Red Beds, Tarim Bain, China [supplement to EAR- 9804965]"	EAR0104896	13,925 /0	13,925 /0	IF suppl to TE grant for EA
Maine GUIDOTTI, Charles V.	"MRI: Acquisition of a Modern Electron Microprobe at the University of Maine"	EAR0116235	626,745 /24	- 0 -	1st yr incr on 2-yr cont grant for EA; split-funded w/ OIA/MRI = 237,500 in FY '01 and EHR/EPSCoR = 237,500 in FY '02
Maryland FARQUHAR, James	"Acquisition of a Gas-Source Mass Spectrometer"	EAR0004130	178,254 /24	178,254 /24	standard grant for EA
Maryland LATHROP, Daniel P.	"MRI: Development of a Three-Meter Liquid Sodium Geodynamo Model"	EAR0116129	1,100,640 /48	- 0 -	standard grant for ITD; split-funded w/ OIA/MRI = $1,100,640$
Maryland MCDONOUGH, William F.	"Acquisition of a Quadrupole Inductively Coupled Plasma Mass Spectrometer, UV Laser Lab and Sample Imaging Unit"	EAR0004095	187,000 /24	184,197 /24	standard grant for EA
Maryland RUDNICK, Roberta L.	"Technician Support: ICP-MS Facility at UMD [Phase II]"	EAR0004128	100,000 /24	70,000 /12	1st yr incr on 2-yr cont grant for TS
Massachusetts HAGGERTY, Stephen E.	"Petrochemistry of Kimberlites, Lamprolites and Diamonds in India"	EAR0106187	6,200 /12	6,200 /12	IF split-funding for EA on CH grant
Massachusetts WILLIAMS, Michael L.	"Development of an Optimized Electron Microprobe for Geochronologic and Trace Element Analysis"	EAR0004077	487,217 /24	487,217 /24	standard grant for ITD
Memphis RYDELEK, Paul A.	"Triggering and Inhibition of Large Earthquakes in the Nankai Trough, Japan"	EAR0003438	2,000 /12	2,000 /12	IF split-funding for EA on PH grant
Mesa State College HRNCIR, Duane C.	"MRI: Acquisition of an ICP-OES Spectrometer for Undergraduate Research and Teaching"	EAR0116419	96,922 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 96,922
Miami - Ohio HUGHES, John M.	"Acquisition of a CCD-Detector Single Crystal Diffractometer"	EAR0003201	140,288 /24	140,288 /24	standard grant for EA
Miami - Ohio WIDOM, Elisabeth	"MRI: Acquisition of a Thermal Ionization Mass Spectrometer for Geochemical and Geochronological Applications"	EAR0116033	309,962 /24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 309,962
Miami - RSMAS DIXON, Timothy H.	"ITR/AP: Collaborative Proposal for First Generation Model and Data Assimilation System to Reduce Volcanic Hazards"	EAR0112694	136,418 /36	136,418 /36	standard grant for Other

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Miami - RSMAS DIXON, Timothy H.	"Collaborative Research: Nazca-South America Convergence and Continental Growth in the Central Andes via GPS Measurements"	EAR0003621	3,800 /12	3,800 /12	IF split-funding for EA on PH grant
Michigan VAN KEKEN, Peter E.	"Upgrading of a Linux PC Cluster for Geodynamical Modeling"	EAR0091971	55,900 /12	55,900 /36	standard grant for EA
Minnesota BANERJEE, Subir K.	"Continuation of a Facility: Institute for Rock Magnetism"	EAR9818704	951,280 /36	331,259 /12	2nd yr incr on 3-yr cont grant for FS
Minnesota BANERJEE, Subir K.	"Pathways of Environmental Diagenesis and their Effects on the Acquisition of Natural Remanent Magnetization Recorded in Chinese Loess and Paleosol"	EAR0003421	30,000 /12	30,000 /12	IF split-funding for EA on PH grant
Minnesota BANERJEE, Subir K.	"Continuation of a Facility: Institute for Rock Magnetism [supplement to EAR-9818704]"	EAR0101480	14,235 /0	14,235 /0	IF suppl to IF grant for FS
Minnesota ITO, Emi	"National Lacustrine Core Curation Facility: LRC Esprit de Core [supplement to ATM-0071477]"	ATM0119454	50,150 /0	50,150 /0	IF suppl to ATM/PC grant for FS
Minnesota KOHLSTEDT, David L.	"Fe-Mg Interdiffusion in Olivine and Magnesiowustite Under Hydrous Conditions: Implications for Mantle Processes"	EAR0106981	7,500 /12	7,500 /12	IF split-funding for EA on CH grant
Minnesota PORTE-AGEL, Fernando	"CAREER: Effect of Land-Surface Heterogeneity on Regional- Scale Fluxes Using a New Generation Large-Eddy Simulation"	EAR0094200	29,250 /12	29,250 /12	IF split-funding for EA on HS grant
Minnesota WHITNEY, Donna L.	"Experimental and Microstructural Study of Garnet Fracture Mechanics"	EAR0106673	3,500 /12	3,500 /12	IF split-funding for EA on PH grant
Minnesota YUEN, David A.	"Collaborative Research: Application of Wavelets in Modeling and Visualizing Multiscale Phenomena in Geophysics"	EAR0106276	7,800 /12	7,800 /12	IF split-funding for EA on PH grant
Missouri VASILYEV, Oleg V.	"Collaborative Research: Application of Wavelets in Modeling and Visualizing Multiscale Phenomena in Geophysics"	EAR0107086	7,500 /12	7,500 /12	IF split-funding for EA on PH grant
MIT HARVEY, Charles F.	"CAREER: Revisiting Two Basic Processes in Hydrogeology Solute Transport in Heterogeneous Formations and Chemical Mixing in Porous Media"	EAR9875995	1,000 /12	1,000 /12	IF split-funding for EA on HS grant
MIT MCLAUGHLIN, Dennis B.	"A New Approach to Hydrologic Data Assimilation"	EAR0003361	6,600 /12	6,600 /12	IF split-funding for EA on HS grant
MIT REILINGER, Robert E.	"Present-Day Kinematics and Dynamics of the Eastern Mediterranean/Caucasus: Interaction of the Arabian, African, and Eurasian Plates [supplement to EAR-9909730]"	EAR0042641	42,344 /0	42,344 /0	IF suppl to PH grant for EA
MIT REILINGER, Robert E.	"Combining InSAR and GPS Measurements of Active Tectonic Deformation within the Arabia-Eurasia Continental Collision Zone"	EAR0106571	8,000 /12	8,000 /12	IF split-funding for EA on PH grant
NAL Research HOANG, Ngoc	"SBIR Phase IIB: Autonomous Data Relay System Utilizing Low-Earth Orbit Satellites"	ENG0119663	45,000 /12	45,000 /12	IF split-funding for ITD on ENG/SBIR grant

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Nevada - Las Vegas CHOPELAS, Anastasia	"Anharmonicity and Phase Transitions of Mantle Phases Using Simultaneous High Pressure-High Temperature Raman Spectroscopy in the Laser Heated Diamond Cell"	EAR0106120	35,000 /12	35,000 /12	IF split-funding for EA on CH grant
New Hampshire CLYDE, William C.	"Acquisition of Paleomagnetic Equipment for the Department of Earth Sciences, University of New Hampshire"	EAR0086672	50,950 /12	50,950 /24	standard grant for EA
New Mexico BREARLEY, Adrian J.	"Acquisition of an Electron Microprobe"	EAR0112339	300,000 /24	- 0 -	on hold for FY '02 decision
New Mexico FISCHER, Tobias P.	"The Flux of Volatiles from Active MARGINS: the Central American Volcanic Arc [supplement to EAR-0079402]"	EAR0118914	5,500 /0	5,500 /0	IF suppl to CD grant for EA
New Mexico KARLSTROM, Karl E.	"Collaborative Research: Great Unconformity of the Southwestern USA Ar-Ar K-Feldspar Thermochronologic and Structural Studies of a Billion Years of Regional Exhumation [supplement to EAR-9902955]"	EAR0105989	5,935 /0	5,935 /0	IF suppl to TE grant for EA
New Mexico Tech KYLE, Philip R.	"MRI: Development of Integrated Seismic, Geodetic and Volcanic Gas Surveillance Instrumentation for Volcanic Research"	OPP0116577	30,000 /12	30,000 /12	IF split-funding for ITD on OPP/MRI grant
New Mexico Tech SMALL, Eric E.	"Invasion of Semiarid Grasslands by Shrubs"	EAR0003514	46,680 /12	46,680 /12	IF split-funding for EA on HS grant
North Carolina CARTER, Joseph G.	"Early Evolution of Ligaments and Shell Microstructure in Bivalvia, with a Comprehensive, Polythetic, Phylogenetic Analysis"	EAR0003431	3,000 /12	3,000 /12	IF split-funding for EA on GE grant
North Carolina GLAZNER, Allen F.	"ITR/IM: Collaborative Research: Development of a Western North American Volcanic and Intrusive Rock Database"	EAR0112738	74,000 /24	1,509 /24	standard grant for Other; split-funded w/ EAR/ITR-small = 34,242 and interagency transfer from DOD/NAVAIR = 32,736
North Carolina State LEITHOLD, Elana L.	"Organic Carbon Loading on Marine Sedimentary Particles as an Indicator of Modern and Ancient River Basin Weathering and Transport Regimes [supplement to OCE-9809553]"	OCE0119165	10,000 /0	10,000 /0	IF suppl to OCE/MGG grant for EA
Northern Illinois SCHERER, Reed P.	"MRI: Acquisition of a Low-Vacuum SEM Microscope for Multi-Disciplinary Research and Education"	EAR0116385	162,965 /24	236 /24	standard grant for EA; split-funded w/ OIA/MRI = 139,689
Notre Dame SILLIMAN, Stephen E.	"Air Entry Barriers: Mechanism for Creating High Permeability Pathways Above the Water Table"	EAR0087228	10,000 /12	10,000 /12	IF split-funding for EA on HS grant
Occidental College BOGUE, Scott W.	"MRI: Acquisition of Superconducting Rock Magnetometer for Department of Geology"	EAR0116311	217,093 /24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $217,093$
Ohio State FOLAND, Kenneth A.	"Collaborative Research: Argon Retentivity and Closure Temperature in Micas and Amphiboles"	EAR0107054	14,900 /12	14,900 /12	IF split-funding for EA on CH grant
Oklahoma DEWERS, Thomas A.	"Acquisition of a Laser Particle Analyzer"	EAR0111510	47,611 /12	47,611 /24	standard grant for EA
Oklahoma ELMORE, R. Douglas	"Collaborative Research: Remagnetization and Orogenic Fluids: Testing the Hypothesis in the Central Appalachians"	EAR0121827	9,785 /12	9,785 /12	IF split-funding for EA on TE grant

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Oxford WILLEMANN, Raymond J.	"Partial Support of the International Seismological Center"	EAR9725096	345,600 /36	62,950 /12	IF split-funding for FS on 4-yr cont PH grant
Oxford WILLEMANN, Raymond J.	"Developing New Services at the International Seismological Centre"	EAR9909662	17,395 /12	23,178 /12	IF split-funding for FS on PH grant
Penn State BRANTLEY, Susan L.	"SGER: Eddy Correlation Measurements for Analysis of Volcanic CO2 Fluxes"	EAR0114858	20,875 /12	20,875 /12	IF split-funding for EA on CH grant
Penn State FREEMAN, Katherine H.	"Technician Support: The Penn State Stable-Isotope Biogeochemistry Laboratory [Phase I]"	EAR0092002	210,000 /36	70,000 /12	1st yr incr on 3-yr cont grant for TS
Penn State FREEMAN, Katherine H.	"Acquisiton of a Mass Spectrometer and Continuous-Flow Inlet Systems for Analyses of H, C, N, O & S Stable Isotopes in Ultra-Small Gas Liquid and Solid Samples for Research in Geosciences"	EAR0080267	302,006 /24	- 0 -	2nd yr incr on 2-yr cont grant for EA; split- funded w/ OPP/Glaciology = 25,000
Penn State VOIGHT, Barry	"Collaborative Research: Magma Reservoir-Conduit Dynamics Revealed by Borehole Geophysics Observatory and Continuous GPS"	EAR0116826	669,048 /36	- 0 -	on hold for FY '02 decision
Princeton BUNGE, Hans-Peter	"ITR/AP: A Finite Element Geodynamo Model Optimized for High-Speed Beowulf PC-Clusters"	EAR0113050	496,270 /36	- 0 -	on hold for FY '02 decision
Princeton DUFFY, Thomas S.	"CSEDI: Theoretical and Experimental Studies of Some Materials Fundamental to the Deep Mantle"	EAR0112532	7,500 /12	7,500 /12	IF split-funding for EA on PH grant
Purdue ELMORE, David	"Facility Support: The Purdue Rare Isotope Measurement Laboratory"	EAR0112480	2,864,054 /36	500,000 /12	1st yr incr on 1.5-yr cont grant for FS
Purdue ELMORE, David	"Development of an Ion Source for Accelerator Mass Spectrometry"	EAR0092508	170,997 /12	170,997 /24	standard grant for ITD
Purdue ELMORE, David	"Facility Support: The Purdue Rare Isotope Measurement Laboratory [supplement to EAR-9809983]"	EAR0104328	53,983 /0	53,982 /0	IF suppl to IF grant for FS
Rensselaer Polytech Inst WILLIAMS, Charles A.	"ITR/AP: Development of Interactive Web-based Tools for Modeling Deformation at Subduction Zones"	EAR0113713	480,938 /36	- 0 -	1st yr incr on 3-yr cont grant for Other; split- funded w/ EAR/ITR-small = 133,000
Rochester BASU, Asish R.	"Request for Technical Associate to Support the Isotope Geochemistry Laboratories at the University of Rochester [supplement to EAR-9730743]"	EAR0120281	20,000 /0	20,000 /0	IF suppl to IF grant for TS
Rochester TARDUNO, John A.	"Development of a CO2 Laser System for Paleointensity Analyses of Single Plagioclase Crystals"	EAR0091403	41,754 /12	41,754 /12	standard grant for ITD
Salish Kootenai College STEVENS, Douglas K.	"Organic Environmental Chemistry, An Integrated Approach for Tribal College Students"	EAR0010054	41,250 /12	41,250 /12	IF split-funding for EA on HS grant
South Alabama AXSMITH, Brian J.	"RUI: Cheirolepidiaceous Conifer Fossils from North America: New Data on the Structure and Diversity of the Dominant Mesozoic Vegetation"	EAR0105476	18,985 /12	18,985 /12	IF split-funding for EA on GE grant
South Florida CONNOR, Charles B.	"ITR/AP: Collaborative Proposal for First Generation Model and Data Assimilation System to Reduce Volcanic Hazards"	EAR0130602	195,665 /36	16,665 /36	standard grant for Other; split-funded w/ EAR/ITR-small = $179,\!000$

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Southern California HENYEY, Thomas L.	"Southern California Earthquake Center [supplement to CAGR EAR-8920136 for WinSAR data purchase]"	EAR0120132	25,000 /0	25,000 /0	IF suppl to PH grant for FS
Southern Maine POLLOCK, Stephen G.	"MRI: X-Ray Diffraction at the University of Southern Maine"	EAR0116481	185,449 /24	- 0 -	1st yr incr on 2-yr cont grant for EA; split-funded w/ OIA/MRI = 53,160 in FY '01 and EHR/EPSCoR = 67,014 in FY '02
Southern Methodist YAPP, Crayton J.	"Ancient Atmospheric CO2, Paleoclimates, and the Stable Isotope Geochemistry of Low Temperature Iron (III) Oxides"	EAR0106257	1,600 /12	1,600 /12	IF split-funding for EA on GE grant
Southern Mississippi SKILLING, Ian	"Collaborative Research: Explaining the Eruption of Huge Volumes of Magma-Sediment Mixtures Preceeding Flood Basalt Effusion: Karoo Lip, South Africa"	EAR0106103	8,990 /12	8,990 /12	IF split-funding for EA on CH grant
St. Thomas - Houston MALLOY, Thomas B.	"MRI: Acquisition of a Combined GC and HPLC System for Undergraduate Research and Training"	EAR0115905	99,468 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 99,468
Stanford BEROZA, Gregory C.	"Waveform-Based Earthquake Location [supplement to EAR-0074084]"	EAR0102803	28,729 /0	28,729 /0	IF suppl to PH grant for EA
Stanford KITANIDIS, Peter K.	"Mathematical and Experimental Studies of Dispersion in Porous Media"	EAR0001441	8,900 /12	8,900 /12	IF split-funding for EA on HS grant
Stanford KLEMPERER, Simon L.	"Seismic Daylight Imaging: A New Passive-Seismic Method to Image Basin and Crustal Structure"	EAR0106693	2,461 /12	2,461 /12	IF split-funding for EA on PH grant
Stanford KLEMPERER, Simon L.	"Shear-Wave Splitting in Central Europe to Test Mantle- Upwelling Anisotropy Model"	EAR0107080	2,200 /12	2,200 /12	IF split-funding for EA on PH grant
Stanford KNIGHT, Rosemary	"Acquisition of a Maran Ultra Nuclear Magnetic Resonance Core Analyzer"	EAR0111278	82,000 /12	82,000 /24	standard grant for EA
Stanford STEBBINS, Jonathan F.	"Disorder and Dynamics in Silicate and Aluminosilicate Liquids, Glasses, and Crystals: Nuclear Magnetic Resonance Studies"	EAR0104926	4,800 /12	4,800 /12	IF split-funding for EA on CH grant
SUNY - Buffalo BAKER, Gregory S.	"Acquisition of Equipment for Investigating Coincident Seismic and GPR Imaging [supplement to EAR-0002233 for OPP/TEA grant]"	EAR0114532	10,985 /0	- 0 -	suppl to IF grant for Other; split-funded w/ OPP/ASS = 10,985
SUNY - Buffalo MITCHELL, Charles E.	"Collaborative Research: Graptolite Macroevolution: Phylogenetic Analysis and Testing of Hypotheses of Directional Change"	EAR0107056	7,000 /12	7,000 /12	IF split-funding for EA on GE grant
SUNY - Stony Brook DAVIS, Daniel M.	"Theoretical and Modeling Studies of Strain Partitioning [supplement to EAR-9909559]"	EAR0111378	19,000 /0	19,000 /0	IF suppl to TE grant for EA
SUNY - Stony Brook KRAUSE, David W.	"Late Cretaceous Vertebrates from Madagascar: Implications for Gondwanan Biogeography"	EAR0106477	12,000 /12	12,000 /12	IF split-funding for EA on GE grant
SUNY - Stony Brook O'LEARY, Maureen A.	"MRI: Acquisition of Instruments and Technical Support for an Interdepartmental Fossil Preparation Laboratory"	EAR0116517	227,934 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 227,934
SUNY - Stony Brook WEIDNER, Donald J.	"Science and Technology Center for High Pressure Research"	EAR0111102	14,680,542 /60	2,058,086 /12	11th and final yr incr on STC CAGR EAR-8920239 for FS; split-funded w/ EHR = 172,720

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SUNY - Stony Brook WEIDNER, Donald J.	"Workshop for Mineral Physics Consortium"	EAR0110248	26,000 /12	26,000 /12	standard grant for Other
SUNY-Binghampton BARKER, Jeffrey	"Acquisition of Ground-Penetrating Radar Equipment"	EAR0092258	27,218 /12	27,218 /24	standard grant for EA
Syracuse BICKFORD, Marion E.	"The Paleoproterozoic of Central Colorado: Accreted Arcs or Rifted Older Crust [supplement to EAR-9805013]"	EAR0044183	6,400 /0	6,400 /0	IF suppl to TE grant for EA
Syracuse SAMSON, Scott D.	"Magmatic and Deformational History of the Cadomian Orogenic Belt, North American Massif"	EAR0115589	5,000 /12	5,000 /12	IF split-funding for EA on TE grant
Tennessee LABOTKA, Theodore C.	"An Experimnetal Study of the Breakdown of Dolomite in Mixed-Volatile Metamorphic Environments"	EAR0087553	11,500 /12	11,500 /12	IF split-funding for EA on CH grant
Tennessee MORA, Claudia	"Technician Support: Stable Isotope Laboratory at the University of Tennessee [Phase I]"	EAR0004104	126,730 /36	41,001 /12	1st yr incr on 3-yr cont grant for TS
Tennessee THONNARD, Norbert	"Development Completion of Rare Krypton Isotope Analysis for the Geosciences and First Validation Measurements"	EAR0119110	376,347 /36	116,894 /12	1st yr incr on 3-yr cont grant for ITD
Texas BENNETT, Philip C.	"Sediment Transport in an Urbanizing Karst Aquifer- Watershed"	EAR0001197	14,000 /12	14,000 /12	IF split-funding for EA on HS grant
Texas BENNETT, Philip C.	"LExEn: Sulfuric Acid Speleogenesis by Chemolithotrophic Bacteria: Community Structure and Habitat Modification by Acid Extremophiles [supplement to EAR-0085576]"	EAR0121834	6,000 /0	6,000 /0	IF suppl to GE grant for EA
Texas CARLSON, William D.	"Facility Support: High Resolution X-Ray Computed Tomography Laboratory"	EAR0004082	386,294 /36	123,104 /12	1st yr incr on 3-yr cont grant for FS
Texas KAPPELMAN, John W.	"Paleontology and Geology of Newly Discovered Oligocene Faunas and Floras in Western Ethiopia"	EAR0001259	15,000 /12	15,000 /12	IF split-funding for EA on GE grant
Texas KETCHAM, Richard A.	"ITR/AP: Computational Methods for Quantitative Analysis of X-ray Computed Tomographic (CT) Data for the Geosciences"	EAR0113480	476,045 /36	100,000 /36	standard grant for Other; split-funded w/ EAR/ITR-small = $250,\!000$
Texas KOCUREK, Gary	"Collaborative Research: Complexity and Paleodynamics of Natural Sand Dune Fields"	EAR0106603	7,000 /12	7,000 /12	IF split-funding for EA on GE grant
Texas - El Paso KELLER, George R.	"ITR/IM+AP: Collaborative Project-Creation of a Geospatial Data System for the Transition Zone Between the Colorado Plateau and Basin & Range Provinces (Geoinformatics in Action)"	EAR0112968	249,381 /36	- 0 -	1st yr incr on 3-yr cont grant for Other; split- funded w/ EAR/ITR-small = 64,312
Texas - El Paso MILLER, Kate C.	"Upgrade to Geophysical Computing at the University of Texas at El Paso"	EAR0112116	99,580 /12	99,580 /36	standard grant for EA
Texas - El Paso PINGITORE, Nicholas E.	"MRI: Acquisition of Laser Ablation for ICP-MS and Electron Microprobe Upgrade, for Geological and Environmental Research and Research Training"	EAR0116660	175,805 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $60,000$
Texas A&M WILTSCHKO, David V.	"Collaborative Research: Integrated Structural and Geochemical Investigation of Alternate Origins for "Crack-Seal" Veins"	EAR0107079	18,010 /12	18,010 /12	IF split-funding for EA on TE grant

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UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities"	EAR0102250	10,520,000 /48	2,033,615 /12	2nd yr incr on 4-yr CAGR ATM-9732665/SPO#2 EAR-9903413 for FS
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR0136073	500,000 /0	22,000 /0	suppl to CAGR ATM-9732665/SPO#2 EAR-9903413 for FS; split-funded w/ Interagency transfer in FY '01 from NASA for SENH and IGS activities = 478,000 and PH = 1,970 for project specific support
UCAR - UNAVCO WARE, Randolph H.	"Support of UNAVCO and Related Activities [supplement]"	EAR0119575	711,337 /0	22,000 /0	suppl to CAGR ATM-9732665/SPO#2 EAR-9903413 for FS; split-funded w/ Interagency transfer from NASA for SENH and IGS activities = 478,000 and OPP = 211,337 for Antarctice Science Support
Utah JOHNSON, William P.	"Spontaneous Detachment and Retardation of Bacteria: Physical and Chemical Controls on these Processes and Their Impact on Bacterial Transport in Groundwater"	EAR0087522	35,000 /12	35,000 /12	IF split-funding for EA on HS grant
VA Museum of Natural Hist FRASER, Nicholas C.	"Insect and Vertebrate Faunas of a Unique Late Triassic Freshwater Ecosystem in Eastern North America"	EAR0106309	2,500 /12	2,500 /12	IF split-funding for EA on GE grant
Vanderbilt BAUDENBACHER, Franz J	"Collaborative Research: Development of an Ultra High Resolution Scanning SQUID Microscope for Paleomagnetic and Rock Magnetic Studies"	EAR0004101	139,910 /24	139,910 /24	standard grant for ITD
VPI & SU ROSS, Nancy L.	"High-Pressure Behavior of Framework Silicates"	EAR0105864	29,500 /12	29,500 /12	IF split-funding for EA on CH grant
Washington CROSSON, Robert S.	"3-D Structure and Tectonic Interpretation of the Cascadia Crust and Subducting Slab from SHIPS and Earthquake Data"	EAR0107138	2,500 /12	2,500 /12	IF split-funding for EA on PH grant
West Georgia LUNEBURG, Catalina M.	"MRI: Acquisition of an ESEM with EDX and EBSD Capability for Microanalysis at the State University of West Georgia"	EAR0116375	300,871 /36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 300,871
West Georgia MAYER, James	"Acquisition of an Ion Chromatograph for Multidisciplinary Water-Chemistry Analysis"	EAR0004070	19,988 /12	19,988 /24	standard grant for EA
Western Michigan ATEKWANA, Estella A.	"Collaborative Research: Biogeochemical Influences on Geophysical Signatures at LNAPL Impacted Sites"	EAR0087795	15,000 /12	15,000 /12	IF split-funding for Other on HS grant
WHOI EDWARDS, Katrina J.	"Acquisition of an Atomic Force Bioscope"	EAR0091716	85,691 /12	42,846 /24	standard grant for EA; split-funded w/ OCE/ITS = 42,845
WHOI EDWARDS, Katrina J.	"Microbial Degradation of Refractory Organic Carbon During Rock Weathering"	EAR0106707	5,000 /12	5,000 /12	IF split-funding for EA on GE grant
WHOI EGLINTON, Timothy I.	"Acquisition of a Gas Chromatography/Time of Flight-Mass Spectrometry (GC/TOF-MS) System for Ultra-High Resolution Molecular Stratigraphy"	EAR0094475	211,753 /12	85,877 /24	standard grant for EA; split-funded w/ OCE/ITS = 42,938, OCE/CO = 42,938 and OPP/AGG = 40,000
WHOI HIRTH, J. Gregory	"Acquisition of EBSD Detector and Software for Microstructural Analyses"	EAR0112266	60,000 /12	40,000 /24	standard grant for EA; split-funded w/ OCE/ITS = $20,000$

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WHOI SHIMIZU, Nobumichi	"Support of a National Ion Microprobe Facility at Woods Hole Oceanographic Institution"	EAR0115433	830,406 /36	268,682 /12	1st yr incr on 2-yr cont grant for FS
WHOI SHIMIZU, Nobumichi	"Support of a National Ion Microprobe Facility at Woods Hole Oceanographic Institution [supplement to EAR-9904400]"	EAR0113064	38,986 /0	38,986 /0	IF suppl to IF grant for FS
WHOI ZAFIRIOU, Oliver C.	"Collaborative Research: The Effects of Aquatic Photochemistry on the Proton and Metal Binding Properties of Dissolved Organic Matter in Freshwater Systems"	EAR0087695	3,750 /12	3,750 /12	IF split-funding for EA on HS grant
Wisconsin COOPER, Reid F.	"Low-Frequency Attenuation in Polycrystalline Silicates and Silicate Partial Melts"	EAR0106620	12,000 /12	12,000 /12	IF split-funding for EA on PH grant
Wisconsin DEMETS, Dennis C.	"Imaging the Mechanics of Shallow Subduction: The Oaxaca GPS Array"	EAR0104299	10,000 /12	10,000 /12	IF split-funding for EA on PH grant
Wisconsin SINGER, Bradley S.	"Technician Support for University of Wisconsin Rare Gas Geochronology Laboratory [Phase I]"	EAR0114055	128,688 /36	40,813 /12	1st yr incr on 3-yr cont grant for TS
Wyoming DUEKER, Kenneth G.	"Unix System Administration Support and Hardware Upgrade to Create an Efficient UW Geophysical Department Computational Center"	EAR0112163	436,123 /36	49,337 /36	standard grant for EA; split-funded w/ PH = $20,663$
Wyoming LILLEGRAVEN, Jason A.	"Linkage of Laramide Depositional and Deformational Histories of the Sweetwater Arch and Adjacent Parts of the Hanna Basin, Wyoming"	EAR9909354	1,010 /12	1,010 /12	IF split-funding for EA on GE grant
Wyoming MOROZOV, Igor B.	"Obtaining a Unique, Comprehensive Deep Seismic Sounding Upper-Mantle Data Set for Broad Seismological and CTBT Monitoring Community"	EAR0092744	365,526 /48	- 0 -	on hold for FY '02 decision
Yale AGUE, Jay J.	"Testing for Regional Fluid Flow in Subducted Crust, Tinos Island, Cyclades (Greece)"	EAR0105927	19,899 /12	19,899 /12	IF split-funding for EA on CH grant
Yale BERNER, Robert A.	"Models for Kerogen Oxidation, the Carbon Cycle, and Atmospheric Oxygen over Phanerozoic Time"	EAR0104797	5,000 /12	5,000 /12	IF split-funding for EA on GE grant
Yale REINERS, Peter W.	"Acquisition of a Laser Extraction System for (U-Th)/He Chronometry"	EAR0111875	49,700 /12	49,700 /24	standard grant for EA

ABBREVIATIONS and EXPLANATIONS

AAS =	Archeology, Archeometry and Systematic Collections Program	GPS =	Global Positioning System
	in SBER	GSN =	Global Seismographic Network of IRIS
AFOSR =	Air Force Office of Scientific Research	GSO =	Graduate School of Oceanography, University of Rhode Island
AGG =	Antarctic Geology and Geophysics Program in OPP	HRTEM =	high- resolution TEM
AMS =	Accelerator Mass Spectrometry	HS =	Hydrologic Sciences Program in EAR
ANS =	Arctic Natural Sciences Program in OPP	ICP-AE =	Inductively coupled plasma-atomic emission spectrometer
AO =	Astronomical Observatory of the Smithsonian Institution	ICP-MS =	Inductively coupled plasma-mass spectrometer
AP =	Applications in Science and Engineering Technical Area of ITR	IF =	Instrumentation and Facilities Program in EAR
ARCSS =	Arctic System Sciences Program in OPP	IM =	Information Management Technical Area of ITR
ASL =	Albuquerque Seismology Laboratory of the USGS	incr =	an annual increment of funds to an active NSF grant
ASS =	Arctic Social Sciences Program in OPP	INT =	Division of International Programs in SBE
ATM =	Division of Atmospheric Sciences in GEO	IRIS =	Incorporated Research Institutions for Seismology
BNL =	Brookhaven National Laboratory	ISS =	Impulsive Stimulated Scattering
CAGR =	Cooperative Agreement	ITD =	Instrument and Technique Development component of IF
CD =	Continental Dynamics Program in EAR		Program
CD-ATM =	Climate Dynamics Program in ATM	ITR =	Information Technology Research Program
CH =	Geochemistry and Petrology Program in EAR	ITR-small =	allocation for class of ITR proposals requesting <= \$500k
CHE =	Chemical Instrumentation Program in MPS	ITS =	Oceanographic Instrumentation and Technical Service Program
CIW =	Carnegie Institution of Washington		in OCE
CO =	Chemical Oceanography Program in OCE	IUPU =	Indiana University - Purdue University system
cont grant =	continuing grant, a multi-year grant funded one year at a time	KNET =	Kyrgyz Broad-Band Seismograph Network
CRDF =	U.S. Civilian Research and Development Foundation	LA-ICP-MS =	laser ablation ICP-MS
DCP =	direct current plasma	LDEO =	Lamont-Doherty Earth Observatory, Columbia University
DMA =	Defense Mapping Agency	MGG =	Marine Geology and Geophysics Program in OCE
DMI =	Division of Design, Manufacture & Industrial Innovation in ENG	MPS =	Directorate for Mathematics and Physical Sciences at NSF
DMR =	Division of Materials Research in MPS	MRI =	Major Research Instrumentation Program in OIA
DOD =	Department of Defense	NAVAIR =	Naval Air Weapons Center
DOE =	Department of Energy	NIMA =	National Imagery and Mapping Agency (formerly DMA)
DRI =	Desert Research Institute of the University of Nevada	NOAA =	National Oceanic and Atmospheric Administration within U.S.
DTM =	Department of Terrestrial Magnetism in CIW		Department of Commerce
$\mathbf{E}\mathbf{A} =$	Equipment Acquisition component of IF Program	NOS =	National Ocean Service in NOAA
EAR =	Division of Earth Sciences in GEO	NSLS =	National Synchrotron Light Source at BNL
$\mathbf{EH} =$	Education & Human Resources Program in EAR	OBES =	Office of Basic Energy Sciences in the U.S. Department of
$\mathbf{EHR} =$	Directorate for Education and Human Resources at NSF		Energy
ENG =	Directorate for Engineering at NSF	OCE =	Division of Ocean Sciences in GEO
EPSCoR =	Experimental Program to Stimulate Competitive Research in	ODP =	Ocean Drilling Program in OCE
	EHR	OIA =	Office of Integrative Activities at NSF (formerly OSTI)
$\mathbf{ES} =$	pre-EarthScope Actvities Account in EAR	OMA =	Office of Multidisciplinary Activities at NSF
FS =	Facility Support component of IF Program	OPP =	Office of Polar Programs at NSF
$\mathbf{FY} =$	Federal fiscal year e.g., FY94: 10/1/93 to 9/30/94	OSTI =	Office of Science and Technology Infrastructure at NSF
GE =	Geology and Paleontology Program in EAR	$\mathbf{OT} =$	Oceanographic Technology Program in OCE
GEO =	Directorate for Geosciences at NSF	Other =	includes categories other than EA, FS, ITD and TS (e.g.,
GL =	Geophysical Laboratory in CIW	D.C.	workshops, research projects etc.)
		PC =	Paleoclimate program in ATM

PE = People and Social Groups Interacting with Computers and

Infrastructure Techncial Area of ITR

PH = Geophysics Program in EAR

REU = Research Experience for Undergraduates Program in EHR

RSMAS = Rosenstiel School of Marine and Atmospheric Sciences

RUI = Research in Undergraduate Institutions Program in EHR

SBE = Directorate for Social, Behavioral & Economic Sciences at NSF
SBER = Division of Social, Behavioral and Economic Research in SBE

SBIR = Small Business Innovation Research Program in ENG

SENH = NASA's Solid Earth And Natural Hazards Research Program

SGER =Small Grants for Exploratory ResearchSIMS =secondary ionization mass spectrometrySIO =Scripps Institution of Oceanography

SNL = Sandia National Laboratory

split-funding two or more programs share the funding of a grant

SPO = Scientific Program Order

standard grant a grant funded for the full amount in its 1st yr

STC = NSF Science and Technology Center SUNY = State University of New York

suppl = a funding supplement to an active NSF grant

TE = Tectonics Program in EAR

TEA = Teaching Experiences in the Arctic

TEM = transmission electron microscopy

TIMS = thermal ionization mass spectrometry

TS = Technician Support component of IF Program

UCAR = University Consortium for Atmospheric Research

UNAVCO = University NAVSTAR Consortium within UCAR

USGS = U.S. Geological Survey

VPI & SU = Virginia Polytechnic Institute and State University

WE = Western Europe Program in INT

WHOI = Woods Hole Oceanographic Institution

XRD = X-ray diffractometer

XRF = X-ray fluorescence spectrometer

NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard, Arlington VA 22230

Division of Earth Sciences (EAR)

Instrumentation and Facilities Program (IF)

Numerical Summary of All Actions in FY-2001

<u>PROPOSALS</u> <u>DOLLARS</u>

Total number of proposals processed by IF	338	Total dollars requested of IF (per year for multi-year proposals)	56,407,863
Logged-in to IF as primary program	232	Total awarded through IF actions in FY-2001	37,352,883
New proposals; full review by IF	198	Awarded from IF budget	27,871,629
Declined	94	For equipment acquisition/upgrade (EA)	4,228,376
Funded entirely from IF budget	57	For instr and technique development (ITD)	1,554,596
Split-funded with other programs	42	For facility support (FS)	20,680,055
Held over for FY'02 decision	5	For technician support (TS)	923,772
		Other (workshops, REU, etc.)	484,830
New proposals; withdrawn before review	13		
• •		Awarded from other NSF budgets through split-funding	7,113,866
Other award actions (incr, suppl, etc)	21		
		For equipment acquisition/upgrade (EA)	3,609,264
Funded entirely from IF budget	15	For instr and technique development (ITD)	1,100,640
Split-funded with other programs		For facility support (FS)	1,122,977
		Other (workshops, REU, etc.)	1,280,985
Logged-in to other NSF programs; IF-split-funding	106	• • • • • • • • • • • • • • • • • • • •	
		Awarded through interagency transfers	2,367,388
		For equipment acquisition/upgrade (EA)	335,888
		For facility support (FS)	1,912,000
		Other (workshops, REU, etc.)	119,500