

UNIVERSITY OF OKLAHOMA

Office of Research Administration

PROPOSAL REPORT

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
99S0619 Eldon Matlick, Music Oklahoma Arts Council September 7, 1999 - September 6, 2000 Midwest Horn Workshop Artist Grant	\$2,937.00
99S0620 Sherril Christian, Chemistry & Biochemistry IASR John Scamehorn, Chemical Eng. & Materials Sci. IASR Oklahoma Alliance for Public Policy Research, Inc. Prime Agency is FD-CLARK January 1, 1999 - December 31, 1999 Deinking of Plastic Packaging Materials - Phase V	\$62,500.00
99S0622 John Greene, Geography EVAC Mark Morrissey, Ok. Climatological Survey EVAC National Science Foundation January 1, 2000 - December 30, 2002 Assessment of the Impacts of Data Availability and Assimilation on Mesoscale Weather Prediction Using Advanced Statistical Verification Methods: An Application for Regional Tactical Military Operations	\$316,745.00
99S0624 Peter Lamb, C I M M S CIMMS Michael Ward, C I M M S CIMMS National Science Foundation September 1, 1999 - August 31, 2001 Coupling Climate, Biophysical, and Economic Models to Demonstrate the Value of Seasonal-to-Interannual Climate Predictions for Wheat Production in Selected U.S. Regions	\$689,252.00

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0625</p> <p>Roger Frech, Chemistry & Biochemistry Eagle-Picher Industries, Inc. Prime Agency is DOD-AF January 26, 1999 - September 30, 1999 Battery Development Program</p>	<p>\$25,000.00</p>
<p>99S0626</p> <p>Stephen Cook, Ok. Biological Survey U.S. Department of Agriculture, Forestry Service June 1, 1999 - June 30, 2000 Impact of Stand Management Practices on the Diversity of Beetles in the Ouachita and Ozark National Forests</p>	<p>\$11,000.00</p>
<p>99S0627</p> <p>Caryn Vaughn, Ok. Biological Survey U.S. Department of Agriculture, Forestry Service June 1, 1999 - May 31, 2000 Mussel Biodiversity of the Mountain Fork River, Oklahoma and Arkansas</p>	<p>\$15,000.00</p>
<p>99S0628</p> <p>Kelvin Droegemeier, Meteorology Yvette Richardson, Center for the Analysis & Prediction of Storms National Science Foundation May 15, 1999 - May 14, 2002 Dynamics of Rotation and Scale Selection in Deep Convective Storms</p>	<p>\$545,850.00</p>
<p>99S0629</p> <p>John Scamehorn, Chemical Eng. & Materials Sci. IASR Sherril Christian, Chemistry & Biochemistry IASR Tappi Foundation January 1, 2000 - January 1, 2001 Removal of Pollutants from Bleach Plant Effluents Using Colloid Enhanced Ultrafiltration</p>	<p>\$40,000.00</p>

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
99S0630	
Michael Ward, C I M M S CIMMS	\$2,206,634.00
Peter Lamb, C I M M S CIMMS	
U.S. Department of State, Agency for International Development	
January 1, 1999 - December 31, 2003	
New Radio and Internet Technology for Communication of Weather and Climate Information to Rural Communities for Sustainable Development in Africa (RANET)	
99S0631	
John Scamehorn, Chemical Eng. & Materials Sci.	\$6,000.00
Sherril Christian, Chemistry & Biochemistry	
Surfactant Associates	
May 1, 1999 - June 30, 2000	
Use of Micellar-Enhanced Ultrafiltration for Removal/Recovery of Dissolved Organics and Metals from Water	
99S0632	
Steve Sherrod, Ok. Biological Survey	\$22,402.00
Donald Wolfe, Ok. Biological Survey	
David Wiedenfeld, Ok. Biological Survey	
Western Governors Association	
June 1, 1999 - September 30, 1999	
Factors Affecting Nesting Success and Mortality of Lesser Prairie-Chickens in New Mexico, 1999	
99S0633	
Carolyn Bremer, Music	\$1,300,234.00
James Faulconer, Music	
U.S. Department of Education	
September 1, 1999 - August 31, 2002	
National Initiative for Technology in Music Education	
99S0634	
Bruce Hoagland, Ok. Biological Survey	\$35,925.00
Bruce Hoagland, Geography	
State of Oklahoma, Secretary of Environment	
Prime Agency is EPA	
October 1, 1999 - September 30, 2000	
Development of an Aquatic and Wetland Plant Manual and Worldwide Web Site for Oklahoma	

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<p>99S0635</p> <p>Daniel Resasco, Chemical Eng. & Materials Sci. W. L. Gore and Associates July 1, 1999 - June 30, 2000 Catalysts for Low Temperature Abatement of NO</p>	<p>\$83,829.00</p>
<p>99S0636</p> <p>Shivakumar Raman, Industrial Eng. National Science Foundation August 1, 1999 - July 31, 2000 Fundamental Examination of the Frictional Boundary Conditions in Machining Using Fractals</p>	<p>\$50,000.00</p>
<p>99S0637</p> <p>Robert Dauffenbach, Center for Economic & Management Research State of Oklahoma, Health Care Authority May 1, 1999 - April 30, 2000 Economic Impact Analyses and Public Education Activities Regarding Medicaid Health Care Expenditures in the State of Oklahoma</p>	<p>\$71,000.00</p>
<p>99S0638</p> <p>J. R. Cruz, Electrical & Computer Eng. Northern Telecomm June 7, 1999 - June 6, 2000 Antenna Performance Comparisons and Applications to IS-2000</p>	<p>\$20,000.00</p>
<p>99S0639</p> <p>Don Wyckoff, Ok. Museum of Natural History U.S. Department of Defense, Army Corps of Engineers August 1, 1999 - January 3, 2000 Identification of Archeological Collections from Oklahoma Archeological Sites on U.S. Army Corps of Engineers Properties Now Curated at the Oklahoma Museum of Natural History</p>	<p>\$13,648.00</p>

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0640</p> <p>Shivakumar Raman, Industrial Eng. State of Oklahoma, Regents for Higher Education August 1, 1999 - July 31, 2000 Fundamental Examination of the Frictional Boundary Conditions in Machining Using Fractals</p>	<p>\$3,000.00</p>
<p>99S0641</p> <p>Md Zaman, Civil Eng. & Environmental Sci. Oklahoma Asphalt Pavement Association July 1, 1999 - September 30, 2000 Evaluation of Rutting Potential of Selected Mixes Using an Asphalt Pavement Analyzer</p>	<p>\$30,000.00</p>
<p>99S0642</p> <p>Md Zaman, Civil Eng. & Environmental Sci. U. S. Department of Transportation, Federal Highway Administration July 1, 1999 - September 30, 2000 Evaluation of Rutting Potential of Selected Mixes Using an Asphalt Pavement Analyzer</p>	<p>\$2,000.00</p>
<p>99S0643</p> <p>Md Zaman, Civil Eng. & Environmental Sci. State of Oklahoma, Department of Transportation July 1, 1999 - September 30, 2000 Evaluation of Rutting Potential of Selected Mixes Using an Asphalt Pavement Analyzer</p>	<p>\$104,129.00</p>
<p>99S0644</p> <p>Wilbur Porter, Engineering Dean's Office U.S. Department of Housing and Urban Development July 1, 1999 - June 30, 2001 Phase I of Planning for Incubator Operations at the Advanced Research Park</p>	<p>\$500,000.00</p>

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0645</p> <p>Stewart Ryan, Physics & Astronomy Ronald Kantowski, Physics & Astronomy Gregory Parker, Physics & Astronomy National Science Foundation January 1, 1900 - December 31, 2004 Short, Animated Instructional Videos for Physics Courses Illustrating Single Physical Concepts and Their Application to Modern Technology</p>	\$463,755.00
<p>99S0647</p> <p>Robert Brooks, Ok. Archaeological Survey State of Oklahoma, Department of Transportation Prime Agency is DOT-FHA June 1, 1999 - June 30, 2000 Statewide Inventory of Archaeological & Historic Resources</p>	\$24,897.00
<p>99S0648</p> <p>Robert Brooks, Ok. Archaeological Survey State of Oklahoma, Department of Transportation Prime Agency is DOT-FHA June 1, 1999 - June 30, 2000 Archaeological and Historic Compliance for Highway Construction</p>	\$99,418.00
<p>99S0649</p> <p>Nicholas Czaplewski, Ok. Museum of Natural History National Science Foundation January 1, 2000 - December 31, 2001 Systematic Studies of Tertiary (late Oligocene-Pliocene) Bats in Florida</p>	\$73,097.00
<p>99S0650</p> <p>Richard Broughton, Ok. Biological Survey Richard Broughton, Zoology National Science Foundation January 1, 2000 - December 31, 2001 Testing the Influence of Assumptions in Molecular Evolution on Phylogenetic Analysis</p>	\$250,750.00

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0652</p> <p>Joshua Wurman, Meteorology National Science Foundation January 1, 2000 - December 31, 2002 Hurricane Atmospheric Boundary Layer Structure at Landfall as Deduced by Ground Based Doppler Radar Observations</p>	\$270,214.00
<p>99S0655</p> <p>T.H. Lee Williams, Geosciences Dean's Office National Science Foundation February 24, 1999 - March 31, 2000 Supplement: vBNS Connection for the Oklahoma Consortium for Advanced Networking in Research</p>	\$284,666.00
<p>99S0657</p> <p>Arthur Breipohl, Electrical & Computer Eng. Connie Dillon, Research Center for Continuing Professional & Higher Ed Gary Emery, Business Administration Dean's Office Fred Lee, Electrical & Computer Eng. National Science Foundation September 1, 1999 - August 31, 2002 Energy Production and Risk Management in a Competitive Environment</p>	\$499,988.00
<p>99S0658</p> <p>Victor De Brunner, Electrical & Computer Eng. Tomasz Przebinda, Mathematics Murad Ozaydin, Mathematics National Science Foundation January 1, 2000 - December 31, 2002 Signal Processing on the Unit Sphere via Local Wavelets, Ramanujan Sets, and the Matching Pursuits Algorithm, with Application to 3-Dimensional Filtering</p>	\$431,899.00
<p>99S0659</p> <p>Lynda Kaid, Communication Kathleen Haynes, Library & Info. Studies National Endowment for the Humanities May 1, 2000 - April 30, 2002 Digitizing Holdings for Preservation and Access of Political Commercials</p>	\$193,443.00

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99S0660	
Kenneth Crawford, Ok. Climatological Survey	\$20,000.00
Mark Shafer, Ok. Climatological Survey	
Renee Mc Pherson, Ok. Climatological Survey	
J Michael Wolfenbarger, Ok. Climatological Survey	
Howard Johnson, Ok. Climatological Survey	
Dale Morris, Ok. Climatological Survey	
Ford Foundation	
August 1, 1999 - July 31, 2000	
The OK-FIRST Program	
99S0661	
Mary O'Hair, Educational Leadership & Policy Studies	\$600,000.00
Disney Learning Partnership	
January 1, 2000 - December 31, 2002	
Project O.N.E. S.T.E.P.: Oklahoma Networks for Excellence in Education (Science and Technology Enhancement Program for Elementary Schools)	
99S0662	
Kevin Kloesel, Ok. Climatological Survey	\$160,000.00
Renee Mc Pherson, Ok. Climatological Survey	
State of Oklahoma, Center for the Advancement of Science and Technology	
August 1, 1999 - July 31, 2001	
ONALERT - Mitigating the Effects of Severe Weather	
99S0663	
David Sabatini, Civil Eng. & Environmental Sci. IASR	\$115,053.00
John Scamehorn, Chemical Eng. & Materials Sci. IASR	
Integrated Petroleum Environmental Consortium	
Prime Agency is EPA	
October 1, 1999 - September 30, 2000	
Surfactant-Enhanced Treatment of Oil-Contaminated Soils and Oil-Based Drill Cuttings	
99S0665	
John Antonio, Computer Science	\$180,408.00
Texas Tech University	
Prime Agency is NSF	
September 1, 1999 - August 31, 2002	
Parallel High Performance Computing Optimization By Parallel Design, Real-Time Control and Computational Intelligence	

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
99S0666	
David Brown, GeoSystems	\$18,000.00
Scott March, GeoSystems	
Mary Banken, GeoSystems	
City of Midwest City	
June 21, 1999 - September 21, 1999	
Image Rectification and Digital Line Adjustment for the City of Midwest City	
99S0667	
John Antonio, Computer Science	\$180,408.00
Texas Tech University	
Prime Agency is NSF	
September 1, 1999 - August 31, 2002	
Using High Performance Computing for Decision-Based Design That Accounts for Modeling Error and Uncertainty	
99S0668	
John Antonio, Computer Science	\$439,283.00
Sudarshan Dhall, Computer Science	
Texas Tech University	
Prime Agency is DOD-ARP	
August 1, 1999 - December 31, 2000	
Configuring Embeddable Adaptive Computing Systems For Multiple Application Domains with Minimal Size, Weight, and Power	
99S0669	
Daniel Glatzhofer, Chemistry & Biochemistry	\$44,864.00
Brewer Science, Inc.	
Prime Agency is NSF	
January 1, 2000 - December 31, 2000	
Novel Approaches to PPV Based Electroluminescent Devices	
99S0670	
Cynthia Rogers, Economics	\$17,171.00
Jill Tao, Political Science	
Tennessee Valley Authority	
September 1, 1999 - September 20, 2000	
Quasi-Experimental Analysis of Economic Development Programs in Florida	

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0671</p> <p>Le Gruenwald, Computer Science Hermann Gruenwald, Management Information Systems National Science Foundation January 15, 2000 - January 14, 2003 An Intelligent Multimedia System to Teach Object-Oriented Design and Programming</p>	\$334,811.00
<p>99S0672</p> <p>Deborah Trytten, Computer Science Le Gruenwald, Computer Science State of Oklahoma, Department of Environmental Quality May 16, 1999 - May 15, 2000 Application Development for Environmental Complaints and Local Services, Waste Management, Water Quality and Air Quality Divisions</p>	\$91,795.00
<p>99S0673</p> <p>T.H. Lee Williams, Geosciences Dean's Office State of Oklahoma, Regents for Higher Education October 30, 1998 - June 30, 1999 Supplemental Salary for Oklahoma EPSCoR Director</p>	\$6,500.00
<p>99S0674</p> <p>Kevin Kloesel, Ok. Climatological Survey Renee Mc Pherson, Ok. Climatological Survey National Science Foundation February 15, 1900 - February 14, 2003 IM-AWARE (Instructional Meteorology-Applications of Weather for Awareness, Readiness and Education)</p>	\$494,673.00
<p>99S0675</p> <p>John Furneaux, Physics & Astronomy Eric Abraham, Physics & Astronomy National Science Foundation January 1, 1900 - December 31, 2002 Modern Electronic Techniques for Physical Measurements</p>	\$125,862.00

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99S0676	
Kelvin Droegemeier, Center for the Analysis & Prediction of Storms CAPS State of Oklahoma, Regents for Higher Education July 1, 1999 - February 28, 2000 Enhancement of the CAPS Storm-Scale Numerical Weather Prediction System and Real Time Access to NEXRAD Radar Base Data: Progress Report for Year-1 and Request for Year-2	\$46,000.00
99S0677	
David Barney, Social Work Stephen Anderson, Social Work Health and Human Services, Health Resources and Services Administration October 1, 1999 - September 30, 2002 Evaluation and Technical Support Center for SPNS/CDC HIV/AIDS Corrections Grantees	\$2,028,693.00
99S0678	
Caryn Vaughn, Ok. Biological Survey Caryn Vaughn, Zoology Christine Hakenkamp, Ok. Biological Survey National Science Foundation March 1, 2000 - February 29, 2004 The Functional Role of Biodiversity: Are stream bivalves redundant?	\$578,280.00
99S0679	
Susan Postawko, Meteorology EVAC Mark Morrissey, Ok. Climatological Survey EVAC Toyota Foundation, Tokyo, Japan October 1, 1999 - September 30, 2001 Global Warming and Environmental Awareness in the Pacific: Mutual Understanding and Cooperation of Diverse Cultures in a Changing World	\$134,722.00
99S0680	
Edgar O'Rear, Chemical Eng. & Materials Sci. Sridhar Radhakrishnan, Computer Science Edgar O'Rear, Engineering Dean's Office T.H. Lee Williams, Geosciences Dean's Office State of Oklahoma, Regents for Higher Education July 1, 1999 - June 30, 2001 Laboratory for Advanced Network Technologies: A National High Speed Network Research Facility	\$14,929.00

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
<p>99S0681</p> <p>Edgar O'Rear, Chemical Eng. & Materials Sci. Sridhar Radhakrishnan, Computer Science Edgar O'Rear, Engineering Dean's Office T.H. Lee Williams, Geosciences Dean's Office National Science Foundation July 1, 1999 - June 30, 2001 Laboratory for Advanced Network Technologies: A National High Speed Network Research Facility</p>	<p>\$494,086.00</p>
<p>99S0682</p> <p>William Bauman Jr, Architecture City of Norman Prime Agency is DHUD July 1, 1999 - June 30, 2000 Low-Income Home : 608 E. Eufaula Street, Norman, Oklahoma</p>	<p>\$45,000.00</p>
<p>99S0683</p> <p>Pamela Genova, Arts & Sciences Dean's Office U.S. Department of Defense, Army June 17, 1999 - August 19, 1999 Intergovernmental Personnel Act Agreement - Cameron Wesson</p>	<p>\$11,396.00</p>
<p>99S0684</p> <p>Michael Ashby, Chemistry & Biochemistry American Chemical Society, Petroleum Research Fund May 1, 2000 - June 30, 2003 Time-Resolved Cryogenic Infrared Spectroscopy of Bioinorganic Reactions</p>	<p>\$90,000.00</p>
<p>99S0685</p> <p>David Penn, Center for Economic & Management Research Community Council of Central Oklahoma July 25, 1999 - October 25, 1999 Developing Social Indicators for Oklahoma County</p>	<p>\$14,379.00</p>

<u>Proposal Submissions - June, 1999</u>	<u>Amount</u>
99S0686	
Pakize Pulat, Industrial Eng.	\$215,478.00
Mary Court, Industrial Eng.	
Craig Harvey, Industrial Eng.	
Randa Shehab, Industrial Eng.	
Thomas Landers, Industrial Eng.	
Litton TASC	
Prime Agency is DOD-AF	
September 1, 1999 - February 28, 2001	
JIT Approach to an Integrated Production Management System	
99S0687	
Bruce Russell, Civil Eng. & Environmental Sci.	\$19,133.00
Thomas Bush, Civil Eng. & Environmental Sci.	
Michael Mooney, Civil Eng. & Environmental Sci.	
State of Oklahoma, Department of Transportation	
Prime Agency is DOT-FHA	
October 1, 1999 - September 30, 2000	
Development of Statewide Portland Cement Patching Products and Procedures.	
99S0688	
Bruce Russell, Civil Eng. & Environmental Sci.	\$1,300.00
Coreslab Structures	
June 16, 1999 - August 15, 1999	
Source of Variation in the Cambers of Double Tees	
99S0689	
Yiqi Luo, Botany & Microbiology	\$681,757.00
U.S. Department of Energy	
June 15, 1999 - June 14, 2002	
Transient Responses in Ecosystems FACE Experiments	
99S0690	
Clifford Jones, Law	\$138,647.00
Japan Foundation	
September 1, 1999 - October 31, 2000	
Comparative Japanese and U.S. Antitrust Law and Policy Enforcement, Market Access Restrictions and the Global Trading System	

Proposal Submissions - June, 1999

Amount

99S0691

Dennis O'Brien, Energy Center Director's Office EC

\$263,455.00

Dennis O'Brien, Engineering Dean's Office EC

U.S. Information Agency

May 1, 1999 - November 30, 2000

Summer Institute in Social Science Research and Public Policy for Unkrainian Social
Scientists

TOTAL PROPOSALS SUBMITTED

\$16,355,295.00

June, 1999