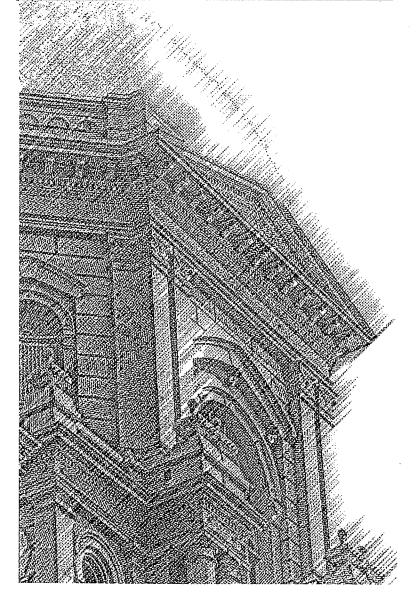
# MOCIE DAME LESSEE LESSE



# **Faculty Notes**

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# Administrators' Notes

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## Documentation

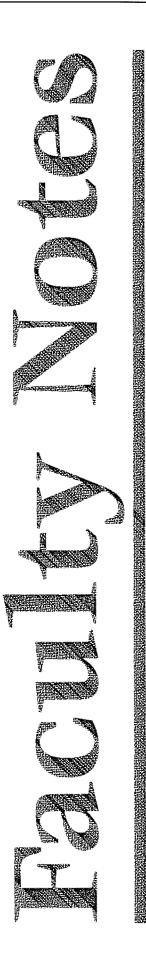
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## Research

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- 20-456.. Centers and Institutes Awards Received April, 2002
- 20-456.. Centers and Institutes Proposals Submitted, April, 2002
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- 20-463 .. Departmental Proposals Submitted May, 2002
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- 20-469 .. Centers and Institutes Proposals Submitted, May, 2002
- 20-472.. Departmental Awards Received June, 2002
- 20-475.. Departmental Proposals Submitted June, 2002
- 20-482.. Centers and Institutes Awards Received June, 2002
- 20-482.. Centers and Institutes Proposals Submitted, June, 2002

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NUMBER 20



#### Honors

Margaret Barry, associate professional specialist, won a University and College Designers Association national design award for Issue 5 of *ND Business* magazine. The magazine was one of the 102 winners selected from a field of 1,500 entries in the "entire magazine" category.

Jessica Chalmers, assistant professor of film, television, and theatre, was awarded a Howard Foundation fellowship for her work, "Avanti." She was one of 12 scholars nationwide to receive the fellowship.

Walton R. Collins, adjunct associate professor of American Studies, received a "Best in Indiana Journalism" award from the Indiana Chapter, Society of Professional Journalists, for an article in *Notre Dame* magazine, "What You Do for the Least of These Strangers."

Glen Dowell, assistant professor of management, received the 2001 Moskowitz Prize for outstanding research on socially responsible investing; and received "Best Paper" for "Pretty Pictures and Ugly Scenes: Political and Technological Maneuvers in High Definition Television," at the Davis Conference on Qualitative Research, Univ. of California Davis, Mar. 30.

Mara Faccio, assistant professor of finance and business economics, has been named to the Financial Management Association, Program Committee, 2002.

Stephen M. Hayes, librarian, was appointed to the editorial review board of the *Journal of Business and Finance Librarianship*.

**Michael D. Hildreth**, assistant professor of physics, has been named an Outstanding Junior Investigator by the U.S. Department of Energy.

Kenneth W. Milani, professor of accountancy, was awarded a Certificate of Merit for "Medical Practice Management: A Strategic Financial Information Approach to the Income Statement," published in Management Accounting Quarterly (summer 2001) by the Strategic Finance magazine.

Elizabeth Moore, assistant professor of marketing, was a corecipient (honorable mention) of the Robert Ferber Award for the outstanding article based on a doctoral dissertation appearing in the Journal of Consumer Research.

Daniel J. Myers, associate professor of sociology and Kroc Institute fellow, was selected to serve as book review editor for the journal *Mobilization*; was selected to serve a three-year term on the editorial board of the journal *American Sociological Review*; and was elected to a three-year term as secretary-treasurer of the American Sociological Association's Section on Collective Behavior and Social Movements.

Guillermo O'Donnell, Kellogg Professor of Government and International Studies, has been selected by the American Political Science Association for the Luebbert Award for Best Paper in Comparative Politics published during academic year 2001-02. The paper "Democracy, Law, and Comparative Politics" was published in Studies in Comparative International Development 3, no. 1 (spring 2001): 7-36.

Georgine Resick, associate professor of music, was awarded a Howard Foundation fellowship in the area of performance for "The Song Cycle in Recording: A Historical Perspective." She was one of 12 scholars nationwide to receive the fellowship.

## Activities

Wendy Arons, assistant professor of film, television, and theatre, presented "Eastern Genre Meets Western Feminist, or: What Are Nice Girls Doing in Films Like These?" at the First Annual Conference on Globalization and Media in Asia at Notre Dame in February, and presented "Karoline Schulze-Kummerfeld's Performance of a Lifetime" at a conference titled "Tales Told by Women" at the Univ. of Georgia, May 31 through June 2.

Klaus-Dieter Asmus, professor of chemistry and biochemistry, led the discussion at the opening session of the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28.

Dinshaw S. Balsara, assistant professor of physics, presented three invited talks: "Protostellar Core Collapse and Fragmentation Using AMR-MHD Simulations" at the Star Formation '02 Conference, Taiwan, in June; "Divergence-free Adaptive Mesh Refinement for Magnetohydrodynamics" in Bordeaux,

France, in June; and "AMR-MHD in Computational Astrophysics" at the IAU Symposium on Computational Astrophysics, Tokyo, in July.

Jeffrey Bergstrand, associate professor of finance and business economics, and S. Baier presented "On the Endogeneity of International Trade Flows and Free Trade Agreements" at the Midwest International Economics and Economic Theory conference, Northwestern Univ., May 3-5.

Jianguo Cao, professor of mathematics, presented "Rigidity of Higher Dimensional Graph-Manifolds" at "The World Scientists Forum for Nanjing University 100th Anniversary," Nanjing, China, May 21.

Thomas Cosimano, professor of finance, presented "Monetary Policy with a Touch of Basel" at the Federal Reserve Board, Washington D.C., Oct. 17, 2001.

Julia Douthwaite, professor of French, Fellow of the Nanovic Institute, and director of the Study Abroad program in France, presented the invited lecture "Haunted by an Idea: The Gothic Imaginary in France, 1793-1801" at the workshop on "Rethinking The Sleep of Reason: Enlightenment Imagination" at the Max-Planck-Insitut für Wissenschaftsgeschichte in Berlin, June 13.

Glen Dowell, assistant professor of management and administrative sciences, presented "Pretty Pictures and Ugly Scenes: Political and Technological Maneuvers in High Definition Television" at the Davis Conference on Qualitative Research, at Univ. of California Davis on Mar. 30, and at the Workshop on Organizations, Institutions, and Change, at Northwestern Univ. on May 9.

Guillermo J. Ferraudi, professional specialist in the Radiation Laboratory, presented "Photochemical and Photophysical Properties of Re/Ru Dyads" at the 25th Dept. of Energy Solar Photochemistry Research Conference, Airlie, Va., June 9-12.

Paquita Friday, assistant professor of accountancy, presented "Voluntary Disclosure and Non-U.S. Firms' Mergers and Acquisitions," coauthored with H. Ashbaugh, and "The Effect of Macroeconomic Changes on the Value Relevance of Accounting Information: The Case of Mexico and the 1995 Financial Crisis," coauthored with E. Gordon, at the 2002

European Accounting Association Annual Congress in Copenhagen, April 25-26; and "Which Firms Choose to List as American Depositary Receipts?" coauthored with **Thomas J. Frecka**, Lizzadro Professor of Accountancy, at the Univ. of Cincinnati on May 3.

Denis Goulet, O'Neill Professor in Education for Justice, presented "Inequalities in the Light of Globalization at the Sixth International Conference on Ethics and Development/IDEA," June 19-22, in Zamorano, Honduras.

Dirk M. Guldi, associate professional specialist in the Radiation Laboratory, presented a seminar lecture at the Univ. of Erlangen, Germany, and the Univ. of Leipzig, Germany on "Oxidative and Reductive Electron Transfer in Donor-Acceptor Ensembles"; presented "Towards Long-Lived Charge Separation in C60-Based Donor Acceptor Ensembles" at the 25th Dept. of Energy Solar Photochemistry Research Conference, June 9-12, in Airlie, Va.; and presented "Small Reorganization Energies of Fullerenes in Electron Transfer Reactions" at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28. He also chaired the session "Nanosystems I."

Roger Huang, Meyer Professor in Global Investment Management, presented "Selective Disclosure and Opportunistic Trading: An Analysis of Discretionary Earnings Announcements" at Vanderbilt Univ. on Feb. 6, and at Southern Methodist Univ. on April 19.

Paul W. Huber, associate professor of chemistry and biochemistry, presented "Restricted Specificity of *Xenopus* TFIIIA for Transcription of Somatic 5S rRNA Genes" at the Third International Conference on Transcription by RNA Polymerases I and III, Pacific Grove, Calif., June 8.

Roger F. Jacobs, professor of law and associate dean for Library and Information Services in the Law School, was an invited summarian for the Third Joint Study Institute of Canadian, American, and British-Irish Association of Law Libraries, Royal Roads Univ., Victoria, B.C., May 22-24; and was also an invited presenter at the Canadian Association of Law Libraries annual meeting in Victoria, May 25-29, presenting "Human Side of Academic Law Librarianship, Mentoring."

Encarnación Juárez, assistant professor of Spanish and fellow of the Medieval Institute, published "El discurso sartorial y el conflicto amoroso social en *El caballero de Olmedo*" in the *Bulletin of the Comediantes* 53 (2001): 247-266.

Prashant V. Kamat, professional specialist in the Radiation Laboratory, presented "Photoinduced Transformations of Semiconductor-Metal Nanocomposites" at the 25th Dept. of Energy Solar Photochemistry Research Conference, Airlie, Va., June 9-12; and "Change Transfer Events in Semiconductor-Metal Nanoparticles," an invited talk, at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28.

Barry P. Keating, Jones Professor of Finance, presented "Third World Debt in the Third Millennium" at the annual meeting of the American Economic Association, Jan. 5, in Atlanta.

Lloyd H. Ketchum Jr., associate professor of civil engineering and geological sciences, presented "Integrating Sustainability Issues into Engineering Curricula" at the Indiana Society of Professional Engineers 65th annual convention, Indianapolis, May 31.

Thomas A. Klein, visiting professor of marketing and business ethics, presented "Direct-to-Consumer Drug Advertising: Discussion" at the Marketing and Public Policy Conference, Atlanta, May 18, and "Justice in the Food Chain: Balancing Benefits and Costs in Supply Networks" at the Macromarketing Seminar at the Univ. of New South Wales, Sydney, Australia, June 13.

Jay A. LaVerne, professional specialist in the Radiation Laboratory, presented "Radiolysis of Water at Ceramic-Oxide Surfaces," coauthored with L. Tandon and A. Slemmons, at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28.

Keith Madden, professional specialist in the Radiation Laboratory, presented "ND Radiation Chemistry Data Center: 2002 Status Report," coauthored with W. Phillip Helman, associate professional specialist in the Radiation Laboratory, at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28.

**Dan Meisel**, director of the Radiation Laboratory and professor of chemistry and biochemistry, presented "Size Dependent Properties of Core-Shell Metallic Nanoparticles" at the 25th Dept. of Energy Solar Photochemistry Research Conference, Airlie, Va., June 9-12; and "Radiation Effects at Nanoparticle Interfaces" at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me., June 23-28.

Juan Migliore, professor of mathematics, was an organizer of the Conference on Zero-dimensional Schemes and Related Topics (in honor of Anthony V. Geramita), held in Acireale, Italy, on June 6-8; gave the invited talk "On the Ubiquity of the Weak Lefschetz Property" at the special session on Commutative Algebra and the Geometry of Projective Varieties, Pisa, Italy, on June 12-15; and gave the invited talk "Ideals of Generic Forms" at the Conference on Current Trends in Commutative Algebra, held in Levico, Italy, on June 17-21.

Daniel J. Myers, associate professor of sociology and Kroc Institute fellow, presented "Breathing Life into Diffusion Models: Structure and Influence in the Spread of Collective Violence" at the Center for the Study of Economy and Society, Cornell Univ., on April 26; and "How Structural Conditions Contribute to Rioting" with Y.E. Li at the annual meetings of the Midwest Sociological Society, Milwaukee, April 6.

Darcia F. Narvaez, associate professor of psychology, presented an invited presentation "Community Voices and Character Education" at the White House Conference on Character and Community, June 19, Washington, D.C.

Samuel Paolucci, professor of aerospace and mechanical engineering, presented "An Adaptive Wavelet Method for Fluid Flows," coauthored with Y.A. Rastigejev, and "Reactive Flows and Slow Manifolds," coauthored with S. Singh and Joseph M. Powers, associate professor of aerospace and mechanical engineering, at the 14th U.S. National Congress of Theoretical and Applied Mechanics, Blacksburg, Va., June 23-28.

Simon Pimblott, professional specialist in the Radiation Laboratory, presented "Role of Low Energy Electrons in Damage to Condensed Media and Mixed Phase Systems," coauthored with N.J.B. Green, at the Gordon Research Conference on Radiation Chemistry, Colby College, Waterville, Me. He also chaired the session "Nano Systems II."

Joseph M. Powers, associate professor of aerospace and mechanical engineering, presented "Reactive Flows and Slow Manifolds," coauthored with S. Singh and Samuel Paolucci, professor of aerospace and mechanical engineering, at the 14th US National Congress of Theoretical and Applied Mechanics, Blacksburg, Va., June 23-28.

Steven R. Schmid, associate professor of aerospace and mechanical engineering, presented "Forming of Metal Foams," coauthored by Glen Nieber, assistant professor of aerospace and mechanical engineering, A. Smith, and P. Nebosky, at the 30th North American Manufacturing Research Conference, Purdue Univ., May 21-23.

Kay L. Stewart, associate professional specialist and associate director of the Freimann Life Science Center, presented "Rodent Behavior and Enrichment" at the 16th annual Charles River Laboratory Short Course on Laboratory Animal Care and Use, June 16-21, Danvers, Mass.

Lee A. Tavis, Smith Professor of Business Administration, presented "The Person, the Market, and the Community" at the conference "The Invisible Hand and the Common Good," Trent Univ., Peterborough, Ontario, June 15.

Julia Adency Thomas, associate professor of history, gave an invited lecture on "Nature, Japan, and the World History of Modernity" at an NEH Summer Institute on "Japan and Modernity" in Los Angeles, in June.

#### **Publications**

Wendy Arons, assistant professor of Film, Television and Theatre, published "From Miss Sara Sampson to Miss Julie: Naturalist Configurations of the Fallen Woman" in *Text and Presentation* 22 (2001): 141-152.

Alicia M. Beatty, associate research professor of chemistry and biochemistry, coauthored "The Reaction of  $Cp^*ReH_6$ ,  $Cp^*=C_5Me_5$ , with Monoborane to Yield a Novel Rhenaborane. Synthesis and Characterization of arachno- $Cp^*ReH_3B_3H_8$ " with S. Ghosh and Thomas P. Fehlner, Grace-Rupley Professor of Chemistry, in Collection of Czechoslovak Chemical Communications 67 (2002): 808-812.

**J.M. Bishop**, research professor emeritus of physics, coauthored "Exotic and qq Resonances in the  $\pi^+\pi^-\pi^-$ system Produced in  $\pi^-\pi$  Collisions at 18 GeV" with S.U. Chung, T. Adams, **Neil M. Cason**, professor of physics, E.I. Ivanov, **John M. LoSecco**, professor of physics, J.J. Manak, **William D. Shephard**, professor of physics, D.L. Stienike, and S.A. Taegar, in *Physical Review D* 65 (2002): 1-16.

James Dougherty, professor of English and editor of *Religion and Literature*, published "Theodore Roethke's 'North American Sequence': Religious Awakening in the West" in *Literature and Belief* 21, no. 1-2 (2001): 177-203.

Mara Faccio, assistant professor of finance, coauthored "Dividends and Expropriation" with Larry H.P. Lang and Leslie Young, *American Economic Review* 91, no. 1 (2001) 54-78.

Guillermo Ferraudi, professional specialist in the Radiation Laboratory, coauthored "Photochemical and Theoretical Study of the Structure, Stability and Acid-Base Equilibrium of Ni(II) and Co(II) Complexes with the Ligand Dinaphtotetraaza[14]Annulene" with A. Rios-Escudero, M. Villagrin, G. Estiu, G. Cardeman-Jiron, and J. Costamagna, presented by A. Rios-Escudero at the 35th International Conference in Coordination Chemistry, Heidelberg, Germany, July 21-26.

Richard Garnett, associate professor of law, published a commentary on the recent school-choice and pledge-of-allegience cases in the *Wall Street Journal* titled "Future Church-State Battles Loom," July 1.

Paul R. Grimstad, associate professor of biological sciences, published "Cache Valley Virus" in *The Encyclopedia of Arthropod-Transmitted Infections*, M.W. Service, ed. (Wallingford, UK: CABI Publishing International, 2001): 101-104; and "Jamestown Canyon Virus," ibid.: 235-239; and coauthored "A Preliminary Characterization of the Physiological Ecology of Overwintering *Anopheles* Mosquitoes in the Midwestern USA" with J.R. Wallace, *Journal of the American Mosquito Control Association* 18, no. 2 (2002): 126-127.

**Xiaobo Hu**, associate professor of computer science and engineering, coauthored "Hybrid Static Output Feedback Stabilization of Second-order Linear

Time-invariant Systems" with G. Zhai and Anthony N. Michel, Freimann Professor of Engineering, published in *Linear Algebra and Its Applications* 351-352 (2002): 475-485.

Roger Huang, Meyer Professor in Global Investment Management, published "The Impact of the Federal Reserve Bank's Open Market Operations" with C.R. Harvey, *Journal of Financial Markets* 5 (April): 223-257.

Richard J. Jensen, guest professor of biology, coauthored "Aptorchis aequalis Nicoll, 1914 (Digenea: Plagiorchiidae) is a senior synonym of Dingularis anfracticirrus Jue Sue and Platt, 1999 (Digenea: Plagiorchiidae)" with T.R. Platt, in Systematic Parasitology 52, no. 3 (July): 183-191.

Barry P. Keating, Jones Professor of Finance, published "Review of FRED-Economic and Financial Database" in *Choice* (Association of College and Research Libraries, 2002): 26.

Lloyd H. Ketchum Jr., associate professor of civil engineering and geological sciences, coauthored "First Flush Analysis of Urban Storm Runoff" with J.H. Lee, K.W. Bang, J.S. Choe, and M.J. Yu, The Science of the Total Environment 293 (2002): 163-175.

Edward J. Maginn, associate professor of chemical engineering, coauthored "Pressure-Enthalpy Driven Molecular Dynamics for Thermodynamic Property Calculation I. Methodology" with L.I. Kioupis, *Fluid Phase Equilibria* 200 (2002): 75-92; and "Pressure-Enthalpy Driven Molecular Dynamics for Thermodynamic Property Calculation II. Applications" with L.I. Kioupis and G. Arya, ibid.: 93-110.

**Cynthia K. Mahmood**, associate professor of anthropology, published "Anthropological Compulsions in a World in Crisis" in *Anthropology Today* 18, no. 3 (June): 1-2.

Ralph McInerny, professor of philosophy, published *Prodigal Father, a Father Dowling Mystery* (St Martin's Press, 2002) 341 pp.

Anthony N. Michel, Freimann Professor of Engineering, coauthored "Partial Stability of General Dynamical Systems Under Arbitrary Initial 2-Perturbations" with Y. Sun, in *International Journal of Hybrid Systems* 2, no. 2 (March): 53-85.

Ken Milani, professor of accountancy, and James L. Wittenbach, professor of accountancy, coauthored "Charting the Provisions of the Charitable Contribution Deduction for Corporations," *Taxation of Exempts* 13, no. 3 (Nov./Dec. 2001): 125-130.

Marvin J. Miller, Clark Professor of Chemistry and Biochemistry, coauthored "Synthesis and Biological Activity of Hydroxamic Acid-derived Vasopeptidase Inhibitor Analogues" with A.J. Walz, published in American Chemical Society Organic Letters 4, no. 12 (2002): 2047-2050; and "Regio- and Stereoselective Ring Openings of 3-Aza-2-oxabicyclo[2.2.1]hept-5-ene Systems with Copper Catalyst-Modified Grignard Reagents: Application to the Synthesis of an Inhibitor of 5-Lipoxygenase" with M.D. Surman and M.J. Mulvihill, published in Journal of Organic Chemistry 67 (2002): 4115-4121.

Daniel J. Myers, associate professor of sociology and Kroc Institute fellow, wrote Toward a More Perfect Union: The Governance of Metropolitan America with R.W. Conant (Novato, Calif.: Chandler and Sharp, 2002); "Social Activism Through Computer Networks," published in Computing in the Social Sciences and Humanities, O.V. Burton, ed. (Urbana: Univ. of Illinois Press, 2002); "Campus Racial Disorders and Community Ties, 1967-1969" with A.J. Buoye, published in Research in Social Movements, Conflict and Change 23 (2001): 297-327; and "Signals, Symbols, and Vibes: An Exercise in Cross-Cultural Interaction" with A.J. Buoye, J. McDermott, D.E. Strickler, and R.G. Ryman, published in Teaching Sociology 29 (2001): 95-101.

Glen Niebur, assistant professor of aerospace and mechanical engineering, coauthored "Forming of Metal Foams" with A. Smith, and Steven R. Schmid, associate professor of aerospace and mechanical engineering, published in *Proc. NAMRC XXX* (2002): 3-8.

Samuel Paolucci, professor of aerospace and mechanical engineering, coauthored "An Adaptive Wavelet Method for Fluid Flows" with Y.A. Rastigejev, in Contemporary Research in Theoretical and Applied Mechanics, R.C. Batra and E.G. Henneke, ed. (Blacksburg, Va.: Virginia Polytechnic Institute and State Univ., 2002): 521.

Joseph M. Powers, associate professor of aerospace and mechanical engineering, coauthored "Reactive Flows and Slow Manifolds" with S. Singh and Samuel Paolucci, professor of aerospace and mechanical engineering, in Contemporary Research in Theoretical and Applied Mechanics, R.C. Batra and E.G. Henneke, ed. (Blacksburg, Va.: Virginia Polytechnic Institute and State Univ., 2002): 502-503.

**Terrence W. Rettig**, professor of physics, coauthored "CO and H<sub>3</sub>+ in the Protoplanetary Disk Around the Star HD141569" with S.D. Brittain, *Nature* (July 4): 57-58.

Alan Seabaugh, professor of electrical engineering, coauthored "Performance-Augmented CMOS Using Back-End Uniaxial Strain" with R. E. Belford, W. Zhao, J. Potashnik, and Q. Liu, in the 60th Device Research Conference Technical Digest (2002): 41-42.

Thomas L. Shaffer, Short Professor Emeritus of Law, published "Using the Pervasive Method of Teaching Legal Ethics in a Property Course" in St. Louis University Law Journal 46, no. 3 (2002): 655-664.

Mark A. Suckow, director and research associate professor in the Freimann Life Science Center, wrote the chapter "Biology and Diseases of Rabbits" in *Laboratory Animal Medicine*, J.G. Fox, L.C. Anderson, F.M. Loew, and F.W. Quimby, eds. (Academic Press, 2002): 329-364.

Lee A. Tavis, Smith Professor of Business Administration, published "Corporate Governance and the Global Social Void" in Vanderbilt Journal of Transnational Law: Corporate Governance, Stakeholder Accountability, and Sustainable Peace: A Symposium sponsored by the William Davidson Institute of the University of Michigan Business School and the Aspen Institute's Initiative for Social Innovation through Business 35, no. 2 (March): 487-547.

**John Weber**, associate professor of marketing, wrote "Illusions of Marketing Planners", *Psychology and Marketing* 18, no. 6 (2001): 527-563.

# Activities

Cathy Pieronek, director of Law School Relations, participated in a panel discussion on "Title IX at Thirty: Is It a Dysfunctional Adult?" at the annual meeting of the National Association of College and University Attorneys, June 26, in Boston.

# **Publications**

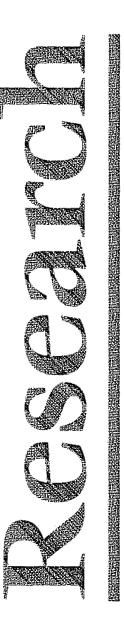
Alan S. Bigger, director of Building Services, coauthored "Restroom Cleaning: Challenges and Solutions" with L.B. Bigger, in *Maintenance Solutions* (May/June): 18-19.

Surat Hotchandani, visiting scholar in the Radiation Laboratory, coauthored "Unusual Electrocatalytic Behavior of Ferrocene Bond Fullerene Cluster Films" with S. Barazzouk and Prashant V. Kamat, professional specialist in the Radiation Laboratory, *Journal of Materials Chemistry* 12 (2002): 2021-2025.



# Additions and Corrections

In issue 18, the activities of Pamela A. Krauser, professional specialist in the Graduate School; Ellen Rogers, director of sponsored programs; and Karen Pace, assistant director of sponsored programs, Office of Research, the Graduate School, were incorrectly reported in the Administrators' Notes section, and should have been in the Faculty Notes section.



04/01/2002 to 04/30/2002

#### **Awards Received**

Category	No.	Amount	
Research	33	\$3,754,117	
Instructional Programs	2	\$133,273	
Total:	35	\$3,887,390	

## **Proposals Submitted**

Category	No.	Amount
Research	56	\$8,666,113
Instructional Programs	1	\$3,800
Total:	57	\$8,669,913

All awards and proposals are credited in the Monthly Summaries report to the academic department of the primary principal investigator. The Office of Research proposal routing form asks principal investigators to indicate at the time the proposal is submitted which unit will be responsible for the conduct of the project. If that unit is a center or institute, the proposal/award is included in the Centers/Institutes report, which is a subset of the Monthly Summaries report.

The Office of Research is doing what it can to ensure all units receive credit for the proposals/awards they submit and receive. However, it depends on the PI to properly identify responsibility for the project at the time the proposal is submitted. Please notify the Office of Research at "researc2@nd.edu" or 1-4670 if you are aware of any proposals or awards that have not been properly credited to a center or institute.

# **April 2002 Cumulative summary**

# **Awards Received**

		07.01	.1999 - 04.30.2000	07.01.	.2000 - 04.30.2001	07.01	.2001 - 04.30.2002
Category		No.	Amount	No.	Amount	No.	Amount
Research		250	\$28,009,970	348	\$50,769,885	312	\$39,142,177
Facilities and Equipment							
Instructional Programs		5	\$130,234	10	\$994,582	12	\$1,365,975
Other Programs		15	\$687,558	1	\$25,000		
Service Programs		2	\$13,222				
add description later						1	\$0
	Total:	272	\$28,840,984	359	\$51,789,467	325	\$40,508,152
			Proposals Sul	bmitted	·		
		07.01.	1999 - 04.30.2000	07.01.	2000 - 04.30.2001	07.01.	2001 - 04.30.2002
Category		No.	Amount	No.	Amount	No.	Amount
Research		473	\$130,948,047	476	\$198,379,642	576	\$189,952,975
Facilities and Equipment		4	\$786,497		-		
Instructional Programs		13	\$3,737,375	4	\$193,683	9	\$4,758,585
Other Programs		2	\$133,500				
Service Programs							
add description later		20			:		
	Total:	492	\$135,605,419	480	\$198,573,325	585	\$194,711,560

# Awards Received

April 1, 2002, through April 30, 2002 Awards for Research

#### **Biological Sciences**

Boyd, Sunny K. (Center or Institute)

Amphibian Diversity in Gogebic County, MI

U.S. Forest Service

\$3,122

10 months

Lodge, David M.

Predicting Identity, Spread and Impact of Future Nonindigenous Species in the Great Lakes

Great Lakes Fishery Commission

\$50,000

41 months

#### **Chemical Engineering**

#### Varma, Arvind

Kinetics and Mechanisms of Rapid Heterogeneous Reactions During Combustion Synthesis

National Science Foundation

\$5,000

48 months

#### Chemistry and Biochemistry

#### Lieberman, Marya

Research Experience for Undergraduates—Nanoscale Chemistry at Notre Dame

National Science Foundation

\$63,336

36 months

#### Scheidt, W.R.

X-Ray and Chemical Studies of Metalloporphyrins

National Institutes of Health

\$331,884

36 months

#### Sevov, Slavi C.

Frameworks of Transition Metals and Multifunctional Linkers

National Science Foundation

\$100,000

36 months

#### Civil Engineering and Geological Sciences

#### Kurama, Yahya C.

CAREER: Seismic Behavior and Design of Non-Emulative Precast Concrete Buildings with Supplemental Passive Energy Dissipation.

National Science Foundation

\$5,000

42 months

#### Neal, Clive R.

Studying the Temporal Geochemical Variation of the Hawaiian Hotspot

Texas A & M Research Foundation

\$17,115

34 months

# Talley, Jeffrey W.

Thermal Programmed Desorption Mass Spectrometry of Persistent Organic Contaminants

Stanford University

\$100,000

31 months

#### The Classics

#### Bloomer, W. Martin

Associate Professor Fellowship for AY 2002-03

American Council Learned Society

\$37,000

12 months

#### Guo, Li

Assistant Professor Fellowship for AY 2002-03

American Council Learned Society

\$30,000

11 months

#### Computer Science and Engineering

#### Freeh, Vincent William

CAREER: Collaborative Memory

National Science Foundation

\$31,250

48 months

# Maurice, Patricia; Madey, Gregory R.

ITR/AP(BES) Stochastic Synthesis: Simulating the

Environmental Transformations of Natural Organic Matter

National Science Foundation

\$6,000

36 months

# **Electrical Engineering**

#### Chen, Danny Z.; Antsaklis, Panos J.

e-Systems (Algorithms and Architectures)

Private Corporation

\$50,000

12 months

# Bernstein, Gary H.; Snider, Gregory L.

Metal/Tunnel-Junction Quantum-dot Cellular Automata Cells without Bias Control

Private Corporation

\$68,055

Fay, Patrick J.; Seabaugh, Alan C.

Antimonide-based Compound Semiconductors

Private Corporation

\$30,000

46 months

Seabaugh, Alan C.

Tunneling-Based Static Random Access Memory

Private Corporation

\$72,037

36 months

#### Government and International Studies

Barber, Sotirios A.

Full Professor Fellowship for AY 2002-03

American Council Learned Society

\$50,000

12 months

#### History

Bederman, Gail

Engendering Neo-Malthusianism: Contraception, Free Love, and Political Theory in England and the USA, 1793-1831

Stanford Humanities Center

\$50,000

12 months

Smyth, James (Center or Institute)

Mellon Postdoctoral Research Fellowship

Folger Shakespeare Library

\$30,000

12 months

Turner, James C. (Center or Institute)

Erasmus Institute

Private Foundation

\$500,000

48 months

#### Mathematics

Diller, Jeffrey A.

Complex Dynamics in Higher Dimensions

National Science Foundation

\$40,292

36 months

Rosenthal, Joachim J.

Research Conference: Mathematical Theory of Networks and

Systems

National Science Foundation

\$15,000

12 months

#### **Physics**

Furdyna, Jacek K.; Bunker, Bruce A.; Ruggiero,

Steven; Dobrowolska-Furdyna, Malgorzat

Spintronics and Spin-Photonics in Ferromagnetic InAs/GaSb-

Based Heterostructures Research Foundation of SUNY

\$465,000

29 months

Johnson, Walter R.

Relativistic Many-Body Theory for Atoms

National Science Foundation

\$75,000

36 months

Ruchti, Randal C.

QuarkNet Modeling Workshop

Arizona State University

\$200,000

27 months

#### Psychology

Boker, Steven Marshall

Dynamic Postural Equilibrium

National Institutes of Health

\$84,105

24 months

Borkowski, John Gregg; Whitman, Thomas Lee

Research Training in Mental Retardation

National Institutes of Health

\$137,327

24 months

Gondoli, Dawn M.

Parenting Stability and Change During Early Adolescence

National Institutes of Health

\$74,313

24 months

Radvansky, Gabriel A.

Comprehension and Memory of Spatial and Temporal Event Components

U.S. Army Research Institute

\$48,387

36 months

## Sociology

Myers, Daniel J.; Sikkink, David H.

Congregational Responses to September 11

Louisville Institute

\$49,894

#### Theology

Aune, David E.

Full Professor Fellowship for AY 2002-03 American Council Learned Society

\$50,000

12 months

#### Walther Cancer Institute

Helquist, Paul; Navari, Rudolph M.; Castellino, Francis J. (Center or Institute)

Molecular Medicine: Gene Array Technology, High-Throughput Synthesis Laboratory and Hormone Dependent Cancers

Department of Army

\$885,000

25 months

#### Awards for Instructional Programs

#### **Biological Sciences**

Diffley, Peter

McGee Fellowship Program in Economics

Private Foundation

\$5,000

12 months

Duman, John G.

Studies of Antifreeze Proteins in Arctic and Nearctic Insects

National Science Foundation

\$128,273

36 months

# **Proposals Submitted**

April 1, 2002, through April 30, 2002

#### Proposals for Research

#### Aerospace and Mechanical Engineering

Mason, James J.; Caron, Edmundo

Circuit Boards for Delphi Automotive Applications

Private Corporation

\$22,276

12 months

Mason, James J.; Roeder, Ryan K.

Variable Diameter Reinforcements for Biocomposites

Private Corporation

\$24,958

12 months

Mueller, Thomas J.; Corke, Thomas C.; Nelson, Robert C.; Renaud, John E.

Morphing Wing Structures for Multiple Mission Performance in Unmanned Air Vehicles

DARPA

\$1,000,000

30 months

#### Niebur, Glen L.

The Role of Fusion Mass Size, Density, and Placement in Stability of Lumbar Interbody Fusions

Private Corporation

\$54,395

12 months

#### Renaud, John E.

Trust Region Meta-Model Management for the Design of a High Speed Supercavitating Vehicle

Department of Navy

\$300,000

36 months

#### Schmid, Steven R.

Chatter Suppression Through Optimization of Emulsion Lubricants

Private Corporation

\$22,000

5 months

#### **American Studies**

#### Ardizzone, Heidi L.

"Under the Mask and Manner": The Worlds of Belle da Costa Greene

National Endowment for the Humanities

\$40,000

12 months

#### Anthropology

#### Chesson, Meredith S.

Rethinking the Collapse of the Early Bronze Southern Levant: The Khirbet el-Minsahlat Project

Private Foundation

\$24,978

14 months

#### Chesson, Meredith S.

Early Urbanism and Households in the Ancient Near East

National Endowment for the Humanities

\$40,000

12 months

#### Art, Art History, and Design

#### Gill, Meredith J.

Augustine and the Arts

National Endowment for the Humanities

\$40,000

9 months

#### **Biological Sciences**

#### Adams, John H.

Molecular Analysis of Apical Organelles of Plasmodium National Institutes of Health

\$259,875

Besansky, Nora J.

Genetics of Anopheles Funestus Populations

National Institutes of Health

\$370,267

12 months

D'Souza-Schorey, Crislyn

Role of Membrane Traffic in Epithelian Cell Migration

American Cancer Society

\$214,960

48 months

McKee, Edward E.

Heart Mitochondrial Toxicity of Antiviral Nucleosides

I.U. School of Medicine

\$243,855

12 months

O'Tousa, Joseph E.

Genetic Analysis of Retinal Degeneration

National Institutes of Health

\$295,018

12 months

Severson, David W.

Mapping of Filarial Vector Competence in Aedes aegypti

Colorado State University

\$104,940

12 months

Severson, David W.

RFLP Mapping of Plasmodium Refactory Genes in

Mosquitoes

National Institutes of Health

\$296,030

12 months

Welsh, JoEllen J.; Tenniswood, Martin

Vitamin D Mediated Apoptosis in Mammary Cells

National Institutes of Health

\$267,300

12 months

#### Chemical Engineering

Brennecke, Joan F.

Travel Funds to EOUIFASE 2002

National Science Foundation

\$20,475

12 months

Varma, Arvind

REU Supplement for NSF Grant CTS-9907321

National Science Foundation

\$5,000

6 months

Wolf, Eduardo E.

REU GOALI: High Throughput Activity and Insitu FRIT and EXAFS Studies of the Effect of S on Noble Metal Supported

Oxidation Catalysts

National Science Foundation

\$12,000

36 months

#### Chemistry and Biochemistry

Kandel, S.A.

Reactive Atom Chemistry at the Surfaces of Organic Films

Private Corporation

\$35,000

12 months

Miller, Marvin J.

Design, Syntheses and Studies of Novel Antituberculosis

Agents

National Institutes of Health

\$476,616

12 months

# East Asian Languages and Literatures

Selden, Lili I.

The Tale of Genji and its Reception as a Narrative of Desire

Columbia University

\$35,000

12 months

Selden, Lili I.

The Tale of Genji and its Reception as a Narrative of Desire

Columbia University

\$40,000

12 months

Selden, Lili I.

The Tale of Genji and its Historical Reception as a Narrative

of Desire

National Institute of Japanese Literature

\$34,950

12 months

Selden, Lili I.

The Tale of Genji and its Reception as a Narrative of Desire

The Edwin O. Reischauer Institute of Japanese Studies

\$40,000

12 months

#### **Electrical Engineering**

Antsaklis, Panos J.

Travel Funds for a Workshop on Hybrid Control of

Networked Systems

National Science Foundation

\$12,000

Bauer, Peter H.

Heterogeneous Networks for Prioritized Sensing and Actuation

National Science Foundation

\$125,000

24 months

Bernstein, Gary H.; Fay, Patrick J.

Quilt Packaging: A Novel Chip-to-Chip Interconnect Approach Using Deep Reactive Ion Etching and Plating of Chip Edge Connectors

Private Corporation

\$146,722

12 months

Snider, Gregory L.

REU Supplement to High Temperature Nanostructures National Science Foundation

\$2,475

3 months

#### **English**

Baldwin, Kate A.

Authenticating Nations: Cultural Fictions of Soviet and American Women During the Cold War National Endowment for the Humanities

\$40,000

12 months

Duffy, John

Writing from These Roots: The Development of Literacy in an American Immigrant Community

National Endowment for the Humanities

\$40,000

9 months

Lander, Jesse M.

Print, Polemic, and Protestantism: Literary Culture in Early Modern England

National Endowment for the Humanities

\$40,000

9 months

Ziarek, Ewa

Feminist Aesthetics: Art, Gender and Race in Modernism National Endowment for the Humanities

\$40,000

9 months

Ziarek, Krzysztof

The Force of Art

National Endowment for the Humanities

\$40,000

12 months

#### Film, Television, and Theatre

Arons, Wendy K.

Staging the Fair Sex

National Endowment for the Humanities

\$40,000

12 months

## German and Russian Languages and Literatures

Gasperetti, David W.

Conceiving the Russian Novel: Toward the Golden Age, 1763-

National Endowment for the Humanities

\$40,000

9 months

#### History

Bederman, Gail

Engendering Neo-Malthusianism: Contraception, Free Love and Political Theory in England and the U.S., 1793-1831

National Endowment for the Humanities

\$40,000

9 months

Smyth, James

Mellon Postdoctoral Research Fellowship

Folger Shakespeare Library

\$30,000

9 months

Wegs, James R.

Denying Their Nazi Past: Austria After World War II

National Endowment for the Humanities

\$24,000

6 months

#### Mathematics

Borelli, Mario

CANDAX-ME McNair

Department of Education

\$233,132

12 months

Gursky, Matthew J.; Han, Qing

NSF/CBMS Regional Conference in the Mathematical Sciences: Fully Nonlinear Equations in Geometry

National Science Foundation

\$31,417

12 months

#### Philosophy

Gutting, Gary M.

Experience in Twentieth-Century French Philosophy

National Endowment for the Humanities

\$40,000

#### **Physics**

## LoSecco, John M.

Research in CP Violation in the B Meson Sector

Department of Energy

\$66,005

12 months

#### Rettig, Terrence W.

An Infrared Study of Preplanetary Disks Around Young Stars: The Potential for Planet Formation

National Aeronautics and Space Administration

\$315,740

36 months

#### Terry, Jeffrey H.; Bunker, Bruce A.

Physico-Chemical Characterization of Advanced Reactor Materials

Department of Energy

\$1,479,086

36 months

#### Program of Liberal Studies

#### Tillman, Mary Katherine

Newman and Philosophy

Private Foundation

\$25,000

12 months

#### Tillman, Mary Katherine

Newman and Philosophy

National Endowment for the Humanities

\$24,000

6 months

#### Psychology

#### Braungart-Rieker, Julia M.

Emotion Regulation from Infancy to Toddlerhood

National Institutes of Health

\$72,050

12 months

# Narvaez, Darcia F.; Yuan, Ke-Hai; Radvansky,

Drug-Related, Moral Narrative Comprehension and Memory

National Institutes of Health

\$327,820

12 months

#### Radvansky, Gabriel A.

Engineering a Transformation of Human-Machine Interaction to An Augmented Cognitive Relationship Sandia National Laboratory

\$19,349

5 months

#### **Radiation Laboratory**

# Pimblott, Simon M.; Meisel, Dan; LaVerne, Jay A.

Maximizing Hydrogen Production in the Radiolysis of Water-Ceramic Oxide Systems

Department of Energy

\$932,424

36 months

#### Romance Languages and Literatures

#### Boulton, Maureen B.

Passion Devotion in Anglo-Norman

National Endowment for the Humanities

\$40,000

12 months

#### Juárez, Encarnación

The Dressed Body and the Construction of Identity in Golden Age Spanish Autobiographies

National Endowment for the Humanities

\$40,000

12 months

#### Perry, Catherine

Figures of Seduction and Vital Energy: Music and Dance in French Literature at the Turn of the Twentieth Century

National Endowment for the Humanities

\$40,000

9 months

#### Proposals for Instructional Programs

#### **Upward Bound**

#### Coates, Alyssia J.; Vann-Hamilton, Joy J.

Upward Bound

Indiana Department of Education

\$3,800

Centers and Institutes Report 04/01/2002 to 04/30/2002

# **Awards Received**

Department or Office	No.	Amount	
Environmental Research Center	1	\$3,122	
Erasmus Institute	1	\$500,000	
Keough Institute for Irish Studies	1	\$30,000	
Walther Cancer Institute	1	\$885,000	
Total	. 4	\$1,418,122	

# **Proposals Submitted**

Department or Office	No.	Amount
Center for Astrophysics	1	\$315,740
Center for Flow Physics and Control	2	\$1,300,000
Center for Molecularly Engineered Materials	1	\$5,000
Center for Tropical Disease Research & Training	4	\$1,031,112
Keough Institute for Irish Studies	1	\$30,000
Laboratory for Image and Signal Analysis	1	\$125,000
Nano Science and Technology Center	2	\$149,197
Nanovic Institute	1	\$24,000
Office of Special Instructional Projects and Activities	1	\$233,132
Radiation Laboratory	1	\$932,424
South Bend Center for Medical Education	1	\$243,855
Total:	16	\$4,389,460

Centers and Institutes Report 07/01/2001 to 04/30/2002

## **Awards Received**

Department or Office	No.	Amount
Alliance for Catholic Education	4	\$268,583
Center for Astrophysics	3	\$31,980
Center for Environmental Science and Technology	1	\$20,000
Center for Flow Physics and Control	11	\$599,690
Center for Molecularly Engineered Materials	2	\$90,000
Center for Orphan Drug Development	1	\$20,000
Center for Transgene Research	3	\$940,875
Center for Tropical Disease Research & Training	4	\$531,308
Environmental Research Center	2	\$44,622
Erasmus Institute	1	\$500,000
Freimann Life Science Center	4	\$43,838
Higgins Labor Research Center	1	\$98,911
Institute for Educational Initiatives	2	\$51,383
Institute for Latino Studies	4	\$2,204,913
Jacques Maritain Center	1	\$30,000
John A. Kaneb Center for Teaching and Learning	1	\$46,100
Kellogg Institute for International Studies	6	\$1,215,780
Keough Institute for Irish Studies	2	\$69,000
Lobund Laboratory	1	\$72,128
Mendelson Center for Sport, Character, & Culture	1	\$18,446
Nano Science and Technology Center	9	\$714,142
Radiation Laboratory	5	\$4,281,854
South Bend Center for Medical Education	2	\$66,688
TRIO Programs	6	\$992,222
Walther Cancer Institute	1	\$885,000
Total	78	\$13,837,463

# **Proposals Submitted**

Department or Office	No.	Amount
Alliance for Catholic Education	1	\$55,000
Center for Astrophysics	7	\$1,175,187
Center for Environmental Science and Technology	4	\$1,195,115
Center for Flow Physics and Control	14	\$18,554,705
Center for Molecularly Engineered Materials	10	\$4,142,977
Center for Transgene Research	5	\$1,174,862

<sup>\*</sup>The figures attributed to centers/institutes in these reports are also included in the general reports for all awards and proposals. However, they are listed under the department of the Principal Investigator rather than the center, institute, lab, or significant University program.

# Awards Received

April 1, 2002, through April 30, 2002

Awards for Research

#### **Environmental Research Center**

Amphibian Diversity in Gogebic County, MI U.S. Forest Service

\$3,122

10 months

#### **Erasmus Institute**

Erasmus Institute

Private Foundation

\$500,000

48 months

#### Keough Institute for Irish Studies

Mellon Postdoctoral Research Fellowship

Folger Shakespeare Library

\$30,000

12 months

#### Walther Cancer Institute

Molecular Medicine: Gene Array Technology, High-Throughput Synthesis Laboratory and Hormone Dependent Cancers

Department of Army

\$885,000

25 months

# **Proposals Submitted**

April 1, 2002, through April 30, 2002

#### Proposals for Research

#### Center for Astrophysics

An Infrared Study of Preplanetary Disks Around Young Stars: The Potential for Planet Formation

National Aeronautics and Space Administration

\$315,740

36 months

#### Center for Flow Physics and Control

Trust Region Meta-Model Management for the Design of a High Speed Supercavitating Vehicle

Department of Navy

\$300,000

36 months

Morphing Wing Structures for Multiple Mission Performance in Unmanned Air Vehicles

DARPA

\$1,000,000

30 months

#### Center for Molecularly Engineered Materials

REU Supplement for NSF Grant CTS-9907321

National Science Foundation

\$5,000

6 months

#### Center for Tropical Disease Research and Training

Mapping of Filarial Vector Competence in Aedes aegypti

Colorado State University

\$104,940

12 months

Molecular Analysis of Apical Organelles of Plasmodium

National Institutes of Health

\$259,875

12 months

RFLP Mapping of Plasmodium Refactory Genes in Mosquitoes

National Institutes of Health

\$296,030

12 months

Genetics of Anopheles Funestus Populations

National Institutes of Health

\$370,267

12 months

#### Keough Institute for Irish Studies

Mellon Postdoctoral Researach Fellowship

Folger Shakespeare Library

\$30,000

9 months

#### Laboratory for Image and Signal Analysis

Heterogeneous Networks for Prioritized Sensing and Actuation

National Science Foundation

\$125,000

24 months

#### Nano Science and Technology Center

REU Supplement to High Temperature Nanostructures National Science Foundation

\$2,475

Quilt Packaging: A Novel Chip-to-Chip Interconnect Approach Using Deep Reactive Ion Etching and Plating of Chip Edge Connectors

Private Corporation

\$146,722

12 months

#### Nanovic Institute

Denying Their Nazi Past: Austria After World War II National Endowment for the Humanities \$24,000 6 months

#### Office of Special Instructional Projects and Activities

CANDAX-ME McNair Department of Education

\$233,132

12 months

#### **Radiation Laboratory**

Maximizing Hydrogen Production in the Radiolysis of Water-Ceramic Oxide Systems

Department of Energy

\$932,424

36 months

# South Bend Center for Medical Education

Heart Mitochondrial Toxicity of Antiviral Nucleosides

I.U. School of Medicine

\$243,855

05/01/2002 to 05/31/2002

# **Awards Received**

Category	No.	Amount	
Research	73	\$8,558,455	
Total:	73	\$8,558,455	

# **Proposals Submitted**

add description later

Total:

537.

No.	Amount	
35	\$11,446,875	
4	\$87,425	
39	\$11,534,300	
	35 4	

# May 2002 Cumulative summary

# **Awards Received**

		07.01.	1999 - 05.31.2000	07.01.2	2000 - 05.31.2001	07.01.	2001 - 05.31.2002
Category		No.	Amount	No.	Amount	No.	Amount
Research		285	\$31,975,095	378	\$59,063,233	385	\$47,700,632
Facilities and Equipment							
Instructional Programs		12	\$1,177,506	10	\$994,582	12	\$1,365,975
Other Programs		15	\$687,558	1	\$25,000		
Service Programs		2	\$13,222				
add description later						1	\$0
	Total:	314	\$33,853,381	389	\$60,082,815	398	\$49,066,607
			Proposals Sul	omitted			
		07.01.	1999 - 05.31.2000	07.01.2	2000 - 05.31.2001	07.01.	2001 - 05.31.2002
Category		No.	Amount	No.	Amount	No.	Amount
Research		517	\$142,973,527	521	\$208,086,245	611	\$201,399,850
Facilities and Equipment		4	\$786,497				
Instructional Programs		14	\$3,831,645	4	\$193,683	13	\$4,846,010
Other Programs		2	\$133,500				
Service Programs							

\$147,725,169

525

\$208,279,928

624

\$206,245,860

#### Awards Received

May 1, 2002, through May 31, 2002 Awards for Research

#### **ACE Educational Outreach**

2

Johnstone, Joyce V. (Center or Institute)

ACE-EDU Outreach Private Foundation

\$51,300

60 months

Johnstone, Joyce V.

I-Read Summer Institute Reading Excellence Program Indiana Department of Education

\$27,000

12 months

#### Aerospace and Mechanical Engineering

Atassi, Hafiz M.

Hydrodynamics and Acoustics of Rotor Blades in Nonuniform Inflow Conditions

Department of Navy

\$55,000

54 months

Jumper, Eric J.

Research on Plasma Actuators at the USAFA Aeronautical Research Center

U.S. Air Force Academy

\$40,000

12 months

Jumper, Eric J. (Center or Institute)

High-bandwidth Wavefront Sensor Development

Corporation

\$175,000

24 months

Jumper, Eric J.

Jet Engine Test Facility U.S. Air Force Academy

\$35,028

12 months

Powers, Joseph M.; Paolucci, Samuel

Multiscale Modeling of Combustion of Energetic Materials

Los Alamos National Laboratory

\$105,955

12 months

Schmid, Steven R.

Chatter Suppression Through Optimization of Emulsion Lubricants

Corporation

\$22,000

6 months

#### **Biological Sciences**

Belovsky, Gary E. (Center or Institute)

Brine Shrimp in the Great Salt Lake

Utah State University

\$11,650

11 months

Belovsky, Gary E.

When Does Grasshopper Herbivory Enhance Rangeland Production

Department of Agriculture

\$158,634

12 months

Bridgham, Scott Donald

Environmental Gradients Structuring Peatland Communities

National Science Foundation

\$6,000

83 months

Bridgham, Scott Donald

REU Supplement

National Science Foundation

\$5,500

72 months

Diffley, Peter (Center or Institute)

Doctoral Scholarship for Kate Nicholls

Private Foundation

\$39,836

33 months

Diffley, Peter (Center or Institute)

Graduate Research Fellowship for Beth Robinson

National Science Foundation

\$32,000

60 months

Fraser, Malcolm J.

Transgenic Engineering of Aedine Mosquitoes Using the PiggyBac Transposon

National Institutes of Health

\$374,124

48 months

Lodge, David M.

Monitoring Rusty Crayfish on the Ottawa National Forest

U.S. Forest Service

\$32,000

73 months

Severson, David William

Mapping of Filarial Vector Competence in Aedes Aegypti

Colorado State University

\$104,941

58 months

Streit, Thomas G.

FIRST STEPS: Eliminating Lymphatic Filariasis in Haiti

Private Foundation

\$950,400

#### Whaley, Michelle A.

REU Site Program for Undergraduate Research in Cellular and Molecular Biology

National Science Foundation

\$61,486

12 months

#### Center for Civil and Human Rights

Meintjes, Garth

Issues of the Columbian War

Open Society Institute

\$60,000

12 months

#### Chemical Engineering

#### Maginn, Edward J.; Brennecke, Joan F.

GOALI: Design and Evaluation of Room Temperature Ionic Liquids for Green Chemical Processing

National Science Foundation

\$163,669

36 months

#### Palmer, Andre F.

**Engineering Artificial Cells** 

National Science Foundation

\$12,000

21 months

#### Varma, Arvind

Inorganic Membranes:; Design, Optimization and Reaction Studies

National Science Foundation

\$5,000

48 months

## Wolf, Eduardo E.

High Throughput Activity and in-situ FTIR and EXAFS Studies of the Effect of S on Noble Metal Supported Oxidation Catalysts

National Science Foundation

\$12,000

35 months

#### Chemistry and Biochemistry

#### Castellino, Francis J.

Blood Coagulation Protein-Metal Ion-Lipid Interactions

National Institutes of Health

\$393,454

24 months

#### Kandel, S.A.

Oxidation of Aluminum Surfaces by Energetic Atoms and Molecules

American Chemical Society

\$35,000

24 months

#### Sevov, Slavi C.

Solution and Solid State Chemistry of Homo-and Hetero-Atomic Deltahedral Clusters

National Science Foundation

\$90,834

35 months

#### Smith, Bradley Dennis

Rationally Designed Promoters and Inhibitors of Membrane Fusion

National Institutes of Health

\$167,389

12 months

#### Taylor, Richard E.

Structural Diversity Based on Cyclopropane Scaffolds

National Science Foundation

\$380,000

36 months

# Civil Engineering and Geological Sciences

#### Gray, William G.

Water Resources Editorial Office Arrangements

American Geophysical Union

\$75,600

52 months

#### Ketchum, Lloyd H.

Continuation of projects 40577 and 44635.

City of Elkhart

\$88,882

12 months

#### Kurama, Yahya C.

CAREER: Seismic Behavior and Design of Non-Emulative Precast Concrete Buildings with Supplemental Passive Energy Dissipation.

National Science Foundation

\$75,000

54 months

#### Neal, Clive R.

Geochemical Evolution of the Moon & Meteorites National Aeronautics and Space Administration \$30,000 12 months

#### Silliman, Stephen E.

An REU Site on Water Resources in Developing Countries National Science Foundation

\$63,200

35 months

# Talley, Jeffrey W.

Thermal Programmed Desorption Mass Spectrometry of Hydrophobic Organic Contaminants

U.S. Army Corps of Engineers

\$50,000

Westerink, Joannes J.

ADCIRC Hydrodynamic Circulation and Transport Code Development

.

Department of Army

\$172,000

56 months

#### Computer Science and Engineering

McCready, Mark J.; Brockman, Jay B.

Feedback Control of an Acid Neutralization Reactor: An Integrated Learning and Student Assessment Module

National Science Foundation

\$74,989

24 months

#### **Electrical Engineering**

Costello, Daniel J.; Massey, Peter C.; Collins, Oliver M.

New Directions in Turbo Coding

National Science Foundation

\$120,000

36 months

Sauer, Ken D.

Research on Iterative Reconstruction Methods for Spiral X-

ray CT

General Electric Corporation

\$28,819

36 months

Snider, Gregory Lynn (Center or Institute)

Fabrication and Characterization of High Temp.

Nanostructures

National Science Foundation

\$2,475

48 months

#### English

Psomiades, Kathy A.

Primitive Marriage: Victorian Anthropology and the Novel

National Endowment for the Humanities

\$40,000

12 months

#### Film, Television, and Theatre

Chalmers, Jessica

Reality Theater: From Authenticity to Liveness

American Council Learned Society

\$30,000

12 months

Chalmers, Jessica

Avanti!

Brown University

\$20,000

12 months

## Government and International Studies

Mainwaring, Scott P.; Welna, Christopher J. (Center or Institute)

Andean Countries-Scholarly Exchange

Private Foundation

\$47,500

25 months

Mosley, Maria E.

German Marshall Fund 2002 Research Fellowship Award

German Marshall Fund of the U.S.

\$40,000

12 months

#### History

Cobb, Paul M.

The Lords of Shayzar: An Arab Family in the Age of the

Crusades

National Endowment for the Humanities

\$40,000

10 months

Jaksic, Ivan A.

The Strange Fascination of Things Spanish: Ticknor, Prescott, and Friends

J.S. Guggenheim Memorial Foundation

\$35,000

12 months

#### Management

Davis, James H.

USASBE Entrepreneurship Awareness and Education Grant Program

Private Foundation

\$53,600

11 months

#### **Mathematics**

Cholak, Peter A.

Computability and Definability in Mathematical Logic

National Science Foundation

\$28,399

35 months

Connolly, Francis X; Isaksen, Daniel C.

An Undergraduate Research Experience in Algebra and Topology (REUSi)

National Science Foundation

\$100,786

24 months

Gursky, Matthew J.

Fully Nonlinear and Higher Order Equations in Geometry

National Science Foundation

\$103,700

Hall, Brian C.

Quantization on Cotangent Bundles

National Science Foundation

\$103,369

36 months

Knight, Julia F.

Computable Structure Theory

National Science Foundation

\$37,150

60 months

Polini, Claudia

Studies of Integrality of Ideals

National Science Foundation

\$31,214

12 months

Rosenthal, Joachim J.

Algebraic Methods in Systems Theory

National Science Foundation

\$38,000

36 months

Xavier, Frederico J.

Applications of Analysis to Differential Geometry

National Science Foundation

\$111,750

36 months

#### Music

Resick, Georgine

Recordings of Early German Song Cycles

Brown University

\$20,000

12 months

#### Philosophy

Bays, Timothy J.

Mellon Postdoctoral Fellowship

University of Chicago

\$90,000

24 months

McMullin, Ernan

International Conference: Galileo and the Church

Private Foundation

\$14,000

5 months

#### Physics

Wiescher, Michael C.; Garcia, Alejandro; Garg, Umesh; Aprahamian, Ani

Apranamian, An

Nuclear Structure and Nuclear Astrophysics

National Science Foundation

\$1,300,000

36 months

#### Bennett, David P.

The Microlensing Planet Search Project

National Aeronautics and Space Administration

\$45,000

36 months

#### Furdyna, Jacek K.

Neutron Scattering Studies of Magnetic Semiconductor Nanostructures

National Science Foundation

\$293,967

36 months

#### Glazier, James Alexander; Veretennikov, Igor N.

Diffusive Coarsening of Liquid Foams in Microgravity

National Aeronautics and Space Administration

\$75,928

45 months

#### Johnson, Walter R.

Photoexcitation and Photoionization in Dense Plasmas

Lawrence Livermore National Laboratory

\$90,160

25 months

#### Kolda, Christopher F.

Probing the Physics of the Hierarchy Problem

National Science Foundation

\$52,000

23 months

# Mathews, Grant James; Frauendorf, Stefan G.; Weber, Fridolin

Nuclear Properties at Extreme Density, Temperature and Spin

Department of Energy

\$138,000

24 months

# Shephard, William D.; Cason, Neal M.; Ruchti, Randal C.; Wayne, Mitchell R.; Hildreth, Michael D.

Research in Hadron Collider Physics

National Science Foundation

\$464,100

24 months

## Ruchti, Randal C.

USCMS Project - Education and Outreach

Fermi National Laboratory

\$16,577

72 months

#### Tanner, Carol E.

Precision Measurements of Transition Amplitudes in Atomic Cesium

National Science Foundation

\$91,815

Psychology

Braungart-Rieker, Julia M.

Emotion Regulation from Infancy to Toddlerhood

National Institutes of Health

\$71,863

12 months

Wenger, Michael J.

Dynamic Models for Latency-Accuracy Relations in Memory

National Institutes of Health

\$68,235

12 months

Sociology

Cárdenas, Gilberto (Center or Institute)

Measuring the Minority Education in the Midwest

Private Foundation

\$408,177

25 months

Theology

Ashley, James M.

CTNS Science and Religion Fellowship

Center for Theology and the Natural Sciences

\$70,000

12 months

**Proposals Submitted** 

May 1, 2002, through May 31, 2002

Proposals for Research

Aerospace and Mechanical Engineering

Incropera, Frank P.; Cunningham, Robert J.

Nanotechnology Engineering Center at the University of

Notre Dame

Department of Energy

\$2,908,000

56 months

Jumper, Eric J.

High-Bandwidth Wavefront Sensor Development

Corporation

\$174,999

24 months

Renaud, John E.

Shape Optimization of an Adaptive Airframe Unmanned Air

Vehicle

National Science Foundation

\$100,000

24 months

Skaar, Steven B.

Modification and Testing of the Prototype Automatically

Guided Wheelchair

Department of Veteran Affairs

\$58,050

12 months

American Studies

Ohmer, Susan C.

America Speaks? George Gallup and the Culture of Opinion

Polling

National Endowment for the Humanities

\$40,000

12 months

Anthropology

Kawano, Satsuki

Emotions and Eldercare Among Japanese Living in the U.S.

University of Texas

\$25,000

12 months

**Biological Sciences** 

Collins, Frank H.

The Anopheles gambiae Genome Project

National Institutes of Health

\$1,487,556

12 months

Collins, Frank H.

Malaria Control by Genetic Manipulation of Vectors

National Institutes of Health

\$690,210

12 months

Ferdig, Michael T.

Genetic Control of Malaria Parasite Proliferation

National Institutes of Health

\$157,160

12 months

Hyde, David R.

Role of Muller Glia During Retinal Regeneration

National Institutes of Health

\$308,286

12 months

McDowell, Mary A.

IL-12 in Leishmania Infected Human Dendritic Cells

National Institutes of Health

\$161,486

12 months

Pollard, Morris

Mapping the Genetic Determinants for the Dietary Influence

on Prostate Cancer Medical College of Wisconsin

\$81,546

Shay, Neil F.

Role of Soybean Phytochemicals in Metabolic Syndrome

Southern Illinois University

\$50,000

12 months

Shay, Neil F.

Novel Effects of Soy Isoflavones on Mammalian Lipid Metabolism

Corporation

\$100,000

24 months

#### **Chemical Engineering**

Chang, Hsueh-Chia

Atomic and Molecular Surface Diffusion Mechanisms

American Chemical Society

\$120,000

36 months

#### Chemistry and Biochemistry

Castellino, Francis J.

Structure-Function Studies on Plasminogen and Plasmin

National Institutes of Health

\$371,250

12 months

Miller, Marvin J.

Bioactive Compounds From Acylnitroso Cycloadducts

National Institutes of Health

\$322,171

12 months

Nowak, Thomas

Catalysis and the Metabolic Functions of Enolase

National Institutes of Health

\$243,385

12 months

Sevov, Slavi C.

Reduced-and Mixed-Valence Transition-Metal Zintl Phases of

the Pnictogens: Synthesis and Properties

American Chemical Society

\$120,000

42 months

#### Civil Engineering and Geological Sciences

Neal, Clive R.

The Geochemical Evolution of the Moon

National Aeronautics and Space Administration

\$177,214

36 months

Spencer, Billie F.

Development of Graduate Modules

Multidisciplinary Center for Earthquake Engineering

Research

\$40,000

12 months

#### **Electrical Engineering**

Fay, Patrick J.

CAREER: Micromachining of Gallium Nitride and Related Materials for Microwave and Optoelectronic Applications

National Science Foundation

\$19,650

12 months

173

Fuja, Thomas E.; Costello, Daniel J.; Huang, Yih-Fang; Collins, Oliver M.

Resource-Efficient Digital Communications: Research and Testbed Development in Support of OFW and JTRS

Department of Army

\$903,000

18 months

Seabaugh, Alan C.; Bernstein, Gary H.; Collins, Oliver M.; Fay, Patrick J.

Mixed Signal Nanoelectronics

Department of Navy

\$1,734,615

48 months

#### Freimann Animal Care Facility

Suckow, Mark A.

Effect of a Novel Biomaterial on Tumor Growth-Addendum

Corporation

\$2,980

12 months

#### Government and International Studies

Lindley, Daniel A.

Is War Rational?: The Extent of Miscalculation as a Cause of

War

Private Foundation

\$60,000

12 months

#### History

Wegs, James R.

Denying Their Nazi Past: Overcoming Authoritarian

Structures

Private Foundation

\$9,000

3 months

#### **Mathematics**

Gursky, Matthew J.

Higher Order Elliptic Equations in Geometry

National Science Foundation

\$16,054

#### **Physics**

Kolata, James J.

Nuclear Structure Research

National Science Foundation

\$56,010

12 months

Ruchti, Randal C.

USCMS Hadron Calorimeter Subsystem

Northeastern University

\$164,724

12 months

Wiescher, Michael C.

Supplemental Request for Collaborative Research of the Joint

Institute

National Science Foundation

\$19,500

12 months

#### Psychology

Borkowski, John G.; Maxwell, Scott E.; Whitman, Thomas L.

Precursors of Retardation in Children with Teen Mothers

National Institutes of Health

\$249,404

12 months

Borkowski, John G.

Preventing Child Neglect: A Model Program

Health and Human Services

\$220,000

12 months

#### Borkowski, John G.; LeClere, Felicia B.; Maxwell, Scott E.

Enhancing Head Start Readiness for High-Risk Children

National Institutes of Health

\$185,625

12 months

#### Theology

Ashley, James M.

CTNS Science and Religion Fellowship

Center for Theology and the Natural Sciences

\$70,000

12 months

#### Proposals for Instructional Programs

## Aerospace and Mechanical Engineering

Niebur, Glen L.; Glazier, James A.

Symposium: The Role of Tissue Mechanics in Biological Responses to Mechanical Loading

National Science Foundation

\$12,425

12 months

#### Niebur, Glen L.; Glazier, James A.

Symposium: The Role of Tissue Mechanics in Biological Responses to Mechanical Loading

Private Foundation

\$10,000

4 months

#### **Educational Talent Search**

Outlaw, Warren G.

Talent Search

Private Foundation

\$1,500

12 months

#### Law School

#### Roemer, James A.

National Youth Sports Program Notre Dame The National Youth Sports Program Fund \$63,500

# Centers and Institutes Report 05/01/2002 to 05/31/2002

# **Awards Received**

Department or Office	No.	Amount
Center for Flow Physics and Control	1	\$175,000
Environmental Research Center	1	\$11,650
Institute for Educational Initiatives	1	\$51,300
Institute for Latino Studies	1	\$408,177
Kellogg Institute for International Studies	1	\$47,500
Nano Science and Technology Center	1	\$2,475
The Graduate School (Other)	2	\$71,836
Total:	8	\$767,938

# **Proposals Submitted**

Department or Office	No.	Amount
Center for Flow Physics and Control	2	\$274,999
Center for Transgene Research	1	\$371,250
Center for Tropical Disease Research & Training	4	\$2,496,412
Center for Zebrafish Research	1	\$308,286
Educational Talent Search	1	\$1,500
Freimann Life Science Center	1	\$2,980
Interdisciplinary Center for the Study of Biocomplexity	. 2	\$22,425
Lobund Laboratory	1	\$81,546
Nano Science and Technology Center	1	\$1,734,615
Nuclear Structure Laboratory	1	\$19,500
Total:	15	\$5,313,513

# Centers and Institutes Report 07/01/2001 to 05/31/2002

## **Awards Received**

Department or Office	No.	Amount	
Alliance for Catholic Education	4	\$268,583	
Center for Astrophysics	3	\$31,980	
Center for Environmental Science and Technology	1	\$20,000	
Center for Flow Physics and Control	12	\$774,690	
Center for Molecularly Engineered Materials	2	\$90,000	
Center for Orphan Drug Development	1	\$20,000	
Center for Transgene Research	3	\$940,875	
Center for Tropical Disease Research & Training	4	\$531,308	
Environmental Research Center	3	\$56,272	
Erasmus Institute	1	\$500,000	
Freimann Life Science Center	4	\$43,838	
Higgins Labor Research Center	1	\$98,911	
Institute for Educational Initiatives	3	\$102,683	
Institute for Latino Studies	5	\$2,613,090	
Jacques Maritain Center	1	\$30,000	
John A. Kaneb Center for Teaching and Learning	1	\$46,100	
Kellogg Institute for International Studies	7	\$1,263,280	
Keough Institute for Irish Studies	2	\$69,000	
Lobund Laboratory	1	\$72,128	
Mendelson Center for Sport, Character, & Culture	1	\$18,446	
Nano Science and Technology Center	10	\$716,617	
Radiation Laboratory	5	\$4,281,854	
South Bend Center for Medical Education	2	\$66,688	
TRIO Programs	6	\$992,222	
The Graduate School (Other)	2	\$71,836	
Walther Cancer Institute	1	\$885,000	
Tota	al: 86	\$14,605,401	

# **Proposals Submitted**

Department or Office	No.	Amount
Alliance for Catholic Education	1	\$55,000
Center for Astrophysics	7	\$1,175,187
Center for Environmental Science and Technology	4	. \$1,195,115
Center for Flow Physics and Control	16	\$18,829,704
Center for Molecularly Engineered Materials	10	\$4,142,977

Department or Office	No.	Amount
Center for Transgene Research	6	\$1,546,112
Center for Tropical Disease Research & Training	14	\$5,539,003
Center for Zebrafish Research	1	\$308,286
Educational Talent Search	1	\$1,500
Environmental Research Center	1	\$3,122
Freimann Life Science Center	7	\$669,892
Institute for Educational Initiatives	1	\$91,767
Institute for Latino Studies	2	\$299,512
Interdisciplinary Center for the Study of Biocomplexity	2	\$22,425
Kellogg Institute for International Studies	2	\$279,706
Keough Institute for Irish Studies	2	\$137,694
Laboratory for Image and Signal Analysis	2	\$288,101
Lobund Laboratory	3	\$206,546
Mendelson Center for Sport, Character, & Culture	1	\$610,219
Nano Science and Technology Center	14	\$9,572,746
Nanovic Institute	1	\$24,000
Nuclear Structure Laboratory	2	\$3,066,559
Office of Special Instructional Projects and Activities	1	\$233,132
Radiation Laboratory	4	\$1,812,948
Reilly Center for Science, Technology and Values	1	\$32,429
Robinson Community Learning Center	1	\$157,275
South Bend Center for Medical Education	6	\$1,456,205
TRIO Programs	2	\$2,176,807
Walther Cancer Institute	4	\$1,613,675
Total:	119	\$55,547,644

# Awards Received

May 1, 2002, through May 31, 2002 Awards for Research

#### Center for Flow Physics and Control

High-bandwidth Wavefront Sensor Development Corporation

\$175,000

24 months

#### **Environmental Research Center**

Brine Shrimp in the Great Salt Lake Utah State University

\$11,650

11 months

#### Institute for Educational Initiatives

ACE-EDU Outreach Private Foundation

\$51,300

60 months

#### Institute for Latino Studies

Measuring the Minority Education in the Midwest Private Foundation

\$408.177

25 months

#### Kellogg Institute for International Studies

Andean Countries—Scholarly Exchange

Private Foundation

\$47,500

25 months

#### Nano Science and Technology Center

Fabrication and Characterization of High Temp. Nanostructures

National Science Foundation

\$2,475

48 months

#### The Graduate School (Other)

Doctoral Scholarship for Kate Nicholls

Private Foundation

\$39,836

33 months

Graduate Research Fellowship for Beth Robinson

National Science Foundation

\$32,000

.60 months

# **Proposals Submitted**

May 1, 2002, through May 31, 2002

Proposals for Research

#### Center for Flow Physics and Control

Shape Optimization of an Adaptive Airframe Unmanned Air Vehicle

National Science Foundation

\$100,000

24 months

High-Bandwidth Wavefront Sensor Development

Corporation

\$174,999

24 months

#### Center for Transgene Research

Structure-Function Studies on Plasminogen and Plasmin

National Institutes of Health

\$371,250

12 months

#### Center for Tropical Disease Research and Training

The Anopheles gambiae Genome Project

National Institutes of Health

\$1,487,556

12 months

Genetic Control of Malaria Parasite Proliferation

National Institutes of Health

\$157,160

12 months

Malaria Control by Genetic Manipulation of Vectors

National Institutes of Health

\$690,210

12 months

IL-12 in Leishmania Infected Human Dendritic Cells

National Institutes of Health

\$161,486

12 months

#### Center for Zebrafish Research

Role of Muller Glia During Retinal Regeneration

National Institutes of Health

\$308,286

12 months

#### Freimann Life Science Center

Effect of a Novel Biomaterial on Tumor Growth-Addendum Corporation

\$2,980

8

#### **Lobund Laboratory**

Mapping the Genetic Determinants for the Dietary Influence on Prostate Cancer

Medical College of Wisconsin

\$81,546

36 months

## Nano Science and Technology Center

Mixed Signal Nanoelectronics

Department of Navy

\$1,734,615

48 months

#### **Nuclear Structure Laboratory**

Supplemental Request for Collaborative Research of the Joint Institute

National Science Foundation

\$19,500

12 months

#### **Educational Talent Search**

Talent Search

Private Foundation

\$1,500

12 months

#### Interdisciplinary Center for the Study of Biocomplexity

Symposium: The Role of Tissue Mechanics in Biological Responses to Mechanical Loading

Private Foundation

\$10,000

4 months,

Symposium: The Role of Tissue Mechanics in Biological Responses to Mechanical Loading

National Science Foundation

\$12,425

06/01/2002 to 06/30/2002

# **Awards Received**

Category	No.	Amount	
Research	51	\$5,545,748	
Instructional Programs	1	\$63,500	
To	otal: 52	\$5,609,248	

# **Proposals Submitted**

Category	No.	Amount	
Research	39	\$10,221,074	
Total:	39	\$10,221,074	

# **June 2002 Cumulative summary**

# **Awards Received**

		07.01	.1999 - 06.30.2000	07.01.	2000 - 06.30.2001	07.01.	2001 - 06.30.2002
Category		No.	/ Amount	No.	Amount	No.	Amount
Research		321	\$37,038,718	410	\$63,072,352	436	\$53,246,380
Facilities and Equipment							
Instructional Programs		12	\$1,177,506	10	\$994,582	13	\$1,429,475
Other Programs		15	\$687,558	1	\$25,000		
Service Programs		2	\$13,222				
	Total:	350	\$38,917,004	421	\$64,091,934	449	\$54,675,855
			Proposals Sul	omitted			
		07.01	.1999 - 06.30.2000	07.01.2	2000 - 06.30.2001	07.01.	2001 - 06.30.2002
Category		No.	Amount	No.	Amount	No.	Amount
Research		548	\$153,843,401	552	\$219,470,196	650	\$211,620,924
Facilities and Equipment		4	\$786,497				
Instructional Programs		14	\$3,831,645	4	\$193,683	13	\$4,846,010
Other Programs		2	\$133,500				
Service Programs							
	Total:	568	\$158,595,043	556	\$219,663,879	663	\$216,466,934

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## Awards Received

For the period June 1, 2002, through June 30, 2002

#### Awards for Research

#### Aerospace and Mechanical Engineering

#### Corke, Thomas C. (Center or Institute)

Controlled Experiments on Instabilities and Transition to Turbulence on Elliptic Cones at Hypersonic Mach Numbers

National Aeronautics and Space Administration \$24,000 36 months

#### Dunn, Patrick F. (Center or Institute)

Entrainment of Tobacco-Smoke-Material Carriers from Surfaces

Corporation

\$584,714

36 months

#### Goodwine, John W.

CAREER: Stratified Motion Planning with Application to Robotic Manipulation

National Science Foundation

\$55,328

48 months

#### Goodwine, John W.

CAREER: Stratified Motion Planning with Application to Robotic Manipulation

National Science Foundation

\$12,000

27 months

#### Nelson, Robert C.

Indiana Space Grant Program

Purdue University

\$19,000

24 months

#### Paolucci, Samuel

Research Support for Yoshinori Aoki

Japan Patent Office

\$30,000

12 months

#### Renaud, John E.

Managing Uncertainty in Bilevel Robust Design Optimization National Science Foundation

\$77,159

36 months

# Renaud, John E. (Center or Institute)

Trust Region Meta-Model Management for the Design of a High Speed Supercavitating Vehicle

Department of Navy

\$70,000

18 months

#### Skaar, Steven B.

Modification and Testing of the Prototype Automatically Guided Wheelchair

Department of Veteran Affairs

\$58,050

12 months

#### Alcohol and Drug Education

#### Firth, Gina M.

St. Joseph County Tobacco Quit Program Healthy Communities Initiative

\$19,990

16 months

#### Anthropology

#### Blum, Susan

Deception and Truth in China

National Endowment for the Humanities

\$40,000

12 months

#### Downey, Gregory J.

An Apprenticeship in Cunning: Learning Capoeira, an Afro-Brazilian Art

Brown University

\$30,000

9 months

#### Kawano, Satsuki

Resting Peacefully? An Examination of Japanese Ancestorhood and Recent Demographic Changes

Japan Foundation

\$40,941

12 months

#### **Biological Sciences**

#### Duman, John G.

Studies of Antifreeze Proteins in Arctic and Nearctic Insects

National Science Foundation

\$12,390

36 months

#### Feder, Jeffrey Lee

The Genetics of Speciation in Rhagoletis

National Science Foundation

\$323,550

60 months

## Ferdig, Michael T. (Center or Institute)

Genetic Control of Malaria Parasite Proliferation

National Institutes of Health

\$157,160

24 months

#### Lodge, David M.

Quantifying Pathways of Nonindigenous Aquatic Species

University of Illinois-Urbana-Champaign

\$65,000

Lodge, David M.

Biocomplexity-Incubation Activity: Risk Assessment of Nonindigenous Species

National Science Foundation

\$6,000

24 months

Lodge, David M.

EPA Fellowship for John Drake Environmental Protection Agency

\$34,000

24 months

O'Tousa, Joseph Edward

Genetic Analysis of Retinal Degeneration

National Institutes of Health

\$295,018

12 months

Shay, Neil F.

Novel Effects of Soy Isoflavones on Mammalian Lipid Metabolism

Corporation

\$100,000

24 months

Shay, Neil F.

The Effect of Soy Extract on Lipid-Related Gene Expression - PreDoctoral Fellowship for ORSOLYA MEZEI

American Heart Association

\$49,000

24 months

Tenniswood, Martin; Flanagan, Louise

Molecular Mechanisms of Metastatic Progression in Breast Cancer

Department of Army

\$150,000

37 months

Welsh, JoEllen J.

Vitamin D Mediated Apoptosis in Mammary Cells

National Institutes of Health

\$267,300

36 months

## **Chemical Engineering**

Varma, Arvind (Center or Institute)

Combustion Mechanisms of Complex Metal Particles

National Science Foundation

\$142,000

36 months

#### Civil Engineering and Geological Sciences

Burns, Peter C.

Post-Doctoral Research Fellowship

National Science Foundation

\$42,600

11 months

Bunker, Bruce A.; Kulpa, Charles F.; Fein, Jeremy B.

Measuring and Modeling Metal Adsorption in Bacteria-Water-Rock Systems

National Science Foundation

\$130,000

12 months

## Computer Science and Engineering

Flynn, Patrick; Bowyer, Kevin W.

Data Sets, Baseline Performance ReferencePoints, and Evaluation Metrics for Human ID

Navy/DARPA

\$313,764

35 months

#### **Electrical Engineering**

Collins, Oliver M.

Acquisition of High Speed Mixed Signal Test Equipment

National Science Foundation

\$266,516

36 months

Fay, Patrick John

CAREER: Micromachining of GaN

National Science Foundation

\$19,650

48 months

Haenggi, Martin

The Role of Feedback in Wireless Networks

Oak Ridge Associated Universities

\$5,000

12 months

Porod, Wolfgang; Bernstein, Gary H. (Center or Institute)

NER:Computing Architectures for Coupled Nanomagnets

National Science Foundation

\$87,552

12 months

## English

Gustafson, Sandra M.

Speaking Democracy: Civic Performance in the Antebellum United States

National Endowment for the Humanities

\$40,000

11 months

#### Freimann Animal Care Facility

Suckow, Mark A. (Center or Institute)

Effect of a Novel Biomaterial on Tumor Growth

Corporation

\$1,156

Suckow, Mark A. (Center or Institute)

Effect of a Novel Biomaterial on Tumor Growth

Purdue University

\$2,980

12 months

History

Biddick, Kathleen A.

Thinking about History in a Digital World

Council International Exchange Scholars

\$20,000

12 months

Jaksic, Ivan A.

The Strange Fascination of Things Spanish

Massachusetts Historical Society

\$23,375

5 months

**Mathematics** 

Buechler, Steven A.

Extending the Scope of Geometrical Model Theory

National Science Foundation

\$39.188

36 months

Sommese, Andrew J.

Collaborative Research: Software for decomposing Solution

Sets of Polynomial Systems

National Science Foundation

\$65,024

24 months

Stolz, Stephan A.

Curvature and Topology

National Science Foundation

\$66,056

60 months

Philosophy

McInerny, Ralph M. (Center or Institute)

Bradley Graduate and Post Graduate Fellowship Program for

2002-03

Private Foundation or Association

\$30,000

12 months

Physics

Bennett, David P. (Center or Institute)

Possible Resolution of Gravitationally Lensed Images Due to

an Intermediate Black Hole in the Galactic Disk

Space Telescope Science Institute

\$18,464

24 months

Bennett, David P. (Center or Institute)

Gravitational Microlensing in the NGC 3314A-B Galaxy Pair

Space Telescope Science Institute

\$175,569

24 months

Kolata, James J.; Wiescher, Michael Caspar; Garcia,

Alejandro; Garg, Umesh; Aprahamian, Ani

Nuclear Structure Research

National Science Foundation

\$16,076

48 months

Rettig, Terrence W. (Center or Institute)

A Study of Volatile Molecules in the Inner Preplanetary Disks

Around Herbig AeBe Stars

National Science Foundation

\$101,716

36 months

Ruchti, Randal C.

Supplemental Funding for Quarknet

Northeastern University

\$283,750

12 months

**Program of Liberal Studies** 

Marvin, Julia J.

History for All: The Prose "Brut" Chronicle and Vernacular

Culture in Late-Medieval England

Private Foundation or Association

\$30,000

12 months

Psychology

Radvansky, Gabriel A.

Engineering a Transformatin of Human-Machine Interaction

to An Augmented Cognitive Relationship

Sandia National Laboratory

\$19,349

6 months

Sociology

Cárdenas, Gilberto (Center or Institute)

Berwyn/Cicero Hispanic/Latino Community Initiative in

Education, Health and Family

Private Foundation or Association

\$1,060,363

36 months

The Graduate School (Other)

Diffley, Peter

Vawter CBA Scholarship for Brad Milunski for AY2002-03

Private Foundation or Association

\$12,500

Diffley, Peter

Vawter CBA Scholarship for Brad Milunski for AY2001-02 Private Foundation or Association

\$12,500

48 months

Awards for Instructional Programs

Law School

Roemer, James A.

National Youth Sports Program Notre Dame
The National Youth Sports Program Fund
\$63,500 12 months

# **Proposals Submitted**

For the period June 1, 2002, through June 30, 2002

Proposals for Research

#### Accountancy

Rivera, Juan M.

Mexican ADRs (American Depository Receipts) in the USA and the Mexican Stock Market as a Program for Economic Development of Mexico

U.S. Agency for International Development \$141,000 24 months

#### Aerospace and Mechanical Engineering

Corke, Thomas C.

University of Notre Dame/Northrop Grumman Corporation Joint Program in Aero-Optics

Corporation, Private Foundation or Association \$25,000 3 months

Niebur, Glen L.; Palmer, Andre F.; Roeder, Ryan K.; Welsh, JoEllen J.; Shay, Neil F.; Otafin, Agnes E.

Notre Dame Bioengineering Summer Research Institute for Biomedical Product Design

National Science Foundation

\$770,170

48 months

Niebur, Glen L.; Schmid, Steven R.

Characterization of Forming of Trabecular Metal Corporation, Private Foundation or Association \$28,215 12 months American Studies

Ohmer, Susan C.

America Speaks? George Gallup and the Culture of Opinion Polling

Library of Congress

\$31,500

9 months

#### **Biological Sciences**

Collins, Frank H.

Cloning of Plasmodium Refractoriness Genes in A. gambiae National Institutes of Health

\$362,903

12 months

Ferdig, Michael T.

Genetic Control of Cross-Resistance in Plasmodium Falciparum

National Institutes of Health

\$347,000

12 months

Hinchcliffe, Edward H.

The Centrosome and Cell Cycle Progression

National Institutes of Health

\$335,000

12 months

Olson, Kenneth R.

Physiology of Trout Natriuretic Peptides

I.U. School Medicine

\$401,374

48 months

Shay, Neil F.

Soy Supplements Interact With Cholesterol-Lowering Drugs

National Institutes of Health

\$180,775

12 months

Shay, Neil F.

Novel Insulin Sensitizing Effects of Soybean Phytochemicals Southern Illinois University

\$51,750

36 months

Welsh, JoEllen J.

Role of Oxidative Stress in Vitamin D3 Mediated Apoptosis in Breast Cancer

Department of Defense

\$44,550

36 months

Welsh, JoEllen J.

Novel Functions of VDR in Breast Cancer

Department of Defense

\$432,039

#### **Chemical Engineering**

#### Varma, Arvind

Palladium Membrane Modules for Hydrogen Separation Corporation, Private Foundation or Association \$30,000 6 months

#### Chemistry and Biochemistry

#### Fehlner, Thomas P.

International: Novel Metallaborane Chemistry. A Combined Experimental and Theoretical Study

National Science Foundation

\$22,590

36 months

#### Nowak, Thomas

The Mechanism of Allosteric Regulation of Pyruvate Kinase Department of Defense

\$443,560

36 months

#### Rosen, Elliot D.

Hemostatic Balance and Arterial Thrombosis National Institutes of Health

\$510,050

12 months

#### Smith, Bradley D.

Chemical Agents that Affect Biomembrane Function National Institutes of Health

\$272,750

12 months

#### Civil Engineering and Geological Sciences

#### Silliman, Stephen E.; Kulpa, Charles F.

Biological Complexity in the Region Bounding the Water Table

National Science Foundation

\$388,996

36 months

#### Computer Science and Engineering

#### Freeh, Vincent W.

MetaJava: A System for SMP Clusters

National Science Foundation

\$162,106

36 months

#### Schaelicke, Lambert; Freeland, Joseph C.

Scalable Programmable Appliance-based Network Intrusion Detection Architecture

National Science Foundation

\$441,256

36 months

#### Dean - College of Arts and Letters

#### Alpert, Sheri A.

DNA Chips and HIPAA: How the Genome will be Handled Under the Federal Medical Privacy Regulations

National Institutes of Health

\$37,125

12 months

#### **Economics**

#### Sent, Esther-Mirjam

Simulating Herbert Simon

Corporation, Private Foundation or Association

\$24,978

10 months

#### **Electrical Engineering**

#### Fay, Patrick J.

Sb-based RITD/HEMT Devices and Circuits

University of Michigan

\$225,003

36 months

#### Hall, Douglas C.

Elaboration of Original Method of Local-thermal Oxidation for Integrated Multi-element Light Indicator Creation

Georgian Technical University

\$7,000

36 months

#### Hall, Douglas C.; Snider, Gregory L.

Oxidation of InA1As for Nanostructure Applications

Corporation, Private Foundation or Association

\$20,000

6 months

#### Seabaugh, Alan C.

Microwave Detection of Biological or Chemical Agents

Corporation, Private Foundation or Association

\$25,000

12 months

#### Freimann Animal Care Facility

#### Suckow, Mark A.

Small Intestinal Submucosa as a Barrier to Tumor Growth

Corporation, Private Foundation or Association

\$1,156

6 months

#### Government and International Studies

## Lieber, Keir A.

U.S. Nuclear Policy Then and Now

Corporation, Private Foundation or Association

\$60,000

#### **Physics**

# Aprahamian, Ani; Garcia, Alejandro

Nuclear Structure and Nuclear Astrophysics

National Science Foundation

\$15,500

12 months

#### Bennett, David P.

A Search for Extra-Solar Planets with a Global Microlensing Follow-up Network

National Aeronautics and Space Administration

\$698,230

36 months

# Jankó, Boldizsár; Dobrowolska-Furdyna, Malgorzata; Furdyna, Jacek K.

Collaborative Research: International Materials Institute for Magnetic Nanohybrids\IMIMN\)

National Science Foundation

\$1,000,000

60 months

#### Rettig, Terrence W.

An Infrared Study of Preplanetary Disks Around Young Stars: The Potential for Planet Formation

National Aeronautics and Space Administration

\$315,740

36 months

#### Psychology

#### Boker, Steven M.

Quantitative Lab Analysis

Corporation, Private Foundation or Association

\$6,300

12 months

# Borkowski, John G.; LeClere, Felicia B.; Maxwell, Scott E.

Child Maltreatment: A Multi-Level Intervention

Center for Disease Control

\$1,905,420

12 months

# Eberhard, Kathleen M.; Ryan-Scheutz, Colleen M.; Scheutz, Matthias J.

Overcoming Interference in Second Language Acquisition

National Institutes of Health

\$74,250

12 months

#### Smith, David A.

Depression, Marital Discord, and Inter-Spousal Criticism

National Institutes of Health

\$74,250

12 months

#### Wenger, Michael J.

Perceptual Processes, Evidence, and Configurality

Indiana University Bloomington

\$235,501

36 months

#### West, Robert L.

Neural Correlates of Prospective Memory National Institutes of Health

\$73,037

# Centers and Institutes Report 06/01/2002 to 06/30/2002

# **Awards Received**

Department or Office	No.	Amount
Center for Astrophysics	3	\$295,749
Center for Flow Physics and Control	3	\$678,714
Center for Molecularly Engineered Materials	1	\$142,000
Center for Tropical Disease Research & Training	1	\$157,160
Freimann Life Science Center	2	\$4,136
Institute for Latino Studies	1	\$1,060,363
Jacques Maritain Center	1	\$30,000
Nano Science and Technology Center	1	\$87,552
Total:	13	\$2,455,674

# **Proposals Submitted**

Department or Office	No.	Amount
Center for Astrophysics	2	\$1,013,970
Center for Environmental Science and Technology	1	\$388,996
Center for Flow Physics and Control	1	\$25,000
Center for Molecularly Engineered Materials	2	\$800,170
Center for Transgene Research	1	\$510,050
Center for Tropical Disease Research & Training	2	\$709,903
Freimann Life Science Center	1	\$1,156
Laboratory for Social Research	1	\$1,905,420
Nano Science and Technology Center	4	\$277,003
Nuclear Structure Laboratory	1	\$15,500
Reilly Center for Science, Technology and Values	1	\$37,125
South Bend Center for Medical Education	1	\$401,374
Total:	18	\$6,085,667

# Centers and Institutes Report 07/01/2001 to 06/30/2002

# **Awards Received**

Department or Office	No.	Amount	
Alliance for Catholic Education	4	\$268,583	
Center for Astrophysics	6	\$327,729	
Center for Environmental Science and Technology	1	\$20,000	
Center for Flow Physics and Control	15	\$1,453,404	
Center for Molecularly Engineered Materials	3	\$232,000	
Center for Orphan Drug Development	1	\$20,000	
Center for Transgene Research	3	\$940,875	
Center for Tropical Disease Research & Training	5	\$688,468	
Environmental Research Center	3	\$56,272	
Erasmus Institute	1	\$500,000	
Freimann Life Science Center	6	\$47,974	
Higgins Labor Research Center	1	\$98,911	
Institute for Educational Initiatives	3	\$102,683	
Institute for Latino Studies	6	\$3,673,453	
Jacques Maritain Center	2	\$60,000	
John A. Kaneb Center for Teaching and Learning	1	\$46,100	
Kellogg Institute for International Studies	7	\$1,263,280	
Keough Institute for Irish Studies	2	\$69,000	
Lobund Laboratory	1	\$72,128	
Mendelson Center for Sport, Character, & Culture	1	\$18,446	
Nano Science and Technology Center	11	\$804,169	
Radiation Laboratory	5	\$4,281,854	
South Bend Center for Medical Education	2	\$66,688	
TRIO Programs	6	\$992,222	
The Graduate School (Other)	2	\$71,836	
Walther Cancer Institute	1	\$885,000	
Tot	al: 99	\$17,061,075	

# **Proposals Submitted**

Department or Office	No.	Amount
Alliance for Catholic Education	1	\$55,000
Center for Astrophysics	9	\$2,189,157
Center for Environmental Science and Technology	5	\$1,584,111
Center for Flow Physics and Control	17	\$18,854,704
Center for Molecularly Engineered Materials	12	\$4,943,147

# **Centers and Institutes Report**

# 07/01/2001 to 06/30/2002

Department or Office	No.	Amount
Center for Transgene Research	7	\$2,056,162
Center for Tropical Disease Research & Training	16	\$6,248,906
Center for Zebrafish Research	2	\$568,161
Educational Talent Search	1	\$1,500
Environmental Research Center	1	\$3,122
Freimann Life Science Center	8	\$671,048
Institute for Educational Initiatives	1	\$91,767
Institute for Latino Studies	2	\$299,512
Interdisciplinary Center for the Study of Biocomplexity	2	\$22,425
Kellogg Institute for International Studies	2	\$279,706
Keough Institute for Irish Studies	2	\$137,694
Laboratory for Image and Signal Analysis	2	\$288,101
Laboratory for Social Research	1	\$1,905,420
Lobund Laboratory	3	\$206,546
Mendelson Center for Sport, Character, & Culture	1	\$610,219
Nano Science and Technology Center	18	\$9,849,749
Nanovic Institute	1	\$24,000
Nuclear Structure Laboratory	3	\$3,082,059
Office of Special Instructional Projects and Activities	1	\$233,132
Radiation Laboratory	. 4	\$1,812,948
Reilly Center for Science, Technology and Values	2	\$69,554
Robinson Community Learning Center	1	\$157,275
South Bend Center for Medical Education	7	\$1,857,579
TRIO Programs	2	\$2,176,807
Walther Cancer Institute	4	\$1,613,675
Total:	138	\$61,893,186

# Awards Received

June 1, 2002, through June 30, 2002

Awards for Research

# Center for Astrophysics

Possible Resolution of Gravitationally Lensed Images Due to an Intermediate Black Hole in the Galactic Disk Space Telescope Science Institute

\$18,464

24 months

Gravitational Microlensing in the NGC 3314A-B Galaxy Pair Space Telescope Science Institute

\$175,569

24 months

A Study of Volatile Molecules in the Inner Preplanetary Disks Around Herbig AeBe Stars

National Science Foundation

\$101,716

36 months

#### Center for Flow Physics and Control

Trust Region Meta-Model Management for the Design of a High Speed Supercavitating Vehicle

Department of Navy

\$70,000

18 months

Entrainment of Tobacco-Smoke-Material Carriers from Surfaces

Corporation, Private Foundation or Association

\$584,714

36 months

Controlled Experiments on Instabilities and Transition to Turbulence on Elliptic Cones at Hypersonic Mach Numbers

National Aeronautics and Space Administration \$24,000 36 months

Center for Molecularly Engineered Materials

Combustion Mechanisms of Complex Metal Particles National Science Foundation

\$142,000

36 months

#### Center for Tropical Disease Research and Training

Genetic Control of Malaria Parasite Proliferation National Institutes of Health

\$157,160

24 months

#### Freimann Life Science Center

Effect of a Novel Biomaterial on Tumor Growth Corporation, Private Foundation or Association \$1,156 12 months

Effect of a Novel Biomaterial on Tumor Growth Corporation, Private Foundation or Association \$2,980 12 months

#### Institute for Latino Studies

Berwyn/Cicero Hispanic/Latino Community Initiative in Education, Health and Family

Corporation, Private Foundation or Association \$1,060,363 36 months

#### Jacques Maritain Center

Bradley Graduate and Post Graduate Fellowship Program for 2002-03

Corporation, Private Foundation or Association \$30,000 12 months

#### Nano Science and Technology Center

NER:Computing Architectures for Coupled Nanomagnets National Science Foundation

\$87,552

12 months

# **Proposals Submitted**

June 1, 2002, through June 30, 2002

Proposals for Research

#### Center for Astrophysics

A Search for Extra-Solar Planets with a Global Microlensing Follow-up Network

National Aeronautics and Space Administration \$698,230 36 months

An Infrared Study of Preplanetary Disks Around Young Stars: The Potential for Planet Formation

National Aeronautics and Space Administration \$315,740 36 months

5,740 36 months

## Center for Environmental Science and Technology

Biological Complexity in the Region Bounding the Water Table

National Science Foundation

\$388,996

#### Center for Flow Physics and Control

University of Notre Dame/Northrop Grumman Corporation Joint Program in Aero-Optics

Corporation, Private Foundation or Association \$25,000 3 months

#### Center for Molecularly Engineered Materials

Notre Dame Bioengineering Summer Research Institute for Biomedical Product Design

National Science Foundation

\$770,170

48 months

Palladium Membrane Modules for Hydrogen Separation Corporation, Private Foundation or Association \$30,000 6 months

## Center for Transgene Research

Hemostatic Balance and Arterial Thrombosis National Institutes of Health \$510,050 12 months

## Center for Tropical Disease Research and Training

Genetic Control of Cross-Resistance in Plasmodium Falciparum

National Institutes of Health

\$347,000

12 months

Cloning of Plasmodium Refractoriness Genes in A. gambiae National Institutes of Health

\$362,903

12 months

#### Freimann Life Science Center

Small Intestinal Submucosa as a Barrier to Tumor Growth Corporation, Private Foundation or Association \$1,156 6 months

#### Laboratory for Social Research

Child Maltreatment: A Multi-Level Intervention Center for Disease Control \$1,905,420 12 months

#### Nano Science and Technology Center

Elaboration of Original Method of Local-thermal Oxidation for Integrated Multi-element Light Indicator Creation Georgian Technical University \$7,000 36 months

Sb-based RITD/HEMT Devices and Circuits

University of Michigan

\$225,003

36 months

Oxidation of InAlAs for Nanostructure Applications Corporation, Private Foundation or Association \$20,000 6 months

Microwave Detection of Biological or Chemical Agents Corporation, Private Foundation or Association \$25,000 12 months

#### **Nuclear Structure Laboratory**

Nuclear Structure and Nuclear Astrophysics National Science Foundation \$15,500 12 months

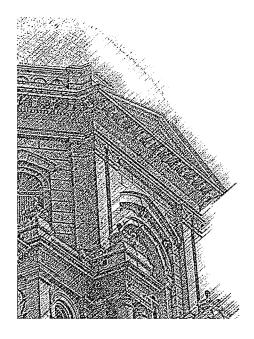
#### Reilly Center for Science, Technology and Values

DNA Chips and HIPAA: How the Genome will be Handled Under the Federal Medical Privacy Regulations National Institutes of Health \$37,125 12 months

#### South Bend Center for Medical Education

Physiology of Trout Natriuretic Peptides I.U. School Medicine \$401,374 48 months

# Notre Dame Report



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