

# Notre Dame Report

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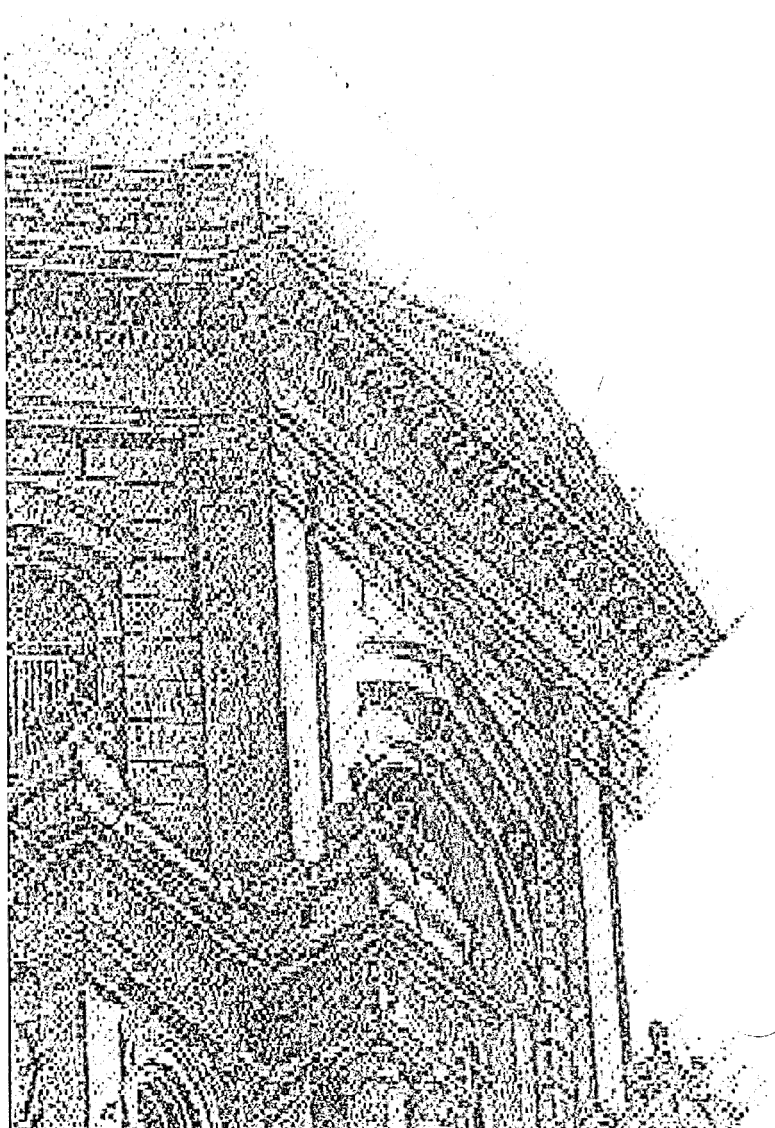
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JANUARY 31, 2003

NUMBER 10

# Faculty Notes

## Honors

**Albert-László Barabási**, the Hofman Professor of Physics, has been nominated for a 2002 *Wired* magazine Rave Award for his book *Linked: The New Science of Networks* (Perseus, 2002).

**Jeffrey Bergstrand**, associate professor of finance and business economics, had his Web page included on the Global Trade Negotiations homepage of the Center for International Development at Harvard Univ. and was designated as a "prominent researcher in international trade" among the 40 international trade economists whose Web pages were cited.

**Kevin Dreyer**, professional specialist in Film, Television, and Theatre, was appointed to the operations board of the Morris Performing Arts Center (MPAC). He is also a mayor's appointee to the MPAC board.

**Jeffrey C. Kantor**, vice president for Graduate Studies and Research, dean of the Graduate School, and professor of chemical engineering, was elected a senior member of the Institute of Electrical and Electronics Engineers, Inc.

**Robert L. Kusmer**, associate librarian, was awarded the opportunity to participate with 10 other librarians in the WESS Study Tour of German libraries and publishers, sponsored by the Goethe Institut-New York and Bibliothek and Information International, Nov. 9-17.

**Guillermo O'Donnell**, the Kellogg Professor of Government and International Studies, received a medal attesting to his appointment by the Government of Brazil to the *Ordem do Merito Cultural*, in January, in recognition of the contributions he has made to Brazilian culture from the angle of the social sciences.

**Wolfgang Porod**, the Freimann Professor of Electrical Engineering and director of the Center for Nano Science and Technology, was elected to the board of governors of the IEEE Circuits and Systems Society for a one-year term.

**Joseph M. Powers**, associate professor of aerospace and mechanical engineering, was appointed an associate editor of the *AIAA Journal of Propulsion and Power*, effective 2003 through 2005, and has joined the AIAA Committee on Standards in Computational Fluid Dynamics (CFD), January.

The **Kaneb Center for Teaching and Learning** has received a \$16,000 gift from the Notre Dame Federal Credit Union for the third consecutive year. This annual gift is given in support of the Kaneb Center's new faculty efforts arranged at the beginning of each academic year, and generously supports the center's lending library of faculty resource books, videos, and cassettes tapes on topics related to teaching and learning, assessment, tenure, and evaluation.

## Activities

**Greg Downey**, assistant professor of anthropology and Kellogg fellow, presented "The Past As Poetry and Foreboding: Sung History in Brazilian Capoeira" at the national meeting of the American Anthropological Association, New Orleans, Nov. 20.

**Kevin Dreyer**, professional specialist in Film, Television, and Theatre, designed the dance lighting for R. Altman's forthcoming motion picture *The Company*, involving original designs for two new ballets and adaptation for film of his own designs for portions of eight other dance works; and reset the lighting for performance's of J. Cranko's *Taming of the Shrew* and R. Joffrey's *The Nutcracker*, both at the Auditorium Theatre in Chicago.

**Denis Goulet**, the O'Neill Professor Emeritus in Education for Justice, Department of Economics and Kellogg Institute and Kroc Institute fellow, presented "Understanding the Middle East" at the Michiana Kiwanis Club, South Bend, Jan. 8.

**Dirk Guldi**, associate professional specialist in the Radiation Laboratory, presented "Carbon Nanostructures: From Fullerenes to Nanotubes. Their Implementation into Donor Acceptor Ensembles" at the IAPS meeting, Clearwater, Fla., Jan. 2-5.

**Maureen T. Hallinan**, the White Professor of Sociology and director of the Center for Research on Educational Opportunity, Institute for Educational Initiatives, organized the Institute for Educational Initiatives' annual education conference at Notre Dame, "Effects of School Sector on Educational Outcomes,"

Nov. 9-10; and presented "Recent Research on Catholic Schools" at the annual meeting of Chicago Catholic school principals, Aug. 16, and "Sorensen's Learning Opportunities Model: A Reconceptualization of School Effects" at the annual American Sociological Association meeting, Aug. 19.

**Bei Hu**, professor of mathematics, presented an invited talk "A PDE Model From Angiogenesis, Part I: *A priori* Estimates" at National Taiwan Normal Univ., Taipei, Dec 24; and the invited talk "A PDE Model From Angiogenesis, Part II: Asymptotic Behavior" at the same school, Dec 31.

**Kwan S. Kim**, professor of economics and Kellogg Institute fellow, was a discussant on the panel of an American Economic Association session titled "Issues in the Implementation of Structural Reforms in East Asia" in Washington, D.C., Jan. 4.

**Dan Meisel**, director of the Radiation Laboratory and professor of chemistry and biochemistry, presented the keynote lecture "Radiolytically Generated Core-shell Nanoparticles: Synthesis and Properties" at the International Symposium on Scientific and Industrial Nanotechnology 2002, Dec. 11-13, in Osaka, Japan; and a seminar "E-beam Generated Nanoparticles: Synthesis and Properties" at the Dept. of Materials Science and Technology, Nanoscience and Nanotechnology Center, Osaka Univ., Dec. 10.

**Timothy C. Ovaert**, professor of aerospace and mechanical engineering, presented "Multiparameter Models of the Viscoelastic/Plastic Mechanical Properties of Coatings via Combined Nanoindentation and Non-Linear Finite Element Modeling" at the AFOSR Workshop on Nanoscale Approaches to Multifunctional Coatings, Keystone, Colo., Aug. 10-17.

**Wolfgang Porod**, the Freimann Professor of Electrical Engineering and director of the Center for Nano Science and Technology, presented the invited talk "Nanotechnology for Imaging: Opportunities and Challenges" at the "NANO 2002 Workshop: Data Analysis and Imaging, Institute for Pure and Applied Mathematics," Univ. of California, Los Angeles, in November.

**Refugio I. Rochin**, visiting fellow of the Institute for Latino Studies, served as

co-organizer and moderator for the panel on "Hispanic Economics or Hispanic Economists" at the annual meeting of the American Social Science Association in Washington, D.C., Jan. 3.

**Thomas L. Shaffer**, the Short Professor of Law Emeritus, presented "Preferential Option for the Poor" at the annual conference of the Law Professors' Christian Fellowship, Catholic Univ. of America, Washington, D.C., Jan. 4; and "Virtue of Friendship in Legal Counseling" during the annual meeting of the section on professional responsibility, Association of American Law Schools, Washington, D.C., Jan. 4.

**Duncan Stroik**, associate professor of architecture, was interviewed by J. Seewer of the Associated Press for an article on theatre style seating, published in *Churches* in November. *Reconquering Sacred Space 2000*, a catalog for an exhibition of the same name and edited by Stroik, was reviewed in *Tbuchstone* magazine, in December. Stroik was quoted in "A 'New' Way of Thinking: Modern Church Design Harmonizes the Changing Face of American Religion" by M. Comfort and J. Comfort, *Church Business*, in January.

**Mark Suckow**, director of the Freimann Life Science Center, presented a seminar "Mucosal Vaccination to Bacterial Pathogens in a Rabbit Model" at the St. Petersburg Military Medical Academy, St. Petersburg, Russia, on Dec. 12, and met with scientists at the Institute of Highly Pure Biopreparations and the Institute of Fever and Infectious Disease to discuss potential collaborative projects.

**Lee A. Tavis**, the C.R. Smith Professor of Finance, presented a case on the Swiss pharmaceutical company Novartis: "Novartis and the United Nations Global Compact Initiative" at the second annual meeting of the United Nations Global Compact Learning Forum, Berlin, Dec. 11-13.

**Carolyn Y. Woo**, the Gillen Dean of the Mendoza College of Business and Siegfried Chair in Entrepreneurial Studies, presented "Grace in a Competitive World," as part of the Hesburgh Lecture series, to the Notre Dame Club of San Diego, Jan. 8; and "Grace in a Competitive World" to the Minority and Women Business Development Council, Jan. 15, in South Bend.

**Samir Younés**, associate professor of architecture and director of Rome Studies, was a consultant for the *Ara sine pacis* film, by filmmaker S. Nathanson, RAI SAT television. The film, which aired on RAI SAT on Jan. 2, is about the architectural schemes for the *Ara Pacis*, the altar to Augustan Peace in Rome.

## Publications

**Asma Afsaruddin**, assistant professor of Arabic and fellow in the Kroc Institute, published "In Praise of the Word of God: Reflections of Early Religious and Social Concerns in the Fada'il al-Qur'an Genre," *Journal of Qur'anic Studies* 4 (2002): 27-48; and a review of D. Madigan's *The Qur'an's Self-Image: Writing and Authority in Islam's Scripture* (Princeton, 2001), in the *American Journal of Islamic Social Sciences* 19, No. 2 (2001, released in October 2002): 129-131.

**Joseph P. Bauer**, professor of law, published "Practices Prohibited by the Sherman Act" in Kintner's *Federal Antitrust Law* I treatise, with W.H. Page (Cincinnati: Anderson Publishing Co., 2002): 434 pp.

**Rev. Thomas E. Blantz, C.S.C.**, professor of history, published the entry "University of Notre Dame du Lac" in *The New Catholic Encyclopedia* 10 (New York: Thomas-Gale Publishers, 2002): 461-462.

**Susan D. Blum**, associate professor of anthropology, has published "Margins and Centers: A Decade of Publishing on China's Minorities"; and reviews of *The Age of Wild Ghosts: Memory, Violence, and Place in Southwest China* by E. Mueggler (Univ. of California Press, 2001); *Other Chinas: The Yao and the Politics of National Belonging*, by R.A. Litzinger (Duke Univ. Press, 2000); *Perspectives on the Yi of Southwest China*, S. Harrell, ed. (ibid., 2001); *The History of Women's Mosques in Chinese Islam: A Mosque of their Own*, by M. Jaschok and S. Jingjun (Curzon, 2000); *Creating the Zhuang: Ethnic Politics in China*, by K. Palmer Kaup (Lynne Rienner, 2000); *Minority Rules: The Miao and the Feminine in China's Cultural Politics*, by L. Schein (Body, Commodity, Text: Duke, 2000); and *Echoes of History: Naxi Music in Modern China*, by H. Rees (Oxford, 2000) for the *Journal of Asian Studies* 61, No. 4 (Nov.): 1287-1310.

**Peter Cholak**, associate professor of mathematics, with L. Harrington, published "On the Definability of the Double Jump in the Computably Enumerable Sets," *Journal of Mathematical Logic* 2, No. 2 (2002): 261-296.

**Greg Downey**, assistant professor of anthropology and Kellogg fellow, published "Domesticating an Urban Menace: Efforts to Reform Capoeira as a Brazilian National Sport" in the *International Journal of the History of Sport* 19, No. 4 (2002): 1-32; and "Listening to Capoeira: Phenomenology, Embodiment, and the Materiality of Music" in *Ethnomusicology* 46, No. 3 (2002): 487-509.

**Jeremiah P. Freeman**, professor emeritus of chemistry and biochemistry, coauthored "Extension of the Sar in the 1,2-Diaminocyclohexane Phenylacetamide Template" with S. Zhao, S.A. Mizzak, and **Jacob Szmuszkowicz**, adjunct professor of chemistry and biochemistry, in *Heterocycles* 58 (2002): 153-157.

**Maureen T. Hallinan**, the White Professor of Sociology and director of the Center for Research on Educational Opportunity, Institute for Educational Initiatives, published "Catholic Education as a Societal Institution" in *Catholic Education: A Journal of Inquiry and Practice* 6, No. 1 (2002): 5-26; and "Ability Grouping and Student Learning" in *Brookings Papers on Education Policy* 2003, D Ravitch, ed. (Brookings: Brookings Institution Press, 2003): 95-140.

**Kevin Hart**, professor of English, published "Blanchot's 'Primal Scene'" in *Australian Divagations: Mallarmé and the Twentieth Century*, J. Anderson, ed. (New York: Peter Lang, 2002): 115-128; "The Little Air," a poem, in *The Recorder* 15, No. 2 (fall): 104-109; and "Found in Translation" in *Eureka Street* 13, No. 1 (Jan.-Feb.): 37-38.

**Lloyd H. Ketchum Jr.**, associate professor of civil engineering and geological sciences and Kellogg Institute fellow, coauthored "Corrosion Control Enhancement from a Dolomite-amended Slow Sand Filter" with S.J. Rooklidge, in *Water Research* 36 (June): 2689-2694; "Calicite-amended Horizontal Roughing Filtration for Clay Turbidity Removal" with S.J. Rooklidge, *Journal of Water Supply: Research and Technology—AQUA* 51, No. 6 (Sept.): 333-342; and "Clay Removal in Basaltic and Limestone Horizontal

Roughing Filters" with S.J. Rooklidge and **Peter C. Burns**, the Massman Associate Professor of Civil Engineering and Geological Sciences, in *Advances in Environmental Research* 7 (2002): 231-237.

**Lee J. Krajewski**, the Daley Professor of Manufacturing Strategy, and L.P. Ritzman published *Foundations of Operations Management* (Upper Saddle River, N.J.: Prentice Hall Publishers, 2003): 473 pp.

**Keir A. Lieber**, assistant professor of political science, published (with R.J. Lieber) "The Bush National Security Strategy," *U.S. Foreign Policy Agenda, An Electronic Journal of the U.S. Department of State* 7, No. 4 (Dec.): and "Grasping the Technological Peace: The Offense-Defense Balance and International Security" in *Offense, Defense, and War: An International Security Reader*, M. Brown and O.R. Cote Jr., eds. (Cambridge, Mass.: 2002).

**John W. Lucey**, associate professor of aerospace and mechanical engineering, had his paper "Summer Engineering Program in London" delivered by L. McWilliams at the 2002 American Society for Engineering Annual Conference in Montreal, June 15-19.

**Juan Migliore**, professor of mathematics, published "On the Minimal Free Resolution of  $n+1$  Generic Forms" (co-authored by R. Miró-Roig), *Transactions of the American Mathematical Society* 355 (2003): 1-36.

**Wolfgang Porod**, the Freimann Professor of Electrical Engineering and director of the Center for Nano Science and Technology, coauthored "Simulation of Field-Coupled Computing Architectures Based on Magnetic Dot Arrays" with G. Csaba, *Journal of Computational Electronics* 1, No. 1-2 (2002): 87-91.

**Duncan Stroik**, associate professor of architecture, had Villa Indiana, a house designed and built by Stroik, published in *A Decade of Art and Architecture 1992-2002* by the Institute of Classical Architecture.

**Mark Suckow**, director of the Freimann Life Science Center, published "Sebaceous Adenocarcinoma of the External Auditory Canal in a New Zealand White Rabbit" with M.C. Rebelatto, A.A. Schulman, and H. HogenEsch, *Journal of Comparative Pathology* 127 (2002): 301-303.

**Richard E. Taylor**, director of graduate studies and associate professor of chemistry and biochemistry, coauthored "Conformation—Activity Relationships in Polyketide Natural Products: A New Perspective on the Rational Design of Epothilone Analogues" with Y. Chen, **Alicia Beatty**, associate research professor of chemistry and biochemistry, D.C. Myles, and Y. Zhou, in the *Journal of the American Chemical Society* 125 (2002): 26-27.

**Robert P. Vecchio**, the Schurz Professor of Management, published "Preferences for Idealized Styles of Supervision" (with K.J. Boatwright) in *Leadership Quarterly* 13 (2002): 327-342.

**Eduardo E. Wolf**, professor of chemical engineering, V. Subramanian, and **Prashant V. Kamat**, professional specialist in the Radiation Laboratory, published "Influence of Metal/Metal Ion Concentration on the Photocatalytic Activity of TiO<sub>2</sub>-Au Composite Nanoparticles," *Langmuir* 19, No. 2 (2003): 469-474.

**Samir Younés**, associate professor of architecture and director of Rome Studies, published "The Empire of Masks. Pluralism and Monism in Architecture" in *Numen* I, No. 1 (Jan. 23), found at [www.numen-magazine.co.uk](http://www.numen-magazine.co.uk).

# Administrators' Notes

## Honors

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**Alan S. Bigger**, director of Building Services, has been reappointed as voluntary faculty advisor for the Facilities Management teleconference series hosted by the Univ. of Texas Health Science Center at San Antonio (Teleconference Network of Texas) for 2003.

## Activities

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**Alan S. Bigger**, director of Building Services, presented a teleconference "Dispensing Success: The Role of Paper Products and Dispenser—All Rolls Are Not Created Equal" for the Univ. of Texas Health Science Center at San Antonio, Jan. 8.

# Documentation

## Errors and Omissions

In issue 4, the entry for **Joanne Mack** was omitted. It reads:

JOANNE MACK, *Associate Professional Specialist in the Snite Museum of Art and Concurrent Assistant Professor of Anthropology*. A.A., College of Marin, 1962; B.A., San Francisco State College, 1964; M.A., Univ. of Wyoming, 1971; Ph.D., Univ. of Oregon, 1979 (1997).

In issue 4, the entry for **Mary C. McKeown** was under an incorrect name. It reads:

MARY C. McKEOWN, *Associate Librarian*. B.A., Univ. of Toronto, 1977; M.L.S., *ibid.*, 1989 (1990).

# Research

## Departmental Awards Received

### and Proposals Submitted

In the period from December 1 to December 31, 2002

Category	AWARDS RECEIVED		PROPOSALS SUBMITTED	
	No.	Amount	No.	Amount
Research	14	\$1,839,954	32	\$5,128,778
Facilities and Equipment	0	\$0	0	\$0
Instructional Programs	1	\$428,694	1	\$204,988
Other Programs	0	\$0	0	\$0
Service Programs	0	\$0	0	\$0
<b>Total</b>	<b>15</b>	<b>\$2,268,648</b>	<b>33</b>	<b>\$5,333,766</b>

#### FISCAL YEAR-TO-DATE CUMULATIVE

Category	AWARDS RECEIVED		PROPOSALS SUBMITTED	
	No.	Amount	No.	Amount
Research	158	\$29,155,194	294	\$86,103,887
Facilities and Equipment	0	\$0	0	\$0
Instructional Programs	10	\$1,333,710	7	\$3,253,080
Other Programs	0	\$0	0	\$0
Service Programs	0	\$0	0	\$0
<b>Total</b>	<b>168</b>	<b>\$30,488,904</b>	<b>301</b>	<b>\$89,356,967</b>

#### December 2002 Cumulative Summary

##### Awards Received

Category	7/1/2000-12/31/2000		7/1/2001-12/31/2001		7/01/2002-12/31/2002	
	No.	Amount	No.	Amount	No.	Amount
Research	235	\$30,318,256	203	\$21,290,584	158	\$29,155,194
Facilities and Equipment	0	\$0	0	\$0	0	\$0
Instructional Programs	8	\$860,726	9	\$1,184,402	10	\$1,333,710
Other Programs	1	\$25,000	0	\$0	0	\$0
Service Programs	0	\$0	0	\$0	0	\$0
<b>Total</b>	<b>244</b>	<b>\$31,203,982</b>	<b>212</b>	<b>\$22,474,986</b>	<b>168</b>	<b>\$30,488,904</b>

##### Proposals Submitted

Category	7/1/2000-12/31/2000		7/1/2001-12/31/2001		7/01/2002-12/31/2002	
	No.	Amount	No.	Amount	No.	Amount
Research	282	\$144,483,109	343	\$123,675,939	294	\$86,103,887
Facilities and Equipment					0	\$0
Instructional Programs	1	\$11,500	5	\$3,763,223	7	\$3,253,080
Other Programs					0	\$0
Service Programs					0	\$0
<b>Total</b>	<b>283</b>	<b>\$144,494,609</b>	<b>348</b>	<b>\$127,439,162</b>	<b>301</b>	<b>\$89,356,967</b>

## **Awards Received**

December 1, 2002, through December 31, 2002

### **Awards for Research**

## **Aerospace and Mechanical Engineering**

**Atassi, Hafiz M.**

Hydrodynamics and Acoustics of Rotor Blades in Nonuniform Inflow Conditions

Department of Navy

\$106,785

54 months

**Jumper, Eric J. (Center or Institute)**

Adaptive Optics for Turbulent Shear Layers

Department of the Air Force

\$50,000

12 months

## **Biological Sciences**

**Hinchcliffe, Edward H.**

Centrosomes and Cell Cycle Regulation

Private Foundation

\$756,000

48 months

**Suckow, Mark Allen (Center or Institute)**

IIMR Assignment Agreement

Private Foundation

\$12,000

12 months

## **Chemical Engineering**

**Varma, Arvind (Center or Institute)**

Mechanistic Studies in Combustion Synthesis of Materials

National Aeronautics and Space Administration

\$27,500

60 months

## **Chemistry and Biochemistry**

**Jacobs, Dennis C.**

Dynamics of Plasma/Surface Interactions

Department of the Air Force

\$116,000

30 months

## **Computer Science and Engineering**

**Kogge, Peter M.**

Morphable Computer Architectures for Highly Energy Aware Systems

Air Force Research Lab/ARPA

\$102,017

36 months

## **Electrical Engineering**

**Fay, Patrick J.; Snider, Gregory L. (Center or Institute)**

Self-Aligned and Self-Limited Quantum Dot Nanoswitches

Ohio State University

\$141,863

24 months

**Fay, Patrick J.; Bunker, Bruce A.; Kosel, Thomas H.;**

**Hall, Douglas C.; Snider, Gregory L. (Center or Institute)**

Electronic Properties and Device Applications of III-V

Compound Semiconductor Native Oxides

Department of the Air Force

\$241,583

31 months

**Seabaugh, Alan C. (Center or Institute)**

Microwave Detection of Biological and Chemical Agents

Corporate Funding

\$25,000

34 months

**Snider, Gregory L.; Merz, James L. (Center or Institute)**

Near-Field Optical Investigation of Si/Ge Quantum Dots

(MRSEC Seed Project)

University of Virginia

\$102,207

32 months

## **Physics**

**Ruggiero, Steven T.**

NIST IPA for Dr. Ruggiero

National Institute Standards and Technology

\$145,363

12 months

## **Program of Liberal Studies**

**Udoh, Fabian E.**

New Views of First-Century Jewish and Christian Self-Definition

Private Foundation

\$3,636

11 months

## **Radiation Laboratory**

**Kamat, Prashant V. (Center or Institute)**

Mechanism of Indo Dye Formation and Its Stability in Hair Proteins

Corporate Funding

\$10,000

1 month



Awards for Instructional Programs**Upward Bound**

**Coates, Alyssia J. (Center or Institute)**  
 Upward Bound  
 Department of Education  
 \$428,694 24 months

**Proposals Submitted**

December 1, 2002 through December 31, 2002  
Proposals for Research

**Aerospace and Mechanical Engineering**

**Schmid, Steven R.**  
 Chatter Suppression Through Optimization of Emulsion  
 Lubricants  
 Corporate Funding  
 \$17,078 6 months

**Sen, Mihir**  
 Communication-Based Remote Control of Hierarchical  
 Thermal Networks  
 National Science Foundation  
 \$455,301 36 months

**Skaar, Steven B.**  
 Autonomous Bag Stacking/Unstacking Systems  
 Corporate Funding  
 \$72,000 24 months

**American Studies**

**Ardizzone, Heidi L.**  
 "Under the Mask and Manner." The Worlds of Belle da Costa  
 Green  
 Private Foundation  
 \$20,000 9 months

**Anthropology**

**Schurr, Mark R.; Hayes, Robert G.**  
 Isotopic Reconstructions of Prehistoric Diet from Burnt Bones  
 National Science Foundation  
 \$272,199 36 months

**Biological Sciences**

**D'Souza-Schorey, Crislyn**  
 Investigating the Therapeutic and Diagnostic Potential of  
 Arfaptin 2 in Huntington's Disease  
 Private Foundation  
 \$194,955 24 months

**Chemical Engineering**

**Wolf, Eduardo E.**  
 Activity Stabilization of a Pt Sulfate Zirconia Catalyst by Site  
 Juxtaposition  
 Private Foundation  
 \$40,000 37 months

**Chemistry and Biochemistry**

**Brown, Seth N.**  
 Alcohol Interchange Reactions of Tripodal Titanium Alkoxides:  
 Kinetics, Thermodynamics, and Applications to Catalysis  
 Private Foundation  
 \$120,000 39 months

**Helquist, Paul; Wiest, Olaf G.**  
 Automated Design and Experimental Screening of Chiral  
 Catalysts  
 National Science Foundation  
 \$826,637 36 months

**Jacobs, Dennis C.**  
 Dynamics of State-Selected Ion Surface Reactions  
 National Science Foundation  
 \$300,000 24 months

**Rosen, Elliot D.**  
 Coagulation Initiation in Factor VII Deficient Mice  
 National Institutes of Health  
 \$284,875 12 months

**Serianni, Anthony S.**  
 NMR Studies of Biologically Important Oligosaccharides  
 National Institutes of Health  
 \$228,690 12 months

**Taylor, Richard E.**  
 Conformation Activity Relationships  
 National Institutes of Health  
 \$167,063 12 months

## Civil Engineering and Geological Sciences

**Fein, Jeremy B.; Kulpa, Charles F.; Bunker, Bruce A.**  
Adsorption of Heavy Metal Cations onto Algal Surfaces and  
onto Natural Populations of Bacteria

National Science Foundation

\$427,602 36 months

**Kareem, Ahsan**

Structural Monitoring of Samsung Tower

Corporate Funding

\$32,000 12 months

## Computer Science and Engineering

**Bowyer, Kevin W.**

Collaborative Research, ITR: Terascale Distributed Learning

National Science Foundation

\$189,651 36 months

**Hu, Xiaobo**

Evolving Test Patterns for Predicting Power Consumption in IP  
Cores

Portland State University

\$99,654 24 months

## Electrical Engineering

**Costello, Daniel J.**

Error Control Coding Techniques for Space and Satellite  
Communications

National Aeronautics and Space Administration

\$135,000 24 months

**Hall, Douglas C.**

Native-Oxide-Based Optical Waveguides in Compound  
Semiconductor Heterostructures

Corporate Funding

\$76,790 10 months

**Merz, James L.; Mintairov, Alexander**

Assembly of Opal/III-V-N Photonic Crystals Using Near-Field  
Scanning Optical Microscope

Department of Army

\$324,935 35 months

## Film, Television, and Theatre

**Crafton, Donald**

The Struggle for Hollywood: A Critical Analysis of Joseph P.  
Kennedy's Film Career

National Endowment for the Humanities

\$40,000 12 months

## History

**Constable, Olivia R.**

Images of a Multi-Cultural Society: Religion, Ethnicity, and  
Gender at the Court of Alfonso X of Castile

Private Foundation

\$20,000 9 months

## Physics

**Barabási, Albert-László**

The Topologic Properties of Metabolic Networks

National Institutes of Health

\$508,555 12 months

## Political Science

**Keys, Mary M.**

Humility and Modernity

Private Foundation

\$35,000 9 months

**Wolbrecht, Christina K.**

Women's Ballots: Turnout and Vote Choice After Suffrage

Private Foundation

\$20,000 9 months

## Program of Liberal Studies

**Udoh, Fabian E.**

New Views of First-Century Jewish and Christian Self-  
Definition

Private Foundation

\$5,000 11 months

## Radiation Laboratory

**LaVerne, Jay A.**

Gas Generation and Modeling: Radiation Chemistry and  
Microdosimetry

Los Alamos National Laboratory

\$49,513 12 months

## Sociology

**Cárdenas, Gilberto**

Private Pension Coverage for Hispanics

Private Foundation

\$19,730 12 months

**Cárdenas, Gilberto**

Concentrating on Latino Education in Illinois

Private Foundation

\$19,750 12 months

### **Theology**

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**Groody, Daniel G.**

An Undocumented Theology: Christian Life from a Mexican  
Immigrant Perspective

Louisville Institute

\$45,000

9 months

**Leyerle, Blake**

Traveling Space: Theorizing Early Christian Pilgrimage

Association of Theological Schools

\$36,600

9 months

**Zachman, Randall C.**

The Living Icons of God: Manifestation and Proclamation in  
the Theology of John Calvin

Association of Theological Schools

\$45,200

9 months

Proposals for Instructional Programs

### **ACE Educational Outreach**

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**Johnstone, Joyce V.**

Writing for Power, Power for Writing

Indiana Comm. Higher Educ.

\$204,988

26 months

# Centers and Institutes

## Awards Received and Proposals Submitted

From Dec. 1 to Dec. 31, 2002

Year-to-Date

	AWARDS RECEIVED		PROPOSALS SUBMITTED		AWARDS RECEIVED		PROPOSALS SUBMITTED	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
African-American Studies	0	\$0	0	\$0	0	\$0	0	\$0
Alliance for Catholic Education	0	\$0	0	\$0	2	\$161,249	0	\$0
Center for Astrophysics	0	\$0	0	\$0	1	\$17,928	4	\$1,773,852
Center for Environmental Science and Technology	0	\$0	0	\$0	1	\$80,000	0	\$0
Center for Flow Physics and Control	1	\$50,000	0	\$0	5	\$544,174	5	\$2,499,643
Center for Molecularly Engineered Materials	1	\$27,500	0	\$0	2	\$33,500	8	\$5,529,839
Center for Orphan Drug Development	0	\$0	0	\$0	1	\$0	0	\$0
Center for Transgene Research	0	\$0	1	\$284,875	3	\$1,023,510	3	\$2,620,416
Center for Tropical Disease Research and Training	0	\$0	0	\$0	7	\$3,515,490	6	\$1,055,245
Center for Zebrafish Research	0	\$0	0	\$0	0	\$0	1	\$334,125
Cushwa Center for American Catholicism	0	\$0	0	\$0	0	\$0	1	\$30,000
Environmental Molecular Research Institute	0	\$0	1	\$427,602	0	\$0	2	\$435,062
Environmental Research Center	0	\$0	0	\$0	0	\$5,020	0	\$0
Freimann Animal Care Facility	0	\$0	0	\$0	0	\$0	0	\$5,020
Freimann Life Science Center	1	\$12,000	0	\$0	3	\$13,500	1	\$309,875
Higgins Labor Research Center	0	\$0	0	\$0	0	\$0	1	\$12,500
Institute for Educational Initiatives	0	\$0	1	\$204,988	0	\$0	2	\$204,988
Institute for Latino Studies	0	\$0	3	\$84,480	5	\$719,512	7	\$487,480
Interdisciplinary Center for the Study of Biocomplexity	0	\$0	0	\$0	2	\$15,000	1	\$594,000
Jacques Maritain Center	0	\$0	0	\$0	0	\$0	0	\$0
John A. Kaneb Center for Teaching and Learning	0	\$0	0	\$0	0	\$0	0	\$0
Kellogg Institute for International Studies	0	\$0	0	\$0	3	\$217,218	4	\$1,738,558
Keough Institute for Irish Studies	0	\$0	0	\$0	1	\$107,694	0	\$0
Kroc Institute for International Studies	0	\$0	0	\$0	1	\$15,000	1	\$15,000
Laboratory for Image and Signal Analysis	0	\$0	0	\$0	0	\$0	0	\$0
Laboratory for Social Research	0	\$0	0	\$0	0	\$0	1	\$247,992
Lobund Laboratory	0	\$0	0	\$0	0	\$0	1	\$513,280
Mendelson Center for Sport, Character, and Community	0	\$0	0	\$0	0	\$0	0	\$0
Nano Science and Technology Center	4	\$510,653	2	\$401,725	7	\$1,680,652	32	\$23,801,699
Nanovic Institute	0	\$0	0	\$0	0	\$0	2	\$16,176
Nuclear Structure Laboratory	0	\$0	0	\$0	0	\$0	0	\$0
Office of Special Instructional Projects and Activities	0	\$0	0	\$0	0	\$0	1	\$1,625,789
Physics	0	\$0	0	\$0	0	\$0	1	\$443,288
Program of Liberal Studies	0	\$0	0	\$0	0	\$0	1	\$103,591
Radiation Laboratory	1	\$10,000	1	\$49,513	2	\$30,000	3	\$379,589
Reilly Center for Science, Technology and Values	0	\$0	0	\$0	0	\$0	0	\$0
Robinson Learning Center	0	\$0	0	\$0	0	\$0	0	\$0
South Bend Center for Medical Education	0	\$0	0	\$0	1	\$243,855	3	\$395,500
TRIO Programs	1	\$428,694	0	\$0	3	\$1,065,595	0	\$0
Walther Cancer Center	0	\$0	1	\$194,955	0	\$0	8	\$3,328,770
<b>Total</b>	<b>9</b>	<b>\$1,038,847</b>	<b>10</b>	<b>\$1,648,138</b>	<b>50</b>	<b>\$9,488,897</b>	<b>100</b>	<b>\$48,501,277</b>

## Awards Received

December 1, 2002, through December 31, 2002

### Awards for Research

#### Center for Flow Physics and Control

Adaptive Optics for Turbulent Shear Layers

Department of the Air Force

\$50,000 12 months

#### Center for Molecularly Engineered Materials

Mechanistic Studies in Combustion Synthesis of Materials

National Aeronautics and Space Administration

\$27,500 60 months

#### Freimann Life Science Center

IIMR Assignment Agreement

Indiana Institute for Medical Research

\$12,000 12 months

#### Nano Science and Technology Center

Self-Aligned and Self-Limited Quantum Dot Nanoswitches

Ohio State University

\$141,863 24 months

Microwave Detection of Biological and Chemical Agents

Corporate Funding

\$25,000 34 months

Electronic Properties and Device Applications of III-V  
Compound Semiconductor Native Oxides

Department of the Air Force

\$241,583 31 months

Near-Field Optical Investigation of Si/Ge Quantum Dots  
(MRSEC Seed Project)

University of Virginia

\$102,207 32 months

#### Radiation Laboratory

Mechanism of Indo Dye Formation and Its Stability in Hair  
Proteins

Corporate Funding

\$10,000 1 month

### Awards for Instructional Programs

#### TRIO Programs

Upward Bound

Department of Education

\$428,694 24 months

## Proposals Submitted

December 1, 2002 through December 31, 2002

### Proposals for Research

#### Center for Transgene Research

Coagulation Initiation in Factor VII Deficient Mice

National Institutes of Health

\$284,875 12 months

#### Environmental Molecular Science Institute

Adsorption of Heavy Metal Cations onto Algal Surfaces and  
onto Natural Populations of Bacteria

National Science Foundation

\$427,602 36 months

#### Institute for Latino Studies

Private Pension Coverage for Hispanics

Private Foundation

\$19,730 12 months

Concentrating on Latino Education in Illinois

Private Foundation

\$19,750 12 months

An Undocumented Theology: Christian Life from a Mexican  
Immigrant Perspective

Louisville Institute

\$45,000 9 months

#### Nano Science and Technology Center

Assembly of Opal/III-V-N Photonic Crystals Using Near-Field  
Scanning Optical Microscope

Department of Army

\$324,935 35 months

Native-Oxide-Based Optical Waveguides in Compound  
Semiconductor Heterostructures

Corporate Funding

\$76,790

10 months

### **Radiation Laboratory**

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Gas Generation and Modeling: Radiation Chemistry and  
Microdosimetry

Los Alamos National Laboratory

\$49,513

12 months

### **Walther Cancer Institute Chair I**

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Investigating the Therapeutic and Diagnostic Potential of  
Arfaptin 2 in Huntington's Disease

Private Foundation

\$194,955

24 months

### Proposals for Instructional Programs

### **Institute for Educational Initiatives**

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Writing for Power, Power for Writing

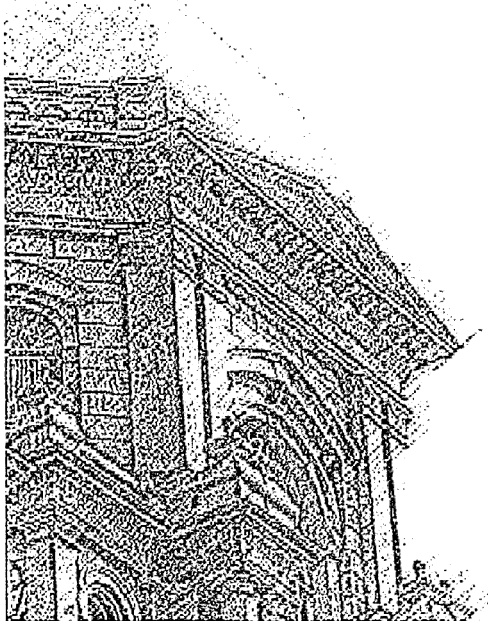
Indiana Comm. Higher Educ.

\$204,988

26 months

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# Notre Dame Report



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