

NATIONAL SCIENCE FOUNDATION

4201 Wilson Boulevard, Arlington VA 22230

Division of Earth Sciences Instrumentation and Facilities Program

Summary of All FY-2004 Actions Leading to AWARDS

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
Alaska FREYMUELLER, Jeffrey T.	"Equipment Support: Mechanisms of Postseismic Deformation following the 2002 Denali Fault Earthquake"	EAR0323156	498,344/36	158,164/12	2nd yr incr on 3-yr cont grant for FS
Alaska MOTYKA, Roman	"Active Tectonics, Glacier Load History and Post-Little-Ice-Age Isostatic Rebound in Southeastern Alaska [supplement to EAR-0229934]"	EAR0407187	16,551/12	8,276/12	IF suppl for EA on TE grant; split-funded w/ $OPP/ANS = 8,275$
Amer Museum of Nat Hist HARLOW, George E.	"MRI: Acquisition of a New X-Ray Microdiffraction System"	EAR0418088	231,000/12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $231,000$
Amer Museum of Nat Hist MATHEZ, Edmond A.	"Collaborative Research: Deposition of Carbon on Newly-Formed Fracture Surfaces and Its Influence on Deformation and Electrical Properties of Rocks"	EAR0337188	2,000/12	2,000/12	IF split-funding for EA on TE grant
Arizona JULL, A.J. Timothy	"NSF Arizona AMS Laboratory: Research Programs and Operations [supplement to EAR-0115488]"	EAR0442303	199,947/6	199,947/6	IF suppl for FS on IF grant
Arizona JULL, A.J. Timothy	"NSF Arizona AMS Laboratory: Research Programs and Operations [supplement to EAR-0405449]"	EAR0405449	86,925/5	86,925/5	IF suppl for FS on IF grant
Arizona NEUMAN, Shlomo P.	"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 -	4th yr incr on 4-yr cont grant for Other; split-funded w/ EAR/ITR-small = 100,000
Arizona OVERPECK, Jonathan T.	"ITR: Development of an Enhanced Computer-Assisted Analysis System for Earth Science Investigation of Laminated Sediments and Tree Rings"	EAR0219075	436,480/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 142,893
Arizona State BUSECK, Peter R.	"Technician Support for Geoscience Research in Transmission Electron Microscopy (Phase II)"	EAR0418960	150,000/24	75,000/12	1st yr incr on 2-yr cont grant for TS
Boise State DAVYDOV, Vladimir I.	"Collaborative Research: Web Tools for Global Time Scale Development: An Example from the Pennsylvanian-Cisuralian (Early Permian)"	EAR0218799	407,179/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 132,677
Boston University PLANK, Terry A.	"Technician Support: Laser Ablation and Inductively Coupled Plasma Laboratories - Phase I"	EAR0233712	210,000/36	35,000/12	2nd yr incr on 3-yr cont grant for TS; split-funded w/ $OCE/MGG = 35,000$
Cal State Fresno PUTIRKA, Keith D.	"MRI: Acquisition of an X-ray Diffraction Instrument: Developing an Interdisciplinary Research/Teaching X-ray Diffraction Laboratory"	EAR0421272	148,421/12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 148,421
Cal State Fullerton ARMSTRONG, Phillip A.	"MRI: Acquisition of Gravity Surveying Equipment for Tectonic and Applied Geology Studies"	EAR0421494	76,109/12	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 99,356

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California - Berkeley BUKOWINSKI, Mark S.	"Structure, Thermoelasticity and Trace-Element Hosting Properties of High-Pressure Silicate Minerals"	EAR0336951	5,000/12	5,000/12	IF split-funding for EA on PH grant
California - Berkeley BURGMANN, Roland	"Kinematic and Dynamic of Time-Dependent Slip Along the Central Creeping Segment of the San Andreas Fault"	EAR0337308	3,000/12	3,000/12	IF split-funding for EA on PH grant
California - Berkeley DIETRICH, William E.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM)"	EAR0236606	514,830/36	177,856/12	2nd yr incr on 2-yr cont grant for FS
California - Berkeley JEANLOZ, Raymond	"Toward Nanoseismology"	EAR0126217	60,000/12	60,000/12	IF split-funding for ITD on PH grant
California - Berkeley MANGA, Michael	"Air Circulation Within Beds of Hot Fragments and Mobility of Pyroclastic Flows"	EAR0408312	9,900/12	9,900/12	IF split-funding for EA on CH grant
California - Berkeley WENK, Hans-Rudolph	"Anisotropy Changes during Phase Transformation"	EAR0337006	12,000/12	12,000/12	IF split-funding for EA on PH grant
California - Davis SPERO, Howard J.	"Acquisition of an Isotope Ratio Mass Spectrometer System for the University of California, Davis"	EAR0348970	315,025/12	104,112/24	standard grant for EA; split-funded w/ OCE/MGG = $104,111$
California - Irvine GRANT, Lisa B.	"Collaborative Research: Multi-cycle Rupture History of the San Andreas Fault in the Carrizo Plain"	EAR0409500	2,500/12	2,500/12	IF split-funding for EA on TE grant
California - Los Angeles AURNOU, Jonathan M.	"Development of an Experimental Geophysical Fluid Dynamics Laboratory [supplement to EAR-0236799]"	EAR0432472	18,585/0	18,585/0	IF suppl for EA on IF grant
California - Los Angeles AXEN, Gary J.	"Kinematic Linkages Among Extrusion, Fold-thrust Shortening, and Foreland Basin Evolution During Early Continental Collision, Zagros Mountains, Iran"	EAR0337775	12,500/12	12,500/12	IF split-funding for EA on TE grant
California - Los Angeles MANNING, Craig E.	"Experimental Investigation of Mineral-Fluid Equilibria at High Pressure"	EAR0337170	18,706/12	18,706/12	IF split-funding for EA on CH grant
California - Los Angeles MARGULIS, Steven A.	"CAREER: Investigation of Regional Land-Atmosphere Interactions Using a Hierarchical Modeling and Data Assimilation Approach"	EAR0348778	30,000/12	30,000/12	IF split-funding for EA on HS grant
California - Los Angeles MCKEEGAN, Kevin D.	"Facility Support: The UCLA National Ion Microprobe"	EAR0421795	1,084,730/36	280,703/12	1st yr incr on 3-yr cont grant for FS
California - Los Angeles SCHAUBLE, Edwin A.	"Theoretical Stable Isotope Geochemistry of Alkaline-Earth Elements"	EAR0345433	9,700/12	9,700/12	IF split-funding for EA on GE grant
California - Merced O'DAY, Peggy	"MRI: Acquisition of a Scanning Electron Microscope for Environmental, Biological, and Materials Research and Education at UC Merced"	EAR0420982	323,743/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $323,743$
California - Riverside GREEN, Harry W.	"Collaborative Research: COMPRES Grand Challenge for Experimental Study of Plastic Deformation under Deep Earth Conditions"	EAR0135411	70,000/12	70,000/12	IF split-funding for ITD on PH grant
California - Riverside PARK, Stephen K.	"Collaborative Research: Electromagnetic Studies of Continents (EMSOC) National Instrument Facility"	EAR0236468	146,411/36	31,829/12	2nd yr incr on 3-yr cont grant for FS

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California - Riverside SCHAAP, Marcel	"Development of a Feedback Syringe Pump Method for the Automated Determination of Unsaturated Hydraulic Conductivity Characteristics"	EAR0236750	189,853/24	107,414/12	2nd yr incr on 2-yr cont grant for ITD
California - Riverside SCHAAP, Marcel	"Collaborative Research: Interfacial Dynamics in Multi-Phase Flow and Transport Processes"	EAR0337378	6,000/12	6,000/12	IF split-funding for EA on HS grant
California - San Diego HILTON, David R.	"Collaborative Research: Resolving Mantle, Crustal and Slab Fluxes to Arc Magmatism in Central America Using Geothermal Fluids and Volcanic Rocks [supplement to EAR-0003628]"	EAR0346542	9,388/0	9,388/0	IF suppl for EA on CH grant
California - San Diego JACKSON, Jeremy B.	"Evolution and Environment of Tropical American Cupuladriid Bryozoa"	EAR0345471	3,500/12	3,500/12	IF split-funding for EA on GE grant
California - San Diego LASKE, Gabrielle M.	"Global Crustal Model CRUST 1.0 and a Crustal Database"	EAR0336864	99,853/12	99,853/12	IF split-funding for ITD on PH grant
California - San Diego STAUDIGEL, Hubertus	"Geochemical Earth Reference Model: GERM Workshop and Database Development"	EAR0230121	55,653/12	55,653/12	IF split-funding for ITD on CH grant
California - San Diego ZUMBERGE, Mark A.	"Development of a New Broadband Optical Seismometer"	EAR0352877	602,113/36	22,938/12	1st yr incr on 3-yr cont grant for ITD
California - Santa Barbara BOLES, James R.	"Understanding the Role of Clay Mineral Surface Interactions in Pressure Solution"	EAR0342796	13,000/12	13,000/12	IF split-funding for EA on GE grant
California - Santa Barbara HACKER, Bradley R.	"Collaborative Research (USC and UCSB): Direct Observation of Depth Variation in Fault Zone Structure Through and Below the Seismogenic Crust"	EAR0309995	18,055/12	18,055/12	IF split-funding for EA on PH grant
California - Santa Cruz COE, Robert S.	"How Complex are Geomagnetic Reversals? Tracking the Steens Reversal in Yellowstone Hotspot Lavas to Construct a Composite Record [supplement to EAR-0310316]"	EAR0438823	11,236/0	11,236/0	IF suppl for EA on PH grant
California - Santa Cruz GILL, James B.	"Melt Sources and Timescales in Western Pacific Island Arcs [supplement to EAR-0106206]"	EAR0353037	9,500/0	9,500/0	IF suppl for EA on CH grant
California Inst of Tech EILER, John M.	"Technician Support for the Laboratories for Stable Isotope Geochemistry at Caltech / Period 2"	EAR0345905	97,832/24	47,724/12	1st yr incr on 2-yr cont grant for TS
California Inst of Tech FARLEY, Kenneth A.	"Development and Characterization of a Paul Ion Trap Optimized for Noble Gas Isotope Ratio Determinations"	EAR0318473	199,418/24	94,282/12	2nd yr incr on 2-yr cont grant for ITD
California Inst of Tech ROSSMAN, George R.	"Acquisition of an Electron Microprobe for Geological and Materials Research at Caltech"	EAR0318518	897,832/24	332,198/24	standard grant for EA
Calvin College CLARK, James A.	"RUI: Paleohydrology of the Great Lakes Region Since the Most Recent Glaciation"	EAR0414012	17,300/12	17,300/12	IF split-funding for EA on GE grant
Carnegie Inst of Wash-GL COHEN, Ronald E.	"A Workshop and Report on Computational Geoinformatics"	EAR0422587	70,000/12	17,500/12	standard grant for Other; split-funded w/ EAR/CI = $35,000$ and ATM/CI = $17,5000$
Carnegie Inst of Wash-GL HEMLEY, Russell J.	"Development of the Next Generation Megabar High-Pressure Cells: A COMPRES Grand Challenge [supplement to EAR- 0135626]"	EAR0445498	250,124/0	125,062/0	IF suppl for ITD on IF grant; split-funded w/ MPS/DMR = 125,062

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Carnegie Inst of Wash-GL MAO, Ho-kwang	"Development of New Diamond Cell Technology for Ultrahigh- Pressure Single-Crystal Structure Analysis Using X-ray Diffraction"	EAR0217389	403,257/36	81,024/12	3rd yr incr on 3-yr cont grant for ITD
Carnegie Inst of Wash-GL SILVER, Paul G.	"Collaborative Research: Developing a Methodology for Imaging Stress Transients at Seismogenic Depth"	EAR0352119	107,572/24	40,619/12	standard grant for ITD
Chicago ENG, Peter	"MRI: Development by the Consortium for Advanced Radiation Sources of a New X-Ray Beamline for High Pressure and Interface Earth Science Research at the GeoSoilEnviroCARS APS Sector"	EAR0421076	654,050/24	- 0 -	standard grant for ITD; split-funded w/ OIA/MRI = $550,001$
Chicago GHIORSO, Mark S.	"Proposal for Developing a Distributed Computing Infrastructure for Computational Thermodynamics with Applications to Geochemistry and Petrology"	EAR0401510	489,094/48	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 121,818
Chicago RIVERS, Mark L.	"GeoSoilEnviroCARS: A National Resource for Earth, Planetary and Environmental Science Research at the Advanced Photon Source"	EAR0217473	9,585,256/60	1,700,000/12	3rd yr incr on 4-yr cont grant for FS
Coastal Carolina HARRIS, Michael S.	"Collaborative Research: Acquisition of a Dual, Complementary Ground Penetrating Radar System for Geoscience Research and Teaching in South Carolina"	EAR0323338	63,475/24	31,738/24	standard grant for EA; split-funded w/ EHR/EPSCoR = 31,737
Colorado LARSON, Kristine M.	"GPS Measurement Corrections for Geophysicists"	EAR0317973	128,515/24	102,474/24	standard grant for ITD
Colorado SMYTH, Joseph R.	"Water in the Mantle: Effects of Hydration on Physical Properties of Mantle Minerals"	EAR0337611	12,200/12	12,200/12	IF split-funding for EA on PH grant
Colorado School of Mines SCALES, John A.	"MRI: Acquisition of a Millimeter Wave Vector Network Analyzer: Seismology without Seismometers"	EAR0421292	231,000/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $231,000$
Colorado State STEIN, Holly J.	"MRI: Acquisition of a Multi-Collector Thermal Ionization Mass Spectrometer for the AIRIE Program"	EAR0421235	569,591/12	10,940/24	standard grant for EA; split-funded w/ OIA/MRI = $488,882$
Dartmouth FENG, Xiahong	"TECHNICIAN SUPPORT: Watershed Studies at Dartmouth College [Phase II]"	EAR0418809	149,503/24	73,707/12	1st yr incr on 2-yr cont grant for TS
Delaware State GWANMESIA, Gabriel D.	"Collaborative Research: Elasticity Grand Challenge of the COMPRESS Initiative"	EAR0135431	20,000/12	20,000/12	IF split-funding for ITD on PH grant
Denver Museum Nat Sci JOHNSON, Kirk R.	"Orogeny, Orography, and the Origin of the First Rainforests: Paleobotany of the Temporally-Calibrated Synorogenic Denver Basin, Colorado"	EAR0345910	12,500/12	12,500/12	IF split-funding for EA on GE grant
Florida JUDGE, Jasmeet	"Improved Estimation of Evapotranspiration and Recharge from a Dynamic SVAT Model through Assimilation of Microwave"	EAR0337277	16,899/12	16,899/12	IF split-funding for EA on HS grant
Florida MCFADDEN, Bruce J.	"Macroevolution and Geochemistry of Cenozoic Giant Sharks"	EAR0418042	2,500/12	2,500/12	IF split-funding for EA on GE grant
Florida MEERT, Joseph G.	"The Assembly of East Gondwana: A Proterozoic Perspective from India"	EAR0409101	2,500/12	2,500/12	IF split-funding for EA on TE grant

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Florida MUELLER, Paul A.	"Technical Support for a New ICP-MS Laboratory for Earth and Ocean Science Research at the University of Florida"	EAR0418905	217,901/36	- 0 -	1st yr incr on 3-yr cont grant for TS; split-funded w/ OCE/ODP = 72,467
Florida NEUHOFF, Phillip	"Site Specific Energetics of Water in Rock-Forming Zeolites"	EAR0336906	14,975/12	14,975/12	IF split-funding for EA on CH grant
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM)"	EAR0236720	1,292,562/36	481,708/12	2nd yr incr on 2-yr cont grant for FS
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM) [supplement to EAR-0236720]"	EAR0406331	32,121/0	10,000/0	IF suppl for FS on IF grant; split-funded w/ $TE = 22,121$
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM) [supplement to EAR-0236720]"	EAR0443369	9,935/0	- 0 -	IF suppl for FS on IF grant; split-funded w/ DEB/ECS = 9,935
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM) [supplement to EAR-0236720]"	EAR0443370	108,949/0	- 0 -	IF suppl for FS on IF grant; split-funded w/ ES = $108,949$
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM) [supplement to EAR-0236720]"	EAR0443449	114,711/0	- 0 -	IF suppl for FS on IF grant; split-funded w/ CD = $114,711$
Florida SHRESTHA, Ramesh L.	"Collaborative Research: Facility Support to Establish and Operate the National Center for Airborne Laser Mapping (NCALM) [supplement to EAR-0236720]"	EAR0424959	26,692/0	- 0 -	IF suppl for FS on IF grant; split-funded w/ GE = $26,692$
Florida International HICKEY-VARGAS, Rose L.	"Generation of Basaltic and Andesitic Magma in the Central Southern Volcanic Zone, Chile"	EAR0337483	1,000/12	1,000/12	IF split-funding for EA on CH grant
Florida State ERICKSON, Gregory M.	"Collaborative Research: The Role of Development and Life History Traits in the Evolution Ceratopsian Dinosaurs"	EAR0418649	12,984/12	12,984/12	IF split-funding for EA on GE grant
Geological Soc of America HESS, John W.	"Develop and Administer a Web Site to Serve and Advance the Biogeoscience Community, www.biogeosciences.org"	EAR0401546	14,929/12	14,929/12	IF split-funding for ITD on BG grant
Hawaii GIAMBELLUCA, Thomas W.	"Hydrology of Tropical Montane Cloud Forest in Hawai'i"	EAR0309731	39,712/12	39,712/12	IF split-funding for EA on HS grant
Hawaii MANGHNANI, Murli H.	"Compressibility and Structure of Silicate Melts at High Pressure [supplement to EAR-0074285]"	EAR0345088	29,000/0	29,000/0	IF suppl for EA on PH grant
Hawaii SHARMA, Shiv K.	"GEORAMAN 2004: 6th International Conference on Raman Spectroscopy Applied to the Earth & Planetary Sciences, Honolulu, HI"	EAR0424071	5,000/12	5,000/12	IF split-funding for Other on CH grant
Hobart & William Smith CURTIN, Tara	"MRI: Acquisition of a CHN Elemental Analyzer, Particle Size Analyzer, and KappaBridge to Investigate the Origin of Rhythmites in the Finger Lakes of New York"	EAR0420576	235,454/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $152,153$
Houston KHAN, Shuhab D.	"Collaborative Project: A GIS Database for Studying and Visualizing Tethyan Plate Collisions"	EAR0237999	96,513/24	48,253/12	2nd yr incr on 2-yr cont grant for ITD

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Houston - Downtown JOHNSON, Kenneth S.	"MRI: Acquisition of an ICP-Optical Emission Spectrometer for Undergraduate Research in the Natural Sciences"	EAR0420790	106,167/24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 106,167
Illinois BASS, Jay D.	"Collaborative Research: Elasticity Grand Challenge of the COMPRES Initiative"	EAR0135642	60,000/12	60,000/12	IF split-funding for ITD on PH grant
Illinois JOHNSON, Thomas M.	"Technical Support for the New MC-ICP-MS Laboratory at University of Illinois at Urbana Champaign"	EAR0348948	245,890/36	75,000/12	1st yr incr on 3-yr cont grant for TS
Illinois - Chicago FLOWER, Martin F. J.	"Collaborative Research: A GIS Database for Studying and Visualizing Tethyan Plate Collisions"	EAR0238416	108,630/24	44,459/12	2nd yr incr on 2-yr cont grant for ITD
Illinois - Chicago JOHNSON, Andrew E.	"Collaborative Research: The Geowall - Stereo Visualization for the Earth Sciences"	EAR0218918	282,541/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = $97,046$
Illinois - Chicago STURCHIO, Neil C.	"Krypton Isotope Hydrology"	EAR0409756	14,100/12	14,100/12	IF split-funding for EA on HS grant
Internat Seismological Ctr SHAPIRA, Avi	"Partial Support of the International Seismological Centre"	EAR0128053	635,421/48	138,518/12	3rd yr incr on 4-yr cont grant for FS
Iowa State HORTON, Robert	"Coupled Heat and Water Transfer in Soil"	EAR0337553	12,000/12	12,000/12	IF split-funding for EA on HS grant
IRIS SIMPSON, David W.	"Exploring the Earth at High Resolution: The IRIS 2005 Program Plan"	EAR0450742	76,291,841/60	12,602,411/12	4th yr incr on 5-yr CAGR EAR-0004370 for FS; split- funded w/ OPP/Glaciology = 23,116
IRIS SIMPSON, David W.	"Exploring the Earth at High Resolution: The IRIS 2005 Program Plan [supplement to CAGR EAR-0004370]"	EAR0339847	2,970,600/0	130,706/0	IF suppl for FS on IF grant; split-funded w/interagency transfer from DOE = 2,839,894
IRIS SIMPSON, David W.	"Exploring the Earth at High Resolution: The IRIS 2005 Program Plan [supplement to CAGR EAR-0004370]"	EAR0451744	112,762/0	- 0 -	IF suppl for FS; split-funded w/ OCE/OTIC = 112,762
Kansas TSOFLIAS, Georgios P.	"Acquisition of a Ground Penetrating Radar (GPR) System"	EAR0345445	61,467/12	61,467/12	standard grant for EA
Louisiana State KARKI, Bijaya B.	"CAREER: Rheology of Materials of Earth's Mantle: High-end Computational/Visualization Research and Education"	EAR0347204	11,000/12	11,000/12	IF split-funding for EA on PH grant
Louisville LAGER, George A.	"High-Pressure Crystal Chemistry and Compressibility of Hydrous Mantle Phases"	EAR0337534	10,000/12	10,000/12	IF split-funding for EA on CH grant
Maryland FARQUHAR, James	"Technical Support for the Stable Isotope Facility at the GL at UMCP"	EAR0345612	225,000/36	75,000/12	1st yr incr on 3-yr cont grant for TS
Massachusetts WILLIAMS, Michael L.	"Development of an Optimized Electron Microprobe for Geochronologic and Trace Element Analysis [supplement to EAR- 0004077]"	EAR0413899	81,983/0	81,983/0	IF suppl for ITD on IF grant
Massachusetts - Dartmouth FRIEDMAN, Peter D.	"Upgrading of Particle Image Velocimetry (PIV) System to Allow Simultaneous Laser Induced Fluorescence (LIF)"	EAR0345375	33,000/6	33,000/12	standard grant for EA
Massachusetts - Dartmouth FRIEDMAN, Peter D.	"An Experimental Investigation of Water- Magma Phase Mingling in Sub-aqueous Volcanic Eruptions"	EAR0408946	25,000/12	25,000/12	IFsplit-funding for EA on CH grant

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Miami - RSMAS GRASMUECK, Mark	"Development of a 'Real 3-D' GPR System for Geoscientific Imaging"	EAR0323213	271,284/24	207,743/12	1st yr incr on 2-yr cont grant for ITD
Michigan EHLERS, Todd A.	"When did the Altiplano Form? A Coupled Thermochronometer and Numerical Model Test"	EAR0409289	6,000/12	6,000/12	IF split-funding for EA on TE grant
Michigan MUKASA, Samuel B.	"Refurbishment of a VG Sector Mass Spectrometer to Gain Negative Ion Capability"	EAR0345135	61,520/12	61,520/12	standard grant for EA
Michigan VAN KEKEN, Peter E.	"Collaborative Research: The Geowall - StereoVvisualization for the Earth Sciences" $ \begin{tabular}{ll} \hline \end{tabular} $	EAR0219246	193,280/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = $66,138$
Michigan WALTER, Lynn M.	"Acquisition of Replacement Equipment for the Experimental and Analytical Geochemistry Laboratory EAGL"	EAR0318037	292,024/36	194,684/12	standard grant for EA
Michigan Tech WATSON, Iain M.	"Development of a Gas Correlation Camera for Improved Ground- Based Monitoring of Volcanic SO2 Emissions"	EAR0321869	48,347/12	48,347/12	standard grant for ITD
Minnesota BANERJEE, Subir K.	"Continuation of a Facility: Institute for Rock Magnetism"	EAR0218384	1,896,496/60	391,056/12	3rd yr incr on 5-yr cont grant for FS
Minnesota BANERJEE, Subir K.	"Continuation of a Facility: Institute for Rock Magnetism [supplement to EAR-0218584]"	EAR0413877	19,257/0	5,000/0	IF suppl for Other on IF grant; split-funded w/ PH = $5,000$, TE = $5,000$, CH = $2,757$ and GE = $1,500$
Missouri GOMEZ, Francisco G.	"Acquisition of Geophysical Field Instrumentation and Computers for Integrated Studies of Continental Geodynamics"	EAR0345538	148,113/24	148,113/24	standard grant for EA
Missouri GOMEZ, Francisco G.	"Collaborative Research: Forearc Extension in a Strongly Coupled Subduction System, Northern Chile"	EAR0337335	20,000/12	20,000/12	IF split-funding for EA on TE grant
Missouri GOMEZ, Francisco G.	"Collaborative Research: Implications of Active Tectonics in Morocco for the Kinematics and Dynamics of Africa-Eurasia Plate Interactions in the Western Mediterranean"	EAR0408661	13,500/12	13,500/12	IF split-funding for EA on TE grant
Missouri SANDVOL, Eric	"Collaborative Research: A GIS Database for Studying and Visualizing Tethyan Plate Collisions"	EAR0238199	91,763/24	39,875/12	2nd yr incr on 2-yr cont grant for ITD
Missouri WHITTINGTON, Alan G.	"Rheological and Thermodynamic Properties of Subduction Zone Magmas and Lavas - An Integrated Experimental and Observational Study"	EAR0407915	16,180/12	16,180/12	IF split-funding for EA on CH grant
MIT HEMOND, Harold F.	"SENSORS: Sensor Networks for the Study of Heterogeneous Fluxes in Lakes"	EAR0330272	43,742/12	43,742/12	IF split-funding for EA on HS grant
MIT KING, Robert W.	"GPS Data Processing Support for the UNAVCO Community"	EAR0317313	277,322/48	65,000/12	2nd yr incr on 2-yr cont grant for FS
MIT NEPF, Heidi M.	"Dispersion in Vegetated Flow"	EAR0309188	38,000/12	38,000/12	IF split-funding for EA on HS grant
MIT REILINGER, Robert E.	"Present-day Kinematics and Dynamics of the Eastern Mediterranean and Caucasus"	EAR0337497	9,400/12	9,400/12	IF split-funding for EA on PH grant

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
MIT REILINGER, Robert E.	"Collaborative Research: Implications of Active Tectonics in Morocco for the Kinematics and Dynamics of Africa-Eurasia Plate Interactions in the Western Mediterranean"	EAR0408728	3,325/12	3,325/12	IF split-funding for EA on TE grant
MIT SHIM, Sang-Heon	"Acquisition of a Combined Micro-Raman Spectroscopy and Laser Heating System for In Situ High Pressure and High Temperature Studies"	EAR0337156	247,770/12	85,244/12	1st yr incr on 2-yr cont grant for EA
MIT SHIM, Sang-Heon	"In Situ Raman Spectroscopy Study for Phase Diagrams of Mantle Minerals at High Pressure and Temperature"	EAR0337005	21,000/12	21,000/12	IF split-funding for EA on CH grant
MIT WHIPPLE, Kelin X.	"Collaborative Research: Bedrock and Sediment Controls on River Incision, Henry Mountains and Navajo Mountain, Utah"	EAR0345622	5,000/12	5,000/12	IF split-funding for EA on GE grant
Montana DEGRANDPRE, Michael	"An Autonomous Freshwater pH Sensor: Development and Applications"	EAR0337460	37,000/12	37,000/12	IF split-funding for EA on HS grant
Montana State MCGLYNN, Brian L.	"COLLABORATIVE RESEARCH: Hydrological Linkages Between Landscapes and Streams: Transferring Reach and Plot Scale Understanding to the Network and Catchment Scales"	EAR0337650	19,460/12	19,460/12	IF split-funding for EA on HS grant
Morehead State JERDE, Eric A.	"MRI: Acquisition of a Scanning Electron Microscope with an Energy Dispersive Spectrometer for Multi-Disciplinary Research and Education"	EAR0420725	271,051/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 131,700 and EHR/EPSCoR = 131,700
New Mexico ASMEROM, Yemane	"Acquisition of a MC-ICPMS for Earth Sciences Research in New Mexico"	EAR0326902	450,100/12	200,000/12	2nd yr incr on 2-yr cont grant for EA
New Mexico GEISSMAN, John W.	"Collaborative Research: Identification of the Plate Boundary Between India and Indochina Through Integrated Petrologic, Structural, and Paleomagnetic Analyses [supplement to EAR- 0309910]"	EAR0429235	13,000/0	13,000/0	IF suppl for EA on TE grant
New Mexico ROY, Mousumi	"Acquisition of Computers and Support for Geodynamic Modeling within an Existing Shared UNIX Facility"	EAR0318105	42,750/12	21,375/24	standard grant for EA; split-funded w/ EHR/EPSCoR = 21,375
North Carolina MILLER, Brent V.	"Collaborative Research: Tectonothermal History of the Acatlán Complex, Southern Mexico: A Record of the Closure of the Rheic Ocean? [supplement to EAR-0308437]"	EAR0408263	9,438/0	9,438/0	IF suppl for EA on TE grant
North Carolina State FODOR, Ronald V.	"Upgrading the ARL-SEMQ Electron Microprobe at North Carolina State University"	EAR0307257	42,300/12	42,300/12	standard grant for EA
North Iowa GROVES, John R.	"Collaborative Research: Web Tools for Global Time Scale Development: an Example from the Pennsylvanian-Cisuralian (Early Permian)"	EAR0218802	80,589/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 25,160
Northern Arizona KAUFMAN, Darrell S.	"Facilities Support: Amino Acid Geochronology Laboratory"	EAR0419617	99,737/24	53,341/12	1st yr incr on 2-yr cont grant for FS
Northern Arizona SAMPLE, James C.	"MRI: Acquisition of a Scanning Electron Microscope Optimized for Elemental Analysis for Geologic Research and Teaching at Northern Arizona University"	EAR0421452	237,127/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $150,\!000$ and OCE/MRI = $87,\!127$
Notre Dame SILLIMAN, Stephen E.	"The Impact of Physical Heterogeneity and Connectivity on LNAPL Entrapment and Dissolution"	EAR0408895	11,000/12	11,000/12	IF split-funding for EA on HS grant

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
Ohio State FOLAND, Kenneth A.	"Technician Support: Ohio State University, Radiogenic Isotopes Laboratory - Phase I"	EAR0137546	162,049/36	55,650/12	3rd yr incr on 3-yr cont grant for TS
Old Dominion NOFFKE, Nora K.	"Microbially Induced Sedimentary Structures from the 2.9 Ga old Pongola and Witwatersrand Supergroups, South Africa"	EAR0345149	5,000/12	5,000/12	IF split-funding for EA on GE grant
Oregon MONTANI, Ryosuke	"CAREER: Framework for Investigating Physical Evolutionary Constraints Using 3-dimensional Data with Application to the Plesiosaurian Neck"	EAR0237233	53,000/12	53,000/12	IF split-funding for EA on GE grant
Oregon WALLACE, Paul	"Acquisition of a New Electron Microprobe"	EAR0345908	547,851/24	547,851/24	standard grant for EA
Oregon State DILLES, John H.	"Collaborative Research: Content and Behavior of Sulfur in Silicic Magma and Links to Generation of Sulfur-rich Ore- forming Fluids of Porphyry Cu-Mo-Au Deposits"	EAR0337798	36,436/12	36,436/12	IF split-funding for EA on CH grant
Oregon State EGBERT, Gary D.	"Collaborative Research: Electromagnetic Studies of Continents (EMSOC) National Instrumentation Facility"	EAR0236788	59,016/36	19,653/12	2nd yr incr on 3-yr cont grant for FS
Oregon State KENT, Adam	"MRI: Collaborative Research: Acquisition of an Electron Microprobe for Oregon State University with Remote Access Facilities for Portland State University"	EAR0320806	539,785/36	253,385/12	2nd yr incr on 2-yr cont grant for EA; split-funded w/ OCE/MGG = $83,000$
Oregon State WILDENSCHILD, Dorthe	"Collaborative Research: Interfacial Dynamics in Multi-Phase Flow and Transport Processes"	EAR0337711	7,500/12	7,500/12	IF split-funding for EA on HS grant
Penn State DUFFY, Christopher J.	"Integrated Modeling of Precipitation-Recharge-Runoff at the River Basin Scale: The Susquehanna"	EAR0310122	6,761/12	6,761/12	IF split-funding for EA on HS grant
Penn State MARONE, Chris J.	"Development of a Pressure Vessel for Hydrothermal Control in Biaxial Deformation Experiments at the Penn State Rock Mechanics Laboratory"	EAR0345813	192,186/24	71,137/12	1st yr incr on 2-yr cont grant for ITD
Pitt CAPO, Rosemary C.	"Collaborative Research: Field and Experimental Iron Isotope Investigation of Sedimentary Pyrite Dissolution in Appalachian Coal Mine Drainage [supplement to EAR-0229019]"	EAR0451322	25,000/0	25,000/0	IF suppl for EA on HS grant
Pittsburgh CAPO, Rosemary C.	"Technician Support: Geochemistry Laboratories at the University of Pittsburgh, Phase I"	EAR0214212	118,347/36	40,310/12	3rd yr incr on 3-yr cont grant for TS
Portland State CADY, Sherry L.	"Facilities Upgrades to the Geomicrobiology and Electron Microscopy Laboratory at Portland State University"	EAR0318506	116,830/12	80,990/12	standard grant for EA
Portland State STRECK, Martin J.	"MRI: Collaborative Research: Acquisition of an Electron Microprobe for Oregon State University with Remote Access Facilities for Portland State University"	EAR0320863	16,400/12	16,400/12	2nd yr incr on 2-yr cont grant for EA
Portland State STRECK, Martin J.	"Collaborative Research: Content and Behavior of Sulfur in Silicic Magma and Links to Generation of Sulfur-rich Ore- forming Fluids of Porphyry Cu-Mo-Au Deposits"	EAR0337556	7,000/12	7,000/12	IF split-funding for EA on CH grant
Princeton DAHLEN, F. Anthony	"ITR/AP: A Finite Element Geodynamo Model Optimized for High-Speed Beowulf PC-Clusters"	EAR0113050	496,270/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = $78,949$

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
Princeton SMITH, James A.	"Collaborative Research: Small-Scale Variability of Rainfall: Experimental Studies"	EAR0409501	3,000/12	3,000/12	IF split-funding for EA on HS grant
Purdue CAFFEE, Marc	"Facility Support: The Purdue Rare Isotope Measurement Laboratory"	EAR0242797	2,266,145/36	735,838/12	2nd yr incr on 2-yr cont grant for FS
Purdue KING, Scott D.	"Acquisition of a Cluster Computer for Geodynamics Research"	EAR0317638	76,800/24	76,800/24	standard grant for EA
Rhode Island HERMES, O. Don	"New X-Ray Fluorescence Spectrometer for the University of Rhode Island XRF Laboratory [supplement to EAR-0236617]"	EAR0413879	10,000/0	10,000/0	IF suppl for Other on IF grant
Rice NIU, Fenglin	"Collaborative Research: Developing a Methodology for Imaging Stress Transients at Seismogenic Depth"	EAR0352134	83,538/24	4,455/12	standard grant for ITD
Rochester GARZIONE, Carmala N.	"Acquisition of a Gas Source Isotope Ratio Mass Spectrometer for the Department of Earth and Environmental Sciences at the University of Rochester"	EAR0317825	158,714/24	158,714/24	standard grant for EA
Rochester GARZIONE, Carmala N.	"Acquisition of a Gas Source Isotope Ratio Mass Spectrometer for the Department of Earth and Environmental Sciences at the University of Rochester [supplement to EAR-0317825]"	EAR0439052	14,442/0	14,442/0	IF suppl for EA on IF grant
Saint Lawrence GAO, Ning	"MRI: St. Lawrence University Acquisition of Instrumentation for Monitoring Climate, Atmospheric, and Aquatic Environmental Processes in Northern New York"	EAR0421249	194,476/36	22/36	standard grant for EA; split-funded w/ OIA/MRI = $129,900$ and ATM/MRI = $64,554$
San Diego State PIETRUSZKA, Aaron J.	"Production of High-Purity 229Th for analyses of U- and Th- Series Isotopes in Geological Materials"	EAR0346052	210,583/36	105,583/36	standard grant for ITD; split-funded w/ OCE/MGG = 52,500 and OCE/ITS = 52,500
Scripps College MCFARLANE, Donald A.	"Acquisition of Ion Chromatograph for Fluorine Relative Dating of Quaternary Fossil Bone"	EAR0317279	19,968/12	13,978/12	standard grant for EA
South Carolina KNAPP, Camelia C.	"Collaborative Research: Acquisition of a Dual, Complementary Ground Penetrating Radar System for Geoscience Research and Teaching in South Carolina"	EAR0323293	61,966/24	30,983/24	standard grant for EA; split-funded w/ EHR/EPSCoR = $30,983$
Southern California DOLAN, James F.	"Collaborative Research: How Constant are Fault Slip Rates in Time and Space? An Analysis of the North and East Anatolian Faults, Turkey"	EAR0409767	10,000/12	10,000/12	IF split-funding for EA on TE grant
Southern California DONNELLAN, Andrea	"Support for a U.S. InSAR Community Workshop"	EAR0453662	16,448/12	16,448/12	IF split-funding for Other on ES grant
Southern California JORDAN, Thomas H.	"Crustal Dynamics Research in Western North America: Data Acquisition for the WInSAR Consortium"	EAR0425887	300,000/36	50,000/12	1st yr incr on 2-yr cont grant for FS
Southern California LUND, Steven P.	"Upgrade of the Paleomagnetism/Rock Magnetism Laboratory at the University of Southern California"	EAR0349894	156,135/12	156,135/12	standard grant for EA
Southern Oregon ELLIOTT, William S.	"MRI: Acquisition of a High Resolution ICP & XRD for Environmental, Earth, & Material Science Research in Biology, Chemistry, Geology, & Physics at Southern Oregon University"	EAR0420855	452,994/24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $219,538$
Stanford CHAMBERLAIN, C. P.	"Phase II: Technician Support for Gas-Isotope Ratio Mass Spectrometer Laboratory at Stanford University"	EAR0217128	139,780/24	69,890/12	2nd yr incr on 2-yr cont grant for TS

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
SUNY - Buffalo JANKOVIC, Igor	"Virtual Porous Medium for Modeling Contaminant Spreading in Groundwater"	EAR0218914	482,344/48	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 92,768
SUNY - Buffalo MITCHELL, Charles E.	"Collaborative Research: Robust Estimation of Biodiversity Dynamics: Global Versus Regional Patterns in the End Ordovician Mass Extinction of Graptolites"	EAR0418790	9,625/12	9,625/12	IF split-funding for EA on GE grant
SUNY - Buffalo SULTAN, Mohamed I.	"Collaborative Research: A GIS Database for Studying and Visualizing Tethyan Plate Collisions"	EAR0237481	102,072/24	52,747/12	2nd yr incr on 2-yr cont grant for ITD
SUNY - Stony Brook LI, Baosheng	"Collaborative Research: Elasticity Grand Challenge of the COMPRES Initiative"	EAR0135550	60,000/12	60,000/12	IF split-funding for ITD on PH grant
SUNY - Stony Brook LIEBERMANN, Robert	"Consortium for Materials Properties Research in the Earth Sciences"	EAR0425632	13,561,585/60	2,200,000/12	3rd yr incr on 5-yr CAGR-0135554 for FS
SUNY - Stony Brook WEIDNER, Donald J.	"Collaborative Research: COMPRES Grand Challenge for Experimental Study of Plastic Deformation under Deep Earth Conditions"	EAR0135551	90,000/12	90,000/12	IF split-funding for ITD on PH grant
Sweet Briar College AMBERS, Rebecca K.	"MRI: Acquisition of an X-ray Diffraction System for Research at an Undergraduate Woman's College"	EAR0420317	73,057/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $73,057$
Syracuse BALDWIN, Suzanne L.	"Acquisition of an Excimer Laser System for Syracuse University Noble Gas Isotope Research Laboratory (SUNGIRL)"	EAR0345822	77,340/12	77,340/12	standard grant for EA
Syracuse BALDWIN, Suzanne L.	"Technician Support: Syracuse University Noble Gas Isotope Research Laboratory (SUNGIRL)"	EAR0130833	210,000/36	50,000/12	3rd yr incr on 3-yr cont grant for TS; split-funded w/ $OPP/AGG = 20,000$
Tennessee PERFECT, Edmund	"Acquisition of an Unsaturated Flow Apparatus (UFA) with Technical Support to Investigate Hydrologic Processes in the Vadose Zone"	EAR0343514	160,294/24	160,294/24	standard grant for EA
Texas BUCKLEY, Sean M.	"ITR: Post-Processing Strategies for Radar Differential Interferometry"	EAR0219293	98,893/36	- 0 -	3rd yr incr on 3-yr cont grant for Other; split-funded w/ EAR/ITR-small = 33,048
Texas CARLSON, William D.	"Facility Support: High-Resolution X-ray Computed Tomography Laboratory"	EAR0345710	1,502,144/60	346,304/12	1st yr incr on 3-yr cont grant for FS
Texas DUTTON, Shirley P.	"Workshop: Curation of Terrestrial Scientific Cores, Samples and Collections"	EAR0435812	10,000/12	10,000/12	IF split-funding for Other on GE grant
Texas WILSON, Clark R.	"Development of an Integrated Superconducting Gravity Meter Sensor System for Subsurface Water Storage"	EAR0345864	665,128/36	234,601/12	1st yr incr on 3-yr cont grant for ITD
Texas - Arlington SCOTESE, Christopher R.	"Collaborative Research: Have Ridge Volumes Changed Over the Past 160 Ma?"	EAR0418395	4,000/12	4,000/12	IF split-funding for EA on GE grant
Texas A&M KARNER, Stephen L.	"Collaborative Research: Deposition of Carbon on Newly-Formed Fracture Surfaces and its Influence on Deformation and Electrical Properties of Rocks"	EAR0337747	4,500/12	4,500/12	IF split-funding for EA on TE grant
Texas A&M-Corpus Christi NAEHR, Thomas H.	"MRI: Acquisition of a Powder X-ray Diffraction System for Earth Science Research and Education"	EAR0421410	187,436/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $60,\!000$ and OCE/MRI = $60,\!000$

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
UNAVCO, Inc. MEERTENS, Charles M.	"Acquisition of New GPS Equipment for the UNAVCO Community Pool in Support of Current and Emerging Solid-Earth Sciences Research Applications"	EAR0214355	375,250/36	153,750/12	2nd yr incr on 3-yr cont grant for FS
UNAVCO, Inc. PRESCOTT, William H.	"Support of UNAVCO Community and Facility Activities"	EAR0404470	13,009,777/48	2,191,274/12	2nd yr incr on 51-mo CAGR-0321760 for FS; split- funded w/ interagency transfer from NASA = 1,063,758 for SENH and IGS activities
UNAVCO, Inc. PRESCOTT, William H.	"Support of UNAVCO Community and Facility Activities [supplement to CAGR EAR-0321760]"	EAR0439735	105,500/0	9,000/0	IF suppl for FS on IF grant; split funded w/ OPP/AGG = $92,500$ and $TE = 4,000$
UNAVCO, Inc. PRESCOTT, William H.	"Support of UNAVCO Community and Facility Activities [supplement to CAGR EAR-0321760]"	EAR0451696	21,420/0	- 0 -	IF suppl for Other on IF grant; split-funded w/ $OPP/AGG = 21,420$
UNAVCO, Inc. PRESCOTT, William H.	"Support of UNAVCO Community and Facility Activities [supplement to CAGR EAR-0321760]"	EAR0403179	367,755/0	- 0 -	IF suppl for FS on IF grant; split funded w/ OPP/ARSL = 130,959; OPP/POSP = 110,590, OPP/AGG = 73,539, OPP/Glaciology = 32,544 and OPP/ABM = 20,123 for support of USAP and Arctic field research programs
Utah JOHNSON, William P.	"Acquisition of Equipment for Direct Observation of Colloid Attachment-Detachment Dynamics and Direct Measurement of Colloid-Substratum Interaction and Adhesion Forces"	EAR0352482	314,442/12	264,442/24	standard grant for EA; split-funded w/ MPS/CHE = 50,000
Utah WANNAMAKER, Philip E.	"Collaborative Research: Electromagnetic Studies of the Continents (EMSOC): National Instrument Facility"	EAR0236553	99,649/36	25,699/12	2nd yr incr on 3-yr cont grant for FS
Utah State RITTS, Bradley D.	"CAREER: Giant Nonmarine Sedimentary Basins of China and Intracontinental Tectonics - an Integrated Research and Education Plan in Asia and Western North America"	EAR0346816	14,000/12	14,000/12	IF split-funding for EA on TE grant
Vanderbilt SAVAGE, Kaye	"Impurities, Stoichiometry, Heterogeneity: Influences on Pyrite Crystal Properties, Oxidation Mechanisms, and Kinetics"	EAR0409155	6,830/12	6,830/12	IF split-funding for EA on CH grant
Vermont KLEPEIS, Keith A.	"Lower Crustal Deformation and Vertical Coupling and Decoupling in the Continental Lithosphere During Late Orogenic Extension [supplement to EAR-0337111]"	EAR0433506	7,313/0	7,313/0	IF suppl for EA on TE grant
Virgina Tech BODNAR, Robert J.	"MRI: Acquisition of an Excimer-Laser Based Laser Ablation ICP-MS System"	EAR0420849	605,584/36	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = $400,866$
Virginia Tech BODNAR, Robert J.	"Upgrading of the Vibrational Spectroscopy Laboratory at Virginia Tech"	EAR0322119	296,010/12	296,010/24	standard grant for EA
Washington ABRAMSON, Evan H.	"Thermodynamics of Mantle Volatiles"	EAR0337796	4,000/12	4,000/12	IF split-funding for EA on CH grant
Washington BOOKER, John R.	"Collaborative Research: Electromagnetic Studies of Continents (EMSOC) National Instrumentation Facility"	EAR0236538	128,687/36	64,662/12	2nd yr incr on 3-yr cont grant for FS
Washington MALONE, Stephen D.	"Seismic Array Studies of Cascadia Deep Tremor"	EAR0337144	2,500/12	2,500/12	IF split-funding for EA on PH grant
Washington WILLET, Sean D.	"Collaborative Research: Thermochronometry and Evolution of the Taiwan Fold and Thrust Belt"	EAR0337782	3,500/12	3,500/12	IF split-funding for EA on TE grant

Institution/PI	Title of Proposal	Proposal #	\$'s Requested/ months	FY04 Funding by IF/months	Comments
Washington WILLETT, Sean D.	"Smoothed Particle Hydrodynamics Model for Geophysical Flows"	EAR0337794	44,702/12	44,702/12	IF split-funding for Other on TE grant
Washington St Louis CRISS, Robert E.	"Upgrading of Isotope Ratio Mass Spectrometer For Automated Hydrogen and Oxygen Isotope Analysis of Water"	EAR0343017	58,014/12	58,014/12	standard grant for EA
Western Michigan KORETSKY, Carla M.	"CAREER: Generation of Sediment Heterogeneity by Macrophytes and Macrofauna and Consequences for Redox Chemistry and Trace Metal Speciation"	EAR0348435	15,921/12	15,921/12	IF split-funding for EA on GE grant
Western Washington HOUSEN, Bernard A.	"Collaborative Research: Late Cenozoic Detachment Faulting in the Western Salton Trough: Strain Partitioning in an Oblique Active-Margin Rift [supplement to EAR-0125454]"	EAR0413942	29,810/0	29,810/0	IF suppl for EA on TE grant
Western Washington HOUSEN, Bernard A.	"MRI: Acquisition of a Vibrating Sample Magnetometer for the Paleomagnetism Laboratory, Western Washington University"	EAR0421457	196,019/24	- 0 -	standard grant for EA; split-funded w/ OIA/MRI = 136,019 and OCE/MRI = 60,000
WHOI PEUCKER-EHRENBRINK, B	"Technician Support for the WHOI ICPMS Facility"	EAR0318137	224,200/36	37,500/	1st yr incr on 3-yr cont grant for TS; split-funded w/ OCE/MGG = $37,500$
Wisconsin JOHNSON, Clark M.	"Technician Support: Request for Phase 1 for MC-ICP-MS Laboratory"	EAR0318213	194,559/36	60,336/12	1st yr incr on 3-yr cont grant for TS
Wisconsin VALLEY, John W.	"MRI: Acquisition of an Ion Microprobe for Stable Isotope Analysis"	EAR0319230	2,000,000/36	621,209/12	2nd yr incr on 2-yr cont grant for EA
Wright State HIGGINS, Steven R.	"Development of "Smart" Scanning Probe Microscopy Instrumentation for Studies of Mineral-Water Interfaces"	EAR0345729	189,024/24	99,358/12	1st yr incr on 2-yr cont grant for ITD
Wyoming EWERS, Brent	"Collaborative Research: Restricted Plasticity of Canopy Stomatal Conductance: A Conceptual Basis for Simpler Spatial Models of Forest Transpiration"	EAR0405381	24,000/12	24,000/12	IF split-funding for EA on HS 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	45,000/12	3rd yr incr on 4-yr cont grant for Other
Yale ANISFELD, Shimon	"Acquisition of a Carbon-Nitrogen-Sulfur Analyzer"	EAR0337134	32,130/12	32,130/12	standard grant for EA
Yale BENOIT, Gaboury	"The Linkage Between Copper Speciation and Nitrogen Cycling in Stratified Lakes"	EAR0337201	6,000/12	6,000/12	IF split-funding for EA on HS grant
Yale KARATO, Shun-ichiro	"Collaborative Research: COMPRES Grand Challenge for Experimental Study of Plastic Deformation under Deep Earth"	EAR0136181	70,000/12	70,000/12	IF split-funding for ITD on PH grant
Yale REINERS, Peter W.	"Acquisition of a 193 nm Laser Ablation System for ICP-MS and (U-Th)/He Chronometry"	EAR0345789	114,850/24	106,750/24	standard grant for EA
Yale REINERS, Peter W.	"Technician Support for the Yale (U-Th)/He Chronometry Facility"	EAR0233767	161,719/36	53,868/12	2nd yr incr on 3-yr cont grant for TS

ABBREVIATIONS and EXPLANATIONS

	TIONS and EAT LANATIONS		
AAS =	Archaeology, Archaeometry and Systematic Collections Program in	$\mathbf{EHR} =$	Directorate for Education and Human Resources at NSF
ADM	SBER Antarctic Biology & Medicine Program in OPP	ENG =	Directorate for Engineering at NSF
ABM =	Air Force Office of Scientific Research	EPSCoR =	Experimental Program to Stimulate Competitive Research in EHR
AFOSR =	Antarctic Glaciology Program in OPP	$\mathbf{ES} =$	EarthScope Science Program in EAR
AG =		FS =	Facility Support component of IF Program
AGG =	Antarctic Geology and Geophysics Program in OPP	$\mathbf{FY} =$	Federal fiscal year e.g., FY94: 10/1/93 to 9/30/94
ANS =	Arctic Natural Sciences Program in OPP	GE =	Geology and Paleontology Program in EAR
AO =	Astronomical Observatory of the Smithsonian Institution	GEO =	Directorate for Geosciences at NSF
AP =	Applications in Science and Engineering Technical Area of ITR	GL =	Geophysical Laboratory in CIW
ARCSS =	Arctic System Sciences Program in OPP	GPS =	Global Positioning System
ARSL =	Arctic Research Support & Logistics Program in OPP	GSN =	Global Seismographic Network of IRIS
ASL =	Albuquerque Seismology Laboratory of the USGS	GSO =	Graduate School of Oceanography, University of Rhode Island
ASS =	Arctic Social Sciences Program in OPP	$\mathbf{HRTEM} =$	high-resolution TEM
ATM =	Division of Atmospheric Sciences in GEO	HS =	Hydrologic Sciences Program in EAR
BG =	Biogeosiences Program in GEO	ICP-AE =	Inductively coupled plasma-atomic emission spectrometer
BIO =	Directorate for Biological Sciences at NSF	ICP-MS =	Inductively coupled plasma-mass spectrometer
BNL =	Brookhaven National Laboratory	IF =	Instrumentation and Facilities Program in EAR
CAGR =	Cooperative Agreement	IM =	Information Management Technical Area of ITR
CD =	Continental Dynamics Program in EAR	IMR =	Instrumentation for Materials Research Program in DMR
CD-ATM =	Climate Dynamics Program in ATM	incr =	an annual increment of funds to an active NSF grant
CEES =	Center for Environmental Sciences at the University of Maryland	INT =	Division of International Programs in SBE
$\mathbf{CH} =$	Geochemistry and Petrology Program in EAR	IRIS =	Incorporated Research Institutions for Seismology
CHE =	Chemical Instrumentation Program in MPS	ISS =	Impulsive Stimulated Scattering
CI =	Cyberinfrastructure accounts in EAR and ATM	ITD =	Instrument and Technique Development component of IF Program
CIW =	Carnegie Institution of Washington	ITR =	Information Technology Research Program
CO =	Chemical Oceanography Program in OCE	ITR-small =	allocation for class of ITR proposals requesting <= \$500k
COMPRES =	Consortium for Materials Properties Research in the Earth Sciences	ITS =	Oceanographic Instrumentation and Technical Service Program in
cont grant =	continuing grant, a multi-year grant funded one year at a time		OCE
$\mathbf{CRDF} =$	U.S. Civilian Research and Development Foundation	IUPU =	Indiana University - Purdue University system
CSEDI =	Cooperative Studies of the Earth's Deep Interior Program in EAR	KNET =	Kyrgyz Broad-Band Seismograph Network
DCP =	direct current plasma	LA-ICP-MS =	laser ablation ICP-MS
DEB =	Division of Environmental Biology in BIO	LDEO =	Lamont-Doherty Earth Observatory, Columbia University
DMA =	Defense Mapping Agency	MC-ICP- MS =	multicollector ICP-MS
DMI =	Division of Design, Manufacture & Industrial Innovation in ENG	MGG =	Marine Geology and Geophysics Program in OCE
DMR =	Division of Materials Research in MPS	MPS =	Directorate for Mathematics and Physical Sciences at NSF
DOD =	Department of Defense	MRI =	Major Research Instrumentation Program in OIA
DR =	Director's Reserve Account in EAR	NAVAIR =	Naval Air Weapons Center
DRI =	Desert Research Institute of the University of Nevada	NIMA =	National Imagery and Mapping Agency (formerly DMA)
DTM =	Department of Terrestrial Magnetism in CIW	NMNH =	National Museum of Natural History of the Smithsonian Institution
$\mathbf{E}\mathbf{A} =$	Equipment Acquisition component of IF Program	NOAA =	National Oceanic and Atmospheric Administration within U.S.
EAR =	Division of Earth Sciences in GEO		Department of Commerce
ECS =	Ecosystem Sciences Cluster in DEB	NOS =	National Ocean Service in NOAA
$\mathbf{EH} =$	Education & Human Resources Program in EAR	NSLS =	National Synchrotron Light Source at BNL

OBES = Office of Basic Energy Sciences in the U.S. Department of Energy

OCE = Division of Ocean Sciences in GEO

ODP = Ocean Drilling Program in OCE

OIA = Office of Integrative Activities at NSF

OMA = Office of Multidisciplinary Activities at NSF

OPP = Office of Polar Programs at NSF

OSP = Polar Operations Support Program in OPP

Other = includes categories other than EA, FS, ITD and TS (e.g., workshops,

research projects etc.)

OTIC = Oceanographic Technology and Interdisciplinary Coordination

Program in OCE

PC = Paleoclimate program in ATM

PE = People and Social Groups Interacting with Computers and

Infrastructure Techncial Area of ITR

PH = Geophysics Program in EAR

PM = Physical Meteorology Program in ATM

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 Research
SIMS = secondary ionization mass spectrometry
SIO = 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

USGS = U.S. Geological Survey

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-2004

PROPOSALS DOLLARS

Total number of proposals processed by IF	311	Total dollars requested of IF (per year for multi-year proposals)	60,158,873
Logged-in to IF as primary program	226	Total awarded through IF actions in FY-2004	41,225,166
New proposals; full review by IF	146	Awarded from IF budget	30,700,605
Declined Withdrawn Funded entirely from IF budget Split-funded with other programs Held over for FY05 decision	69 2 39 26 10	For equipment acquisition/upgrade (EA) For instr and technique development (ITD) For facility support (FS) For technician support (TS) Other (workshops, REU, etc.)	5,243,837 2,249,789 22,304,344 748,985 153,650
New proposals; withdrawn before review	10	Awarded from other NSF budgets through split-funding	6,620,909
New proposals; return without review Other award actions (incr, suppl, etc) Funded entirely from IF budget Split-funded with other programs	8 62 35 27	For equipment acquisition/upgrade (EA) For instr and technique development (ITD) For facility support (FS) For technician support (TS) Other (workshops, REU, etc.)	3,814,664 780,063 882,541 164,967 978,674
Logged-in to other NSF programs; IF-split-funding		Awarded through interagency transfers	3,903,652
		For facility support (FS)	3,903,652