

## **Faculty Notes**

411

411

Honors Activities Publications 413

#### **Administrators' Notes**

Appointments Honors 414

414

#### **Documentation**

University Committee on Libraries— March 4, 2005 414

415 Research - March 2005

A P R I L U M В E R

## Faculty Notes

#### Honors

Ani Aprahamian, professor of physics, was elected to the International Advisory Committee for the Ninth Topical Conference on Giant Resonances, "Collection Motion in Nuclei under Extreme Conditions," to be held June 20–23, 2006, in Germany.

J. Douglas Archer, librarian, was named to a three year-term on the Intellectual Freedom Committee of the Indiana Library Federation.

Ikaros I. Bigi, professor of physics, was appointed to the Lepton Collider Program Advisory Committee, KEK, Tsukuba City, Japan; was elected a fellow of the American Physical Society and was cited for correctly predicting large CP violation in B meson decays; and was named winner of the 2004 J.J. Sakurai Prize in Theoretical Particle Physics "for pioneering theoretical insights that pointed the way to the very fruitful experimental study of CP violation in B decays, and for continuing contributions to CP and heavy flavor physics."

Malgorzata Dobrowolska-Furdyna, professor of physics, was elected a fellow of the American Physical Society and was cited for her seminal contributions to the understanding of the role of electron spin in optical transitions in semiconductor compounds.

Julia Douthwaite, professor of Romance Languages and Literatures, fellow in the Nanovic Institute, and assistant provost for International Studies, was named advisory editor of the scholarly journal Eighteenth-Century Studies for a three-year term of service.

Jacek K. Furdyna, professor of physics, was elected a fellow of the Institute of Physics in the U.K., in recognition of his status in the physics community.

Carol Tanner, associate professor of physics, was installed as chair of the Topical Group on Precision Measurements and Fundamental Constants at the April 2005 meeting of the American Physical Society.

#### **Activities**

Mark S. Alber, professor of mathematics and concurrent professor of physics, presented "Two-Stage Aggregate Formation via Streams in Myxobacteria" in the "Special Session on Biological Computation" and chaired the "Special Session on Advances in the Biological Physics of Morphogenesis" at the annual meeting of the American Physical Society on March 24 in Los Angeles.

Ani Aprahamian, professor of physics, presented the seminar "Aspects of Nuclear Structure in Astrophysics: Following the Light in the Universe," Indiana Univ. Cyclotron Facility, Bloomington, Feb. 25.

Wendy Arons, assistant professor in Film, Television, and Theatre and fellow in the Nanovic Institute, presented "Ventriloquism" and participated in a roundtable discussion on "Performance Studies and Historiography" at the "Performance Studies International Conference," Brown Univ., Providence, March 30 through April 3.

Dinshaw S. Balsara, assistant professor of physics, presented the invited talk "Amplification of Interstellar Magnetic Fields by Supernova-Driven Turbulence" at an Isaac Newton Institute workshop, "Large-Scale Computation in Astrophysics," Cambridge Univ., Oct. 11–15.

Joseph P. Bauer, professor of law, was an invited speaker at the "Conference on Litigating Conspiracy" at the Univ. of Western Ontario, London, Ontario, on April 1.

Ikaros I. Bigi, professor of physics, presented the "High Energy Physics Colloquium" at LNF Frascati, Italy, July 9; two invited lectures at FPCP04 in Daegu, Korea, Oct. 6 and 8; an invited talk at the "V(xb) Workshop," Nagoya Univ., Japan, Oct. 14; the "High Energy Physics Colloquium" at Michigan State Univ., East Lansing, Oct. 27; the "High Energy Physics Colloquium" at SLAC, Stanford Univ., Dec. 9; and an invited talk at the "V(ub)SF Workshop, SLAC, Dec. 11.

Neal M. Cason, professor of physics, presented the colloquium "Exotic Mesons: From Discovery to Spectroscopy" at the Univ. of Alabama, Tuscaloosa, March 23.

Philippe Collon, assistant professor of physics, presented the invited seminar "Accelerator Mass Spectrometry: From Tracing Oceans to Nuclear Astrophysics (and RIA)" for the Dept. of Physics, Western Michigan Univ., Kalamazoo, Oct. 4; and the invited seminar "Accelerator Mass Spectrometry: From Tracing Oceans to Nuclear Astrophysics" at the National Superconducting Accelerator Laboratory, Michigan State Univ., East Lansing, Jan. 19.

William G. Dwyer, the Hank Professor of Mathematics, was an invited participant in the workshop on Goodwillie Calculus held at the Banff International Research Station, Canada, April 2–7, where he presented "Goodwillie Calculus and Localization."

Agustin Fuentes, associate professor of anthropology, co-organized the symposium "The Human-Nonhuman Primate Interface: History, Evolution and Conservation, The Third Annual Wiley-Liss Symposium" at the 74th annual meeting of the American Association of Physical Anthropologists, Milwaukee, where he presented "Human-Nonhuman Primate Interconnections and Their Relevance to Biological Anthropology" and was a panel discussant for the "American Association of Physical Anthropologists Ethics Discussion Panel.

Jacek K. Furdyna, professor of physics, presented "Electronic Effects on the Growth and Composition of Ferromagnetic III<sub>1</sub>. xMnxV Semiconductors" at the "International Conference on Low-Dimensional Semiconductor Structures," Mautendorf, Austria, Feb. 15-21, 2004; "Magnetic Anisotropy in Ferromagnetic III-Mn-V Semiconductors: Issues and Observations," an invited talk, at the annual meeting of the German Physical Society, Regensburg, Germany, March 7–12, 2004; "Electronic Effects on the Growth and Composition of Ferromagnetic III<sub>1-x</sub>Mn<sub>x</sub>V Semiconductors" at the Univ. of Michigan "Materials Engineering Seminar," April 2, 2004; "Controlling Ferromagnetic Properties of Ultra-Thin Ga(1-x)Mn(x)As Films by Remote p-Type Doping," an invited talk, at the "Argonne Workshop on Nanomagnetism" May 4, 2004; "Fermi Level Effects on

Mn Incorporation in Modulation-Doped Ferromagnetic III<sub>1-x</sub>Mn<sub>x</sub>V Heterostructures," an invited talk, at the "International Conference on Nanospintronics Design and Realization," Kyoto, Japan, May 24-28; an invited overview on ferromagnetic semiconductors at the "Gordon Conference on Defects in Semiconductors," New London, N.H., July 18-23; the invited talk "Magneto-Optical Study of Nonmagnetic Quantum Dots Coupled to a Magnetic Semiconductor Quantum Well" at the annual meeting of the European Materials Research Society, Warsaw, Sept., 5-11; the colloquium "Coupled Magnetic Quantum Dots" at the Institute of Physics, Polish Academy of Sciences, Warsaw, Sept. 16; and "Spintronics and Spin-Photonics in InAs/ GaSb-Based Heterostructures" at the "Spins in Semiconductor Program Review" of the Defense Advanced Research Programs Agency, San Francisco, Oct. 24-29.

Umesh Garg, professor of physics, presented the colloquium "Experimental Determination of Nuclear Incompressibility" for the Physics Dept., Panjab Univ., Chandigarh, India, Jan. 28; the colloquium "How Far Can You Squeeze a Star?" for the Physics Dept., Clark Atlanta Univ., Feb. 11; and "How Far Can You Squeeze a Star: Experimental Determination of Nuclear Incompressibility," an invited talk, at the "2005 Joint Annual Conference of the National Society of Black Physicists and the National Society of Hispanic Physicists," Orlando, Feb. 16–19.

Nicole Stelle Garnett, associate professor of law, was coauthor of an *amicus curiae* brief on behalf of legal scholars before the U.S. Supreme Court in *Kelo v. New London*; hosted a open meeting of the National Prison Rape Elimination Commission, Notre Dame, March 31; and moderated "Prisoner Rape and Prison Reform, "*Notre Dame Journal of Legislation* Symposium," Notre Dame Law School, March 31.

Richard W. Garnett, associate professor of law, presented "Free Speech, Public Property, and Government Money" at "The Rehnquist Legacy" conference, Indiana Univ. School of Law in Bloomington, April 1–2; and presented at a panel discussion on "The Shiavo Case," Notre Dame Law School, March 30.

Meredith J. Gill, assistant professor of art history, presented "Forgery, Faith, and Divine Hierarchy after Lorenzo Valla" at the international, interdisciplinary conference "Revisioning High Renaissance Rome" at the Univ. of Edinburgh on April 5; and "Speaking Books and Moving Images: Augustinian Conversion" at the "Renaissance Society of America Annual Conference" in Cambridge, U.K., on April 9.

Jan L. Hagens, assistant professor of German, presented "From Romantic to Familial Love: Comparing Lessing's Nathan the Wise, Goethe's Iphigenia among the Taurians, and Kleist's The Prince of Homburg," and chaired a panel on "Theorizing the Artist and the Audience" at "Text and Presentation: Comparative Drama Conference IXXX," California State Univ., Northridge, April 1–3.

Claudia Kselman, professional specialist in the office of International Studies, presented "Facilitating Study Abroad from the U.S. Campus Perspective: Issues and Priorities for Registrars" at the annual meeting of the American Association of Collegiate Registrars and Admissions Officers, in New York, March 30; and organized and chaired the panel "Will It Count: Credits and Grades in Direct Enrollment Programs" for the annual meeting of NAFSA, the Association of International Educators, in Baltimore, May 26, 2004.

John M. LoSecco, professor of physics, presented "Double Chooz, A  $\overline{v}_c$  Experiment to Measure  $\theta_{13}$ " at the Experimental Physics Seminar, Brookhaven National Laboratory, N.Y., March 24.

Edward J. Maginn, associate professor of chemical and biomolecular engineering, presented the invited seminars "Development of New Molecular Dynamics Sampling Methods for Phase Equilibria Calculations," Dept. of Chemical Engineering, Carnegie-Mellon Univ., March 17; "In Search of Environmentally Benign Solvents: Are Ionic Liquids the Right Solution?" to the Dept. of Chemical and Petroleum Engineering, Univ. of Pittsburgh, March 18; and "That's a Salt? The Properties and Potential Uses of Ionic Liquids," Dept. of Chemical Engineering, Texas Tech Univ., April 1.

**Lenny Moss**, assistant professor of philosophy, Nanovic Institute fellow, and fellow

of the Reilly Center, presented "Habermas, Human Nature and the Anthropological Framework of Critical Theory" at the Pacific Division meeting of the American Philosophical Association, March 24.

Rev. Ronald J. Nuzzi, director, ACE Leadership Program, presented three sessions at the annual National Catholic Educational Association convention in Philadelphia, April 4–8, titled: "Doctoral Dissertations on Catholic Education: Advancing Theory and Practice," "Catholic Schools in the USA: An Encyclopedia," and "Why A Catholic Education Matters: Ten Things You Cannot Get Anywhere Else"; and presented a professional inservice day for Catholic school teachers and principals in Stark County, Ohio, April 8, titled "Celebrating Our Success: Research on Catholic School Effectiveness," Louisville.

Dorothy Pratt, assistant dean in Arts and Letters, gave a series of invited lectures for the ND alumni tour in March.

Robert P. Sedlack, assistant professor of design, presented the invited talk "Graphic Identities: The Process and Product of Logo Design" at a meeting of the Michiana chapter of the American Marketing Association, Feb. 17.

Mei-Chi Shaw, professor of mathematics, gave an invited talk in the Southern California Geometric analysis conference at the Univ. of California at Irvine, titled "Estimates for the d\bar-Neumann Operator in Complex Projective Spaces with Applications" on Feb. 19.

Yang Sun, visiting associate professor of physics, presented "Nuclear Astrophysics: Physicists Unite behind Big Ideas" at a colloquium at Indiana Univ. South Bend, Feb. 10.

Julia Adeney Thomas, associate professor of history, was a commentator on a panel called "Ecology and the Industrial State: The Beginnings of Environmentalism in Modern Japan" at the meeting of the Association of Asian Studies Conference in Chicago on April 2.

Eugene Ulrich, the O'Brien Professor of Theology, presented two adult enrichment classes on "The Dead Sea Scrolls and the Bible" at First Presbyterian Church, South Bend, on Feb. 20 and 27; and the lecture "The Impact of the Dead Sea Scrolls on Our Bible," accompanying the Dead Sea Scrolls exhibition at the Gulf Coast Exploreum, Mobile, April 19.

Rev. Oliver F. Williams, C.S.C., director of the Center for Ethics and Religious Values in Business and fellow of the Kroc Institute, presented "The United Nations Global Compact: The Moral Purpose of Business" to the New York City Notre Dame Alumni Club, March 14; and "The Challenge: To Avoid Checking Our Spiritual Values at the Office Door," Executive MBA Retreat, Notre Dame, March 18.

Robin Darling Young, associate professor of theology, presented "Exile and Return in The Hymn of the Pearl" at the Univ. of Toronto, March 21; and "The Heart, The Mirror and the Art of Memory in The Hymn of the Pearl" for the Canadian Society for Syriac Studies, March 23.

#### **Publications**

David E. Campbell, assistant professor of political science, and a fellow of the Institute for Educational Initiatives, published "Contextual Influences on Participation in School Governance," *Besieged: School Boards and the Future of Education Politics*, ed. W.G. Howell (Washington, DC: Brookings Institution Press, 2005).

Jay A. LaVerne, professional specialist in the Radiation Laboratory, published "Decomposition of Hydrogen Peroxide at Water-Ceramic Oxide Interfaces" with A. Hiroki, *Journal of Physical Chemistry B* 109, No. 8 (2005): 3364–3370; and "H2 and Cl2 Production in the Radiolysis of Calcium and Magnesium Chlorides and Hydroxides" with L. Tandon, *Journal of Physical Chemistry A* 109, No. 12: 2861–2865.

A. Eugene Livingston, professor of physics, published "2s<sup>2</sup> <sup>1</sup>S<sub>0</sub>-2s2p <sup>3</sup>P<sub>1</sub> Intercombination Transition Wavelengths in Be-like Ag<sup>43+</sup>, Sn<sup>46+</sup>, and Xe<sup>50+</sup> Ions" with D. Feili, et al., *Physica Scripta* 71 (2005): 48–51.

John M. LoSecco, professor of physics, published "Detector Depth Dependence of the High Energy Neutrino Flux," *Physical Review B* (Proceedings Supplements) 143 (2005): 577.

Edward J. Maginn, associate professor of chemical and biomolecular chemistry,

published "Synthesis, Structural Characterization, and Molecular Modeling of Dodecaniobate Keggin Chain Materials" with F. Bonhomme, J.P. Larentzos, and M. Nyman, *Inorganic Chemistry* 44 (2005): 1774–1785; and "Anion Effects on Gas Solubility in Ionic Liquids" with J.L. Anthony, J.L. Anderson, and **Joan F. Brennecke**, the Keating-Crawford Professor of Chemical Engineering, *Journal of Physical Chemistry B* 109 (2005): 6366–6374.

John M. Mahoney, adjunct professor of chemistry and biochemistry, published "Molecular Recognition of Trigonal Oxyanions Using a Ditopic Salt Receptor: Evidence for Anisotropic Shielding Surface around Nitrate Anion" with K.A. Stucker; H. Jiang; Ian Carmichael, professional specialist and director of the Radiation Laboratory, N.R. Brinkmann; Alicia M. Beatty, associate professor of chemistry and biochemistry; Bruce C. Noll, research associate professor of chemistry and biochemistry; and Bradley D. Smith, professor of chemistry, Journal of the American Chemical Society 127, No. 9 (2005): 2922–2928.

John Matthias, professor of English, published *New Selected Poems* (Cambridge: Salt Publications, 2004): 387 pp.; "The CoTranslator's Dilemma," *PEN America* 3m No. 6 (spring): 157–159; and a translation of J. Svenbro's "A Critique of Pure Representation" and "The Lake School Manifesto," both with L.-H. Svensson, in *Verse: The Second Decade* 21, Nos. 1–3 (spring): 542–543.

Juan Migliore, professor of mathematics, published "Tetrahedral Curves," written with U. Nagel, in *International Mathematics Research Notices 2005*, No. 15 (2005): 899–939.

Alven M. Neiman, professional specialist in the Dept. of Philosophy, published "Soul Sickness and Salvation: Therapy and the Art of Philosophy" in C. Higgins, ed., *Philosophy of Education 2004* (Urban, Ill.: The Philosophy of Education Society and The Univ. of Illinois at Urbana Champaign, 2005): 304–307.

Bruce C. Noll, research associate professor of chemistry and biochemistry, published "[Fe(TPP)(THF)<sub>2</sub>]" with W. Robert Scheidt, the Warren Professor of Chemistry and Biochemistry; and C.-J. Hu, Acta Crystallographica Section E (Structure Reports Online): E61 m830–m831.

William O'Rourke, professor of English, published "What It's Like to Have a Heart Attack," *Indy Men's Magazine* 3, No. 6 (February): 33–35+.

**Dorothy Pratt**, assistant dean in Arts and Letters, published the entry "Abraham Lincoln" in the *Berkshire Encyclopedia of World History*, W.H. McNeill, ed. (2005.

Jim A. Seida, assistant professor of accountancy, published "Quantifying the Costs of Intertemporal Taxable Income Shifting: Theory and Evidence from the Property-Casualty Insurance Industry" with D.W. Randolph and G.L. Salamon, *The Accounting Review* 80, No. 1 (January): 315–348.

Mei-Chi Shaw, professor of mathematics, published "Holder and L^p Estimates for \square\_b on CR Manifolds of Arbitrary Codimension" with L. Wang, Mathematische Annalen 331 (2005): 297–343; "Boundary Holder and L^p Estimates for Local Solutions of the Tangential Cauchy-Riemann Equation" with C. Laurent-Thiebaut, Transactions of American Mathematical Society 357 (2005): 151–177; and "The Smoothness of Riemannian Submersions with Nonnegative Sectional Curvature" with J. Cao, Communication in Contemporary Mathematics, 7 (2005): 1–8.

Marina Smyth, librarian, published "The Date and Origin of *Liber de ordine creaturarum*" in *Peritia: Journal of the Medieval Academy of Ireland* 17–18 (2003–2004): 1–39.

Richard E. Taylor, director of Graduate Studies and professor of chemistry and biochemistry, published "Total Synthesis of (+)-Peloruside A" with M. Jin, *Organic Letters* 7, No. 7 (2005): 1303–1305.

Eugene Ulrich, the O'Brien Professor of Theology, published (with F. Moore Cross, et al.) "Qumran Cave 4, XII: 1–2 Samuel," Discoveries in the Judaean Desert 17 (Oxford: Clarendon Press, 2005): xix + 271 pp. + XXVII plates.

Michael Wiescher, the Friemann Professor of Physics, published "The Reactions and Ashes of Thermonuclear Explosions on Neutron Stars" with J.L. Fisker, et al., *Nuclear Physics A* 752 (2005): 604–607c.

# Administrators' Notes

#### **Appointments**

Robert McQuade has been appointed associate vice president for human resources, effective May 16.

#### Honors

Jeffrey R. Shoup, director of Residence Life and Housing, received the "Outstanding Service to the Commission for Campus Judicial Affairs and Legal Issues Award" at the annual American College Personnel Association convention in Nashville, April 1–5.

## Documentation

## University Committee on Libraries

March 4, 2005

The meeting was called to order at Café de Grasta by Chairman David Smith. Also in attendance were John Adams, Craig Barbolla, Susan Blum, Roger Jacobs, Brian Pitts (for Wesley Calvert), Walter "Jack" Pratt, Charles Rosenberg, Andrew Sommese, John Weber, and Jennifer Younger.

The minutes of the meeting of February 21, 2005 were approved as written.

Chair's report: Smith reviewed the time line and content for the committee's annual report for 2004/05.

Director's report. Younger reported on the budget for FY05/06. There is good news. The provost provided an additional \$300,000 in recurring funds for the library acquisitions budget, in clear recognition of the need to retain critical journal subscriptions and book purchases. Increasing graduate stipends was another very high priority in the University budget for the next year, and Younger commended the provost for providing funds to the library. The 1% increase in the non-salary budget and endowment income added about \$150,000 as

well to the library acquisition budget, for a total increase of about \$450,000.

A lengthy discussion followed about the library acquisition budget. Younger will provide members with relative expenditure data by college, as well as data on relative expenditures for books and serials. Members inquired as to the number and scope of subject funds. Younger will provide information on that as well. The suggestion was made that perhaps all endowments for acquisitions could be assessed some percent of annual income in support of general and/or interdisciplinary books and serials.

Younger also mentioned the document delivery pilot project to offer unmediated access to journal articles is underway. This will allow faculty and graduate students in the Biological Sciences and Psychology Departments, and the College of Engineering, to obtain journal articles directly from the journal publisher, which is expected to take less time than sending the request to the interlibrary loan staff.

Smith proposed additional content to be added to the committee's web page, which is now accessible on the library site. All agreed to expanding the content, which would include links to announcements about the Graduate School funds awarded to the library, links to statements by other

universities and libraries on various issues, library reports such as the Report to the Academic Council, March 2002, and an article on the high cost of scholarly publishing.

Younger mentioned that last year the Office of Information Technologies asked the University Libraries to assume responsibility for the campus search engine. The library agreed to do so and is now consulting faculty and students about desired functionality in a campus search engine. Sommese suggested a search engine such as Google be purchased. Younger agreed this is a good option. Rosenberg stated he hopes the Libraries could obtain new funding for such a purchase. Younger also agreed this would be very desirable. Committee members indicated some interest in hearing more about this project.

Smith noted the success of the recent campus lectures by Dr. Peter Suber on the topic of open access to peer-reviewed research articles and preprints. Adams would like to see the library establish a digital repository and provide instruction to faculty on how to supply articles to a campus preprint archive. He noted preprints can be peer-reviewed or not as determined by the copyright agreement between the author and the journal publisher. Smith noted that not all journals would permit authors to post the final version of their articles to a preprint archive although some do.

The next meeting is scheculed for April 1, 2005

Respectfully submitted,

Dave Smith, UCL Chair and Jennifer Younger, Edward H. Arnold Director of University Libraries (in the absence of the secretary)



#### **Awards and Proposal Summary**

03/01/2005 to 03/31/2005

#### **Awards Received**

Category	No.	Amount	
Research	23	\$3,128,637	
Total:	23	\$3,128,637	

#### **Proposals Submitted**

Category	No.	Amount
Research	59	\$17,534,715
Instructional Programs	3	\$333,147
Total:	62	\$17,867,862

## **March 2005 Cumulative summary**

#### **Awards Received**

		07.01	.2002 - 03.31.2003	07.01.	2003 - 03.31.2004	07.01	.2004 - 03.31.2005
Category		No.	Amount	No.	Amount	No.	Amount
Research		258	\$43,902,214	289	\$43,608,594	259	\$52,854,634
Facilities and Equipment							
Instructional Programs		10	\$1,333,710	8	\$1,166,443	2	\$44,000
Other Programs				1	\$62,500		
Service Programs							
	Total:	268	\$45,235,924	298	\$44,837,537	261	\$52,898,634
			Proposals Sub	omitted			
		07.01	.2002 - 03.31.2003	07.01.	2003 - 03.31.2004	07.01	2004 - 03.31.2005
Category		No.	Amount	No.	Amount	No.	Amount
Research		435	\$124,893,919	565	\$200,215,788	599	\$177,029,870
Facilities and Equipment							
Instructional Programs		8	\$3,278,078	6	\$491,350	14	\$2,955,803
Other Programs							
Service Programs							•
	Total:	443	\$128,171,997	571	\$200,707,138	613	\$179,985,673

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 that 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 research@nd.edu or 631-4670 if you are aware of any proposals or awards that have not been properly credited to a center or institute.

Investiga	tor(s)	Title	Sponsor	Dollars	Months
Awards for Research					
Department or Office:	ACE Educational C	Outreach			
Johnstone, Joyce V.		ACE Replication Project	Corporate Funding	\$50,000	60
Department or Office:	Aerospace and Me	chanical Engineering			
Sen, Mihir		Adaptation and Implemention of Intelligent Systems Course and Lab	Ohio Northern University	\$16,148	24
Thomas, Flint O. Powers, Joseph M. Corke, Thomas C. Dunn, Patrick F. (Center or Institute)		Cavitation Suppression in Piston Fuel Pumps	Corporate Funding	\$121,943	33
Department or Office:	Anthropology				
Kuijt, lan		Early Village Social Organization and Food Production	National Endowment for the Humanities	\$40,000	12
Department or Office:	Biological Sciences	3			
Ferdig, Michael T.		Genetic Control of	National Institutes of	\$334,125	60
(Center or Institute)		Cross-Resistance in Plasmodium Falciparum	Health		
Hellmann, Jessica J.		Predicting the Impact of Climate Change on Animal Distributions: The Importance of Local Adaptation and Species' Traits	Department of Energy	\$293,555	24
Li, Lei (Center or Institute)		Centrifugal Modulation of Vertebrate Visual Sensitivity	National Institutes of Health	\$222,750	24
McDowell, Mary A. (Center or Institute)		Interleukin-12 Regulation in Leishmania Infected Human Dendritic Cells	National Institutes of Health	\$285,000	59

Investigat	tor(s)	Title	Sponsor	Dollars	Months
Schorey, Jeffrey S. (Center or Institute)		Macrophage Signaling Upon M. Avium Infection	National Institutes of Health	\$300,000	48
Vihtelic, Thomas S. (Center or Institute)		Development of Wild-Type and Mutant Zebrafish Lens	National Institutes of Health	\$259,875	36
Department or Office:	Chemical Engineer	ing			•
Palmer, Andre F. (Center or Institute)		Engineering Artificial Cells	National Science Foundation	\$74,886	57
Department or Office:	Chemistry and Biod	chemistry			
Miller, Marvin J.		Design, Syntheses and Studies of Novel Antituberculious Agents	National Institutes of Health	\$331,951	36
Mobashery, Shahriar		Penicillin-Binding Proteins, Mechanisms and Inhibition	National Institutes of Health	\$277,500	48
Department or Office:	Computer Science	& Engineering			
Chandra, Surendar Flynn, Patrick J.		Hydra: A robust and self-managing video sensing system for retrospective surveillence	National Science Foundation	\$222,950	11
Department or Office:	Electrical Engineer	ing			
Porod, Wolfgang Fay, Patrick J. Bernstein, Gary H. (Center or Institute)	-	Focal Plane Array Processors with Adaptive Visual Range and Nanoantenna Sensors	Corporate Funding	\$21,000	6
Porod, Wolfgang Fay, Patrick J. Bernstein, Gary H. (Center or Institute)		Multispectral Nanoantenna Infrared Sensors	Corporate Funding	\$30,000	6

Investiga	tor(s)	Title	Sponsor	Dollars	Months
Seabaugh, Alan C. (Center or Institute)		Student Travel Support for the Device Research Conference	t Department of Navy	\$5,000	12
Department or Office:	History				
Appleby, Robert S. (Center or Institute)		Indiana Center for Cultural Exchange, Purdue University	Purdue University	\$13,188	12
Department or Office:	Mathematics				
Polini, Claudia Migliore, Juan C.		Midwest Algebra, Geometry and Their Interactions Conference	National Science Foundation	\$20,000	12
Sigal, Israel Michael		Quantum and Classical Evolution	National Science Foundation	\$109,685	36
Department or Office:	Physics				
Garnavich, Peter M. (Center or Institute)	-	Towards a Comprehensive Understanding of Type la Supernovae	Private Foundation	\$12,000	24
Department or Office:	Political Science				
Welna, Christopher J (Center or Institute)		Building Capacity for Social Progress: A Partnership for Leadership Development	Department of Education	\$62,081	12
Department or Office:	Sociology				
Cardenas, Gilberto (Center or Institute)		Latino Leadership Evaluation Dissemination	Private Foundation	\$25,000	12

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Investigator(s)	Title	Sponsor	Dollars	Months
Proposals for Research				
Department or Office:	Aerospace and Mechanical Engineer	ing		
Corke, Thomas C.	Plasma Assisted Aerodynamic Control System for Munition Maneuvering	Corporate Funding	\$260,000	24
Jumper, Eric J. Cavalieri, David Rennie, Robert M. Gordeyev, Stanislav V.	Year 2: Aero-Optical Modeling and Validation for HEL Systems	Corporate Funding	\$209,975	12
Jumper, Eric J.	Toward Adaptive-Optic Mitigation of Aero-Optic Effects	Department of the Air Force	\$203,189	36
Morris, Scott C.	Experimental Measurements of a Low Noise Trailing Edge	Stanford University	\$20,000	9
Nelson, Robert C.	The Flow Physics of Controlling the Leading Edge Vortex	Clarkson University	\$228,349	36
Roeder, Ryan K. Niebur, Glen L.	Contrast Agents for Micro-Computed Tomography of Microdamage in Bone	Department of Army	\$791,625	48
Department or Office	Biological Sciences			
Department or Office: Besansky, Nora J.	The 2Rj inversion breakpoint of An. gambiae: molecular diagnosis and characterization.	World Health Organization	\$30,501	12

Investigator(s)	Title	Sponsor	Dollars	Months
Boyd, Sunny K.	Neuropeptide Modulation of a Vocal Motor Pathway	National Science Foundation	\$5,611	12
Fraser, Malcolm J. Severson, David W. Collins, Frank H.	Developing site-specific recombinases for transgenesis and functional genomics in mosquitoes	National Institutes of Health	\$589,644	12
Fraser, Malcolm J.	Transgenic Engineering of Aedine Mosquitos	f National Institutes of Health	\$428,700	12
Hinchcliffe, Edward H.	Cell and Physiological Dynamics Live Cell Confocal Microscope	National Institutes of Health	\$386,515	12
Lamberti, Gary A.	The Toxicity of ionic liquids to a vascular plant (Lemna Minor) in the presence of dissolved organic matter	Indiana Academy of Science	\$2,307	7
Lamberti, Gary A.	Effects of Room-Temperature Ionic Liquids on Species Interactions: Experiments with Algae and Daphnia	Indiana Academy of Science	\$2,350	3
Lamberti, Gary A.	The spread and impacts of invasive species in U.S. rivers and streams: A multi-species approach	Indiana Academy of Science	\$2,555	14

Investigator(s)	Title	Sponsor	Dollars	Months
Li, Lei	Searching for visual system mutations in adult zebrafish	National Institutes of Health	\$259,875	12
McKee, Edward E.	Heart Mitochondrial Toxicity of Antiviral Nucleosides	Indiana University-School of Medicine	\$43,389	12
Suckow, Mark A.	Xenogeneic Vaccine for Treatment of Prostate Cancer	Private Foundation	\$16,500	12
Whaley, Michelle A.	RET in Integrative Cell and Molecular Biology	National Science Foundation	\$18,000	. 2
Department or Office: Center for Kroeker, Charlotte Cramer, Craig J.	or Pastoral Liturgy J.S. Bach Festival	Indiana Arts Commission	\$6,000	10
December 2000	d and Diameter day Engineer	·		
Chang, Hsueh-Chia Sengupta, Shramik	al and Biomolecular Engineer Microfluidic Analytical Separator for Proteomics	Corporate Funding	\$48,000	23
Ostafin, Agnes E.	REU Supplement: Towards a new Biomolecular Chemical Engineering Curriculum	National Science Foundation	\$12,000	36
Schneider, William F. Wolf, Eduardo E.	Fundamental Mechanisms and Kinetics of NOx Selective Catalytic Reduction	Department of Energy	\$458,253	36

Inve	estigator(s)	Title	Sponsor	Dollars	Months
Schneider, Willia	am F.	Environmental Catalysis at the Interface of Metals and Metal Oxides: Models and Mechanisms of Oxidation Catalysis from First Principals	Department of Energy	\$868,032	48
Department or	Office: Chemistry	and Biochemistry			
Joyce, David E.	•	Cathepsin-E Tumor Marker in Min/+ Mouse Colon Cancer	Private Foundation	\$22,000	12
Lieberman, Man Ovaert, Timothy	•	Investigation of Diesel Lacquers	Corporate Funding	\$38,303	6
				•	
Mobashery, Sha	hriar	Resistance to Beta-Lactam Antibiotics	National Institutes of Health	\$377,000	12
Mobashery, Sha	hriar	Acquisition of LC/MS System at the University of Notre Dame	National Institutes of Health	\$451,701	12
D	Office Challengin	and a second Octobration Color			
Department or 6 Kurama, Yahya 6 Salvati, Lynn A.		eering and Geological Scie NEESR-SG: Performance-Based Engineering of Innovative Coupled Wall Systems-Distributed Hybrid Testing and Model Based Simulation	University of Cincinnati	\$286,245	48
Kurama, Yahya (	<b>C</b> .	NEESR-II Multi-Axial Seismic Evaluation of Precast Concrete Walls with Large Openings	National Science Foundation	\$374,976	36

Investigator(s)	Title	Sponsor	Dollars	Months
Maurice, Patricia A. DuBois, Jennifer	Biomolecular controls on Fe acquisition mediated actinide mobility	Department of Energy	\$530,837	36
Salvati, Lynn A.	NEESR-SG Development of a Site for a Calibration of Site Response Models in the Central and Eastern United States		\$159,208	48
Silliman, Stephen E.	International Partnership on Ground Water Recharge Evapotranspiration-critical Coupled Hydrologic Processes	University of Nevada Reno	\$430,060	60
Vichit-Vadakan, Wilasa	Creating a Sustainable Campus: Direct Utilization of Coal Combustion By-products	Environmental Protection Agency	\$12,139	18
Department or Office: Compute Izaguirre, Jesus A.	er Science & Engineering CAREER: Scalable Mathematical and Computational Models for Biomolecular Modeling	National Science Foundation	\$18,750	3
Poellabauer, Christian	Operating System Services for Scalable Self-Managing Distributed Systems	Department of Energy	\$315,670	36
Scheutz, Matthias J. Snider, Gregory L. Bauer, Peter H.	A low-complexity sensor net for tracking airbourne chemicals	National Science Foundation	\$747,843	36

Investigator(s)	Title	Sponsor	Dollars	Months
Striegel, Aaron	REU Supplement: Transparent Techniques for Bandwidth Conservation	National Science Foundation	\$12,000	3
Department or Office: Election Bauer, Peter H.	strical Engineering Spatio-Temporal Evidence Fusion and	National	\$451,546	60
	Filtering for Low Signature Events	Geospatial-Intelligence Agency		
Fuja, Thomas E Laneman, J. N.	Coding/Routing Interaction in Mesh Networks	Corporate Funding	\$23,160	12
Costello, Daniel J.	NUIT- A Farahana I			
Porod, Wolfgang Bernstein, Gary H.	Introduction to Nanotechnology Based on Scanning Probe Instruments	National Science Foundation	\$12,000	3
Porod, Wolfgang Fay, Patrick J.	Multispectral Nanoantennas Infrared Sensors	Corporate Funding	\$450,000	· 18
Bernstein, Gary H.	·			
Seabaugh, Alan C.	Sensors: Tunnel-Diode RF Sensor Transceivers	National Science Foundation	\$375,001	36

Investigator(s)	Title	Sponsor	Dollars	Months
Snider, Gregory L. Bernstein, Gary H. Orlov, Alexei Fay, Patrick J. Lent, Craig S.	International Partnership for Quantum Computing and Quantum-Dot Cellula Automata		\$2,500,002	60
Snider, Gregory L.	High-Speed Carbon Nanotube Properties	Corporate Funding	\$90,000	36
Department or Office: Rodriguez, Jaime J.	English  American Myths and the Mexican War: Identity, Time and the Narratives of Nations	University of California-Los Angeles	\$39,000	9
Department or Office: Miller, Marvin J.	George & Winifred Clark II (Chemist Bioactive Compounds from Acylnitroso Cycloadducts	ry) National Institutes of Health	\$294,030	12
Department or Office: Brown-Gort, Allert R. Loving, Charles R.	Institute for Latino Studies  Caras Vermos,  Corazones No Sabemos  The Human Landscape of  Mexican Migration to the  United States	of	\$120,831	20
Brown-Gort, Allert R. Loving, Charles R.	Caras Vemos, Corazone no Sabemos: The Huma Landscape of Mexican Migration to the US		\$157,605 ·	20

Investigator(s	i) Title	Sponsor	Dollars	Months	
Department or Office:	Mathematics	Sporisor	Dollars	wontns	
Alber, Mark S. Maurice, Patricia A.	CMG Research: Development of a	National Science Foundation	\$582,869	36	
Burns, Peter C.	Quantitive Hybrid Mode to Study Uranium	1			
Woertz, Jennifer R.	Transport in a Complex Geological Setting				
Alber, Mark S.	Multiscale Analysis of	Department of Energy	#400.070		
Woertz, Jennifer R.	Cell Aggregation:	Department of Energy	\$469,879	36	
Sigal, Israel Michael	Matching Micoscale to Macroscale through Mesoscale				
Department or Office:	Physics				
Barabasi, Albert-Laszlo	The nature of time in complex systems	Private Foundation	\$439,808	60	
Hildreth, Michael D.	A Demonstration of the Electronic and Mechanical Stability of BPM-Based Energy Spectrometer for the International Linear	University of Oregon	\$308,875	36	
	Collider				
LoSecco, John M. Tanner, Carol E.	Analysis and Development of Optical Coherent State Quantun Computer Architectures	National Institute Standards & Technology	\$7,560	6	
Department or Office:	Psychology				
Borkowski, John G.	Predicting and Preventin	g National Institutes of Health	\$1,292,453	12	
Boker, Steven M.	Neglect in Teen Mothers				
LeClere, Felicia B.					
Maxwell, Scott E.			,		

Investigator(s)	Title	Sponsor	Dollars	Months
Cummings, E. M. Maxwell, Scott E.	Marital Conflict Resolution and Child Development	National Institutes of Health	\$702,514	12
Department or Office: Carmichael, lan C.	Radiation Laboratory  Radiation and Photochemistry in the Condensed Phase	Department of Energy	\$475,000	12
Department or Office: Caponigro, Jerome V.	Robinson Community Learning Center Financial Literacy Initiative	r Private Foundation	\$29,480	12
Caponigro, Jerome V.	TV4KIDZ	Private Foundation	\$5,000	14
Department or Office:  Meier, John P.	Theology  A Marginal Jew: Rethinking the Historical Jesus. Volume Four: The Last Four Enigmas		\$40,000	12
Proposals for Instructional Department or Office: Cavalieri, David	Il Programs  Aerospace and Mechanical Engineeri  Educational Training of a  New L-Band Station		\$7,000	4
Department or Office: Seabaugh, Alan C.	Electrical Engineering Student Travel Support for the Device Research Conference	r Department of Navy	\$5,000	7

Investigator(s)

Title

Sponsor

**Dollars** 

Months

Department or Office:

**Physics** 

Coshow, Suzanne M.

ISE Pre-Proposal for

National Science Foundation

\$321,147

36

Wiescher, Michael C.

Development of JINA Interactives & Games

#### **Awards and Proposal Summary**

Centers and Institutes Report 03/01/2005 to 03/31/2005

#### **Awards Received**

Department or Office	No.	Amount
Center for Astrophysics	1	\$12,000
Center for Flow Physics and Control	1	\$121,943
Center for Molecularly Engineered Materials	.1	\$74,886
Center for Tropical Disease Research & Training	3	\$919,125
Center for Zebrafish Research	2	\$482,625
Institute for Latino Studies	1	\$25,000
Kellogg Institute for International Studies	1	\$62,081
Kroc Institute for International Peace Studies	1	\$13,188
Nano Science and Technology Center	3	\$56,000
Total:	14	\$1,766,848

#### **Proposals Submitted**

Department or Office	No.	Amount
Center for Children and Families	2	\$1,994,967
Center for Environmental Science and Technology	1	\$530,837
Center for Flow Physics and Control	6	\$928,513
Center for Microfluidics and Medical Diagnostics	1	\$48,000
Center for Molecularly Engineered Materials	1	\$12,000
Center for Tropical Disease Research & Training	3	\$1,048,845
Center for Zebrafish Research	2	\$646,390
Institute for Church Life	1	\$6,000
Institute for Latino Studies	2	\$278,436
Joint Institute for Nuclear Astrophysics	1	\$321,147
Lobund Laboratory	1	\$16,500
Nano Science and Technology Center	6	\$3,432,003
Radiation Laboratory	1	\$475,000
Robinson Community Learning Center	1	\$5,000
Walther Cancer Research Center	2	\$473,701
Total:	31	\$10,217,339

## **Awards and Proposal Summary**

## Centers and Institutes Report 07/01/2004 to 03/31/2005

#### **Awards Received**

Department or Office	No.	Amount
ACE Educational Outreach	1	\$65,600
Center for Applied Mathematics	1	\$302,729
Center for Astrophysics	4	\$167,000
Center for Children and Families	1	\$1,629,988
Center for Environmental Science and Technology	2	\$135,518
Center for Flow Physics and Control	12	\$723,521
Center for Molecularly Engineered Materials	3	\$466,649
Center for Transgene Research	3	\$158,625
Center for Tropical Disease Research & Training	10	\$5,355,301
Center for Zebrafish Research	4	\$492,201
Environmental Molecular Science Institute	1	\$1,000,000
Environmental Research Center	2	\$431,265
Freimann Life Science Center	5	\$28,371
Institute for Church Life	1	\$80,000
Institute for Educational Initiatives	2	\$85,500
Institute for Latino Studies	14	\$1,302,443
Interdisciplinary Center for the Study of Biocomplexity	1	\$160,160
Jacques Maritain Center	1	\$25,000
Kellogg Institute for International Studies	3	\$378,094
Kroc Institute for International Peace Studies	3	\$354,657
Nano Science and Technology Center	20	\$4,064,826
Nanovic Institute	1	\$121,927
Nuclear Structure Laboratory	2	\$2,055,080
Office of the Provost	1	\$3,000,000
Radiation Laboratory	4	\$7,240,270
South Bend Center for Medical Education	. 2	\$263,836
Walther Cancer Research Center	3	\$349,105
To	otal: 107	\$30,437,666

#### **Proposals Submitted**

Department or Office	No.	Amount
Center for Astrophysics	10	\$2,010,047
Center for Children and Families	4	\$2,401,087
Center for Environmental Science and Technology	1	\$530,837
Center for Flow Physics and Control	21	\$6,492,038

## **Awards and Proposal Summary**

#### **Centers and Institutes Report**

07/01/2004 to 03/31/2005

Center for Microfluidics and Medical Diagnostics  Center for Molecularly Engineered Materials  Center for Social Concerns  Center for Transgene Research  Center for Tropical Disease Research & Training  Center for Zebrafish Research  Environmental Molecular Science Institute  Environmental Research Center  Freimann Life Science Center  Institute for Church Life  Institute for Educational Initiatives  Institute for Latino Studies  Joint Institute for Nuclear Astrophysics  Kellogg Institute for International Studies  Kroc Institute for International Peace Studies  Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Research Center		Amount
Center for Social Concerns Center for Transgene Research Center for Tropical Disease Research & Training Center for Zebrafish Research Environmental Molecular Science Institute Environmental Research Center Freimann Life Science Center Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	4	\$822,774
Center for Transgene Research Center for Tropical Disease Research & Training Center for Zebrafish Research Environmental Molecular Science Institute Environmental Research Center Freimann Life Science Center Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for International Peace Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	5	\$1,473,813
Center for Tropical Disease Research & Training Center for Zebrafish Research Environmental Molecular Science Institute Environmental Research Center Freimann Life Science Center Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Research Center	1	\$20,000
Center for Zebrafish Research Environmental Molecular Science Institute Environmental Research Center Freimann Life Science Center Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for International Peace Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	12	\$4,183,437
Environmental Molecular Science Institute  Environmental Research Center  Freimann Life Science Center  Institute for Church Life  Institute for Educational Initiatives  Institute for Latino Studies  Joint Institute for Nuclear Astrophysics  Kellogg Institute for International Studies  Keough Institute for Irish Studies  Kroc Institute for International Peace Studies  Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	17	\$12,974,647
Environmental Research Center  Freimann Life Science Center  Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies  Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for Irish Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	8	\$2,030,205
Freimann Life Science Center  Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for Irish Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	1	\$197,225
Institute for Church Life Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for Irish Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	2	\$13,542
Institute for Educational Initiatives Institute for Latino Studies Joint Institute for Nuclear Astrophysics Kellogg Institute for International Studies Keough Institute for Irish Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	8	\$771,206
Institute for Latino Studies  Joint Institute for Nuclear Astrophysics  Kellogg Institute for International Studies  Keough Institute for Irish Studies  Kroc Institute for International Peace Studies  Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	5	\$78,474
Joint Institute for Nuclear Astrophysics  Kellogg Institute for International Studies  Keough Institute for Irish Studies  Kroc Institute for International Peace Studies  Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	5	\$211,704
Kellogg Institute for International Studies Keough Institute for Irish Studies Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	26	\$2,893,623
Keough Institute for Irish Studies  Kroc Institute for International Peace Studies  Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	1	\$321,147
Kroc Institute for International Peace Studies Lobund Laboratory Nano Science and Technology Center Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	1	\$793,129
Lobund Laboratory  Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	1	\$40,000
Nano Science and Technology Center  Nuclear Structure Laboratory  Radiation Laboratory  Reilly Center for Science, Technology and Values  Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	4	\$2,163,224
Nuclear Structure Laboratory Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	1	\$16,500
Radiation Laboratory Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	53	\$33,170,839
Reilly Center for Science, Technology and Values Robinson Community Learning Center Walther Cancer Institute Chair I Walther Cancer Research Center	1	\$5,038,680
Robinson Community Learning Center  Walther Cancer Institute Chair I  Walther Cancer Research Center	9	\$2,886,924
Walther Cancer Institute Chair I Walther Cancer Research Center	1	\$37,500
Walther Cancer Research Center	3	\$304,947
	2	\$1,044,958
<b></b> 1	13	\$3,652,385
Total:	220	\$86,574,892

Centers and institutes report					
Investigat	or(s)	Title	Sponsor	Dollars	Award #
Awards for Research Department or Office:	Center for Astrophy	sics			
Garnavich, Peter M. (Center or Institute)		Towards a Comprehensive Understanding of Type Ia Supernovae	Private Foundation	\$12,000	006449-001
Department or Office:	Center for Flow Phy	sics and Control			
Thomas, Flint O. Powers, Joseph M. Corke, Thomas C. Dunn, Patrick F. (Center or Institute)		Cavitation Suppression in Piston Fuel Pumps	Corporate Funding	\$121,943	006221-001
Department or Office:	Center for Molecula	rly Engineered Materials	s		
Palmer, Andre F. (Center or Institute)		Engineering Artificial Cells	National Science Foundation	\$74,886	005548-001
Department or Office:	Center for Tropical	Disease Research & Tra	aining		
Schorey, Jeffrey S. (Center or Institute)		Macrophage Signaling Upon M. Avium Infection	National Institutes of Health	\$300,000	006201-001
Ferdig, Michael T. (Center or Institute)		Genetic Control of Cross-Resistance in Plasmodium Falciparum	National Institutes of Health	\$334,125	005954-001
McDowell, Mary A. (Center or Institute)		Interleukin-12 Regulation in Leishmania Infected Human Dendritic Cells	National Institutes of Health	\$285,000	006454-001
Department or Office:	Center for Zebrafish	n Research			
Vihtelic, Thomas S. (Center or Institute)		Development of Wild-Type and Mutant Zebrafish Lens	National Institutes of Health	\$259,875	006013-001
Li, Lei (Center or Institute)		Centrifugal Modulation of Vertebrate Visual Sensitivity	National Institutes of Health	\$222,750	006160-001

Investigat	tor(s)	Title	Sponsor	Dollars	Award #
Department or Office:	Institute for Latino	Studies			
Cardenas, Gilberto (Center or Institute)		Latino Leadership Evaluation Dissemination	Private Foundation	\$25,000	006448-001
Department or Office:	Kellogg Institute for	r International Studies			
Welna, Christopher J (Center or Institute)		Building Capacity for Social Progress: A Partnership for Leadership Development	Department of Education	\$62,081	005559-001
Department or Office:	Kroc Institute for In	ternational Peace Studio	<del>9</del> 8		
Appleby, Robert S. (Center or Institute)		Indiana Center for Cultural Exchange, Purdue University	Purdue University	\$13,188	006460-001
Department or Office:	Nano Science and	Technology Center			
Porod, Wolfgang Fay, Patrick J. Bernstein, Gary H. (Center or Institute)		Focal Plane Array Processors with Adaptive Visual Range and Nanoantenna Sensors	Corporate Funding	\$21,000	006456-001
Seabaugh, Alan C. (Center or Institute)		Student Travel Support for the Device Research Conference	Department of Navy	\$5,000	006452-001
Porod, Wolfgang Fay, Patrick J. Bernstein, Gary H. (Center or Institute)		Multispectral Nanoantenna Infrared Sensors	Corporate Funding	\$30,000	006455-001

Investigator(s)	Title	Sponsor	Dollars	Proposal #
Proposals for Research				
Department or Office:	Center for Children and Families			
Cummings, E. M. Maxwell, Scott E.	Marital Conflict Resolution and Child Development	National Institutes of Health	\$702,514	05090572
Borkowski, John G. Boker, Steven M. LeClere, Felicia B. Maxwell, Scott E.	Predicting and Preventing Neglect in Teen Mothers	National Institutes of Health	\$1,292,453	05090616
Department or Office	Center for Environmental Science and	Technology		
Department or Office:	Biomolecular controls on		\$530 837	05090565
Maurice, Patricia A. DuBois, Jennifer	Fe acquisition mediated actinide mobility	Department of Energy	φοσο,σοι	
Department or Office:	Center for Flow Physics and Control			
Corke, Thomas C.	Plasma Assisted Aerodynamic Control System for Munition Maneuvering	Corporate Funding	\$260,000	05090577
I				
Jumper, Eric J. Cavalieri, David Rennie, Robert M.	Year 2: Aero-Optical Modeling and Validation for HEL Systems	Corporate Funding	\$209,975	05090609
Gordeyev, Stanislav V.				
Morris, Scott C.	Experimental Measurements of a Low Noise Trailing Edge	Stanford University	\$20,000	05090601

		Centers and ins	sinutes report		
Investigato	or(s)	Title	Sponsor	Dollars	Proposal #
Jumper, Eric J.		Toward Adaptive-Optic Mitigation of Aero-Optic Effects	Department of the Air Force	\$203,189	05090619
Nelson, Robert C.		The Flow Physics of Controlling the Leading Edge Vortex	Clarkson University	\$228,349	05090618
Department or Office:	Center for	Microfluidics and Medical	Diagnostics		
Chang, Hsueh-Chia Sengupta, Shramik		Microfluidic Analytical Separator for Proteomics	Corporate Funding	\$48,000	05090604
Department or Office:	Center for	Molecularly Engineered Ma	aterials		
Ostafin, Agnes E.		REU Supplement: Towards a new Biomolecular Chemical Engineering Curriculum	National Science Foundation	\$12,000	05090596
Department or Office:	Center for <sup>-</sup>	Tropical Disease Research	& Training		
Fraser, Malcolm J. Severson, David W. Collins, Frank H.		Developing site-specific recombinases for transgenesis and functional genomics in mosquitoes	National Institutes of Health	\$589,644	05090562
Fraser, Malcolm J.		Transgenic Engineering of Aedine Mosquitos	National Institutes of Health	\$428,700	05090584
Besansky, Nora J.		The 2Rj inversion breakpoint of An. gambiae: molecular diagnosis and characterization.	World Health Organization	\$30,501	05090573

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	Investigator(s)	Title	Sponsor	Dollars	Proposal #
	Department or Office:	Center for Zebrafish Research			
	Li, Lei	Searching for visual system mutations in adult zebrafish	National Institutes of Health	\$259,875	05090592
	Hinchcliffe, Edward H.	Cell and Physiological Dynamics Live Cell Confocal Microscope	National Institutes of Health	\$386,515	05090603
	Department or Office:	Institute for Church Life			
	Kroeker, Charlotte	J.S. Bach Festival	Indiana Arts Commission	\$6,000	05090615
	Cramer, Craig J.				
			•		
	Department or Office:	Institute for Latino Studies			
	Brown-Gort, Allert R. Loving, Charles R.	Caras Vermos, Corazones No Sabemos. The Human Landscape of Mexican Migration to the United States	Private Foundation	\$120,831	05090595
	Brown-Gort, Allert R. Loving, Charles R.	Caras Vemos, Corazones no Sabemos: The Human Landscape of Mexican Migration to the US	Private Foundation	\$157,605	5 05090608
	Department or Office: Suckow, Mark A.	Lobund Laboratory  Xenogeneic Vaccine for Treatment of Prostate Cancer	Private Foundation	\$16,500	0 05090583
	Department or Office:	Nano Science and Technology Center	r		
•	Seabaugh, Alan C.	Sensors: Tunnel-Diode RF Sensor Transceivers	National Science Foundation	\$375,00 <sup>-</sup>	1 05090569

Investigator(s	Title	Sponsor	Dollars	Proposal #
Snider, Gregory L.	High-Speed Carbon Nanotube Properties	Corporate Funding	\$90,000	05090602
Porod, Wolfgang Fay, Patrick J. Bernstein, Gary H.	Multispectral Nanoantennas Infrared Sensors	Corporate Funding	\$450,000	05090620
Porod, Wolfgang Bernstein, Gary H.	NUE: A Freshman-Level Introduction to Nanotechnology Based on Scanning Probe Instruments	National Science Foundation	\$12,000 ·	05090587
Snider, Gregory L. Bernstein, Gary H. Orlov, Alexei Fay, Patrick J. Lent, Craig S.	International Partnership for Quantum Computing and Quantum-Dot Cellular Automata	National Science Foundation	\$2,500,002	05090585
Department or Office: Carmichael, lan C.	Radiation Laboratory  Radiation and Photochemistry in the Condensed Phase	Department of Energy	\$475,000 (	05090589
Department or Office: Caponigro, Jerome V.	Robinson Community Learning Center TV4KIDZ	Private Foundation	\$5,000 (	05090617

#### **Centers and Institutes Report**

Investigator(s)

Title

Sponsor

Dollars

Proposal #

Department or Office:

Walther Cancer Research Center

Joyce, David E.

Cathepsin-E Tumor Marker in Min/+ Mouse Private Foundation

\$22,000 05090590

Colon Cancer

Mobashery, Shahriar

Acquisition of LC/MS

National Institutes of Health

\$451,701 05090600

System at the University

of Notre Dame

**Proposals for Instructional Programs** 

Department or Office:

Center for Flow Physics and Control

Cavalieri, David

Educational Training of a Purdue University

\$7,000 05090579

New L-Band Station

Department or Office:

Joint Institute for Nuclear Astrophysics

Coshow, Suzanne M.

ISE Pre-Proposal for Development of JINA National Science Foundation

\$321,147 05090599

Wiescher, Michael C.

Interactives & Games

Department or Office:

Nano Science and Technology Center

Seabaugh, Alan C.

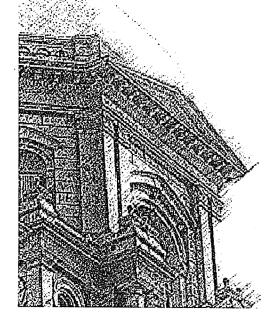
Student Travel Support for Department of Navy

the Device Research

Conference

\$5,000 05090576

# Notre Dame Report



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#### April 29, 2005

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