

ARCTIC SCIENCE, ENGINEERING, AND EDUCATION

Directory of Awards: Fiscal Year 1997



National Science Foundation

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AND EDUCATION**

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INTRODUCTION: ARCTIC SCIENCE, ENGINEERING, AND EDUCATION

The following is a report on Arctic grants awarded by the National Science Foundation (NSF) during Fiscal Year 1997 (October 1, 1996 to September 30, 1997).

Presentation of this information is partially a response to the Arctic Research and Policy Act of 1984. The Arctic is defined by the Act as “all United States and foreign territory north of the Arctic Circle and all United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwin Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas; and the Aleutian chain.”

The Act designates the NSF as lead agency and chair agency for the Interagency Arctic Research Policy Committee, and calls for integrated planning and budgetary processes.

This detailed listing shows the scope of NSF activities in the Arctic. Essentially, all NSF funds were devoted to basic science, engineering, and education and related operational, informational, and advisory support. Further information on other agencies’ programs is presented in the journal, *Arctic Research of the United States*, and the *U.S. Arctic Research Plan* and its biennial revisions.

In addition to investigations in Alaska and adjacent waters, research was supported in all Arctic-bordered countries. Of the total \$49.39 million obligated in Fiscal Year 1997, the Office of Polar Programs’ (OPP) share is \$30.71 million. The remainder was awarded from funds in other Divisions and programs throughout the Foundation. There were 364 awards to 129 institutions in 37 U.S. states, the District of Columbia, and Sweden.

NSF funding of Arctic research since 1989 is shown below in thousands of dollars.

	FY89	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97
OPP	10,175	12,310	14,696	20,638	22,072	24,205	25,809	29,118	30,715
Other	13,549	11,778	12,445	14,308	13,779	16,279	19,386	16,959	18,674
Total	23,724	24,088	27,151	34,946	35,851	40,484	45,195	46,077	49,389

In some instances, awards are listed that may not fall strictly within the limits of the Arctic as defined by the Arctic Research and Policy Act, but apply to processes, properties, and phenomena of the Arctic. Examples include research on boreal forests, subarctic or temperature zone glaciers, geological and atmospheric projects south of the Arctic Circle, and laboratory and theoretical studies. Individual awards contain their own logistics budgets and no attempt is made to separate those costs; only specific awards for field support are listed separately. A complete listing of institutions and organization that received funds in Fiscal Year 1997 follows.

Users of this list should keep in mind that these projects do not exhaust the range of subjects that might be supported by NSF in the future. Research that promises to add significantly to science, engineering, or education is eligible for consideration. The data reported in this award list were compiled from individual program submissions from throughout the NSF. The information includes awards for research but excludes administrative costs that are included in NSF budget source documents.

Charles E. Myers
Head, Interagency Arctic Staff
Office of Polar Programs

DESCRIPTION OF CONTENTS AND EXPLANATION OF FORMAT

The *Arctic Science, Engineering, and Education Directory of Awards* provides bibliographic data on the Arctic awards granted each Fiscal Year by the National Science Foundation. All awards are listed under their primary science program area. Split-funded awards are listed only under their primary science program. Indexes appear at the end of the publication by Institution and Principal Investigator with entries listed in alphabetical order referring to the corresponding page number.

The definition of fields and sample record below shows how each bibliographic reference is listed. **The complete abstracts for the awards can be accessed from the National Science Foundation's web site at <http://www.nsf.gov>.**

Sample Record and Field Definitions:

1. Title of the Award
2. Owner Division and Award Number
3. Start Date–End Date
4. Funding Division and Amount Funded
5. Name of Institution (any college, university, laboratory, industry, or other organization designated as the NSF Awardee)
6. Address of Awardee Institution
7. Principal Investigator (PI)

Format at a Glance:

1. **Paleozoic Faunal Affinity Studies in West-Central and East-Central Alaska**
2. EAR 9312854
3. 09/15/1996–08/14/1999
4. (OPP) \$25,000 (DEB) \$12,919
5. University of Oregon–Eugene
6. Eugene, OR 97403-5219
7. Norman M. Savage

**FISCAL YEAR 1997 NATIONAL SCIENCE FOUNDATION
ARCTIC AWARDS SUMMARY**

Science Program Area	No. of Awards	OPP Funding	Non-OPP Funding	Total
Arctic Natural Sciences	168	\$10,316,151	\$9,509,521	\$19,825,672
Arctic System Science	120	\$13,564,291	\$3,530,465	\$17,094,756
Arctic Social Sciences and Education	50	\$1,407,516	\$4,433,477	\$5,840,993
Arctic Coordination and Information	10	\$864,025	\$98,762	\$962,787
Arctic Research Support	5	\$414,964	\$161,183	\$576,147
Arctic Logistics	2	\$2,830,366	\$47,618	\$2,877,984
Major Research Instrumentation	3	\$801,022	\$600,000	\$1,401,022
Life in Extreme Environments (LExEn)	3	\$300,015	\$300,000	\$600,015
Other Arctic Research Support	3	\$216,465	\$0	\$216,465
GRAND TOTALS	364	\$30,714,815	\$18,674,026	\$49,388,841

FISCAL YEAR 1997 ARCTIC AWARDS FOR INSTITUTIONS AND ORGANIZATIONS BY STATE

	OPP Funding	Non-OPP Funding	Total
Alaska	\$4,198,939	\$7,041,892	\$11,240,831
<i>Alaska Federation of Natives</i>	\$97,469	\$2,000,000	\$2,097,469
<i>Anchorage School District</i>	\$0	\$928,488	\$928,488
<i>Arctic Research Consortium of the United States (ARCUS)</i>	\$332,551	\$0	\$332,551
<i>Association of Village Council Presidents</i>	\$89,193	\$0	\$89,193
<i>Barrow Arctic Science Consortium</i>	\$113,500	\$47,600	\$161,100
<i>Fairbanks North Star Borough</i>	\$0	\$519,034	\$519,034
<i>KCAW-FM Raven Radio</i>	\$0	\$1,372	\$1,372
<i>Shishmaref Native Corporation</i>	\$74,940	\$0	\$74,940
<i>U.S. Geological Survey-Water Resources Division</i>	\$43,432	\$0	\$43,432
<i>University of Alaska-Anchorage</i>	\$598,749	\$0	\$598,749
<i>University of Alaska-Fairbanks</i>	\$2,849,105	\$3,445,398	\$6,294,503
<i>University of Alaska-SE Juneau</i>	\$0	\$100,000	\$100,000
Arizona	\$209,729	\$10,530	\$220,259
<i>Arizona State University</i>	\$0	\$10,530	\$10,530
<i>University of Arizona</i>	\$209,729	\$0	\$209,729
California	\$3,201,705	\$3,146,708	\$6,348,413
<i>Aerospace Corporation</i>	\$0	\$65,000	\$65,000
<i>Jet Propulsion Laboratory</i>	\$35,500	\$0	\$35,500
<i>Naval Postgraduate School</i>	\$138,927	\$65,000	\$203,927
<i>Naval Undersea Warfare Center</i>	\$111,388	\$0	\$111,388
<i>SAI Science Applications International Corporation</i>	\$65,100	\$0	\$65,100
<i>San Diego State University Foundation</i>	\$676,294	\$119,650	\$795,944
<i>San Jose State University Foundation</i>	\$5,781	\$0	\$5,781
<i>SRI International</i>	\$160,000	\$2,347,631	\$2,507,631
<i>University of California-Berkeley</i>	\$334,841	\$0	\$334,841
<i>University of California-Irvine</i>	\$509,777	\$0	\$509,777
<i>University of California-Los Angeles</i>	\$431,316	\$24,999	\$456,315
<i>University of California-San Diego</i>	\$10,000	\$10,000	\$20,000
<i>University of California-Santa Cruz</i>	\$37,119	\$0	\$37,119
<i>University of California-SD Scripps Institute</i>	\$685,662	\$514,428	\$1,200,090
Colorado	\$3,156,095	\$561,470	\$3,717,565
<i>Colorado State University</i>	\$108,333	\$49,670	\$158,003
<i>Denver Museum of Natural History</i>	\$9,975	\$100,000	\$109,975
<i>NOAA-Environmental Research Laboratory</i>	\$323,261	\$0	\$323,261
<i>Space Science Institute</i>	\$5,000	\$0	\$5,000
<i>U.S. Geological Survey-Denver</i>	\$100,000	\$0	\$100,000
<i>University Corporation for Atmospheric Research</i>	\$279,379	\$0	\$279,379
<i>University of Colorado-Boulder</i>	\$2,240,185	\$391,800	\$2,631,985

	OPP Funding	Non-OPP Funding	Total
<i>University of Denver</i>	\$89,962	\$20,000	\$109,962
Connecticut	\$5,000	\$10,000	\$15,000
<i>University of Connecticut</i>	\$5,000	\$10,000	\$15,000
Delaware	\$650,000	\$782,000	\$1,432,000
<i>Bartol Research Institute</i>	\$650,000	\$782,000	\$1,432,000
District of Columbia	\$326,256	\$0	\$326,256
<i>Department of Navy–Naval Research Laboratory</i>	\$215,456	\$0	\$215,456
<i>National Academy of Sciences</i>	\$105,100	\$0	\$105,100
<i>National Oceanic and Atmospheric Administration (NOAA)</i>	\$3,700	\$0	\$3,700
<i>Smithsonian Institution</i>	\$2,000	\$0	\$2,000
Florida	\$385,359	\$214,980	\$600,339
<i>Emory–Riddle Aeronautical University</i>	\$0	\$100,000	\$100,000
<i>Florida International University</i>	\$106,258	\$0	\$106,258
<i>Florida State University</i>	\$0	\$74,980	\$74,980
<i>University of Miami</i>	\$123,042	\$0	\$123,042
<i>University of Miami–School of Marine and Atmospheric Sciences</i>	\$156,059	\$40,000	\$196,059
Hawaii	\$127,065	\$0	\$127,065
<i>University of Hawaii–Manoa</i>	\$127,065	\$0	\$127,065
Illinois	\$177,863	\$166,700	\$344,563
<i>University of Illinois Urbana–Champaign</i>	\$0	\$166,700	\$166,700
<i>University of Illinois–Chicago</i>	\$177,863	\$0	\$177,863
Indiana	\$165,499	\$176,330	\$341,829
<i>Indiana University–Bloomington</i>	\$115,499	\$0	\$115,499
<i>Purdue University Research Foundation</i>	\$50,000	\$176,330	\$226,330
Kansas	\$240,020	\$0	\$240,020
<i>University of Kansas–Main Campus</i>	\$240,020	\$0	\$240,020
Louisiana	\$49,970	\$0	\$49,970
<i>Louisiana State University & A&M College</i>	\$49,970	\$0	\$49,970
Maine	\$129,643	\$0	\$129,643
<i>Bigelow Laboratory for Ocean Sciences</i>	\$126,143	\$0	\$126,143
<i>Bowdoin College</i>	\$3,500	\$0	\$3,500
Maryland	\$752,243	\$260,000	\$1,012,243
<i>Capital Systems Group, Inc.</i>	\$15,118	\$0	\$15,118
<i>Friday Systems Services, Inc.</i>	\$39,448	\$0	\$39,448
<i>JLM Associates, Inc.</i>	\$26,091	\$0	\$26,091
<i>Johns Hopkins University</i>	\$329,900	\$180,000	\$509,900
<i>University of Maryland–Center for Estuarine Research</i>	\$39,683	\$0	\$39,683
<i>University of Maryland–College Park</i>	\$302,003	\$80,000	\$382,003

	OPP Funding	Non-OPP Funding	Total
Massachusetts	\$2,188,867	\$1,926,768	\$4,115,635
<i>Boston College</i>	\$94,195	\$29,985	\$124,180
<i>Boston University</i>	\$41,108	\$190,667	\$231,775
<i>Harvard University</i>	\$0	\$266,000	\$266,000
<i>Marine Biological Laboratory</i>	\$1,778,378	\$936,912	\$2,715,290
<i>Tufts University</i>	\$0	\$83,452	\$83,452
<i>University of Massachusetts–Amherst</i>	\$156,560	\$56,354	\$212,914
<i>Woods Hole Oceanographic Institution</i>	\$118,626	\$363,398	\$482,024
Michigan	\$447,081	\$523,473	\$970,554
<i>Michigan State University</i>	\$201,003	\$0	\$201,003
<i>University of Michigan</i>	\$246,078	\$523,473	\$769,551
Minnesota	\$104,446	\$0	\$104,446
<i>Saint Olaf College</i>	\$18,601	\$0	\$18,601
<i>University of Minnesota–Twin Cities</i>	\$85,845	\$0	\$85,845
Missouri	\$121,901	\$23,634	\$145,535
<i>University of Missouri–Columbia</i>	\$10,000	\$23,634	\$33,634
<i>University of Missouri–Saint Louis</i>	\$111,901	\$0	\$111,901
Nebraska	\$3,249,290	\$0	\$3,249,290
<i>University of Nebraska–Lincoln</i>	\$3,249,290	\$0	\$3,249,290
Nevada	\$110,157	\$0	\$110,157
<i>University of Nevada–Desert Research Institute</i>	\$76,185	\$0	\$76,185
<i>University of Nevada–Las Vegas</i>	\$33,972	\$0	\$33,972
New Hampshire	\$870,192	\$179,261	\$1,049,453
<i>Dartmouth College</i>	\$134,603	\$179,261	\$313,864
<i>U.S. Army Cold Region Research and Engineering Laboratory</i>	\$449,130	\$0	\$449,130
<i>University of New Hampshire</i>	\$286,459	\$0	\$286,459
New Jersey	\$182,417	\$132,415	\$314,832
<i>Princeton University</i>	\$0	\$132,415	\$132,415
<i>Rutgers University–New Brunswick</i>	\$182,417	\$0	\$182,417
New Mexico	\$87,314	\$0	\$87,314
<i>New Mexico Institute of Mining & Technology</i>	\$2,800	\$0	\$2,800
<i>University of New Mexico</i>	\$84,514	\$0	\$84,514
New York	\$1,946,030	\$670,685	\$2,616,715
<i>Columbia University</i>	\$1,033,068	\$538,590	\$1,571,658
<i>CUNY Hunter College</i>	\$223,130	\$0	\$223,130
<i>Health Research, Inc.</i>	\$0	\$74,517	\$74,517
<i>SUNY–Albany</i>	\$260,910	\$24,268	\$285,178

	OPP Funding	Non-OPP Funding	Total
<i>SUNY–Brookport</i>	\$34,420	\$33,310	\$67,730
<i>SUNY–Buffalo</i>	\$255,626	\$0	\$255,626
<i>University of Rochester</i>	\$138,876	\$0	\$138,876
North Carolina	\$45,000	\$10,000	\$55,000
<i>East Carolina University</i>	\$5,000	\$10,000	\$15,000
<i>North Carolina State University</i>	\$40,000	\$0	\$40,000
Ohio	\$838,201	\$511,473	\$1,349,674
<i>Ohio State University Research Foundation</i>	\$771,718	\$511,473	\$1,283,191
<i>University of Cincinnati</i>	\$66,483	\$0	\$66,483
Oregon	\$585,733	\$262,108	\$847,841
<i>Oregon State University</i>	\$502,166	\$132,156	\$634,322
<i>University of Oregon–Eugene</i>	\$83,567	\$129,952	\$213,519
Pennsylvania	\$154,255	\$0	\$154,255
<i>Carnegie Mellon University</i>	\$7,000	\$0	\$7,000
<i>Individual Award</i>	\$2,999	\$0	\$2,999
<i>Lehigh University</i>	\$10,000	\$0	\$10,000
<i>Penn State University–University Park</i>	\$134,256	\$0	\$134,256
Rhode Island	\$20,000	\$396,343	\$416,343
<i>Brown University</i>	\$0	\$140,000	\$140,000
<i>University of Rhode Island</i>	\$20,000	\$256,343	\$276,343
South Carolina	\$0	\$19,500	\$19,500
<i>Clemson University</i>	\$0	\$19,500	\$19,500
Tennessee	\$83,187	\$3,708	\$86,895
<i>NOAA–Air Resources Laboratory</i>	\$78,187	\$0	\$78,187
<i>University of Tennessee–Knoxville</i>	\$5,000	\$3,708	\$8,708
Texas	\$392,901	\$50,000	\$442,901
<i>Texas A&M Research Foundation</i>	\$28,125	\$0	\$28,125
<i>University of Houston</i>	\$0	\$50,000	\$50,000
<i>University of Texas–Austin</i>	\$364,776	\$0	\$364,776
Utah	\$246,139	\$247,767	\$493,906
<i>Brigham Young University</i>	\$49,702	\$55,000	\$104,702
<i>University of Utah</i>	\$89,925	\$0	\$89,925
<i>Utah State University</i>	\$59,891	\$114,200	\$174,091
<i>Utah State University Foundation</i>	\$46,621	\$78,567	\$125,188
Virginia	\$2,666,082	\$125,161	\$2,791,243
<i>Arctic Research Commission</i>	\$500,000	\$0	\$500,000
<i>Computational Physics, Inc.</i>	\$0	\$40,002	\$40,002
<i>Department of Navy–Office of Naval Research</i>	\$1,296,612	\$0	\$1,296,612
<i>Gerber Scientific, Inc.</i>	\$0	\$79,904	\$79,904
<i>National Science Foundation, Office of Polar Programs</i>	\$413,515	\$5,255	\$418,770

	OPP Funding	Non-OPP Funding	Total
<i>Old Dominion Research Foundation</i>	\$365,955	\$0	\$365,955
<i>U.S. Geological Survey</i>	\$90,000	\$0	\$90,000
Washington	\$1,878,771	\$700,597	\$2,579,368
<i>McPhee Research</i>	\$0	\$102,000	\$102,000
<i>University of Puget Sound</i>	\$18,900	\$0	\$18,900
<i>University of Washington</i>	\$1,830,961	\$598,597	\$2,429,558
<i>Washington State University</i>	\$28,910	\$0	\$28,910
Wisconsin	\$172,535	\$309,994	\$482,529
<i>University of Wisconsin–Madison</i>	\$162,690	\$309,994	\$472,684
<i>University of Wisconsin–Milwaukee</i>	\$9,845	\$0	\$9,845
Wyoming	\$444,726	\$210,529	\$655,255
<i>University of Wyoming</i>	\$444,726	\$210,529	\$655,255
Sweden	\$104,204	\$0	\$104,204
<i>International Geosphere</i>	\$104,204	\$0	\$104,204
GRAND TOTALS	\$30,714,815	\$18,674,026	\$49,388,841

ARCTIC NATURAL SCIENCES

An Investigation of Magnetospheric Boundaries Using Ground-Based Induction Magnetometers Operated at Manned Stations as Part of an Extensive Ground Array

OPP 9613683
04/17/1997–03/31/1999
(OPP) \$63,837 (Arctic funding component only)
University of New Hampshire
Durham, New Hampshire 03824
Roger L. Arnoldy

An Updated Magnetometer Array on the Greenland Ice Cap (MAGIC-II) to Investigate Multi-Scale Ionospheric Current Systems

OPP 9614189
03/27/1997–03/31/1998
(OPP) \$50,120 (ATM) \$50,120
University of Michigan
Ann Arbor, Michigan 48109-2143
Vladimir O. Papitashvili

Arctic Research Initiative Expansion of the Dual Auroral Radar Network (SuperDARN)

OPP 9704717
09/04/1997–08/31/2000
(OPP) \$200,000
Johns Hopkins University
Baltimore, Maryland 20723-6099
William A. Bristow

Atmospheric Dynamics Using Sodium Lidar and Rayleigh Lidars at Fort Collins and Arctic Lidar Observatory for Middle Atmosphere Research (ALOMAR)

ATM 9510145
09/05/1995–08/31/1998
(ATM) \$60,000
University of Colorado–Boulder
Boulder, Colorado 80309-0019
David C. Fritts

ATM 9510130
09/06/1995–08/31/1998
(ATM) \$40,000
Colorado State University
Fort Collins, Colorado 80523-1875
Chiao-Yao She

Atmospheric Oxygen Variability in Relation to Annual and Decadal Variations in Terrestrial and Marine Ecosystems

ATM 9612518
03/21/1997–03/31/1998
(OPP) \$40,000 (Arctic funding component)
(ATM) \$215,031 (OCE) \$50,000
University of California–SD Scripps Institute
La Jolla, California 92093-0236
Ralph F. Keeling

Balloon Borne Measurements in the Arctic Vortex

OPP 9423285
03/29/1995–05/31/1998
(OPP) \$186,556
University of Wyoming
Laramie, Wyoming 82071
James M. Rosen

Collaborative Studies of the High-Latitude Ionosphere Using a Dynasonde Network in the Scandinavian Sector

OPP 9530935
03/20/1997–02/28/1998
(OPP) \$46,621 (ATM) \$16,000
Utah State University Foundation
Logan, Utah 84322-1947
Frank T. Berkey

Collisionless Magnetic Reconnection

OPP 9713271
09/09/1997–08/31/1998
(OPP) \$50,000 (EAR) \$30,000
University of Maryland–College Park
College Park, Maryland 20742
James F. Drake

Cosmic Rays and the Interplanetary Magnetic Field

ATM 9616610
03/04/1997–02/28/1998
(OPP) \$50,000 (ATM) \$182,000
Bartol Research Institute
Newark, Delaware 19716
John W. Bieber

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): A Complement of Optical Instruments for the Polar Cap Observatory

ATM 9612839

03/21/1997–02/28/1998

(ATM) \$115,000

University of Michigan

Ann Arbor, Michigan 48109-2143

Timothy L. Killeen

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Arctic Observations of the Upper Mesosphere and Thermosphere

ATM 9612881

12/02/1996–11/30/1998

(ATM) \$65,000

Aerospace Corporation

Los Angeles, California 90009-2957

James H. Hecht

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): CEDAR-HLPS Ionospheric Model Comparisons with Polar Cap Observations

ATM 9612835

11/29/1996–11/30/1998

(ATM) \$71,000

Utah State University

Logan, Utah 84322-4405

Jan J. Sojka

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Dynasonde Doppler Measurements at Mid-Latitude

ATM 9525818

02/02/1996–12/31/1997

(ATM) \$62,567

Utah State University Foundation

Logan, Utah 84322-1947

Frank T. Berkey

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Early Polar Cap Observatory

ATM 9311236

09/29/1993–08/31/1998

(OPP) \$160,000 (ATM) \$117,915

SRI International

Menlo Park, California 94025

John D. Kelly

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Establishment of a Resonance Lidar Capability at Sondrestrom, Greenland, for Studies of Metallic Structures in the Upper Atmosphere

ATM 9612796

12/23/1996–12/31/1998

(ATM) \$120,796

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Brenton J. Watkins

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Ground-Based Imaging of Upper Atmospheric Wind and Temperature Fields in the Auroral Zone

ATM 9523810

01/25/1996–06/30/1998

(ATM) \$52,391

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Mark Conde

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Lidar Studies of Multiple Metals in the Arctic Mesopause

ATM 9612870

01/02/1997–12/31/1997

(ATM) \$97,233

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Richard L. Collins

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Radar Investigations of Mesospheric and Lower Thermospheric Dynamics at Sondre Stromfjord, Greenland

ATM 9201996

09/25/1992–08/31/1997

(ATM) \$19,500

Clemson University

Clemson, South Carolina 29634-1911

Miguel F. Larsen

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Radar, Optical and Satellite Studies of High-Latitude Arcs

ATM 9415794

01/06/1995–12/31/1997

(ATM) \$43,200

Utah State University

Logan, Utah 84322-4405

Bela G. Fejer

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Small-Scale Plasma Structuring Mechanisms in the High-Latitude Ionosphere

ATM 9416078

01/06/1995–12/31/1998

(ATM) \$50,000

University of Maryland–College Park

College Park, Maryland 20742-3511

Parvez Guzdar

Coupling, Energetics and Dynamics of Atmospheric Regions (CEDAR): Using Coincident Radar and Optical Data from CEDAR Auroral Campaigns to Investigate Thermospheric Response to Heating, Energization of Electrons, and Emission Processes

ATM 9612859

01/03/1997–12/31/1997

(ATM) \$40,002

Computational Physics, Inc

Fairfax, Virginia 22150

Douglas J. Strickland

Dual Auroral Radar Network (SuperDARN): Global-Scale Observations of the High-Latitude Ionosphere

ATM 9502993

07/31/1995–08/31/1998

(ATM) \$180,000

Johns Hopkins University

Baltimore, Maryland 20723-6099

Raymond A. Greenwald

Geospace Environmental Monitoring (GEM): A Magnetometer Array for Cusp and Cleft Studies (MACCS-East)

ATM 9401733

08/29/1994–08/31/1998

(ATM) \$144,581

Boston University

Boston, Massachusetts 02215

W. Jeffrey Hughes

Geospace Environmental Monitoring (GEM): A Survey of Simultaneous Pc 3 Micropulsations and High-Latitude Impulsive Events for the GEM Boundary Layer Campaign

ATM 9623790

07/08/1996–06/30/1998

(ATM) \$50,000

University of Houston

Houston, Texas 77204-5506

Edgar A. Bering

Ground-Based Infrared Measurements in the Arctic

OPP 9633041

09/20/1996–09/30/1998

(OPP) \$89,962 (ATM) \$20,000

University of Denver

Denver, Colorado 80208-0202

Frank J. Murcray

Heterogeneous Bromine Reactions at Polar Atmospheric Conditions

ATM 9530659

08/13/1996–07/31/1998

(ATM) \$74,517

Health Research, Inc

Albany, New York 12201-0509

Liang T. Chu

High Resolution Infrared Radiometry of the Arctic Sky from a Ship-Based Platform

OPP 9712873

05/21/1997–05/31/1998

(OPP) \$18,900

University of Puget Sound

Tacoma, Washington 98416

Steven Neshyba

Magnetic Separatrix Identification and Measurement of Flow Across It

OPP 9423489

09/02/1997–04/30/1999

(OPP) \$20,000 (ATM) \$24,999

University of California–Los Angeles

Los Angeles, California 90095-1565

Lawrence R. Lyons

Measurement and Analysis of Midlatitude and Arctic Stratiform Clouds

ATM 9521073

06/06/1997–11/30/1997

(ATM) \$79,904

Gerber Scientific, Inc

Reston, Virginia 22090

Hermann E. Gerber

Multi-Radar Studies of the Dynamics of the Antarctic Ionosphere

OPP 9421266

07/14/1995–06/30/1998

(OPP) \$42,000 (Arctic funding component only)

Johns Hopkins University

Baltimore, Maryland 20710

Kile B. Baker

Multi-Station Auroral Spectroscopy-II

ATM 9610052

12/16/1996-11/30/1998

(ATM) \$85,000

University of Illinois-Urbana/Champaign

Champaign, Illinois 61801

Gary R. Swenson

Observations and Modeling of the High-Latitude Ionosphere

ATM 9523818

08/23/1996-08/31/1998

(ATM) \$94,879

University of Alaska-Fairbanks

Fairbanks, Alaska 99775-7320

Brenton J. Watkins

Operation of the Alaska-Canada High-Latitude Magnetometer Chain

ATM 9523998

04/16/1996-03/31/1998

(OPP) \$12,644 (ATM) \$80,000

University of Alaska-Fairbanks

Fairbanks, Alaska 99775-7320

John V. Olson

Plasma Sheet Dynamics During Geomagnetic Disturbances: Observations from the Ground and from Space

OPP 9619733

03/13/1997-03/31/1999

(OPP) \$124,484

University of California-Los Angeles

Los Angeles, California 90095-1565

Lawrence R. Lyons

Riometry in Antarctica and Conjugate Regions

OPP 9505823

07/14/1995-06/30/1998

(OPP) \$252,003 (Arctic funding component only)

University of Maryland-College Park

College Park, Maryland 20742

Theodore J. Rosenberg

Simultaneous *In Situ* Measurements within Polar Stratospheric Clouds of Particle Size, Number, Composition, Scattering Ratio, and of Gas Phase Concentrations of Nitric Acid and Water

OPP 9707520

08/28/1997-07/31/1998

(OPP) \$28,375

University of Wyoming

Laramie, Wyoming 82071

Terry L. Deshler

Sondrestrom Facility: Research, Operation, and Coordination

ATM 9317167

02/10/1994-09/30/1998

(ATM) \$2,179,716

SRI International

Menlo Park, California 94025

John D. Kelly

Space Weather Outreach

ATM 9615624

03/14/1997-02/28/1998

(OPP) \$5,000 (Arctic funding component only)

Space Science Institute

Boulder, Colorado 80303-7814

Paul B. Dusenbery

Space Weather: Event-Driven Operations and Analysis of the Sondrestrom Radar for the National Space Weather Program

ATM 9713600

09/11/1997-08/31/1998

(ATM) \$50,000

SRI International

Menlo Park, California 94025

John D. Kelly

Space Weather: Forecasting the High-Latitude F-Region Weather

ATM 9613925

09/06/1996-08/31/1998

(ATM) \$29,985

Boston College

Chestnut Hill, Massachusetts 02159

Dwight Decker

Space Weather: Ionospheric Electric Fields at High Latitudes

OPP 9613847

09/24/1996-09/30/1999

(OPP) \$77,900

Johns Hopkins University

Baltimore, Maryland 20723-6099

J. Michael Ruohoniemi

Support for ARGOS Data Collection and Location System

OCE 8341973

09/01/1983-07/31/1998

(OPP) \$3,700 (Arctic funding component only)

National Oceanic and Atmospheric Administration

(NOAA)

Washington, District of Columbia 20230

Michael J. Hall

The Heiss Island Imaging Photometer

OPP 9708101

07/15/1997–07/31/1998

(OPP) \$94,195

Boston College

Chestnut Hill, Massachusetts 02167-3862

Cesar E. Valladares

The Importance of Halogen Atom Chemistry in the Arctic Troposphere

ATM 9631572

02/04/1997–01/31/1999

(OPP) \$50,000 (ATM) \$96,330 (CHE) \$80,000

Purdue University Research Foundation

West Lafayette, Indiana 47907-1397

Paul B. Shepson

The Spectral Radiative Properties of Stratus Clouds and Ice Surfaces in the Arctic

OPP 9414172

03/17/1995–12/31/1998

(OPP) \$138,230

University of Washington

Seattle, Washington 98195-1640

Peter V. Hobbs

Theoretical Studies of Heterogeneous Halogen Chemistry on Stratospheric and Tropospheric Ice

ATM 9613802

01/30/1997–01/31/1999

(ATM) \$115,448

University of Colorado–Boulder

Boulder, Colorado 80309

James T. Hynes

Theoretical Studies of the Chemical Composition of the Earth's Atmosphere

ATM 9320778

06/29/1994–05/31/1998

(ATM) \$266,000

Harvard University

Cambridge, Massachusetts 02138

Michael B. McElroy

Tracing Upper Arctic Circulation Via Barium, Oxygen Isotopes and Dissolved Organic Matter (DOM) Fluorescence

OPP 9707459

08/15/1997–07/31/1998

(OPP) \$49,059

Oregon State University

Corvallis, Oregon 97331-5503

Kelly K. Falkner

Unidata: 1993–1998

ATM 9218790

06/10/1994–09/30/1998

(OPP) \$1,076 (Arctic funding component only)

University Corporation for Atmospheric Research

Boulder, Colorado 80307-3000

David W. Fulker

US–German Cooperative Research: Mesoscale Modeling of the Wintertime Atmospheric Circulation in the Greenland Area

INT 9603416

04/22/1997–04/30/1999

(INT) \$13,800

Ohio State University Research Foundation

Columbus, Ohio 43210-1002

David H. Bromwich

Variations in Upper Atmospheric Constituents' Density and Thermodynamics in the Polar Cusp and Polar Cap Regions over Longyearbyen, Svalbard

ATM 9528593

05/06/1996–04/30/1998

(ATM) \$100,000

Emory–Riddle Aeronautical University

Daytona Beach, Florida 32114-3900

Gulamabas G. Sivjee

Water Cycle Variations in Northern High Latitudes

ATM 9319952

03/31/1994–09/30/1998

(ATM) \$81,700

University of Illinois–Urbana/Champaign

Champaign, Illinois 61801-3070

John E. Walsh

A Collaborative Proposal on Particle Dynamics in an Arctic Ecosystem: Role of Enzymatic Hydrolysis in Carbon Export

OPP 9709945

08/28/1997–07/31/1998

(OPP) \$83,971

Oregon State University

Corvallis, Oregon 97331

Ian D. Walsh

OPP 9710029

08/28/1997–07/31/1998

(OPP) \$48,088

University of Washington

Seattle, Washington 98195-7940

Jody W. Deming

Analysis of DNA From Permafrost Specimens

OPP 9617068

12/02/1996–11/30/1997

(OPP) \$50,000

University of California–Los Angeles

Los Angeles, California 90095-1606

Robert K. Wayne

Ecology and Conservation of High-Altitude Siberian Lakes

OPP 9725155

07/02/1997–06/30/1998

(OPP) \$10,369

University of Kansas–Main Campus

Lawrence, Kansas 66045-2106

Cynthia A. Annett

Ecophysical Limits to Northern Breeding Distributions of Arctic Sandpipers

OPP 9696134

04/05/1996–05/31/1999

(OPP) \$111,901

University of Missouri–Saint Louis

Saint Louis, Missouri 63121-4499

Robert E. Ricklefs

Effects of Species Traits and Biodiversity on Ecosystem Processes in Arctic Tundra

OPP 9523247

09/23/1996–08/31/1998

(OPP) \$72,350

University of California–Berkeley

Berkeley, California 94720-3140

F. Stuart Chapin

Extracellular Carbon and Sulfur Production by Arctic Phytoplankton during the Spring Bloom

OPP 9709779

08/20/1997–07/31/1998

(OPP) \$50,000

University of California–SD Scripps Institute

La Jolla, California 92093-0218

Maria Vernet

OPP 9711723

08/14/1997–07/31/1998

(OPP) \$50,000

Bigelow Laboratory for Ocean Sciences

West Boothbay Harbor, Maine 04578

Patricia A. Matrai

Global Change and the Carbon Balance of Arctic Ecosystems: The Importance of Carbon-Nutrient Interactions in Soils

OPP 9615563

03/19/1997–03/31/1998

(DEB) \$236,912

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

Knut J. Nadelhoffer

Hormone–Behavior Adaptations in Arctic Birds

OPP 9530826

07/24/1996–06/30/1998

(OPP) \$161,765

University of Washington

Seattle, Washington 98195-1800

John C. Wingfield

Interactions between Plant Chemicals and Microbial Communities through Forest Succession in the Alaskan Taiga: Collaborative Research

DEB 9622788

04/30/1996–05/31/1998

(DEB) \$55,000

Brigham Young University

Provo, Utah 84602

Rex G. Cates

Key Connections in Arctic Aquatic Landscapes

OPP 9615949

05/19/1997–04/30/1998

(OPP) \$983,505

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

John E. Hobbie

Latitudinal Gradients, Natural Selection, and Variation in N:P Stoichiometry in Plankton: A Test of the Growth Rate Hypothesis

DEB 9527322

08/08/1996–07/31/1998

(DEB) \$3,530

Arizona State University

Tempe, Arizona 85287

James J. Elser

Molecular Genetics of Paraphyly of Brown Bears and Polar Bears: Interspecific Hybridization or Emergence from a Common Ancestor?

OPP 9707626

08/29/1997–08/31/1998

(OPP) \$43,491

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7000

Gerald F. Shields

**Nematode Biodiversity in Soils of the Short Grass
Steppe**

DEB 9626813
08/15/1996–01/31/1998
(OPP) \$10,000 (DEB) \$9,670
Colorado State University
Fort Collins, Colorado 80523
Diana W. Freckman

**Phytoplankton Community Structure in the North
Water Polynya: Causes and Consequences**

OPP 9707527
09/09/1997–08/31/2000
(OPP) \$60,000
University of Washington
Seattle, Washington 98195-7940
Joyce Lewin

**Plasticity of Life History Traits in Arctic Charr:
Use of Retrospective Data to Couple Migration
Data with Environmental Variation**

OPP 9530081
08/16/1996–07/31/1998
(OPP) \$101,153
University of Hawaii–Manoa
Honolulu, Hawaii 96822
Richard L. Radtke

**Presidential Faculty Fellows Program: Transport
of Carbon, Nitrogen, Phosphorus, and Sulfur
Through Arctic Tundra Ecosystems**

OPP 9553064
12/04/1995–12/31/1997
(OPP) \$108,982
University of Michigan
Ann Arbor, Michigan 48109-1048
George W. Kling

**Prolonged Production and Trophic Transfer to
Predators: Processes at the Inner Front of the
Southeastern Bering Sea: Collaborative Research**

OPP 9617236
03/04/1997–02/28/1999
(OPP) \$162,995
University of Texas–Austin
Austin, Texas 78373-5015
Terry E. Whitledge

OPP 9617287
03/04/1997–02/28/1999
(OPP) \$440,841
University of California–Irvine
Irvine, California 92717
George L. Hunt

**Small Grant for Exploratory Research (SGER):
Evolution of Reproductive Mode in Arctic Sea
Stars (*Echinodermata: Asteroidea: Asteroiidae*)**

OPP 9707806
04/10/1997–06/30/1998
(OPP) \$49,970
Louisiana State University & A&M College
Baton Rouge, Louisiana 70803-1725
David W. Foltz

**Small Grant for Exploratory Research (SGER):
Breeding Adaptations in Birds at Extreme High
Latitude**

OPP 9708594
04/10/1997–06/30/1998
(OPP) \$39,502
University of Washington
Seattle, Washington 98195-1800
P. Dee Boersma

**Successional Processes in Taiga Forests of Interior
Alaska: A Long Term Ecological Research
(LTER) Program for Study of Controls of
Subarctic Forest Development**

DEB 9211769
08/24/1992–04/30/1999
(DEB) \$670,000
University of Alaska–Fairbanks
Fairbanks, Alaska 94720-3140
F. Stuart Chapin

**The Arctic Long-Term Ecological Research
(LTER) Project: Terrestrial and Freshwater
Research on Ecological Controls**

DEB 9211775
08/20/1992–10/31/1997
(DEB) \$600,000
Marine Biological Laboratory
Woods Hole, Massachusetts 02543
John E. Hobbie

**The Importance of Foraging Pattern on
Reproductive Success in the Northern Fur Seal,
*Callorhinus Ursinus***

OPP 9500072
04/17/1995–04/30/1998
(OPP) \$37,119
University of California–Santa Cruz
Santa Cruz, California 95064
Daniel P. Costa

The Physiology and Biochemistry of Organic Osmolytes in Arctic Fishes

OPP 9423920

06/19/1995–06/30/1998

(OPP) \$33,972

University of Nevada–Las Vegas

Las Vegas, Nevada 89154-4004

James A. Raymond

What Are the Sources and Significance of Dissolved Organic Carbon and Nutrient Signals within the Arctic Basin?

OPP 9617341

06/17/1997–05/31/1998

(OPP) \$99,449

University of Texas–Austin

Austin, Texas 78373-5015

Terry E. Whitley

Active Seismic Zones of Interior Alaska

EAR 9706318

05/16/1997–05/31/1999

(EAR) \$150,000

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Jeffrey Freymueller

Aerogeophysics in the Canada Basin: Collaborative Research

OPP 9531249

06/27/1996–05/31/1998

(OPP) \$102,332

University of Texas–Austin

Austin, Texas 78759-8500

Lawrence A. Lawver

OPP 9626701

06/27/1996–05/31/1998

(OPP) \$215,456

Department of Navy–Naval Research Laboratory

Washington, District of Columbia 20375-5350

John M. Brozena

Atmospheric Contamination of Russian Soils (1895–Present)

SBER 9601272

09/10/1996–08/31/1998

(SBER) \$5,000

SUNY–Albany

Albany, New York 12222

Andrei Lapenis

An Integrated Modeling and Experimental Study of the Formation and Dynamics of Patterned Ground

OPP 9530809

05/24/1996–05/31/1998

(OPP) \$107,208

University of Washington

Seattle, Washington 98195-1360

Bernard Hallet

OPP 9530860

05/24/1996–05/31/1998

(OPP) \$58,755

University of California–SD Scripps Institute

La Jolla, California 92093-0225

Bradley Werner

Atmospheric Dust in North Central Greenland Ice: North Grip

OPP 9616146

04/17/1997–03/31/1998

(OPP) \$199,998

Columbia University

New York, New York 10964-8000

Pierre E. Biscaye

Determining the Reliability of Using Cosmogenic Nuclides to Date Arctic Beach Sediment

OPP 9618844

04/18/1997–05/31/1998

(OPP) \$88,318

University of Kansas–Main Campus

Lawrence, Kansas 66045

John C. Gosse

Emplacement of the Ultramafic Massifs of the Kenai Peninsula, Alaska and Their Possible Relationship to the Border Ranges Fault System

EAR 9706699

07/24/1997–07/31/1998

(EAR) \$46,086

Boston University

Boston, Massachusetts 02215

Timothy M. Kusky

History of Quaternary Ice Sheets on Arctic Islands, Phase I: Integrated Approach Using Dating of Terrestrial Glacial Deposits, Glacially Abraded Bedrock and Marine Shorelines

OPP 9530857

07/22/1996–06/30/1998

(OPP) \$119,711

University of Arizona

Tucson, Arizona 85721

Marek G. Zreda

Influence of Climate and Environmental Factors on the Thermal Regime of the Active Layer and Permafrost

OPP 9531220
08/12/1996–07/31/1998
(OPP) \$100,976
University of Alaska–Fairbanks
Fairbanks, Alaska 99775-7320
Thomas E. Osterkamp

Investigation of the Effects of Climatic Change and Human Activities on Discontinuous Permafrost in Alaska

OPP 9423426
04/21/1995–06/30/1998
(OPP) \$75,070
University of Alaska–Fairbanks
Fairbanks, Alaska 99775-7320
Thomas E. Osterkamp

Late Quaternary Dynamics of the Labrador/Foxe Sectors of the Laurentide Ice Sheet, Eastern Canadian Arctic

EAR 9510063
07/31/1995–07/31/1998
(EAR) \$97,234
University of Colorado–Boulder
Boulder, Colorado 80309-0250
Gifford H. Miller

Mount Erebus Volcano Observatory

OPP 9419267
07/05/1995–06/30/1998
(OPP) \$2,800 (Arctic funding component only)
New Mexico Institute of Mining & Technology
Socorro, New Mexico 87801
Philip R. Kyle

Paleozoic Faunal Affinity Studies in West-Central and East-Central Alaska

EAR 9312854
05/17/1994–01/31/1998
(EAR) \$5,000
University of Oregon–Eugene
Eugene, Oregon 97403
Norman M. Savage

Pleistocene Glacial Ice Cover and Interglacial Paleoclimatic History in the NE Russian Arctic–Comparisons with Alaska

OPP 9423730
07/12/1995–06/30/1998
(OPP) \$76,560 (POWRE) \$23,086
University of Massachusetts–Amherst
Amherst, Massachusetts 01003-5820
Julie Brigham-Grette

Rates of Glacial Erosion in Southern Alaska

EAR 9628675
07/18/1996–07/31/1998
(EAR) \$105,625
University of Washington
Seattle, Washington 98195-1360
Bernard Hallet

Seismic Study of the Iceland Hotspot

EAR 9417918
03/21/1996–03/31/1998
(EAR) \$132,415
Princeton University
Princeton, New Jersey 08544
W. J. Morgan

Testing Earth System Models with Paleoenvironmental Observations (TEMPO)

ATM 9510668
07/31/1995–08/31/1998
(OPP) \$25,000 (EAR) \$235,000
University of Wisconsin–Madison
Madison, Wisconsin 53706
John E. Kutzbach

ATM 9523584
08/11/1995–08/31/1998
(EAR) \$124,952
University of Oregon–Eugene
Eugene, Oregon 97403
Patrick J. Bartlein

ATM 9523585
10/19/1995–10/31/1998
(EAR) \$140,000
Brown University
Providence, Rhode Island 02912
Thompson Webb

The Strand Fiord Large Igneous Province: A Multidisciplinary Investigation of its Origin and Paleomagnetic Record

OPP 9531007
05/21/1996–05/31/1998
(OPP) \$138,876
University of Rochester
Rochester, New York 14627
John A. Tarduno

Workshop on Paleoenvironments of Beringia

OPP 9617429
05/01/1997–02/28/1998
(OPP) \$32,031 (INT) \$15,570
University of Colorado–Boulder
Boulder, Colorado 80309-0450
Scott A. Elias

A Tracer Release Experiment in the Greenland Sea

OCE 9529605

05/01/1996–04/30/1998

(OCE) \$74,994

University of Wisconsin–Madison

Madison, Wisconsin 53706-1490

Kim A. Van Scoy

Abrupt Onset of Large-Scale Northern Hemisphere Glaciation: Are Volcanoes the Smoking Gun?

OCE 9506716

02/17/1996–02/28/1998

(OCE) \$65,000

University of Michigan

Ann Arbor, Michigan 48109-1063

David K. Rea

Abundance, Biomass, Vertical Distribution and Selected Process Studies of Arctic Ocean Zooplankton: A Collaborative Proposal for Ancillary Use of the Surface Heat Budget of the Arctic Ocean (SHEBA) Platform

OCE 9707182

07/30/1997–07/31/1998

(OPP) \$5,000 (OCE) \$77,628

University of Rhode Island

Kingston, Rhode Island 02881

Robert G. Campbell

OCE 9707184

07/30/1997–01/31/1999

(OPP) \$20,000 (OCE) \$55,737

Woods Hole Oceanographic Institution

Woods Hole, Massachusetts 02543

Carin J. Ashjian

Carbon Oxidation and Denitrification Rates in Sediments of the Chukchi Sea

OPP 9530774

06/17/1996–05/31/1998

(OPP) \$76,143

Bigelow Laboratory for Ocean Sciences

West Boothbay Harbor, Maine 04575

John P. Christensen

Deep Structure of a Hotspot Influenced Rifted Volcanic Margin: A Joint U.S.–Danish Seismic Experiment off SE Greenland

OCE 9416631

05/21/1996–05/31/1998

(OCE) \$233,035

Woods Hole Oceanographic Institution

Woods Hole, Massachusetts 02543

W. S. Holbrook

Fluxes of Dissolved Inorganic, Dissolved Organic and Particulate Carbon Associated with Water Masses of the Arctic Ocean Based on Samples from the 1996 U.S.N. Pargo Cruise

OPP 9622621

04/15/1996–04/30/1999

(OPP) \$123,804

Columbia University

New York, New York 10964

Raymond N. Sambrotto

Improved Instrumentation for Arctic Submarine-Based Geophysical Surveys: Collaborative Research

OPP 9615283

08/22/1996–08/31/1998

(OPP) \$317,296 (OCE) \$50,000

Columbia University

New York, New York 10964-8000

Dale N. Chayes

OPP 9615666

08/22/1996–08/31/1998

(OPP) \$25,911

University of Hawaii–Manoa

Honolulu, Hawaii 96822

Margo H. Edwards

Influence of Jokulhlaups on Deep-Sea Sedimentation Adjacent to the Iceland Hotspot

OCE 9402296

02/24/1995–01/31/1998

(OCE) \$53,694

University of Rhode Island

Kingston, Rhode Island 02882

Steven Carey

Integrated Geophysical Study of the Arctic Mid-Ocean Ridge and Alpha Ridge from a Nuclear Submarine: Collaborative Research

OPP 9618436

06/09/1997–02/28/1998

(OPP) \$75,589

Columbia University

New York, New York 10964-8000

James R. Cochran

OPP 9619251

06/09/1997–05/31/1998

(OPP) \$1

University of Hawaii–Manoa

Honolulu, Hawaii 96822

Margo H. Edwards

**Modeling Studies of Eddies under Arctic Sea Ice:
Collaborative Research**

OPP 9614107

04/15/1997–03/31/1998

(OPP) \$40,000

North Carolina State University
Raleigh, North Carolina 27695
Ping-Tung Shaw

OPP 9709952

04/08/1997–03/31/1998

(OPP) \$39,683

University of Maryland–Center for Estuarine
Research
Cambridge, Maryland 21613
Shenn-Yu Chao

**Ocean–Ice Sheet Interactions in the North
Atlantic Prior to ~130,000 Years Ago**

OCE 9509997

09/08/1995–08/31/1998

(OCE) \$101,560

Columbia University
New York, New York 10964-8000
Gerard C. Bond

**Oxygen, Nutrient and Salinity Analyses in the
Eastern Arctic Ocean**

OCE 9521382

04/25/1996–03/31/1998

(OCE) \$53,019

University of California–SD Scripps Institute
La Jolla, California 92093-0214
James H. Swift

Polar Sea Convective Instabilities

OPP 9530530

07/30/1996–06/30/1998

(OPP) \$101,400

Naval Postgraduate School
Monterey, California 93943
Roland W. Garwood

**Polymer Physics of Marine Gels: Dynamics of
Dissolved Organic Carbon (DOC–POC) Studied
by Dynamic Laser Scattering Spectroscopy using
Phaeocystis Gels as a Model**

OPP 9615197

01/07/1997–12/31/1998

(OPP) \$182,734

University of Washington
Seattle, Washington 98195
Pedro Verdugo

**Professional Opportunities for Women in
Research and Engineering (POWRE): An Arctic
Ocean Time-Series of Dissolved Inorganic Carbon**

OCE 9753170

09/26/1997–09/30/1999

(OCE) \$74,980

Florida State University
Tallahassee, Florida 32306-4320
Patricia L. Yager

***R/V Alpha Helix* Ship Operations Support**

OCE 9703848

03/31/1997–12/31/1998

(OPP) \$463,838 (OCE) \$180,855

University of Alaska–Fairbanks
Fairbanks, Alaska 99664
T. D. Smith

***R/V Alpha Helix* Shipboard Scientific Support
Equipment**

OCE 9619210

05/03/1997–04/30/1999

(OCE) \$106,673

University of Alaska–Fairbanks
Fairbanks, Alaska 99664
T. D. Smith

***R/V Cape Henlopen* Ship Operations–1997**

OCE 9707084

02/06/1997–12/31/1999

(OPP) \$24,000 (Arctic funding component only)

Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543
Richard F. Pittenger

***R/V GYRE* Ship Operations**

OCE 9703492

04/08/1997–12/31/1998

(OPP) \$28,125

Texas A&M Research Foundation
College Station, Texas 77843
Edwin W. Shaar

**Seasonal Study of Production and Respiration in
the Central Arctic**

OCE 9708088

05/16/1997–11/30/1998

(OPP) \$50,000 (OCE) \$88,734

Oregon State University
Corvallis, Oregon 97331-5503
Patricia A. Wheeler

Submarine Cruise: Tracer Studies of the Large-Scale Circulation of the Upper Waters in the Canadian Basin

OPP 9529834

06/17/1996–05/31/1998

(OPP) \$87,730

Columbia University

New York, New York 10964-8000

Peter Schlosser

Submarine Profiling of Arctic Properties: Temperature, Salinity and Ice Draft

OPP 9619180

05/16/1997–04/30/1998

(OPP) \$65,100

SAI Science Applications International Corporation

San Diego, California 92121-1522

Peter N. Mikhalevsky

Support for the Science Experiment Project (SCICEX) Special Data Acquisition from a U.S. Navy Nuclear Submarine Platform

OPP 9726160

07/22/1997–01/31/1998

(OPP) \$111,388

Naval Undersea Warfare Center

San Diego, California 92106-3521

Mike Hacking

Synthesis and Integration of Riverine, Oceanic and Sea Ice Tracer/Contaminant Data with High Resolution Coupled Ocean–Sea Ice Models

OPP 9708924

09/03/1997–08/31/1998

(OPP) \$75,000

Columbia University

New York, New York 10964

Stephanie L. Pfirman

Tracing Riverine Inputs and Ventilation Processes of the Upper Arctic by Means of Submarine-Mounted On-Line Chemical Sensors

OPP 9622603

05/15/1996–04/30/1998

(OPP) \$73,167 (OCE) \$30,000

Oregon State University

Corvallis, Oregon 97331-5503

Kelly K. Falkner

Validation of NASA Scatterometer from Satellite (NSCAT) Remotely Sensed Sea Ice Conditions as a Predictor of Environmental Conditions

OPP 9711001

04/16/1997–03/31/1998

(OPP) \$49,702

Brigham Young University

Provo, Utah 84602

Perry J. Hardin

Viral Diversity and Mortality of Phyto- and Bacterioplankton in the Arctic Ocean

OPP 9623130

05/07/1996–04/30/1998

(OPP) \$68,997

University of California–SD Scripps Institute

La Jolla, California 92093-0202

Farooq Azam

Viral Diversity and Mortality of Sea-Ice Bacteria and Algae in the Arctic Ocean

OPP 9617045

07/23/1997–07/31/1998

(OPP) \$120,671

University of California–SD Scripps Institute

La Jolla, California 92093-0202

Farooq Azam

A Cooperative Ice Core Paleoclimate Study of Monsoon Variability as Archived in the Dasuopu Glacier, China

ATM 9523237

04/25/1996–04/30/1998

(EAR) \$397,673

Ohio State University Research Foundation

Columbus, Ohio 43210-1002

Lonnie G. Thompson

A New Concept in Glacier Mass Balance

OPP 9707515

09/04/1997–08/31/1998

(OPP) \$200,003

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Keith Echelmeyer

Assessment of Variations in the Snow Accumulation Rate in Northern Greenland

OPP 9423530

03/29/1995–09/30/1998

(OPP) \$80,556

University of Colorado–Boulder

Boulder, Colorado 80309-0449

Anne W. Nolin

Atmospheric Transport and Deposition of Chemical Constituents at Summit, Greenland: Interpretation of the Greenland Ice Sheet Project (GISP2) Ice Core

OPP 9423410

06/16/1995–05/31/1998

(OPP) \$7,000

Carnegie Mellon University

Pittsburgh, Pennsylvania 15213

Cliff I. Davidson

Basal Morphology and Dynamics of a Temperate Surge-Type Glacier

OPP 9423477

04/13/1995–06/30/1998

(OPP) \$204,108

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

William D. Harrison

Climatic Impacts of the Greenland Ice Sheet

OPP 9707557

09/09/1997–07/31/2000

(OPP) \$250,000

Ohio State University Research Foundation

Columbus, Ohio 43210-1002

David H. Bromwich

Development of Laser-Based Resonance Ionization Spectroscopy Techniques for 81Kr and 85Kr Measurements in the Geosciences

EAR 9410695

08/30/1994–08/31/1998

(OPP) \$5,000 (Arctic funding component)

(EAR) \$3,708

University of Tennessee–Knoxville

Knoxville, Tennessee 37996-0140

Norbert Thonnard

Firn Properties and Processes at Shallow Coring Sites in Greenland

OPP 9530737

04/12/1996–04/30/1998

(OPP) \$33,483

U.S. Army Cold Region Research and Engineering Laboratory (USACRREL)

Hanover, New Hampshire 03755-1290

Mary R. Albert

Direct Measurement of the *In Situ* Stress Tensor at Depth in Glacier Ice: Collaborative Research

OPP 9531450

07/29/1996–06/30/1998

(OPP) \$149,418

University of Colorado–Boulder

Boulder, Colorado 80309-0450

W. Tad Pfeffer

OPP 9531565

08/05/1996–07/31/1998

(OPP) \$63,984

University of Wyoming

Laramie, Wyoming 82071

Neil F. Humphrey

Global Glacier Mass Balance Synthesis

OPP 9530782

09/06/1996–08/31/1998

(OPP) \$94,593

University of Colorado–Boulder

Boulder, Colorado 80309

Mark F. Meier

Ice Core Analysis and Physical Glaciology of the Galena Creek Rock Glacier, Wyoming: Collaborative Research

EAR 9710061

03/27/1997–03/31/1998

(OPP) \$30,000 (EAR) \$10,529

University of Wyoming

Laramie, Wyoming 82071

Neil F. Humphrey

Ice–Radar and Satellite Remote-Sensing Studies of Glaciers and Ice Sheets, II

OPP 9531501

04/15/1996–03/31/1998

(OPP) \$18,601 (Arctic funding component only)

Saint Olaf College

Northfield, Minnesota 55057

Robert W. Jacobel

Isotopic Analyses on the North Greenland Ice Core Project (NGRIP) Deep Ice Core

OPP 9615232

05/16/1997–04/30/1998

(OPP) \$145,225

University of Colorado–Boulder

Boulder, Colorado 80309-0450

James W. White

Late Quaternary Glaciation of Northern Novaya Zemlya, Russia: Collaborative Research

OPP 9529350

07/12/1996–06/30/1998

(OPP) \$60,509

University of Colorado–Boulder

Boulder, Colorado 80309-0250

Gifford H. Miller

OPP 9796024

10/28/1996–06/30/1998

(OPP) \$90,540

University of Illinois–Chicago

Chicago, Illinois 60607-7059

Steven L. Forman

Late Quaternary Ice Sheet Extent, Chronology, and Paleogeography, East Greenland Margin/Denmark Strait: Implications for the Arctic and North Atlantic Oceans

OPP 9707161

08/28/1997–08/31/1999

(OPP) \$204,024

University of Colorado–Boulder

Boulder, Colorado 80309-0450

Anne Jennings

Observations and Modeling of Flow and Fracture Processes Leading to Iceberg Calving: Collaborative Research

OPP 9614493

06/11/1997–05/31/1998

(OPP) \$136,679

University of Colorado–Boulder

Boulder, Colorado 80309-0450

W. Tad Pfeffer

OPP 9614505

06/12/1997–05/31/1998

(OPP) \$43,432

U.S. Geological Survey–Water Resources Division

Anchorage, Alaska 98416-0001

Robert M. Krimmel

Operation and Maintenance of the U.S. National Ice Core Laboratory

OPP 9634659

05/09/1996–10/31/2002

(OPP) \$90,000 (Arctic funding component only)

U.S. Geological Survey

Reston, Virginia 22090

Joan J. Fitzpatrick

Pleistocene Sea-Level and Glacial Fluctuations, Coastal Ahklun Mountains, Southwest Alaska

OPP 9529940

06/17/1996–05/31/1998

(OPP) \$59,891

Utah State University

Logan, Utah 84322-4505

Darrell Kaufman

Relationships between Climate and Glacier Variations in Western North America

ATM 9530691

05/15/1996–04/30/1998

(OPP) \$30,000 (EAR) \$44,923

University of Washington

Seattle, Washington 98195

Howard Conway

Rheology of Basal Ice

OPP 9423422

03/09/1995–03/31/1998

(OPP) \$6,670

University of Minnesota–Twin Cities

Minneapolis, Minnesota 55455

Roger Hooke

Tritium in Basal Ice and Debris Bands: Demonstration of Freeze-On from Subglacial Waters

OPP 9530757

07/31/1996–06/30/1998

(OPP) \$10,000

Lehigh University

Bethlehem, Pennsylvania 18015

Edward B. Evenson

Workshop on Tidewater Glaciers

OPP 9701756

03/28/1997–11/30/1997

(OPP) \$13,870

Ohio State University Research Foundation

Columbus, Ohio 43210-0001

Cornelis J. van der Veen

Research Experience for Undergraduates (REU) Site: Environmental Chemistry and Biochemistry in Alaska

OPP 9501808

07/10/1995–06/30/1998

(OPP) \$47,000

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7000

Lawrence K. Duffy

**Intergovernmental Personnel Act (IPA) Mobility
Assignment**

OPP 9729092

09/30/1997–12/31/1997

(OPP) \$27,265

University of Nebraska–Lincoln

Lincoln, Nebraska 68588-0135

Douglas Siegel-Causey

Intergovernmental Personnel Act (IPA) Support

OPP N/A

Fiscal Year 1997

(OPP) \$19,253

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

**Science Priorities for NSF's Arctic Natural
Sciences Program**

OPP 9707783

03/18/1997–02/28/1998

(OPP) \$105,100

National Academy of Sciences

Washington, District of Columbia 20418

Chris Elfring

Scientific Meetings and Panel Support

OPP N/A

Fiscal Year 1997

(OPP) \$19,060

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

**Support for Graduate Attendance at the Arctic
Workshops, 1997–1999**

OPP 9614129

12/02/1996–11/30/1998

(OPP) \$22,661

University of Colorado–Boulder

Boulder, Colorado 80309-0450

John T. Andrews

**Support Services for the Arctic Natural Sciences
Program**

OPP 9741301

03/27/1997–03/31/1998

(OPP) \$39,448

Friday Systems Services, Inc.

Lanham–Seabrook, Maryland 20850

Thomas L. Binaut

ARCTIC SYSTEM SCIENCE

1000 Years of Proxy Climate Records from the North Atlantic Region: A Contribution to the Arctic System Science (ARCSS) Plan for Integration: Collaborative Research

OPP 9418845
09/17/1994–11/30/1998
(OPP) \$15,000
University of Colorado–Boulder
Boulder, Colorado 80309-0450
Astrid Ogilvie

A Multimillennial Temperature Reconstruction from Far Northeastern Eurasia

ATM 9709661
08/01/1997–07/31/1998
(OPP) \$54,910
University of Arizona
Tucson, Arizona 85721
Malcolm K. Hughes

A Synthesis and Analysis of the Regional Impacts of Global Change in the Western Arctic/Bering Sea

OPP 9614126
01/29/1997–01/31/1998
(OPP) \$113,516
University of Alaska–Fairbanks
Fairbanks, Alaska 99775-7740
Gunter E. Weller

Cooperative Agreement: Support of the National Center for Atmospheric Research

ATM 9403608
12/10/1993–09/30/1998
(OPP) \$207,877 (Arctic funding component only)
University Corporation for Atmospheric Research
Boulder, Colorado 80307-3000
Richard Anthes

Ecological Research Aircraft with Remote Sensing and Flux Instrumentation

DBI 9604793
03/27/1997–03/31/1999
(OPP) \$119,650 (BIR) \$119,650
San Diego State University Foundation
San Diego, California 92182-4614
Walter C. Oechel

Facilitation of Arctic Research in the Barrow Environmental Observatory

OPP 9706494
09/30/1997–08/31/2000
(OPP) \$113,500 (Other) \$47,600
Barrow Arctic Science Consortium
Barrow, Alaska 99723
Glenn W. Sheehan

Organizational Support to the U.S. Arctic Science Program

OPP 9404321
06/06/1994–04/30/1998
(OPP) \$332,551
Arctic Research Consortium of the United States (ARCUS)
Fairbanks, Alaska 99708-0684
Nicholas E. Flanders

Scientific Management of the National Ice Core Laboratory

OPP 9617009
12/11/1996–10/31/1998
(OPP) \$25,000 (Arctic funding component only)
University of New Hampshire
Durham, New Hampshire 03824-3525
Paul A. Mayewski

Spatial and Temporal Variability of Arctic Mixed Layer from Russian and American Data

OPP 9708635
08/15/1997–07/31/1998
(OPP) \$75,000
University of Washington
Seattle, Washington 98105-6698
James H. Morison

Standing Stocks and Production Rates in the Canada, Makarov, and Eurasian Basins of the Arctic Ocean: The Role of Lower Trophic Level Processes in the Arctic Carbon Cycle

OPP 9400306
05/04/1994–07/31/1997
(OPP) \$13,423 (OCE) \$13,422
Oregon State University
Corvallis, Oregon 97331-5503
Patricia A. Wheeler

**Sustainability of Arctic Communities:
Interactions Between Global Changes, Public
Policies, and Ecological Processes**

OPP 9521459

09/01/1995–08/31/1998

(OPP) \$545,162

University of Alaska–Anchorage

Anchorage, Alaska 99508

John A. Kruse

**The Outflow of Fresh Water from the Canadian
Archipelago: Synoptic Currents, Hydrography,
and Long Term Forcing**

OPP 9708349

06/16/1997–05/31/1999

(OPP) \$182,417

Rutgers University–New Brunswick

New Brunswick, New Jersey 08903

Andreas Munchow

The Solar Cycle and Terrestrial Aridity

OPP 9711609

08/01/1997–07/31/2000

(OPP) \$255,626

SUNY–Buffalo

Buffalo, New York 14260-1500

Michael Ram

**University Corporation for Atmospheric Research
(UCAR) Educational Outreach and Related
Activities**

ATM 9417693

06/21/1994–09/30/1998

(OPP) \$70,426 (Arctic funding component only)

University Corporation for Atmospheric Research

Boulder, Colorado 80307-3000

Richard Anthes

**Cosmogenic Radionuclides in the Greenland Ice
Sheet Project (GISP2) Ice Core: ^{10}Be , ^{26}Al , and
 ^{36}Cl**

ATM 9707492

05/16/1997–08/31/1999

(OPP) \$151,800

University of California–Berkeley

Berkeley, California 94720-7450

Kunihiko Nishiizumi

**Delta and Deuterium Excess in the Greenland Ice
Sheet Project (GISP2) Ice Core**

OPP 9321564

06/21/1994–06/30/1998

(OPP) \$88,723

University of Colorado–Boulder

Boulder, Colorado 80309-0450

James W. White

**Extraction and Analysis of Methyl Bromide in
Greenland Ice Cores**

ATM 9707535

07/09/1997–06/30/1998

(OPP) \$90,000 (ATM) \$40,000

University of Miami–School of Marine and

Atmospheric Sciences

Miami, Florida 33149-1098

Eric S. Saltzman

**Greenland Ice Sheet Project (GISP2)–Science
Management Office (1997–1999)**

OPP 9614503

11/27/1996–11/30/1997

(OPP) \$55,757

University of New Hampshire

Durham, New Hampshire 03824-3525

Paul A. Mayewski

**History of Forcing Significance of Greenland Ice
Sheet Project (GISP2) Record**

ATM 9706921

09/18/1997–08/31/1998

(OPP) \$100,000

University of New Hampshire

Durham, New Hampshire 03824-3525

Paul A. Mayewski

**Nested General Circulation Model
(GCM)/Mesoscale Model Studies of Large, Rapid
Holocene and Late-Glacial Climate Changes:
Synthesis with the Greenland Ice Core Records:
Collaborative Research**

OPP 9614927

04/24/1997–05/31/1999

(OPP) \$124,256

Penn State University–University Park

University Park, Pennsylvania 16802

Richard B. Alley

OPP 9614907

04/24/1997–05/31/1999

(OPP) \$84,514

University of New Mexico

Albuquerque, New Mexico 87131

Peter J. Fawcett

**Relationships Between Air and Snow Chemistry
in Winter at Summit, Greenland: Cooperative
Research**

OPP 9530818

09/18/1996–08/31/1997

(OPP) \$4,000

University of California–Irvine

Irvine, California 92717

Donald R. Blake

Tephrochronology of the Greenland Ice Sheet Project (GISP2) Ice Core

OPP 9423441

04/20/1995–03/31/1998

(OPP) \$5,000

University of New Hampshire

Durham, New Hampshire 03824-3525

Gregory A. Zielinski

The Record of Cosmogenic *In Situ* and Atmospheric ¹⁴C in the Greenland Ice Sheet Project (GISP2) Ice Core

OPP 9530897

09/10/1996–08/31/1999

(OPP) \$5,000

University of California–San Diego

San Diego, California 92093-0220

Devendra Lal

A Hierarchic Geographic Information System (GIS) for Studies of Process, Pattern and Scale in Arctic Ecosystems

OPP 9318530

06/14/1994–05/31/1999

(OPP) \$119,827

University of Colorado–Boulder

Boulder, Colorado 80309-0450

Donald A. Walker

A Regional Model of the Arctic Land–Atmosphere System

OPP 9318533

07/01/1994–05/31/1998

(OPP) \$106,110

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7740

Gunter E. Weller

Active Layer/Landscape Interactions: A Retrospective and Contemporary Approach in Arctic Alaska

OPP 9612647

05/28/1996–05/31/1998

(OPP) \$167,715(ATM) \$19,268

SUNY–Albany

Albany, New York 12222

Frederick E. Nelson

Arctic System Science (ARCSS) Land–Atmosphere–Ice Interactions (LAI) Science Management Office

OPP 9614135

12/11/1996–12/31/1998

(OPP) \$109,994

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7740

Gunter E. Weller

Arctic–Boreal Transects: Synthesis of Information on the Effects of Climate and Vegetation Diversity on Ecosystem and Global Processes

OPP 9523396

09/20/1995–08/31/1998

(OPP) \$7,050

University of California–Berkeley

Berkeley, California 94720-3140

F. Stuart Chapin

Attaining Ecological Understanding at the Regional Level: The Kuparuk River as a Model Arctic System

OPP 9318529

05/17/1994–05/31/1998

(OPP) \$94,851

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

John E. Hobbie

Belowground Carbon Sources and Sinks in Arctic Tundra Ecosystems

OPP 9615942

03/31/1997–03/31/1998

(OPP) \$247,285

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

Knute J. Nadelhoffer

Biodiversity Consequences of Global Climate Change

DEB 9711621

09/04/1997–09/30/2000

(OPP) \$45,000 (Arctic funding component only)

University of Kansas–Main Campus

Lawrence, Kansas 66045

A. Townse Peterson

CO₂ and Methane Fluxes by Ecosystem Type and Long-Term Feedback Relationships with the Atmosphere

OPP 9318531

07/01/1994–05/31/1998

(OPP) \$64,936

University of California–Irvine

Irvine, California 92697-3100

William S. Reeburgh

OPP 9318532

07/01/1994–12/31/1998

(OPP) \$103,641

University of California–Berkeley

Berkeley, California 94720-3140

F. Stuart Chapin

Climatic and Vegetational Oscillations during the Last Glacial–Interglacial Transition in Alaska

ATM 9619583

03/19/1997–03/31/1998

(OPP) \$79,175

University of Minnesota–Twin Cities

Minneapolis, Minnesota 55414

Feng S. Hu

Comparative Responses of Moist and Dry Arctic Tundra to Altered Snow and Temperature Regimes

OPP 9400083

07/13/1994–06/30/1998

(OPP) \$114,171

University of Colorado–Boulder

Boulder, Colorado 80309-0450

Marilyn D. Walker

OPP 9617643

09/24/1996–08/31/2000

(OPP) \$120,796

University of Wyoming

Laramie, Wyoming 82071-3354

Jeffrey M. Welker

Detection of Heat and Moisture Movement in the Upper Permafrost, Northern Alaska

OPP 9529783

05/13/1996–05/31/1998

(OPP) \$66,483

University of Cincinnati

Cincinnati, Ohio 45221

Kenneth M. Hinkel

Effects of Climate Change and Sea Level Rise on Trophic Dynamics and Ecosystem Processes of the Coastal Tundra Ecosystem, the Yukon-Kuskokwim Delta, Alaska

OPP 9214970

08/19/1993–01/31/1999

(OPP) \$278,036

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7000

James S. Sedinger

Effects of Increased Season Length on Plant Phenology, Community Composition, Productivity, and Ecosystem Carbon Fluxes in Alaskan Tundra: Implications for Climate Warming

OPP 9321626

07/20/1994–08/31/1997

(OPP) \$11,400

Florida International University

Miami, Florida 33199

Steven F. Oberbauer

OPP 9615845

11/29/1996–11/30/1998

(OPP) \$94,858

Florida International University

Miami, Florida 33199

Steven F. Oberbauer

Evolutionary Response of Arctic Plant Populations to Climate Change

OPP 9321917

07/05/1994–06/30/1998

(OPP) \$78,209

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-0180

Kent E. Schwaegerle

Hydrologic Analyses of Nested Watersheds in the Siberian Arctic

EAR 9614387

01/29/1997–01/31/1999

(OPP) \$108,850 (EAR) \$108,850 (INT) \$24,300

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-5860

Larry D. Hinzman

Hydrologic Linkages with Arctic Freshwater and Terrestrial Systems

OPP 9318535

06/01/1994–05/31/1999

(OPP) \$220,018

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-5860

Douglas L. Kane

Land–Atmosphere–Ice Interactions (LAI) Flux Study: CO₂ and Methane Fluxes by Ecosystem Type and Long-Term Feedback Relationships with the Atmosphere

OPP 9318534

07/01/1994–05/31/1998

(OPP) \$87,000

University of Alaska–Fairbanks

Fairbanks, Alaska 99775

Chien-Lu Ping

Large Area Estimates of Carbon Fluxes in Arctic Landscapes

OPP 9318527

06/01/1994–12/31/1998

(OPP) \$306,644

San Diego State University Foundation

San Diego, California 92182-4614

Walter C. Oechel

Primary Production in Arctic Ecosystems: Interacting Mechanisms of Adjustment to Climate Change

OPP 9415411

04/10/1995–03/31/1998

(OPP) \$192,750

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

Edward B. Rastetter

Relationships between Air and Snow Chemistry in Winter at Summit, Greenland: Cooperative Research

OPP 9530575

09/18/1996–08/31/1998

(OPP) \$11,108

University of Arizona

Tucson, Arizona 85721

Roger C. Bales

OPP 9530579

09/24/1996–08/31/1998

(OPP) \$36,865

University of New Hampshire

Durham, New Hampshire 03824-3525

Jack E. Dibb

Response of Arctic Tundra to Variation of Temperature

OPP 9714103

07/14/1997–06/30/1998

(OPP) \$201,003

Michigan State University

East Lansing, Michigan 48824-1312

Patrick J. Webber

Study of Photoplastic Effect on Ice

DMR 9413362

01/03/1995–05/30/1998

(OPP) \$25,000 (DMR) \$60,000

Dartmouth College

Hanover, New Hampshire 03755-8000

Victor F. Petrenko

Terrestrial Ecology and Global Change (TECO): Patterns and Controls of Temporal Variation in CO₂ Sequestration and Loss in Arctic Ecosystems

DEB 9730004

09/24/1997–09/30/1998

(OPP) \$250,000 (Arctic funding component only)

San Diego State University Foundation

San Diego, California 92182-4614

Walter C. Oechel

Terrestrial Ecology and Global Change (TECO): The Role of Wildfire in Alaska: Experimental and Regional Approaches to Improved Understanding of Boreal Feedbacks to Climate (FROSTFIRE)

DEB 9728963

09/16/1997–08/31/2000

(DEB) \$1,200,000

University of Alaska–Fairbanks

Fairbanks, Alaska 94720-3140

F. Stuart Chapin

The Distribution of O₂ in Air: Implications for the Global Carbon Cycle

ATM 9523696

03/21/1997–03/31/1998

(OPP) \$15,000 (Arctic funding component)

(ATM) \$70,021 (OCE) \$55,000

University of Rhode Island

Kingston, Rhode Island 02882

Michael L. Bender

The Role of Snow Cover and Its Distribution in Governing Heat and Mass Exchange in the Arctic

OPP 9415386

09/29/1994–08/31/1998

(OPP) \$146,145

U.S. Army Cold Region Research and Engineering

Laboratory (USACRREL)

Hanover, New Hampshire 03755-0170

Matthew Sturm

Variations in Circumpolar Frozen Ground Conditions and Model Scenarios of Future Conditions: Collaborative Research

OPP 9614537
12/17/1996–11/30/1998
(OPP) \$93,195
SUNY–Albany
Albany, New York 12222
Frederick E. Nelson

OPP 9614557
12/17/1996–11/30/1998
(OPP) \$100,649
University of Colorado–Boulder
Boulder, Colorado 80309-0449
Roger G. Barry

A Hydrographic Tracer Study of the Canadian Archipelago Outflow from the Arctic Ocean

OPP 9708420
05/16/1997–05/31/1999
(OPP) \$232,546
Oregon State University
Corvallis, Oregon 97331-5503
Kelly K. Falkner

Analysis of Arctic Ice Draft Profiles Obtained by Submarines

OPP 9634513
08/26/1996–07/31/1999
(OPP) \$82,500
U.S. Army Cold Region Research and Engineering Laboratory (USACRREL)
Hanover, New Hampshire 03755
Walter B. Tucker

Applications of Small Research Aircraft to Understanding Horizontal Inhomogeneities in Surface Fluxes for the Surface Heat Budget of the Arctic Ocean (SHEBA)

OPP 9701523
06/16/1997–05/31/1998
(OPP) \$78,187
NOAA–Air Resources Laboratory
Oak Ridge, Tennessee 37831-2456
Steven B. Brooks

OPP 9701880
06/06/1997–05/31/1998
(OPP) \$40,457
University of Colorado–Boulder
Boulder, Colorado 80309-0311
James A. Maslanik

Contemporary Water and Constituent Balances for the Pan-Arctic Drainage System: Continent to Coastal Ocean Fluxes

OPP 9524740
09/11/1995–08/31/1999
(OPP) \$59,987
Marine Biological Laboratory
Woods Hole, Massachusetts 02543
Bruce J. Peterson

Dense Water Transport off Arctic Continental Shelves: Numerical Studies of Shelf-Basin Interaction

OPP 9422292
04/12/1995–03/31/1998
(OPP) \$74,626 (OCE) \$74,626
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543
Glen G. Gawarkiewicz

Deployment of Surface-Based, Active Remote Sensors during Surface Heat Budget of the Arctic Ocean (SHEBA)

OPP 9701730
05/19/1997–04/30/1998
(OPP) \$188,660
NOAA–Environmental Research Laboratory
Boulder, Colorado 80303-3328
Taneil Uttal

Determining the Internal Pack Ice Stress and Its Relationship to Ice Deformation During Surface Heat Budget of the Arctic Ocean (SHEBA)

OPP 9707375
07/07/1997–06/30/1998
(OPP) \$50,622
U.S. Army Cold Region Research and Engineering Laboratory (USACRREL)
Hanover, New Hampshire 03755
Jacqueline A. Richter-Menge

Development of a 3-D Sea Ice Model for Climate Applications

OPP 9614492
04/03/1997–03/31/1998
(OPP) \$103,842
University of Colorado–Boulder
Boulder, Colorado 80309-0429
Judith A. Curry

Development of a Sample, Lightweight Cloud/Radiation Instrumentation Package and Balloon Platform for Deployment at the Surface Heat Budget of the Arctic Ocean (SHEBA) Ice Camp

OPP 9504356

08/17/1995–07/31/1998

(OPP) \$42,693

University of Alaska–Fairbanks
Fairbanks, Alaska 99775-7320
Knut Stamnes

Documenting, Understanding, and Predicting the Aggregate Scale Surface Radiation Flux for the Surface Heat Budget of the Arctic Ocean (SHEBA): Collaborative Research

OPP 9701757

05/22/1997–06/30/1998

(OPP) \$41,108

Boston University
Boston, Massachusetts 02118-1401
Jeffrey R. Key

OPP 9703127

05/21/1997–06/30/1998

(OPP) \$176,692

University of Colorado–Boulder
Boulder, Colorado 80309-0429
Judith A. Curry

Evaluating Heat Exchange Between Arctic Leads and Underlying Water of Adjacent Ice by Be-7 Measurements

OPP 9701067

05/20/1997–04/30/1998

(OPP) \$66,059

University of Miami–School of Marine and Atmospheric Sciences
Miami, Florida 33149
David C. Kadko

Experimental and Theoretical Study of Crack Dynamics in Sea Ice: Collaborative Research

OPP 9707052

08/28/1997–08/31/1999

(CMS) \$119,261

Dartmouth College
Hanover, New Hampshire 03755-8000
Victor F. Petrenko

OPP 9726412

08/28/1997–08/31/1999

(CMS) \$83,452

Tufts University
Medford, Massachusetts 02155
Mark L. Kachanov

Explicit Modeling of the Summertime Surface Heat Budget of the Arctic Ocean (SHEBA) Sea Ice Pack: Collaborative Research

OPP 9701592

06/09/1997–05/31/1998

(OPP) \$10,828

University of Washington
Seattle, Washington 98105-6698
Michael Steele

OPP 9701990

06/09/1997–05/31/1998

(OPP) \$35,500

Jet Propulsion Laboratory
Pasadena, California 91109
Benjamin Holt

OPP 9702040

06/09/1997–05/31/1998

(OPP) \$6,125

U.S. Army Cold Region Research and Engineering Laboratory (USACRREL)
Hanover, New Hampshire 03755-1290
Mark Hopkins

Hydrography of the Canada Basin

OPP 9709130

06/13/1997–08/31/1998

(OPP) \$317,239

University of California–SD Scripps Institute
La Jolla, California 92093-0214
James H. Swift

Investigations of the Western Arctic: Transport and Water Properties in the Bering Strait and Over the Chukchi Shelf

OPP 9219847

05/27/1993–11/30/1997

(OCE) \$15,103

University of Washington
Seattle, Washington 98105-6698
Knut Aagaard

Marine Terrestrial Variability of the Labrador Sea Region over Decadal to Millennial Time Scales

ATM 9709918

09/03/1997–08/31/1998

(OPP) \$119,702 (EAR) \$8,404

University of Colorado–Boulder
Boulder, Colorado 80309-0450
Jonathan T. Overpeck

**Measurement of Chlorofluorocarbon (CFC)
Samples Collected from the Eastern Eurasian
Basin on *Polarstern Cruise Ark XI/1***

OPP 9615312
12/11/1996–11/30/1998
(OPP) \$105,000 (OCE) \$105,000
Columbia University
New York, New York 10964-8000
William M. Smethie

**Measuring, Parameterizing, and Modeling
Atmospheric Surface Fluxes During Surface Heat
Budget of the Arctic Ocean (SHEBA)**

OPP 9701390
06/18/1997–05/31/1998
(OPP) \$37,527
Naval Postgraduate School
Monterey, California 93943-5114
Peter S. Guest

OPP 9701766
05/16/1997–04/30/1998
(OPP) \$134,601
NOAA–Environmental Research Laboratory
Boulder, Colorado 80303
C. W. Fairall

OPP 9702025
05/16/1997–04/30/1998
(OPP) \$68,204
U.S. Army Cold Region Research and Engineering
Laboratory (USACRREL)
Hanover, New Hampshire 03755
Edgar L. Andreas

**Modeling the Effects of Leads upon the
Atmosphere and the Surface Heat Budget of the
Arctic Ocean (SHEBA)**

OPP 9702583
04/23/1997–04/30/2000
(OPP) \$89,925
University of Utah
Salt Lake City, Utah 84112
Steven Krueger

Northern Research Basins Workshop

OPP 9614368
12/02/1996–11/30/1998
(OPP) \$22,959
University of Alaska–Fairbanks
Fairbanks, Alaska 99775-5860
Douglas L. Kane

**Observations of Ice–Ocean Momentum and Heat
Fluxes at the Surface Heat Budget of the Arctic
Ocean (SHEBA) Ice-Camp**

OPP 9701797
06/11/1997–05/31/1998
(OCE) \$196,378
University of California–SD Scripps Institute
La Jolla, California 92093-0213
Robert Pinkel

**Regional Ice Thickness Distributions for Surface
Heat Budget of the Arctic Ocean (SHEBA)**

OPP 9701514
05/27/1997–04/30/1998
(OPP) \$86,304
University of Washington
Seattle, Washington 98195
Ronald W. Lindsay

**Science Support for U.S.–Canada–Japan Surface
Heat Budget of the Arctic Ocean (SHEBA)
Projects in the Arctic**

OPP 9714630
05/22/1997–05/31/1999
(OPP) \$500,000
Department of Navy–Office of Naval Research
Arlington, Virginia 22217
Randall S. Jacobson

**Surface Heat Budget of the Arctic Ocean
(SHEBA) Logistics Support**

OPP 9714349
05/27/1997–05/31/1999
(OPP) \$796,612
Department of Navy–Office of Naval Research
Arlington, Virginia 22217-5660
Michael L. Van Woert

**Surface Heat Budget of the Arctic Ocean
(SHEBA) Project Office**

OPP 9505093
06/28/1995–12/31/1997
(OPP) \$49,745
University of Washington
Seattle, Washington 98105-6698
Richard E. Moritz

**Surface Heat Budget of the Arctic Ocean
(SHEBA) Project Office, Phase 2**

OPP 9720144
06/30/1997–06/30/1999
(OPP) \$375,601 (OCE) \$100,000
University of Washington
Seattle, Washington 98105-6698
Richard E. Moritz

Surface Heat Budget of the North Water Polynya
OPP 9708045
08/11/1997–07/31/1998
(OPP) \$123,042
University of Miami
Coral Gables, Florida 33149-1098
Peter J. Minnett

Temporal Remote Sensing of Seasonal Inundation and Ice Breakup on Arctic Russian Rivers: Controls on Water, Sediment, and Nutrient Delivery to the Arctic Ocean
OPP 9708997
07/29/1997–07/31/1999
(OPP) \$176,162
University of California–Los Angeles
Los Angeles, California 90095-1524
Laurence C. Smith

Tethered Balloon Measurements of Cloud–Radiation–Sea Ice Interactions at the Surface Heat Budget of the Arctic Ocean (SHEBA) Ice Camp: An Integrated Experimental and Modeling Study: Collaborative Research
OPP 9701840
06/02/1997–05/31/1998
(OPP) \$30,000
University of California–SD Scripps Institute
La Jolla, California 92093-0221
Dan Lubin

OPP 9703126
06/02/1997–05/31/1998
(OPP) \$350,082
University of Alaska–Fairbanks
Fairbanks, Alaska 40292
Knut Stamnes

OPP 9703565
06/02/1997–05/31/1998
(OPP) \$76,185
University of Nevada–Desert Research Institute
Reno, Nevada 89506
Randolph D. Borys

The Role of the Arctic Ocean in Global Climate: Identifying the Ice Export from the Arctic Ocean into the Greenland Sea During the Last 300 ka by IRF Tracers
OPP 9614451
01/22/1997–01/31/1999
(OPP) \$249,953
Old Dominion Research Foundation
Norfolk, Virginia 23529-0276
Dennis A. Darby

The Science Experiment Project (SCICEX) Ice Thickness Distribution Test Using a U.S. Navy Nuclear Submarine as a Research Platform
OPP 9617343
03/27/1997–03/31/2000
(OPP) \$136,466 (OCE) \$136,465
University of Washington
Seattle, Washington 98105-6698
D. Andrew Rothrock

Tritium/He-3 and O-18 Measurements During the Arctic Climate System Study (ACSYS) Expedition
OPP 9530795
04/15/1996–04/30/1999
(OCE) \$37,530
Columbia University
New York, New York 10964-8000
Peter Schlosser

Upper Ocean Effects on the Surface Heat Budget of the Arctic (SHEBA)
OPP 9701383
05/19/1997–04/30/1998
(OCE) \$140,849
Columbia University
New York, New York 10964-8000
Douglas G. Martinson

OPP 9701391
06/19/1997–05/31/1998
(OCE) \$65,000
Naval Postgraduate School
Monterey, California 93943
Timothy P. Stanton

OPP 9701558
05/27/1997–05/31/1998
(OCE) \$102,000
McPhee Research
Naches, Washington 98937
Miles G. McPhee

OPP 9701831
05/19/1997–04/30/1998
(OCE) \$196,481
University of Washington
Seattle, Washington 98105-6698
James H. Morison

Workshop on the Study of Arctic Change in Ocean Circulation
OPP 9712315
08/07/1997–07/31/1998
(OPP) \$31,079
University of Washington
Seattle, Washington 98105-6698
James H. Morison

Applied Paleoecology: Vegetation History, Soil Carbon Accumulation and Climatic Interactions of the Peatlands on the North Slope, Alaska

ATM 9416858

07/05/1996–12/31/1998

(OPP) \$68,643

Ohio State University Research Foundation

Columbus, Ohio 43210-1002

Wendy R. Eisner

Lake Ice Modeling and the Paleoenvironment of the Eastern Canadian Arctic over the Last 21 kA:

Collaborative Research

OPP 9614632

11/29/1996–11/30/1998

(OPP) \$98,333

Colorado State University

Fort Collins, Colorado 80523

Roger A. Pielke

OPP 9614667

10/31/1996–11/30/1998

(OPP) \$130,398

University of Colorado–Boulder

Boulder, Colorado 80309-0450

John T. Andrews

Late Quaternary Climates of Western Beringia

ATM 9317569

04/20/1994–09/30/1998

(OPP) \$133,149

University of Washington

Seattle, Washington 98195

Patricia M. Anderson

Late Quaternary Climatic and Vegetation History of the Alaskan North Slope: Part II, Analysis of Paleo Records

ATM 9423392

04/14/1995–03/31/1998

(OPP) \$128,000

University of Washington

Seattle, Washington 98195-2100

Linda B. Brubaker

Long-Term, High-Resolution Paleoclimate in the Wrangell Mountain Range in Alaska

ATM 9709095

07/31/1997–07/31/1998

(OPP) \$30,000 (EAR) \$100,000

Columbia University

New York, New York 10964-8000

Gordon C. Jacoby

Paleoclimate (O to > 14 kA) of W and NW Iceland, A Comparison of Lake and Near-Shore Marine Proxy Records: A U.S.–Iceland Contribution to Paleoclimates from Arctic Lakes and Estuaries (PALE)

ATM 9531397

04/22/1996–04/30/1999

(OPP) \$119,607

University of Colorado–Boulder

Boulder, Colorado 80309-0450

John T. Andrews

Paleoenvironmental Reconstructions and Paleoclimate Implications for the Last Interglacial and the 40 to 10 kA Time Windows in the Eastern Canadian Arctic

ATM 9708418

08/04/1997–07/31/1998

(OPP) \$50,000 (EAR) \$50,000

University of Colorado–Boulder

Boulder, Colorado 80309-0250

Gifford H. Miller

Paleoenvironmental Time Series From Postglacial Lake Basins on Kola Peninsula, Russia:

Collaborative Research

ATM 9632926

05/06/1996–06/30/1998

(OPP) \$60,670

University of California–Los Angeles

Los Angeles, California 90095-1524

Glen M. MacDonald

ATM 9796013

07/01/1996–06/30/1999

(OPP) \$87,323

University of Illinois–Chicago

Chicago, Illinois 60680-6998

Steven L. Forman

Paleohydrology Across Central Alaska: A Multiproxy Approach to Lake-Level Records:

Collaborative Research

ATM 9707398

07/28/1997–08/31/1998

(OPP) \$35,454

University of Alaska–Fairbanks

Fairbanks, Alaska 99775

Bruce P. Finney

ATM 9707625

07/28/1997–08/31/1998

(OPP) \$80,000 (EAR) \$33,268

University of Massachusetts–Amherst

Amherst, Massachusetts 01003-5820

Mark B. Abbott

**Paleoclimates from Arctic Lakes and Estuaries
(PALE) Steering Committee, Data Coordination,
and Community Radiocarbon Dating**

ATM 9526384

08/07/1995–08/31/1998

(OPP) \$130,421 (ATM) \$45,144

University of Colorado–Boulder

Boulder, Colorado 80309-0250

Gifford H. Miller

**Quaternary Paleoclimatic Variations of Beringia:
Large-Scale Controls and Regional Responses**

ATM 9532074

04/16/1996–05/31/1998

(OPP) \$83,567

University of Oregon–Eugene

Eugene, Oregon 97403

Patrick J. Bartlein

Intergovernmental Personnel Act (IPA) Support

OPP N/A

Fiscal Year 1997

(OPP) \$19,715 (Other) \$661

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

Scientific Meetings and Panel Support

OPP N/A

Fiscal Year 1997

(OPP) \$10,643

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

**U.S. Support for Central Scientific Coordination
and Integration Activities of the International
Geosphere–Biosphere Programme (IGBP)**

OCE 9320648

09/30/1993–08/31/1998

(OPP) \$34,912 (Arctic funding component only)

International Geosphere

Stockholm, Z-Sweden

Chris G. Rapley

OCE 9619897

09/29/1997–08/31/1998

(OPP) \$69,292 (Arctic funding component only)

International Geosphere

Stockholm, Z-Sweden

Chris G. Rapley

ARCTIC SOCIAL SCIENCES AND EDUCATION

A Directory of Arctic Social Scientists

OPP 9422303

10/14/1997–01/31/1997

(OPP) \$2,999

Individual Award

Arlington, Pennsylvania 17011-4355

Ernest S. Burch, Jr.

Alaska Native Science Commission

OPP 9527788

04/12/1996–02/28/1998

(OPP) \$92,469

Alaska Federation of Natives

Anchorage, Alaska 99501

Dorothy M. Larson

An Archaeological Resource Dilemma in Perspective: Values and Practices on St. Lawrence Island

OPP 9633760

07/26/1996–07/31/1998

(OPP) \$9,965

Indiana University–Bloomington

Bloomington, Indiana 47405

Richard Wilk

Athabaskan–Eyak–Tlingit Comparative Lexical Database

SBER 9410909

04/21/1995–04/30/1998

(OPP) \$36,054 (SBER) \$36,054

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7680

Jeffrey A. Leer

Conference: Northern Native Communities Development

OPP 9725719

07/29/1997–07/31/1998

(OPP) \$36,320

University of Alaska–Anchorage

Anchorage, Alaska 99508-4614

Victor Fischer

Dissertation Grant: The Dynamics of Memory and History in a Former Soviet Penal Colony: An Anthropological Study of Magadan, Siberia

OPP 9707960

06/17/1997–06/30/1998

(OPP) \$15,000

Columbia University

New York, New York 10027

David C. Koester

Dissertation Improvement Grant: A Comparative Analysis of Inuit Mortuary Practices from Prehistoric Times to the Influences of Christianity

OPP 9614714

12/17/1996–11/30/1997

(OPP) \$9,845

University of Wisconsin–Milwaukee

Milwaukee, Wisconsin 48824-1118

Lynne G. Goldstein

Dissertation Improvement Grant: Home Watching TV: Traditional Knowledge and Social Change in the Kluane Region of Canada's Yukon Territory

OPP 9614319

01/21/1997–12/31/1997

(OPP) \$10,000

Johns Hopkins University

Baltimore, Maryland 21218

Katherine Verdery

Dissertation Improvement Grant: Subsistence Economy and Labrador Inuit Culture Change

OPP 9616802

01/15/1997–12/31/1998

(OPP) \$20,000

CUNY Hunter College

New York, New York 10021

Thomas H. McGovern

Dissertation Research: An Examination of Lithic Technology during the Transition from Late Pleistocene to Modern Environments in the Upper Kolyma Region, Western Beringia

OPP 9612532

08/02/1996–06/30/1998

(OPP) \$8,012

University of Washington

Seattle, Washington 98195

Donald K. Grayson

Dissertation Research: Cancer at Point Hope, Alaska: Science and the Politics of Knowledge

SBER 9713961

06/24/1997–06/30/1998

(SBER) \$7,000

Arizona State University

Tempe, Arizona 85287

Stephen S. Kulis

Dissertation Research: The Organization of Complexity: A Study of Late Prehistoric Village Organization in the Eastern Aleutian Region

OPP 9629992

07/05/1996–05/31/1998

(OPP) \$8,265

University of Wisconsin–Madison

Madison, Wisconsin 53706

Herbert D. Maschner

Doctoral Dissertation Research: Aging and Intergeneration Family Dynamics in Copper Inuit Community

OPP 9618271

12/19/1996–12/31/1997

(OPP) \$10,000

Penn State University–University Park

University Park, Pennsylvania 16802

Patricia Draper

Early Prehistoric Occupation of Southwestern Alaska

OPP 9614995

03/05/1997–02/28/1998

(OPP) \$28,910

Washington State University

Pullman, Washington 99164

Robert E. Ackerman

Historical Dimensions of Sustainability in the North Atlantic ca. 2000 BP–Present

OPP 9523529

09/24/1996–08/31/1998

(OPP) \$72,702

CUNY Hunter College

New York, New York 10021

Thomas H. McGovern

Identification of Historic Photographs from Northwest Greenland

OPP 9707905

05/21/1997–05/31/1998

(OPP) \$3,500

Bowdoin College

Brunswick, Maine 04011

Genevieve M. LeMoine

Information Dissemination Activities for Women and Girls (IDA/WG): Alaska Women in Science

HRD 9552947

09/15/1995–08/31/1998

(OSR) \$1,372

KCAW–FM Raven Radio

Sitka, Alaska 99835

Ken Fate

Integrating Traditional and Scientific Knowledge in Large Mammal Research

OPP 9709971

06/19/1997–06/30/1999

(OPP) \$54,802

Dartmouth College

Hanover, New Hampshire 03755-3577

Nicholas E. Flanders

Research Support

OPP 9615900

08/05/1996–07/31/1997

(OPP) \$7,200

Old Dominion Research Foundation

Norfolk, Virginia 23529-0090

Carole L. Seyfrid

Late Prehistoric and Ipiutak Settlements in the Brooks Range

OPP 9413112

08/15/1994–07/31/1998

(OPP) \$34,420 (OSR) \$33,310

SUNY–Brockport

Brockport, New York 12201

Richard E. Reanier

Late Quaternary Paleoecology and Archeology of Alaska's Alexander Archipelago

SBER 9722858

07/30/1997–06/30/2000

(OPP) \$9,975 (SBER) \$100,000

Denver Museum of Natural History

Denver, Colorado 80205-5798

E. James Dixon

North Atlantic Biocultural Coordination and Research Project

OPP 9222956

04/12/1993–09/30/1998

(OPP) \$130,428

CUNY Hunter College

New York, New York 10021

Thomas H. McGovern

Occupational, Educational and Residential Choices of Arctic Youth: Longitudinal Comparison of High School Aspirations and Young Adult Behaviors

OPP 9319921

04/14/1994–09/30/1998

(OPP) \$108,802

Old Dominion Research Foundation

Norfolk, Virginia 23508-0369

Garland F. White

Population Contact and the Spread of the 1918–1919 Influenza Pandemic in the Central Subarctic

SBER 9615945

06/01/1997–05/31/2000

(OPP) \$10,000 (SBER) \$23,634

University of Missouri–Columbia

Columbia, Missouri 65211

Lisa Sattenspiel

Preparation of Internet Profiles on NSF Arctic Social Science Projects for Presentation on the Arctic Studies Center's Web Site

OPP 9632174

05/28/1996–05/31/1997

(OPP) \$2,000

Smithsonian Institution

Washington, District of Columbia 20560

William W. Fitzhugh

Qamani II: Toponyms and Site Information Regarding Lands Along the Tapqaq and Saniniq Coasts and In Bering Land Bridge National Preserve

OPP 9708443

07/18/1997–06/30/1998

(OPP) \$74,940

Shishmaref Native Corporation

Shishmaref, Alaska 99577

Susan W. Fair

Remote Sensing and Geographic Information System Development for Archaeological, Ecological, and Geomorphological Reconnaissance on the Peninsula

OPP 9630072

07/08/1996–06/30/1999

(OPP) \$88,949

University of Wisconsin–Madison

Madison, Wisconsin 53706

Herbert D. Maschner

Symposium: Ioann Veniaminov in Alaska and Siberia and His Contributions to Arctic Social Science, University of Alaska, Fairbanks, December 5–7, 1997

OPP 9709326

04/24/1997–03/31/1999

(OPP) \$10,000 (INT) \$10,000

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7720

Lydia T. Black

Social Structure, Agreement, and Conflict in Groups in Extreme and Isolated Environments: A Cross-Cultural Comparison: Collaborative Research

OPP 9530404

05/07/1997–03/31/1998

(OPP) \$5,000 (Arctic funding component)

(SBER) \$10,000

East Carolina University

Greenville, North Carolina 27834

Jeffrey C. Johnson

OPP 9610231

05/07/1997–03/31/1998

(OPP) \$5,000 (Arctic funding component)

(SBER) \$10,000

University of California–San Diego

San Diego, California 92037-0807

Lawrence A. Palinkas

OPP 9796301

06/15/1997–04/31/2001

(OPP) \$5,000 (Arctic funding component)

(SBER) \$10,000

University of Connecticut

Storrs, Connecticut 06269

James S. Boster

U.S.–Russia Joint Collaborative Research: Y Chromosome Variation in Native Human Populations of Siberia

OPP 9423429

08/18/1995–07/31/1998

(OPP) \$24,000

University of Arizona

Tucson, Arizona 85721

Michael F. Hammer

Visiting Professorships for Women (VPW): Yup'ik Conception of Wellness

HRD 9627078

08/28/1996–08/31/1998

(HRD) \$16,856

University of Alaska–Fairbanks

Fairbanks, Alaska 94305

Penelope M. Cordes

Western Aleutians Archaeological Paleobiological Project

OPP 9614472

01/27/1997–01/31/1998

(OPP) \$96,333

University of Kansas–Main Campus

Lawrence, Kansas 66045-7501

Dixie West

Western Arctic Whale Hunting Societies: Origins, Development Environmental Responses, and Contemporary Sociocultural Dimensions—Sociocultural Component

OPP 9634538
09/10/1996–08/31/1998
(OPP) \$17,267
University of Alaska—Anchorage
Anchorage, Alaska 99501
Roger K. Harritt

Workshop to Coordinate Projects Among Environmental and Cultural Researchers in Kamchatka, Russia, March 1997

OPP 9707060
03/28/1997–02/28/1998
(OPP) \$3,651 (INT) \$3,651
Columbia University
New York, New York 10027
David C. Koester

Workshop: Aleutian Research Consortium

OPP 9714926
08/06/1997–07/31/1999
(OPP) \$40,476
University of Wisconsin—Madison
Madison, Wisconsin 53706
Herbert D. Maschner

Yup'ik Elders in Museums: Central Yup'ik Indigenous Knowledge Project

OPP 9615086
01/07/1997–12/31/1998
(OPP) \$89,193
Association of Village Council Presidents
Bethel, Alaska 99516
Ann Fienup-Riordan

Yup'ik Women, Yup'ik Families: A Comparative Study of Siberian Yup'ik and St. Lawrence Island Yup'ik Family Life

OPP 9796084
01/15/1997–12/31/1998
(OPP) \$105,534
Indiana University—Bloomington
Bloomington, Indiana 47405
Carol Z. Jolles

A Scientific Group Communications and Collaborative Testbed for Upper Atmospheric Research

ESI 9216848
09/02/1993–02/28/1998
(IRI) \$250,329
University of Michigan
Ann Arbor, Michigan 48109-1092
Daniel E. Atkins

Adapting Yup'ik Elders' Knowledge: Pre-K-to-6 Math and Instructional Materials Development

ESI 9618099
03/07/1997–05/31/1998
(ESI) \$373,749
University of Alaska—Fairbanks
Fairbanks, Alaska 99775-0900
Jerry Lipka

Alaska Native/Rural Education Consortium for Systemic Integration of Indigenous and Western Scientific Knowledge

DESR 9554466
09/26/1995–08/31/2000
(DESR) \$2,000,000
Alaska Federation of Natives
Anchorage, Alaska 99501
Dorothy M. Larson

Partners in Science: To Further Math and Science Learning in Grades K–12 in the Fairbanks North Star Borough School District

REC 9618276
02/24/1997–01/31/1998
(RED) \$519,034
Fairbanks North Star Borough
Fairbanks, Alaska 99707-1250
Nicholas Stayrook

Project on Leading Alaska Reform in Science (POLARIS)

ESI 9454390
10/12/1994–10/31/1997
(ESI) \$537,628
Anchorage School District
Anchorage, Alaska 99519-6614
Robert M. Nanney

Rural Alaskan Environmental Education Program

DUE 9553680
07/14/1995–09/30/1998
(DUE) \$100,000
University of Alaska—SE Juneau
Juneau, Alaska 99835
John W. Carnegie

The Earth Systems Program Implementation Project (ESIP)

ESI 9454411
02/13/1995–08/31/1998
(ESI) \$390,860
Anchorage School District
Anchorage, Alaska 99508-3498
Judith Hurlburt

Alaska Native Science Commission

OPP 9527788

04/12/1996–02/28/1998

(OPP) \$5,000

Alaska Federation of Natives

Anchorage, Alaska 99501

Dorothy M. Larson

**Integrating Traditional and Scientific Knowledge
in Large Mammal Research**

OPP 9709971

06/19/1997–06/30/1999

(OPP) \$54,801

Dartmouth College

Hanover, New Hampshire 03755-3577

Nicholas E. Flanders

Intergovernmental Personnel Act (IPA) Support

OPP N/A

Fiscal Year 1997

(OPP) \$40,064

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

Scientific Meetings and Panel Support

OPP N/A

Fiscal Year 1997

(OPP) \$6,941

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

ARCTIC COORDINATION AND INFORMATION

Research at Undergraduate Institutions (RUI): Ice Scour Disturbance and the Structure of Arctic Bottom Communities

OPP 9321504
06/07/1994–11/30/1998
(OPP) \$5,781
San Jose State University Foundation
San Jose, California 95192-0139
Rikk G. Kvitek

Development of a Differential Frost Heave Model: Application to Patterned Ground Formation

OPP 9321405
06/23/1994–06/30/1998
(OPP) \$5,000
University of Colorado–Boulder
Boulder, Colorado 80309-0424
William B. Krantz

Arctic Environmental Data and Information (AEDI)

OPP 9728364
09/25/1997–09/30/1998
(OPP) \$100,000
U.S. Geological Survey–Denver
Denver, Colorado 80208
Douglas R. Posson

Arctic Research Commission (ARC)

OPP 9714570
06/02/1997–09/30/1998
(OPP) \$500,000
Arctic Research Commission
Arlington, Virginia 22230
Garrett W. Brass

Support to Interagency Arctic Research Policy Committee (IARPC) Staff

OPP 9622318
01/25/1996–12/31/1997
(OPP) \$62,051
U.S. Army Cold Region Research and Engineering
Laboratory (USACRREL)
Hanover, New Hampshire 03755-1290
David W. Cate

Field Stations and Marine Laboratories (FSML)– An Arctic Winter Residence Facility for the Toolik Field Station, Alaska

DBI 9714094
09/12/1997–08/31/1999
(OPP) \$98,000 (BIR) \$98,762
University of Alaska–Fairbanks
Fairbanks, Alaska 99775
Brian M. Barnes

Preparation of the Arctic Science, Engineering, and Education Directory of Awards: Fiscal Year 1997

OPP Purchase Order
10/1/97–2/28/98
(OPP) \$12,000
JLM Associates, Inc.
Rockville, Maryland 20853
Joy L. Motheral

Publication Costs

OPP N/A
Fiscal Year 1997
(OPP) \$29,578
National Science Foundation, Office of Polar
Programs
Arlington, Virginia 22230
Arctic Science Section

Support for the Arctic Logistics Information Access Service (ALIAS)

OPP 9200919
09/27/1993–12/30/1996
(OPP) \$15,118
Capital Systems Group, Inc.
Rockville, Maryland 20850
Raj N. Shah

OPP Purchase Order
10/01/1997–09/30/98
(OPP) \$14,091
JLM Associates, Inc.
Rockville, Maryland 20853
Joy L. Motheral

ARCTIC RESEARCH SUPPORT

A Conductivity Temperature Depth (CTD)/ Hydrographic Section Across the Arctic Ocean

OPP 9322546

04/01/1994–09/30/1997

(OPP) \$29,250

University of Washington

Seattle, Washington 98105-6698

Knut Aagaard

Continuing Operation of a Magnetometer Array on the Greenland Ice Cap (MAGIC) to Investigate Propagating Ionospheric Current Systems for Geospace Environment Modeling (GEM)

ATM 9501380

05/11/1995–05/30/1999

(OPP) \$86,976 (ATM) \$43,024

University of Michigan

Ann Arbor, Michigan 48109-2143

Vladimir O. Papitashvili

Intergovernmental Personnel Act (IPA) Support

OPP N/A

Fiscal Year 1997

(OPP) \$1,434

National Science Foundation, Office of Polar
Programs

Arlington, Virginia 22230

Arctic Science Section

Publication Costs

OPP N/A

Fiscal Year 1997

(OPP) \$1,593

National Science Foundation, Office of Polar
Programs

Arlington, VA 22230

Arctic Science Section

Research Experience for Undergraduates (REU)

Site: Summer Internships in Space Physics and Aeronomy

ATM 9709085

06/12/1997–06/30/1998

(OPP) \$5,000 (ATM) \$24,000

University of Alaska–Fairbanks

Fairbanks, Alaska 99775-7320

Roger W. Smith

ARCTIC LOGISTICS

Logistic and Engineering Support by the Polar Ice Coring Office (PICO)

OPP 9423042

08/30/1994–08/31/1999

(OPP) \$3,222,025 (Arctic funding component only)

University of Nebraska–Lincoln

Lincoln, Nebraska 68588-0135

Karl C. Kuivinen

Scientific Meetings and Panel Support

OPP N/A

Fiscal Year 1997

(OPP) \$48,540 (OCE) \$4,594

National Science Foundation, Office of Polar Programs

Arlington, Virginia 22230

Arctic Science Section

OTHER ARCTIC RESEARCH SUPPORT

Major Research Instrumentation: Development of a Polar Network of Cosmic Ray Observatories

OPP 9724293

09/04/1997–08/31/2000

(OPP) \$600,000 (MRI) \$600,000

Bartol Research Institute

Newark, Delaware 19716

John W. Bieber

Major Research Instrumentation: Panel Meeting Support

OPP N/A

Fiscal Year 1997

(OPP) \$1,822

National Science Foundation, Office of Polar Programs

Arlington, Virginia 22230

Arctic Science Section

Major Research Instrumentation: Temperature Reconstruction by Stable Isotope Analysis of Ice Cores from the Poles to the Tropics

OPP 9724416

08/28/1997–08/31/1998

(OPP) \$199,200

Ohio State University Research Foundation

Columbus, Ohio 43210-1002

Lonnie G. Thompson

Life in Extreme Environments (LExEn): Ecology of Microbial Systems in Extreme Environments: The Role of Nanoflagellates in Cold and Nutrient-Poor Arctic Freshwaters

OPP 9714327

09/04/1997–08/31/2000

(OPP) \$200,000 (DEB) \$100,000

Marine Biological Laboratory

Woods Hole, Massachusetts 02543

John E. Hobbie

Life in Extreme Environments (LExEn): Longevity and Diversity of Microorganisms Entrapped in Tropical and Polar Ice Cores

OPP 9714206

09/04/1997–09/30/2000

(OPP) \$240,005 (DEB) \$100,000

Ohio State University Research Foundation

Columbus, Ohio 43210

John N. Reeve

Life in Extreme Environments (LExEn): The Snow Alga Chlamydomonas Nivalis: Photosynthesis Under the Greatest Extremes of High Light, UV-B Radiation and Low Temperature on Earth

IBN 9714268

09/15/1997–08/31/2000

(OPP) \$15,015 (IBN) \$200,000

University of Wyoming

Laramie, Wyoming 82071-3434

Thomas C. Vogelmann

NSF's Modeling Institutions of Excellence Competition

OPP N/A

Fiscal Year 1997

(OPP) \$105,000

National Science Foundation, Office of Polar Programs

Arlington, Virginia 22230

Arctic Science Section

NSF's Recognition Awards for Integration of Research and Education

OPP N/A

Fiscal Year 1997

(OPP) \$67,333

National Science Foundation, Office of Polar Programs

Arlington, Virginia 22230

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NSF Administrative Costs

OPP N/A

Fiscal Year 1997

(OPP) \$44,132

National Science Foundation, Office of Polar Programs

Arlington, Virginia 22230

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