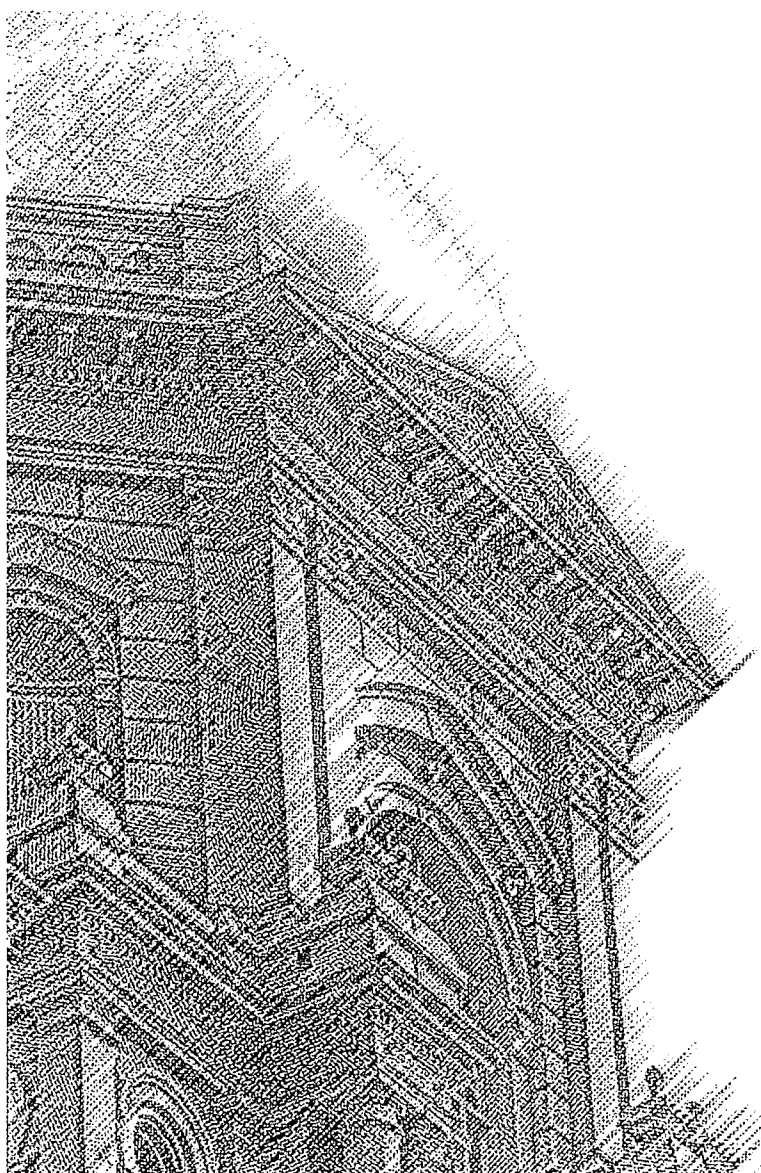


# Notre Dame Report



---

## The University

201 Elizabeth Dole to Speak at Commencement

---

## Faculty Notes

202 Honors  
202 Activities  
205 Publications

---

## Administrators' Notes

208 Appointments  
208 Honors  
208 Publications

---

## Documentation

209 Academic Council Minutes  
*August 25, 1998*  
212 Academic Council Minutes  
*September 9, 1998*  
218 Faculty Senate Journal  
*October 13, 1998*

---

## Research

222 Awards Received and Proposals Submitted  
223 Awards Received  
224 Proposals Submitted

---

DECEMBER 11, 1998

NUMBER 8

# The University

## Elizabeth Dole to Speak at Commencement

Elizabeth Dole, president of the American Red Cross and a career public servant who has been named one of the world's 10 most admired women, will be the principal speaker at the University of Notre Dame's 154th Commencement on May 16, 1999.

President of the Red Cross since 1991, Dole is credited with initiating a sweeping transformation of the organization's biomedical services and a dramatic improvement in its work as the nation's largest blood, plasma, and tissue product supplier. She also has led a fund-raising effort that has generated more than \$562 million to assist victims of hurricanes, floods, earthquakes, tornadoes, winter storms, and non-weather related disasters. Under her direction, the Red Cross' national network of trained disaster relief workers has grown from 3,200 to almost 21,000. Representing the American Red Cross internationally, she visited Kuwait to assess services being provided to U.S. military personnel and also has visited Red Cross relief operations in famine-stricken Somalia and Mozambique, in Croatia, and in Rwandan refugee camps in the Republic of Congo.

While on an unpaid leave of absence from the Red Cross from Nov. 1995-Jan. 1997, she assisted her husband, former U.S. Senator Bob Dole, in his presidential campaign.

Elizabeth Dole has served five U.S. presidents, most recently when President Bush made her the nation's 20th secretary of labor in 1989. As secretary, she worked to increase safety and health in the workplace, advocated upgrading the skills of American workers, and acted to improve labor-management relations, most notably in helping to resolve the bitter Pittston coal strike in Virginia.

Dole previously had been a member of President Reagan's Cabinet from 1983-87 as secretary of transportation—the first woman to hold that position. During her four-and-a-half-year tenure, she led the government in the initiation of random drug testing, spearheaded the national effort to raise the drinking age to 21, and directed the overhaul of the aviation safety inspection system. She also managed the sale of the government-owned freight railroad, CONRAIL, an action that returned \$2 billion to the U.S. Treasury.

Earlier, Dole served six years as a member of the Federal Trade Commission and two years as President Reagan's assistant for public liaison. Her White House service began when she was appointed deputy assistant to President Nixon for consumer affairs in 1971.

A native of Salisbury, N.C., Dole was graduated with distinction from Duke University in 1958 and was a member of Phi Beta Kappa. She subsequently earned both master's and law degrees from Harvard. Her previous academic honors have included the Radcliffe College Medal and honorary degrees from the College of William and Mary, Dartmouth College, Johns Hopkins University, and Smith College.

# Faculty Notes

## Honors

**Panos J. Antsaklis**, professor of electrical engineering, was elected President of the Mediterranean Control Association (MCA), which promotes and coordinates control and automation activities in Mediterranean countries in Europe, Asia and Africa.

**Ahsan Kareem**, professor of civil engineering and geological sciences, was appointed to the International Scientific Advisory Committee of the Third International Conference on Computational Stochastics Mechanics in Santorini, Greece, June 14-17.

**Thomas Cosimano**, professor of finance, has been named to the Board of Associate Editors for the *Journal of Economics and Business* effective January 1, 1999.

**Frank P. Incropera**, McCloskey dean of engineering and Brosey professor of mechanical engineering, has received a two-year appointment to serve as Liaison to the National Research Council for the Mechanical Engineering Section of the National Academy of Engineering.

**David C. Leege**, professor of government and international studies, was honored by the board of overseers of National Election Studies for his four years of service as its chair. He was appointed to the board of consultants for the "Assessment of Civic Education" project of the Center for Public Justice and the Center for Christian Studies. He was appointed to the board of directors of Lutheran Music Program, Inc., in Minneapolis, Minnesota.

**Diana C.J. Matthias**, associate professional specialist and curator of academic programs in the Snite Museum of Art, has been selected as the Art Education Association of Indiana's 1998 Outstanding Art Educator, Museum Education Division.

**Daniel T. Simon**, professor of accountancy, received the Vernon K. Zimmerman Outstanding Paper award for his paper entitled "Determinants of Audit Fees: The Importance of Liti-

gation, Disclosure, and Regulatory Burdens in Audit Engagements in 20 Countries" at the "International Association for Accounting Education and Research" Research Conference, October 1998.

**Sandra C. Vera-Munoz**, assistant professor of accountancy, has been appointed as Chair of the 1999 Outstanding Doctoral Dissertation Award Committee of the Accounting, Behavior, and Organizations Section of the American Accounting Association.

**Sandra Vitzthum**, assistant professor of architecture, was presented the 1998 Preservation Award from the Montpelier (Vermont) Heritage Group for enhancing the city's architectural past with her newly constructed information booth, November.

## Activities

**Joseph P. Amar**, associate professor of classics, gave the paper "The Syriac Commentary on the Psalms Attributed to Theodore of Mopsuestia" at the The Harp of Prophecy conference at the University of Notre Dame, October 16-18.

**J. Matthew Ashley**, assistant professor of theology, gave the lecture titled "Roman Catholic Social Teachings in Context," at Little Flower Parish, South Bend, Indiana, November 1.

**Klaus-Dieter Asmus**, professor of chemistry and biochemistry, gave the invited talk "Decarboxylation of Amino Acids; The Radical Mechanism" at the University of Auckland in Auckland, New Zealand, November 13; and at the Heart Research Institute in Sydney, Australia, November 26. He presented "On the Chemistry of Halogenated Aliphatic, Oxy and Peroxyl Radicals" at the joint meeting of the Australian Institute of Nuclear Science and Engineering and the Society of Free Radical Research Australia at the University of Melbourne in Melbourne, Australia, November 16.

**Patricia Blanchette**, assistant professor of philosophy, gave the talk "Frege's Metatheory" at the Western Canadian Philosophical Association meeting in Vancouver, British Columbia, November 6. She presented "Frege's Metatheory and the 1906 Independence Test" at Purdue University in West Lafayette, Indiana, November 12.

**Jianguo Cao**, associate professor of mathematics, delivered the invited lecture "Non-positively curved manifolds with small volume" at the University of Michigan, Ann Arbor, Michigan, November 3.

**Karen Chandler**, assistant professor of mathematics, gave the talk title "Reducible Hyperplane Sections" at the Boston University Geometry seminar in Boston, Massachusetts, November 11. She presented "Fat points" at the MIT Algebraic Geometry seminar at the Massachusetts Institute of Technology in Boston, Massachusetts, November 20.

**Kevin J. Christiano**, associate professor of sociology, served as discussant in the session on "Catholics in Different Socio-Cultural Contexts" at the annual meeting of the Society for the Scientific Study of Religion in Montreal, Quebec, Canada, November 6.

**Thomas Cosimano**, professor of finance, presented the paper "Can an Equity Market Account for the Predictability of Asset Returns?" co-authored with **Ralph Chami**, assistant professor of finance, at the Midwest Macroeconomic Association at Indiana University at Bloomington, October 10.

**Michael J. Crowe**, professor in the program of liberal studies, presented the paper "The John Herschel Correspondence Project" and chaired the session on "Recent Research on the Herschels" at the annual meeting of the History of Science Society in Kansas City, Missouri, October 23.

**Jay P. Dolan**, professor of history, conducted a two day seminar in American Catholic history for the School of Theology sponsored by the

Office of Religious Education of the Diocese of Little Rock, Arkansas, November 6-7.

**Dennis P. Doordan**, associate professor of architecture, conducted a workshop for junior faculty and graduate students on publishing in design publications and was an invited respondent for the symposium "Reflecting on Design: Its Values, Ideals, and Realities," sponsored by the College of Architecture and Environmental Design at Arizona State University in Tempe, Arizona, November 6.

**Alan Dowty**, professor of government and international studies, presented the talk "Toward a Universal Ban on First Use of Weapons of Mass Destruction" before the Non-Governmental Organizations Committee on Disarmament at the United Nations in New York, October 29.

**Richard Economakis**, assistant professor of architecture, exhibited architectural drawings for project entitled "Masterplan for the Extension of the Town of Göcek, Turkey" by the Deupi Economakis Design Partnership at the 23rd International Conference on "Making Cities Livable," Santa Barbara, California, November 16-18.

**Michael J. Francis**, assistant provost for international studies and professor of government, presented the paper "Will the United States Be Able To Resist Its Traditional Urge to Intervene in Latin America?" co-authored with Victor Hinojosa, at the meeting of the Latin American Studies Association in Chicago, September 23-26.

**Stephen A. Fredman**, professor of English, presented the invited lecture "'By the Waters of Manhattan': Jewish Contexts for the Emergence of Objectivist Poetry" to the Austrian American Studies Conference on Cultural Encounters: American Studies in the Age of Multiculturalism" in Innsbruck, Austria, November 7.

**Umesh Garg**, professor of physics, gave the invited talk "The Isoscalar Giant Dipole Resonance; What's New" at the Conference on Collective Excitations in Bose and Fermi Systems in

Serra Negra, Brazil, September 14-17. He gave the nuclear seminar "The Isoscalar Giant Dipole Resonance" at the National Superconducting Cyclotron Laboratory in East Lansing, Michigan, October 21.

**Denis Goulet**, O'Neill professor in Education for Justice, Department of Economics, lectured on "Brief Thoughts on the Relevance of Lebre's Development Legacy in an Age of Globalization" at the conference on *L'Economie Humaine et la Dynamique du Développement a l'Heure de la Mondialisation* at UNESCO in Paris, France, November 13.

**Peaches M. Henry**, assistant professor of English, presented "A woman may be relied on as a journalist no less than a man" Frances Power Cobbe, *Professional Journalist*, at the 40th annual convention of the Midwest Modern Language Association in St. Louis, Missouri, November 7.

**Iván Jaksic**, associate professor of history, delivered papers on Andres Bello at Vanderbilt University, February 10, and St. Antony's College, Oxford, June 6. He served as commentator at the sixth Nineteenth-Century History Workshop on the Politics of Religion at the Institute of Latin American Studies at the University of London in London, England, May 22. He served as commentator at the conference on Confronting Non-Democratic Legacies During Democratic Deepening: Latin America and Southern Europe in Comparative Perspective in Buenos Aires, Argentina, August 27-29. He served as chair and discussant at the panel on "Key Elections in Latin American History, 1830-1930" at the 21st international congress of the Latin American Studies Association in Chicago, Illinois, September 24-26.

**Maxwell Johnson**, associate professor of theology, presented "Liturgy and Theology," at the MA Colloquium, Department of Theology, University of Notre Dame, October 7. He presented "Syllabus Preparation for THEO 100/200: Foundations of Theology," for the third session on teaching Theology for Department of Theology graduate students, November 11.

**Ahsan Kareem**, professor of civil engineering and geological sciences, presented the papers "Modeling of Nonlinear Aerodynamic Drag Loading on Structures," co-authored with M.A. Tognarelli, and "Simulation of Non-Gaussian Pressure Fluctuations on Building Envelopes," co-authored with K.R. Gurley, and chaired the technical session Application of Non-Gaussian Models at the 12th Engineering Mechanics Conference, Engineering Mechanics: A Force for the 21st Century in La Jolla, California, May 17-21. He presented the keynote lecture "Wind Effects on Offshore Structures," served on a panel focusing on wind hazard mitigation, and made remarks at the conference banquet recognizing the services of Professor J. Blessman, founder and first director of the Wind Tunnel Laboratory of the Federal University of Rio Grande do Sol, at the Jubileum Conference on Wind Effects on Buildings and Structures in Porto Alegre, Brazil, May 25-29.

**Lee Krajewski**, William and Cassie Daley Professorship professor of management, presented "The Effective Use of Supply-Chain Flexibility," at Boston College, November 6.

**David C. Leege**, professor of government and international studies, gave a colloquium on "The Politics of Cultural Differences" at the University of Arizona in Tucson, Arizona, March 2. He gave the colloquium "Predator-Prey Behavior in American Political Campaigns: Aiming Cultural Appeals at Vulnerable Members of the Majority Coalition" at the seminar on science and society at Ohio State University in Columbus, Ohio, May 18. He served as a discussant on the panel "Religion at the Polls" at the annual convention of the American Political Science Association in Boston, Massachusetts, September 5. He delivered the paper "Religion, Culture, and Politics within the American 'Culture Wars': The Autonomy of the Political" to the annual convention of the Society for the Scientific Study of Religion in Montreal, Canada, November 6.

**Diana C.J. Matthias**, associate professional specialist and curator of academic programs in the Snite Museum

of Art, arranged and chaired the pre-conference event for educators "Learning Theory and Practice for Museum Educators" and organized and chaired the panel session "What Makes a Good Education Program for College and University Students?" Parts 1 and 2 at the Midwest Museums' Conference in Madison, Wisconsin, October 28-31.

**Ralph McInerny**, professor of philosophy, presented "The Blessing of the Magisterium" at the Call to Holiness conference at the Clarion Conference Center in Milwaukee, Wisconsin, October 31.

**Sandra C. Vera-Munoz**, assistant professor of accountancy, presented "The Effects of Division Performance Framing on Managers' Goal-Incongruent Investment Decisions," with J. Ho, at the 1998 American Accounting Association's Annual Meeting in New Orleans, Louisiana, August 18. She also presented the paper at the 1998 Behavioral Decision Research in Management Conference, sponsored by the School of Business at the University of Miami, Coral Gables, Florida, June 21.

**Dian H. Murray**, professor of history and associate dean of the College of Arts and Letters, gave the invited lecture "Conquest, Rebellion and Tribute: China and the Southern 'Barbarians'" at Williams College in Williamstown, Massachusetts, November 16.

**Susan Ohmer**, assistant professor of American studies, gave the invited presentation "The Science of Pleasure: George Gallup and Audience Research in Hollywood" at the Film Seminar of the University of Chicago in Chicago, Illinois, November 5.

**Teresa Godwin Phelps**, professor of law, delivered the paper "Orestes' Dilemma: Revenge in Literature and Law" at the Mid-Atlantic Popular Culture Conference in Morgantown, West Virginia, October 31. She filed an amicus brief with Kelly Askin and Sharelle Aitchinson at the International Tribunal for the Former Yugoslavia, which was accepted by the Tribunal on November 12. She presented a Gender Studies Colloquium entitled

"Gendered Space and the Reasonableness Standard in Sexual Harassment Law" at the University of Notre Dame, November 19.

**Walter F. Pratt**, professor of law, delivered the invited lecture "The Historical Context of 'Marbury v. Madison,'" to the Law Department at the National University of Ireland, Galway, November 11.

**Ramachandran Ramanan**, professor of accountancy, addressed high school students at the Century Center on October 26 as part of the "Accounting Careers Day for High School Students" organized by the Indiana Society of CPAs, Michiana Chapter. Professor Ramanan spoke about how students could prepare for a career in accounting.

**Jonathan Sapirstein**, professor of physics, gave the talk "Breakdowns of Perturbation Expansions in QED" at the University of Michigan in Ann Arbor, Michigan, November 3. He presented the seminar "Helium Fine Structure and the Fine Structure Constant" at York University in Toronto, Ontario, November 4.

**Steven R. Schmid**, assistant professor of aerospace and mechanical engineering, organized the Symposium on Tribology in Manufacturing Processes and presented the papers "An Overview of Emulsion Lubrication in Metal Rolling" and "Friction and Wear in Manufacturing Examined at the Nanometric Scale" at the International Mechanical Engineering Conference and Exposition (IMECE '98) in Anaheim, California, November 16.

**Robert P. Schmuhl**, professor and chair of American Studies, delivered an invited lecture, "The Perils of Politics, 1998," to The Fortnightly Club of Chicago on October 22, 1998. He analyzed "The 1998 Elections" on the WNIT-TV program "Politically Speaking" on November 8, 1998, and he discussed "Impeaching a President" on WGN's "Extension 720" in Chicago on November 20, 1998.

**Daniel Sheerin**, professor of classics, presented the paper "Putting on St. Agnes: A Gender Paradigm for Medieval Nuns" at the Transmission of Knowledge and the Problems of Gender Workshop, sponsored by the Gender Studies Group of the Nederlandse Onderzoekschool Medievistiek and the Medieval Institute of the University of Notre Dame, at the University of Groningen, November 11.

**William C. Strieder**, professor of chemical engineering, gave a presentation entitled "Competitive Diffusion into Two Sinks with a Finite Interfacial Reaction Coefficient" coauthored with G. Zoia at the AIChE Annual Meeting, Miami, Florida, November 18.

**Anthony M. Trozzolo**, Huisking professor of chemistry and biochemistry, was the American Chemical Society Coronado Lecturer for November and presented the invited lecture "Origins of Modern Photochemistry in Italy: A Lot of Bologna" at the San Diego Section of the ACS in San Diego, California, November 10; at the Central New Mexico Section of the ACS in Santa Fe, New Mexico, November 11; and at the Central Arizona Section of the ACS at Arizona State University in Tempe, Arizona, November 12.

**Raimo Väyrynen**, professor of government and international studies, presented a paper on "Security through Community: Some Dissenting Notes" at the Third European Conference on International Relations in Vienna, September 16-19. He also delivered a paper on "Environmental Security in a Conflict Zone: The Case of the Korean Peninsula," at the International Symposium in Peace Studies in the Post-Cold War Era, organized in Seoul by the Korean National Commission for UNESCO, November 19-21.

**Sandra Vitzthum**, assistant professor of architecture, presented a paper "Politics, Irony, and Traditional Architecture" at the 23rd International Making Cities Livable Conference in Santa Barbara, California in a plenary session November 19.

**Carlos Waisman**, visiting fellow in the Kellogg Institute for International Studies, gave the lecture "Neomercantilism and Its Legacy" at the Kellogg Institute for International Studies at the University of Notre Dame, November 19.

**John A. Weber**, associate professor of marketing, presented a paper entitled "Benchmarking Distribution Performance in Business Markets: An Empirical Study," at the American Marketing Association Summer Educators' Conference in Boston, Massachusetts, August 15-18.

**Henry Weinfield**, associate professor in the Program of Liberal Studies, read new translations of the turn-of-the-century American poet Stuart Merrill and gave the talk "Ceding the Initiative to Words: Mallarmé, Lyric Poetry, and the Art of Translation" at the conference on Translation: Priorities, Theory, Practice at the Stevens Institute of Technology in Hoboken, New Jersey, November 13-15.

**Christopher J. Welna**, associate director and professional specialist in the Kellogg Institute for International Studies and concurrent assistant professor of government and international studies, gave the seminar "What Fosters NGOs? Judicial Uncertainty and Human Rights NGOs in Mexico's States" at the Kellogg Institute for International Studies at the University of Notre Dame, November 17.

**David Yamane**, assistant professor of sociology, gave the keynote address "Negotiating the Prophetic and the Political: Reflections on Faith-Based Political Advocacy in Wisconsin" to the Wisconsin Interfaith IMPACT 20th Anniversary Year Consultation on Faith-Based Public Policy Work in Wisconsin in Madison, Wisconsin, November 12.

**Samir Younés**, associate professor of architecture, delivered a lecture entitled "Restituting the City: The Prince of Wales's Urban Design Task Force For Sidon," and exhibited his architectural drawings entitled "The Master Plan for Sidon" at the International Making Cities Livable conference held in Santa Barbara, California, November 16-20.

## Publications

**Peter C. Burns**, assistant professor of civil engineering and geological sciences, wrote "CCD X-ray Area Detectors Applied to the Analysis of Mineral Structures," published in *Canadian Mineralogist*, vol. 36, 1998, pp. 847-853. He wrote "The Crystal Structure of Szeicsite,  $\text{Cu}_3\text{MoO}_4(\text{OH})_4$ ," published in *Mineralogical Magazine*, vol. 62, 1998, pp. 461-469. He co-authored "The Crystal Structure of  $\text{Ca}[\text{Zn}_8(\text{SO}_4)_2(\text{OH})_{12}\text{Cl}_2](\text{H}_2\text{O})_9$ , A New Phase from Slag Dumps at Val Varenna, Italy" with A.C. Roberts and A.J. Nikischer, published in the *European Journal of Mineralogy*, vol. 10, 1998, pp. 923-930. He co-authored "Fluorine Variations in Hambergite from Granitic Pegmatites" with M. Novak and G.B. Morgan, published in *Canadian Mineralogist*, vol. 36, 1998, pp. 441-446.

**Ian Carmichael**, associate professional specialist in the Radiation Laboratory, and **Anthony S. Serianni**, associate professor of chemistry, co-authored "Three-bond C-O-C-C Spin-coupling Constants in Carbohydrates: Development of a Karplus Relationship," with B. Bose, S. Zhao, R. Stenutz, F. Cloran, P.B. Bondo, G. Bondo, and B. Hertz, published in *Journal of the American Chemical Society*, vol. 120, no. 43, 1998, pp. 11158-11173.

**Peter Cholak**, assistant professor of mathematics, published the paper "The dense simple sets are orbit complete for simple sets" in the *Annals of Pure and Applied Logic*, vol. 94, 1998, pp. 37-44.

**Michael J. Crowe**, professor in the Program of Liberal Studies, edited *Calendar of the Correspondence of Sir John Herschel*. David R. Dyck and James J. Kevin served as associate editors. Cambridge, England: Cambridge University Press, 1998. x + 828 pages.

**Roberto DaMatta**, professor of anthropology, wrote "Dez Anos Depois: Em Torno da Originalidade de Gilberto Freyre," published in *Ciência & Trópico*, Volume 25, no. 1, Jan/Jun. 1997, pp. 17-37.



**Paul W. Huber**, associate chairperson and associate professor of chemistry and biochemistry, co-authored "Inhibition of RNA Polymerase III Transcription by a Ribosome-Associated Kinase Activity" with Cara J. Westmark and Romi Ghose, published in *Nucleic Acids Research*, vol. 26, 1998, pp. 4758-4764.

**Frank P. Incropera**, McCloskey dean of engineering and Brosey professor of mechanical engineering, co-authored "Experimental Evaluation of the Laser Assisted Machining of Silicon Nitride Ceramics," with Jay C. Rozzi, Frank E. Pfefferkorn and Yung C. Chin, published in *Manufacturing Science and Engineering*, vol. 8, 1998, pp. 229-239.

**Iván Jaksic**, associate professor of history, edited *Selected Writings of Andres Bello*. New York and Oxford: Oxford University Press, 1998. He wrote a review of *Hispanic Philosophy in the Age of Discovery*, by Kevin White, published in the *Journal of the History of Philosophy*, vol. 36, no. 3, 1998, pp. 463-465. He co-authored "Life Without the King: Centralists, Federalists, and Constitutional Monarchists in the Making of the Spanish American Republics, 1808-1830" with Marcelo Leiras, *Working Paper #255*, Helen Kellogg Institute for International Studies, University of Notre Dame, 1998.

**Erik A. Johnson**, visiting research assistant professor of civil engineering and geological sciences, co-authored the paper "Multiobjective Optimal Structural Control of the Notre Dame Building Model Benchmark" with L.A. Bergman and P.G. Voulgaris, published in *Earthquake Engineering and Structural Dynamics*, vol. 27, no. 11, 1998, pp. 1165-1187.

**Prashant V. Kamat**, professional specialist in the Radiation Laboratory, co-authored "Spectral Characterization of the One-electron Oxidation Product of cis-bis(isothiocyanato)bis(4,4'-dicarboxylato-2,2'-bipyridyl) ruthenium(II) Complex Using Pulse Radiolysis" with Suresh Das, published in *The Journal of Physical Chemistry B*, vol. 102, no. 45, 1998, pp. 8954-8957.

**Maryann O. Keating**, Indiana University South Bend and Barry P. Keating professor of finance wrote "The crossroads between John Paul II's social vision and conservative economic thought" published in the *International Journal of Social Economics*, vol. 25, no. 11/12, 1998, pp.1790-1802.

**Gyula Klima**, associate professor of philosophy, wrote "Ancilla Theologiae vs. Domina Philosophorum: Thomas Aquinas, Latin Averroism, and the Autonomy of Philosophy," published in *Miscellanea Mediaevalia 26: Was ist Philosophie im Mittelalter? (What is Philosophy in the Middle Ages?) Proceedings of the Tenth International Congress of Medieval Philosophy (SIEPM)*. Berlin: Walter de Gruyter GmbH & Co., pp. 393-402.

**James J. Kolata**, professor of physics, co-authored "Subbarrier fusion of  $^6\text{He}$  with  $^{209}\text{Bi}$ ," with **Valdir Guimarães**, visiting scholar in physics, D. Peterson, P. Santi, R. White-Stevens, P.A. DeYoung, G.F. Peaslee, B. Hughey, B. Atalla, M. Kern, P.L. Jolivet, J.A. Zimmerman, M.Y. Lee, F.D. Becchetti, E.F. Aguilar, E. Martnez-Quiroz, and J.D. Hinnefeld, published in *Physics Review Letters*, vol. 81, 1998, pp. 4580-4583.

**A. Eugene Livingston**, professor of physics, co-authored "Measurements of  $2S\ ^2S_{1/2}-2P\ ^2P_{3/2,1/2}$  transition energies in lithiumlike heavy ions: Experiments and results for  $\text{Ni}^{25+}$  and  $\text{Zn}^{27+}$ ," with U. Staudte, Ph. Bosselmann, R. Büttner, D. Horn, H.-H. Schartner, F. Folkmann, T. Ludziejewski and P.H. Mokler, published in *Physical Review A*, vol. 58, no. 5, pp. 3516-3523.

**Scott Mainwaring**, professor of government, write "Electoral Volatility in Brazil," published in *Party Politics*, vol. 4, no. 4, pp. 523-545.

**Ralph McInerny**, professor of philosophy, wrote the introduction to *The Broken World: Gabriel Marcel's Perspective*, translated by Katharine Rose Hanley. Milwaukee, Wisconsin: Marquette University Press, 1998, pp. 9-11. He wrote "Deroches Naturales y Religion," published in *Persona y Derecho*, vol. 38, 1998, pp. 149-165.

**Dian H. Murray**, professor of history and associate dean of the College of Arts and Letters, wrote "Chinese Triad Society Rebellions," published in J. Goldstone, ed., *The Encyclopedia of Political Revolutions*. Washington, D.C.: Congressional Quarterly, Inc., 1998, pp. 100-101. She wrote "Cheng I Sao," published in Lily Xiao Hong Lee and Agnes D. Stefanowska, eds., *Biographical Dictionary of Chinese Women. Volume 1: The Qing Period, 1644-1911*. Armonk, New York: M.E. Sharpe, Inc., 1998, pp. 317-319.

**Daniel J. Myers**, assistant professor of sociology, co-authored "Probabilistic Coalition Structure Theories: An Empirical Comparison in Four-person Superadditive Sidepayment Games" with H. Andrew Michener, published in the *Journal of Conflict Resolution*, vol. 42, no. 6, December 1998, pp. 830-860.

**Thomas Nowak**, professor of chemistry and biochemistry, co-authored "pH Dependence of the Reaction Catalyzed by Yeast Mg-Enolase" with Dmitriy A. Vinarov, published in *Biochemistry*, vol. 37, no. 43, 1998, pp. 15238-15246.

**Walter Nugent**, Tackes professor of history, co-edited *The Wisconsin Frontier*, by Mark Wyman, and *Frontier Illinois*, by James E. Davis, with Malcolm Rohrbough, for their series "A History of the Trans-Appalachian Frontier," Bloomington, Indiana: Indiana University Press, 1998.

**William O'Rourke**, professor of English, wrote "Starr enhances Clinton appeal," published in the *Chicago Sun-Times*, Vol. 52, No. 260, November 21, 1998, p.18.

**Teresa Godwin Phelps**, professor of law, wrote a review of Martha Nussbaum's "Cultivating Humanity: A Classical Defense of Reform in Liberal Education," published in *Journal of College and University Law*, vol. 25, pp. 185-189.

**John E. Renaud**, associate professor of aerospace and mechanical engineering, co-authored "Automatic Differentiation for More Efficient System Analysis and Optimization," with B.A. Wujek, published in *Engineering Opti-*

mization, vol. 31, no 1, pp. 101-139. He co-authored "Thermal Approximations in Multidisciplinary Design and Optimization of Thin Walled High Temperature Components," with R. Tappeta, S. Nagendra and K. Badhrinath, published in *General Electric Corporate Research and Development Technical Report 98CRD107*, July, Class1, General Electric Corporate Research and Development, Niskayuna, New York.

**Steven T. Ruggiero**, associate professor of physics, co-authored "Tunneling in Multilayer Fullerene/ $\text{Al}_2\text{O}_3$  and Fullerene/Ge Systems" with S. Nolen, published in *Physical Review B*, vol. 58, no. 16, October 15, 1998, pp. 10942-10947.

**Steven R. Schmid**, assistant professor of aerospace and mechanical engineering, co-authored "Single Asperity Plowing of Metallic and Polymeric Surfaces in an Atomic Force Microscope: An Overview of Recent Developments" with L.G. Hector, J. Elings, H. Hampel, and H. Piehler, published in N. Moody, ed., *Fundamentals of Nanoindentation and Nanotribology*. Warrendale: Materials Research Society, 1998, pp. 391-398. He co-authored "Grain Orientation Effect During Single Asperity Plowing of Two-Dimensionally Polycrystalline Aluminum Alloys" with L.G. Hector, S.M. Opalka, and H. Weiland, published in N. Moody, ed., *Fundamentals of Nanoindentation and Nanotribology*. Warrendale: Materials Research Society, 1998, pp. 399-408. He co-authored *Fundamentals of Machine Elements* with B. Hamrock and B. Jacobsen. New York: McGraw-Hill, 1998.

**Susan G. Sheridan**, assistant professor of anthropology, co-authored "Female Biological Resiliency: Differential Stress Response by Sex in Human Remains from Ancient Nubia," with D.P. VanGerven, published in *Human Evolution*, vol. 12, vol. 4, pp. 241-252.

**Dennis M. Snow**, professor of mathematics, co-authored "Compact Complex Homogeneous Manifolds with Large Automorphism Groups" with Jörg Winkelmann, published in *Inventiones mathematicae*, vol. 134, 1998, pp. 139-144.

**Billie F. Spencer Jr.**, professor of civil engineering and geological sciences, co-authored "Benchmark Problems in Structural Control: Part I — Active Mass Driver System" with S.J. Dyke and H.S. Deoskar, published in *Earthquake Engineering Structural Dynamics*, vol. 27, 1998, pp. 1127-1139. He co-authored "Benchmark Problems in Structural Control: Part II — Active Tendon System" with S.J. Dyke and H.S. Deoskar, published in *Earthquake Engineering Structural Dynamics*, vol. 27, 1998, pp. 1141-1147. He co-authored "An experimental study of MR dampers for seismic protection," with S.J. Dyke, **Michael Sain**, professor of electrical engineering, and J.D. Carlson, published in *Smart Materials and Structures*, vol. 7, 1998, pp. 693-703.

**William C. Strieder**, professor of chemical engineering, co-authored "Radiation Perpendicular to the Symmetry Axis of Prolate and Oblate Cavities," with S.P. Fitzgerald, published in *AIChE Journal*, vol. 44, No. 11, pp. 2351-2359.

**Arvina Varma**, professor chemical engineering, wrote "An approximate criterion for reactor thermal runaway," published in *Chemical Engineering Science*, vol. 53, no. 18, 1998, pp. 3341-3344.

**Raimo Väyrynen**, professor of government and international studies, wrote "Multilateral Security: Common, Cooperative, or Collective," in Michael Schechter, ed., *Future Multilateralism. The Political and Social Framework*. New York: Macmillan, 1998, pp. 42-65. He wrote "Global Interdependence or the European Fortress? Technology Policies in Perspective," published in *Research Policy*, vol. 27, no. 4, 1998, pp. 627-37. He wrote "Environmental Security and Conflicts. Concepts and Policies," published in *International Studies*, vol. 35, no. 1, 1998, pp. 3-21.

**John A. Weber**, associate professor of marketing, wrote "Benchmarking Distribution Performance in Business Markets: An Empirical Study," published in R.C. Goodstein and S.R. MacKenzie, eds., *Enhancing Knowledge Development in Marketing, Proceedings*

of 1998 AMA Summer Educators' Conference, Chicago: American Marketing Association, vol. 9, pp. 328-330. He co-authored "Planning Market Share Growth in Mature Industrial Markets," with U. Dholakia, published in *Industrial Marketing Management*, vol. 27, pp. 401-429.

**Henry Weinfield**, associate professor in the Program of Liberal Studies, wrote "The Sorrows of Eros," published in *Talisman: A Journal of Contemporary Poetry and Poetics*, vol. 19, Winter 1998/1999, pp. 25-29.

**Michael R. Welch**, associate professor of sociology, co-authored "Pro-Life Catholics and Support for Political Lobbying by Religious Organizations," with **David C. Legee**, professor of government, and Robert Woodberry, published in *Social Science Quarterly*, vol. 79, no 3, pp. 649-663.

**Oliver F. Williams, C.S.C.**, associate professor of management, wrote a book review on "Capturing the Heart of Leadership: Spirituality and Community in the New American Workplace" authored by Gilbert W. Fairholm, Connecticut: Praeger, 1997. Fr. Williams' book review appeared in *Business and the Contemporary World*, Vol. X (3), 533-536 (1998).



# Administrators' Notes

## Appointments

**Philip J. Iapalucci, Jr.**, has been appointed director of audit and advisory services at the University of Notre Dame, according to E. William Beauchamp, C.S.C., executive vice president. Iapalucci replaces Kathleen Anthony, who recently was named Notre Dame's director for year 2000 (Y2K) compliance.

Iapalucci has spent the last seven years with Eastman Kodak Corporation in Rochester, N.Y., in various positions. Most recently, he served as director of corporate accounting, overseeing an operating budget of more than \$2 million and helping to manage the transformation of Kodak's graphics business into a new \$1.5-billion joint venture with Sun Chemical. During his work with Kodak, Iapalucci conducted audits in Australia, Brazil, Hong Kong and Vietnam.

Prior to joining Kodak, Iapalucci spent three years as a senior tax consultant in the Charlotte, N.C., office of the accounting firm Deloitte and Touche, where he specialized in tax compliance and tax planning strategies for multistate and international corporations.

Iapalucci earned his master's of business administration degree from Notre Dame in 1991. He received his bachelor's degree from West Virginia University in 1986.

## Honors

**Robert Watkins**, director of materials management, received the Exemplary Leadership Award on behalf of the University of Notre Dame from the Minority and Women Business Development Council of St. Joseph County, in recognition of continuing leadership and outstanding support in fostering the growth and development of minority owned enterprises in St. Joseph County, Indiana, October 15.

## Publications

**Alan S. Bigger**, director of building services, co-authored "Hands Off: Touchless Cleaning Systems Move into Rest Rooms" with Linda B. Bigger, published in *Maintenance Solutions*, vol. 6, no. 11, November 1998, pp. 10-12.

# Documentation

## Academic Council

**August 25, 1998**

**Members in Attendance:** Rev. Edward A. Malloy, C.S.C., Dr. Nathan O. Hatch, Rev. William E. Beauchamp, C.S.C., Rev. Timothy R. Scully, C.S.C., Jeffrey C. Kantor, Carol A. Mooney, Patricia A. O'Hara, James L. Merz, Mark Roche, Carolyn Woo, Eileen Kolman, David Link, Frank Incropera, Jennifer Younger, Frank Law, John Welle, Cornelius Delaney, Joan Aldous, Richard McBrien, Henry Weinfield, Thomas Blantz, C.S.C., Patrick Gaffney, C.S.C., Naomi Meara, John Derwent, Charles Kulpa, Robert Scheidt, David Kirkner, Samuel Paolucci, John Affleck-Graves, Fernand Dutille, Rev. Richard Bullene, C.S.C., Lorry Zeugner, Kathleen Maas Weigert, Ava Preacher

**Members not in Attendance:** Francis J. Castellino, Michael Detlefsen, Rick Mendenhall

**Observers:** Andrea Midgett, Dennis K. Moore, Ltc. Michael Edwards, Harold Pace, Dan Saracino, Julie Potter

Prof. Hatch opened the meeting at 3:05 p.m. with a prayer.

Before undertaking its formal business, the members of the Academic Council introduced themselves to the group at large.

**1. Minutes approved.** The minutes of the March 19, 1998 and April 28, 1998 meetings were approved without amendment.

**2. Election of the Executive Committee.** Prof. Hatch and Fr. Scully explained how members of the Academic Council are elected to its Executive Committee. (The Executive Committee convenes before each Council meeting to establish the agenda for the full Council meeting and to discuss issues that have been brought to its attention from other University entities, such as the Faculty Senate.) Prof. Hatch emphasized that the voting process for election to the Executive Committee has been organized so as to allow the

best chance possible for balance and diversity among the University's many colleges and entities. Also, in an effort to sustain a strong link between the Executive Committee and the Council's three standing committees, it was decided a few years ago that members of the Executive Committee must be available to chair one of the Council's standing committees, if they are elected to do so by their standing committee, as is strongly encouraged. Prof. Hatch asked any individual who might be nominated for the Executive Committee, but who could not chair a standing committee, to withdraw his or her name from nomination. He also reminded everyone that only elected or ex officio members of the Council are eligible to vote for members of the Executive Committee.

During the course of the meeting, the full Council elected five of its members to serve on the Executive Committee: John Affleck-Graves, David Kirkner, Richard McBrien, Mark Roche, and Carolyn Woo. Fr. Malloy named Charles Kulpa, Frank Law, and Naomi Meara to fill three appointed positions. Michael Detlefsen, Nathan Hatch, and Timothy Scully serve ex officio.

**3. Brief remarks by Prof. Hatch and others.** During the lengthy voting process, Prof. Hatch and others commented on a number of initiatives taking place throughout the University. Prof. Hatch first spoke of the newly introduced financial-aid package for undergraduates, which makes great strides in meeting the goals of the Colloquy for the Year 2000 to meet the full financial needs of all students admitted to the University. The growth in financial aid expenditure has been supported solely by the endowment. Most recently, that portion of the endowment designated for financial aid has grown from about \$80 million to \$400 million. This past year alone, University spending on financial aid for first year students jumped about 40%. Prof. Hatch said that the increase in spending is essential to the continued health of the University since peer institutions have traditionally spent much more on financial aid per student than Notre Dame. Only by

increasing financial aid will the University be able to attract and keep quality students.

Fr. Beauchamp remarked that while most of the money being spent on financial aid will continue to come from the endowment, the University also committed itself a few years ago to earmarking specifically for financial aid some of the income derived from television contracts, Bowl games, credit card licensing, etc. Over a two-year period, \$5 million of expendable money from these sources has been set aside for financial aid. This figure will now be an annual contribution.

Fr. Scully asked Mr. Saracino to comment on the University's push toward increased financial aid and the initiatives it has dovetailed in the Office of Undergraduate Admissions. Mr. Saracino said that the University is not only working to meet the full demonstrated need of all admitted students, it is seeking to do so creatively. For example, the University began increasing last year the number of students whose financial need is met with one job and one loan, as is the practice of peer institutions. Such increased aid is enabling more students to choose Notre Dame because they want to be here; for the first time, for many students, the playing field has been leveled. Historically, full need at Notre Dame has been met with one job and two loans.

Mr. Saracino said that Admissions is working diligently to utilize insights gained last spring from student focus groups who appraised our admissions materials. For starters, it has completely revised most of its publications and its application form. (The new application form was recently mailed to 18,000 students around the world.) The focus groups demonstrated that Notre Dame applicants are largely high-ability, Catholic students who are very aware of the University's Catholic milieu and sports tradition, and largely ignorant of its academic reputation. Mr. Saracino felt that the revised application brochure offers the most compelling case ever for the University in terms of its academic reputation. Admissions also just finished making a

first-rate video on the University that will soon be mailed to 4000 high schools around the world. And a newly revised website that will allow students to apply to the University electronically will soon be unveiled. In conclusion, Mr. Saracino said that he is excited about the promise of building next year on a class that is already excellent, both in terms of diversity and quality.

Next, Prof. Kantor remarked briefly on computing and technology at the University. He said that as an early adopter of Web technologies, the University positioned itself well a few years ago to present itself to the outside world via computing. However, it became apparent last year that the University has fallen behind some of its peers on the look and feel of its website, particularly when used as a recruiting tool. The University has also fallen behind in its internal use of the Web for academic business and administrative processes. It was therefore decided over the summer that a few University departments should be targeted for Web development, beginning with the Office of Admissions. Prof. Kantor said that the Office of Admissions should be very proud of its recent work on the Web, which Mr. Saracino reviewed. Other ongoing Web development projects include the Library and the Office of the Registrar. A new staff position, Web Administrator, was recently created to coordinate the various ongoing efforts and to develop a strategy for using the Web as a marketing and administrative tool. The new administrator, Tom Monaghan, should be on campus by mid-September.

Prof. Hatch said that the new bookstore remains under construction and is scheduled to open in February 1999, during Junior Parents' Weekend. The Welcome Center and alumni offices, which are part of the complex, will open over Christmas break. The bookstore will have 75,000 titles, more than triple the number it has carried in the past. A faculty committee has been working with Follett, the company that will manage the bookstore. Prof. Hatch said that Follett has been very receptive to the kind of bookstore the

University wants and needs. The new space will include a coffee shop, places to sit and read, etc., similar to a Barnes & Noble bookstore.

Prof. Hatch announced that the new facility for the London Program is open, just off Trafalgar Square. By next semester the University will have 127 undergraduates housed in the facility, and will include additional programs in Law, Business, and Engineering. The facility will be a great place to hold conferences when the building is otherwise not in use, such as in the summer. The University's trustees will hold their February meeting at the facility this winter, at which time the building will be dedicated.

Also, Prof. Hatch continued, the new Keough-Notre Dame Irish Studies Centre in Dublin will open this fall. Notre Dame has leased and helped renovate space in Newman House, where Cardinal Newman started the Catholic University of Dublin a century and half ago. The building is also home to the Irish Studies Program of University College Dublin. Several prominent faculty, from here and elsewhere, including Prof. Deane, will offer a graduate seminar there next summer in collaboration with UCD. The seminar will be open to top graduate students of Irish Studies from anywhere, including those from Trinity and University College, Dublin.

Prof. Hatch then returned to computing on campus. He recalled that the University invested significantly in academic computing several years ago, from the support infrastructure required for very large computers to providing computers for all faculty. The University did not, at that time, develop a similar plan to support computing for all of its staff. It was only decided last year that the University should move toward that goal. It is increasingly important that the University not be identified with or devoted to just one or two types of computing systems, Prof. Hatch said, and the University remains committed to supporting a diverse environment. However, one of the most substantial costs of computing is the expense of helping individuals with their different com-

puting needs. And the only way to lessen that expense is to have every-one possible use specific kinds of software, and then provide support for those users.

Prof. Kantor said that the University added a line in this year's budget to begin covering the cost of adding 2700 new computing workstations for all University academic and administrative staff. Last spring, a subcommittee of the University Committee on Computers and Information Systems began compiling a list of recommendations that would outline the new program in some detail. Their recommendations were submitted to the full Committee in July. From there, the Office of Information Technology (OIT) developed an implementation plan that was recently submitted to the Provost's office.

Funding for the Campus Workstation Program (CWP) will not be fully in place this year, but will instead be spread out over the next three years, with budget add-ons in years two and three. It will at that point cover the costs of a three-year replacement cycle for faculty workstations and a four-year replacement cycle for staff workstations. (Faculty computers are currently replaced every five years.) Eventually, the CWP will also include workstations in the public computer clusters located around campus. Prof. Kantor said that the task force report and the OIT implementation plan can be reviewed on the new OIT website.

Prof. Kantor reported that around 600 new workstations will be installed this year; a few are already in place. Two full-time staff in the OIT have been assigned to the program, and four new technicians have been hired to install the necessary hardware and software for the new machines. If an older machine is being replaced, a technician will transfer information from it onto the new machine, and make sure that all of the information has been accepted and that the new software is running correctly. Prof. Kantor said that the program will unfortunately require learning a whole new set of computer language. An understanding has been reached with the OIT about

the level of service they will provide for the program, information that is also detailed on the Web.

Next, Dr. Younger spoke about the evolving plan to redesign space inside the Hesburgh Library, which has not been renovated since it was built over 30 years ago. She reported that the Library has established a committee to consider how the space can best be used for the next several years. The committee hopes to reach consensus by the end of this fall. In an effort to discern what the perceived needs of the Library are, focus groups of faculty and students (both graduate and undergraduate) are being formed. The committee is also working with an architect to formulate what it will call a "summary program" of the kinds of things that should be accomplished with the renovation. This spring (1999), the committee will begin to look closely at the compiled ideas to decide what will and will not work with the building. Dr. Younger said that she and a few other individuals recently traveled to look specifically at two university libraries that have undergone renovation. One of the libraries had very small, closed in spaces; the other was much more open and could be used in a variety of ways. At first impression, the latter seemed more amenable to the Hesburgh Library.

Prof. Scheidt asked when the renovated space will be available in the Library. Dr. Younger replied that all of the faculty, graduate student, and other offices once housed in the basement of the Library have been moved out of the building. The OIT has been using some space there for ResNet, but should be finished and out by the end of September. All of this newly available space will be used for Library staff and compact, overflow shelving. Dr. Younger added that discussions with University Archives are also underway to determine how the renovated space can best suit their needs. Renovation of the main part of the Library should begin in July 2000.

Prof. Hatch then introduced the new dean of engineering, Frank Incropera. Dean Incropera, whose research inter-

ests include the transfer of thermal energy and its relationship to problems in manufacturing, energy conversion, and the cooling of high-performance electronic components, had been at Purdue for 32 years before he came to Notre Dame last month.

In closing, Prof. Hatch reported that an ad hoc steering committee continues to work on ideas for a Performing Arts Center. The many diverse groups with an active interest in the proposed new facility will require listening and compromise. However, work has been moving steadily ahead since the spring, with the help of an architectural firm based in Los Angeles. It is hoped that a final program for the building can be completed in the next few months. From there, the design of the building itself can commence. One unexpected suggestion from the architectural firm has been to locate the facility near the edge of campus, which would leave two pods of space available for additional future expansion. It had been assumed by many individuals that the new building would anchor the end of the DeBartolo quadrangle, but the architects fear that placing it there would leave vacant space at the end of campus that could not be used effectively in the future. Fr. Beauchamp said that the design committee is not yet at a point to discern the ultimate benefits of where the architects think the center should be located. However, he said, the proposal seems realistic.

Fr. Malloy mentioned that the renovation of Flanner Hall has been completed, and that emeriti faculty and other academic units who have moved into the building seem satisfied. Prof. Scheidt asked about plans for a new teaching building for the College of Science. Prof. Hatch responded that the building will cost an estimated \$60 million. Though the University is anxious to undertake construction, not enough money has been raised to do so.

Fr. Scully concluded by asking last year's chairs of the Council's standing committees to submit to him a report of last year's accomplishments and those items that remain on the agenda.

There being no further business, the meeting was adjourned at 3:55 p.m.

## Academic Council

September 9, 1998

### Members in Attendance:

Rev. Malloy, C.S.C., Dr. Nathan Hatch, Rev. Timothy Scully, C.S.C., Jeffrey Kantor, Patricia O'Hara, James Merz, Carol Mooney, Mark Roche, Francis Castellino, Carolyn Woo, Eileen Kolman, Frank Incropera, Jennifer Younger, Michael Detlefsen, Frank Law, John Welle, Cornelius Delaney, Joan Aldous, Henry Weinfield, Thomas Blantz, C.S.C., Patrick Gaffney, C.S.C., Richard McBrien, Naomi Meara, John Derwent, Charles Kulpa, Robert Scheidt, David Kirkner, Samuel Paolucci, John Affleck-Graves, Fernand Dutille, Rev. Richard Bullene, C.S.C., Lorry Zeugner, Kathleen Maas Weigert, Ava Preacher, Kori Georgi, Daniel Mullen, Omar Munoz

### Members not in Attendance:

Rev. William E. Beauchamp, C.S.C., David Link, Rick Mendenhall

**Observers present:** Andrea Midgett, Dennis Moore, Lt. Michael Edwards, Harold Pace, Barbara Walvoord, Julie Potter

**Visitors:** Professors Greg Sterling, Randall Zachman, Dennis Brown

Prof. Mooney opened the meeting at 4:05 p.m. with a prayer.

After Prof. Hatch explained how this annual, retreat-like meeting of the full Academic Council would be structured, he turned the floor over to Fr. Malloy.

**1. Opening remarks by Fr. Malloy, President.** Fr. Malloy began by introducing Omar Munoz, a new student member of the Academic Council from the Law School. He then moved on to a discussion of several issues, beginning with a report issued by the National Commission on the Cost of Higher Education (NCCHE), entitled *Straight Talk About College Costs and Prices*. Fr. Malloy said that he took the opportunity this past summer to discuss the NCCHE's report with

the Officers of the University when they met at Land-of-Lakes for their annual retreat. Rather than spend all of their time reviewing the past academic year, the report helped the group better understand the lack of clarity within and outside the Academy regarding the financing of higher education in this country. Fr. Malloy said that one of the most valuable aspects of the report, which he considers to be very good overall, is the help it offers by defining and clarifying terms used by institutions to describe their financial needs and condition, terms that may not be understood as intended, or that are used interchangeably though they do not mean the same thing. Many of the defined terms helped illuminate, for himself and the Officers, some of the complexities surrounding the reality of institutional finances that hinder good decision-making and good public relations.

For example, *cost per student* is the average amount an institution spends annually to provide an individual student's education and all related services, such as residential facilities, security, health care, office staff, etc. For institutions like Notre Dame, the cost per student is much more than the University receives from individual students or from sources that help subsidize students. In other words, institutions like Notre Dame give more than they receive. Fr. Malloy said that while this reality does not comfort parents who are already stretched financially, it is an honest reminder that the great combination of resources offered by institutions like Notre Dame is very costly.

Another definition clarified in the report is *sticker price*. Notre Dame, like all institutions, lists what it charges for tuition, board, and fees. Notre Dame's sticker price is already considered very high by many, if not most people, and may challenge beliefs regarding the affordability of education, especially for private schools. However, an institution's sticker price never covers the institution's education cost per student.

Another definition clarified by the report is the *total price of attendance*. This is what parents and students pay in addition to tuition and fees, such as travel costs, vehicle or equipment costs, electrical accoutrements, etc. The *net price* is what students pay after financial aid is subtracted from the total price of attendance. A student might receive one or more of several types of subsidy. For example, undergraduates may receive a variety of loans, either from the government or from the institution itself. And while most doctoral-level students do not pay directly for their education, most professional students do. The net price is the amount of money an individual student and/or his family must come up with in the end. Fr. Malloy said that most people outside of academia are not really interested in the institution's cost per student, and are interested in the sticker price only if they have to pay the whole amount. They are, however, very interested in the total price of attendance and the net price. He urged faculty, administrators, and others to keep these definitions clearly in mind when talking to prospective students, families, and donors.

Fr. Malloy explained that the NCCHE gathered its data from both private and public institutions of higher learning. *Concerns about escalating costs and the subsequent strain placed on families is true for both types of institutions*, though a much greater percentage of what it costs to educate students is subsidized by taxes or other income sources for public schools. However, the Commission reached several conclusions that are appropriate for either kind of institution. For example, it concluded that *concerns about rising college prices are real*. The Commission did comparative studies for both kinds of institutions, reviewing the financial landscape for the past several years, and concluded that *costs are continually rising*. Fr. Malloy said that if Notre Dame faculty had to pay the whole cost of their children's college education, or if they had to pay more out-of-pocket when a child decides to attend an institution other than Notre Dame, they could more easily understand the fear many parents face. The Commission also concluded that *the public and its leaders*

are concerned about the priorities of higher education. In particular, the public fears that institutions have de-emphasized quality teaching, and emphasized faculty research. The public feels that it is paying large sums of money for education that is going into the coffers of the institution instead of into teaching. But, Fr. Malloy said, the public is getting much more from higher education than it realizes. Unfortunately, what is being received is easily obscured the high costs of education.

The NCCHE further concluded that *confusion about the costs and price of higher education abounds*. The two terms, cost and price, are used equivalently, which deepens the confusion. The Commission also recognized that *rising costs for universities are as troubling as rising prices for students*. The modern university is much more all-encompassing in terms of laboratories, buildings, libraries, computers, etc., than its predecessors ever were, and it must all be paid for in some way. The major concern of every university is how it can cover its costs relative to its income. Fr. Malloy said that the United States has a world-class system of higher education. Students from all over the world wish to study in this country, especially at the graduate level. Universities must continue to stress what this country offers in terms of public and private education, including a residence tradition; vast amounts of research carried on within universities; great diversity of faculty, students, and types of institutions, etc.

Fr. Malloy then enumerated several recommendations made by the NCCHE. First, *institutions of higher learning must intensify their efforts to control costs and to increase institutional productivity*. Next, *the academic community must provide the leadership required to develop better consumer information about costs and prices and to improve accountability to the general public*. Fr. Malloy said that he reviewed the report with the administration so they could better explain Notre Dame's financial situation now, historically, and comparatively, and better make a case for why a family or individual should consider making the financial

sacrifices that are required to pay for a Notre Dame education. The third recommendation calls for *the government to develop new approaches to academic regulation, approaches that emphasize performance instead of compliance, and differentiation instead of standardization*. The government should ask institutions to explain their goals and plans, instead of imposing identical regulations on all institutions. For example, most American institutions accept anyone with a high-school diploma, though the public thinks they are highly selective. Everyone pays for a system that allows access, because of a choice the country has made about availability.

The NCCHE also recommends that *the academic community develop well-coordinated, efficient accrediting processes that relate institutional productivity to effectiveness in improving student learning*. Fr. Malloy reminded the Academic Council that this issue has been discussed at some length by its members, and that the University has taken some very concrete steps to improve pedagogy, including the establishment of the Kaneb Center for Teaching and Learning. Finally, the NCCHE recommends that *the government continue funding the existing student aid program, while simplifying and improving the financial delivery system*. This is of particular interest to Notre Dame as more students move from receiving grants to receiving loans. The large debts that students may owe when they graduate can be a source of tremendous pressure for everyone involved.

Fr. Malloy said that there is pressure on Notre Dame, including pressure from the Board of Trustees, to be more disciplined and astute financially. One very significant manifestation of this is that the University is allowed, by its Trustees, to raise tuition, room, and board only within a very narrow range when compared to the past. The University continues to be successful in fund-raising, but that money comes in over a long period of time, or it comes in as endowments where only the interest earned on endowed sums may be spent. In one sense, Fr. Malloy said, a false impression is given when

representatives speak of the great success of the University's fund-raising campaigns, when numerous faculty are added to the school, or when new buildings are erected on campus. For such positive developments belie the University's ability to take on new challenges through its operating budget. It takes the University much longer to raise money now than it did in the past, for instead of raising tuition significantly, the University must continually broaden its base of donor support. The University has balanced its budgets and its fund-raising efforts do meet with success, but none of that is as easy as it once was when tuition was increased by several percentage points annually. Fr. Malloy said that everyone must consider the reality of the University's costs and price, and must also consider how to deal with the false perception that the University's operating budgets are growing as they did in the past. At this point, the administration does not feel that the University should return to its old strategy of large tuition increases to cover the operating budget, nor would it have permission to do so from its Board of Trustees.

Fr. Malloy briefly discussed a new proposal for implementation of the Apostolic Constitution, *Ex corde ecclesiae*. In review, Fr. Malloy said that he and other university administrators have worked for over nine years on a proposal for implementation that would be acceptable to American Catholic universities. Over a year-and-a-half ago the American Catholic bishops approved a proposal and it was submitted to Rome. The Americans eventually heard back from Rome that work was required on certain areas of the proposal, which prompted the formation of a new subcommittee. However, the reworked proposal issued by the subcommittee ignores most of the discussion that impacted the crafting of the first, submitted proposal; it is very different from the proposal that was passed by the American bishops in November 1996, and it leaves little room for adaptation to the American context. Fr. Malloy said that the overall reaction of university presidents and representatives is that this is the worst response document to date.

However, though it may be altered slightly, it will be sent out to all appropriate constituencies in the near future. It will then be the responsibility of the receivers of the document to respond to those areas that are considered so inappropriate by Fr. Malloy and others.

Fr. Malloy said that the U.S. case against the *Ex corde esslesiae* is not new; it has been stated before and it will be extremely important to state it again. He also said that at some point during the academic year, he will ask the Academic Council to form a group to respond to the new proposal in a thoughtful and coherent manner. Fr. Malloy said that he is not pleased with the turn the discussion has taken. However, it allows American Catholic institutions another opportunity to speak to the issue and participate in the next round of discussions.

Fr. Malloy then announced the completion of the Jerry Hank Family Center for Environmental Science, and said that along with a lot of lab reconfiguration going on. Biological Sciences has added several new faculty this fall. He also said that the South Dining Hall was expanded and renovated over the summer, and was cleaned outside. Basement space there was made available for various student activities, including offices for the Observer, and a new, 24-hour coffee shop was added. It has all been well received by the students. The LaFortune Student Center was also partially renovated over the break, and a new fast-food operation was installed there. Morrissey Hall was also renovated. Fr. Malloy expressed pleasant surprise at receiving a resolution from the Student Senate commending the administration and expressing thanks for all of the student-related projects that were completed over the summer.

Fr. Malloy reported that the renovation of the new facility that will house the London Program is complete; the building will be dedicated by the Board of Trustees in February. He also said that renovations of the facility that will house the Keough Notre Dame Study Centre, Dublin have also been completed. That facility will be dedi-

cated in mid-October. On campus, Flanner Hall has been completely transformed into office space for faculty, including emeriti faculty, centers, institutes, and Notre Dame Press. Reactions from those who have moved into Flanner have been very positive. The ongoing renovation of existing academic space continued over the summer, as it does every year; a new parking lot is being built next to WNDU; and significant parking was added north of Douglas Road, between Juniper and Hgwy. 31. In the same vicinity, a new building was constructed for Ave Maria Press. Fr. Malloy said that the Holy Cross Community traded the old press space, which the University needs for expansion of the Power Plant, for a new building north of campus. He also said that the renovation of Main Building continues, and should be completed sometime next summer, if all goes as scheduled. The new golf course should also be open by next summer. Over Christmas break, the new Eck Visitor's Center and Alumni offices will open; the new bookstore, part of the same complex, is scheduled to open in February. Finally, Fr. Malloy said that the University is very close to completing the initial work of deciding what should and should not be included in the proposed Performing Arts Center; the next step will include building plans.

Fr. Malloy reported that Notre Dame moved up one, to #18 of the nation's top universities in the recent college issue of *U.S. News and World Report*. He said that the University placed well in several categories and less well in two: academic reputation and financial resources. He repeated his conviction that academic reputation is driven primarily by a university's graduate programs and the visibility and productivity of its faculty. Financial resources is a question of how the overall resources of the university are divided and used. He did not agree with the magazine's appraisal of Notre Dame in this category though on the positive side, one could say that the University delivers a better education with less resources than does its peers. On the other hand, he said, people outside the University keep thinking there must be money hidden somewhere that could be put

to other purposes. Fr. Malloy said that he would welcome anyone's analysis of the University's financial resources relative to its reputation or anything else. Overall, he said, Notre Dame is in the right company. If one looks further in the report, the University also ranks #18 among national universities for schools that offer the best value for the money, a category it does not always place in. That particular category is determined by the quality ranking of the other national institutions, their net cost, and the average level of financial aid they offer per student. Fr. Malloy expressed hope that the University will improve in this category next year because of improvements that have been made in financial aid.

Fr. Malloy mentioned briefly a new book, *The Shape of the River*, by William Bowen and Derek Bok, two former Ivy League school presidents. The book is a unique study of the long-term consequences of race-sensitive admissions procedures for colleges and universities. The authors conclude that race-sensitive policies have worked well in accomplishing what they sought to do. Without discussing the book further, Fr. Malloy said that Notre Dame's posture with regard to the debate raging around Affirmative Action has borne out the truth of this newly released book.

Fr. Malloy concluded by mentioning three issues of particular concern for him because of their impact on the life of the University. The first is what he called the "Friday problem," or the gradual disappearance of Fridays from the academic calendar. Fr. Malloy said that it is obviously convenient for faculty to not teach on Fridays, and it is even more convenient for students to not take classes on Fridays. It is especially convenient for students to begin weekend partying one day earlier. Fr. Malloy said that there is a very significant relationship between what happens on Fridays (whether a student is in class or not) and Thursday nights (whether a student is partying or not). Fr. Malloy said that he is very unhappy with the momentum that seems to have been established at Notre Dame, as it has at peer institutions, to have classes only four days a week. He



asked the Academic Council, especially its Undergraduate Studies Committee, to consider the matter, because what has sprung from the private interest of faculty and students could have a very significant impact on the social environment of such a heavily residential campus as Notre Dame.

Next, Fr. Malloy reported that he has an article coming out this fall in the magazine, *The Presidency*, on alcohol abuse on college and university campuses. Campus alcohol abuse is an issue that Fr. Malloy has discussed before with the Academic Council. It has also been discussed in some depth by the Undergraduate Studies Committee, and by the Faculty Affairs Committee. In his article, Fr. Malloy reviews what has been learned about the issue at the national level, especially by the National Institute of Health. He is also co-chairing a new group that is appraising research that has been done on alcohol and the student population and its impact on quality of life and other matters. Fr. Malloy said that he was bringing the issue before the Council again because of riots that took place on several campuses last spring and the negative public momentum that ensued. He emphasized that his involvement with the issue at the national level in no way diminishes his concern for the problem on this campus. He has discussed Notre Dame's alcohol problem with many people over an extended period of time, most notably with the Vice President for Student Affairs. The University is trying to find and do those things that might help the problem. Alcohol is the most significant behavioral problem on campus today, Fr. Malloy opined. It affects the quality of the learning environment more than any other problem.

In closing, Fr. Malloy spoke of the spate of negative, embarrassing publicity the University endured this past summer over athletics, most notably the football program. The University has fully reviewed the alleged abuses, though he could not comment specifically because of ongoing judicial procedures. However, he said that he identified with the fears and embar-

assment many felt when they picked up local and national newspapers; it was very difficult to see athletics at Notre Dame portrayed so negatively, especially when press coverage has historically been so positive. Fr. Malloy said that the University closely followed the various media who reported on the situation. He also said that the euphoria of having just won a major home football game should not in any way obscure the issues and or lead anyone to think that the problems will now simply vanish. Fr. Malloy reminded everyone that the University has a very clear statement on intercollegiate athletics that was approved by the Academic Council. That statement continues to be the standard for the University. If problems with individuals or programs need addressing, the University will address them.

Prof. Dutile asked for more information about the Friday problem. Prof. O'Hara replied that the Undergraduate Studies Committee did some research on the problem a year ago. They discovered that Friday is, by far, the lightest class day of the week at Notre Dame. Prof. Dutile asked if students are not signing up for Friday classes, or if they are not attending their Friday classes. Fr. Scully answered that not enough faculty offer Friday classes. Fr. Malloy said that he is most disturbed by the fact that Friday is being incorporated into the weekend almost without thought or deliberation. Once everyone gets used to it, the week will effectively be reduced to four days without anyone ever asking if it is a good thing or not for students and faculty.

Dean Roche said that he has, for the last two years, encouraged departmental chairs through an orientation booklet he distributes, to spread their department's classes throughout the week, including Friday, which is not fully utilized for classroom space. He has suggested that if the Friday problem is not solved voluntarily, it could be solved by means of a formula that would require departments to spread their courses over the full week. He also said that he would find it helpful, as perhaps the other deans would, to receive data on Friday classes from the

Registrar, so they would better know what is and is not happening on the last day of the work week.

Prof. Kantor responded that data on the problem has been compiled in a preliminary way, and should be ready soon for distribution. The numbers so far show the growth of Tuesday/Thursday classes on campus, as well as Monday/Wednesday classes; the combination of the two have resulted in fewer course offerings on Fridays. Dean Castellino said that the College of Science is so short on space that teaching and labs take place through late Friday afternoon, though students do exert pressure to drop Friday from the schedule, especially if their only class all day is a late lab. The crunch felt by Science is not only a result of tight space, but is also a result of the increase in Monday/Wednesday classes in other colleges, which diminishes the number of labs that can be offered on those days, particularly in the mornings. Dean Castellino said that he also looks forward to receiving more data on the problem.

**2. Remarks by Prof. Hatch, Provost.** Prof. Hatch said that he was encouraged recently by a luncheon for new faculty, where he witnessed firsthand the kind of strength being added to the University at both the junior and senior faculty levels. He mentioned specifically seven new endowed chairholders or senior faculty: John Meier, a theologian and leading Catholic scholar of the New Testament; Frank Incropera, a new endowed chair and the new Dean of Engineering; Kristin Shrader-Frechette, a philosopher with a special interest in environmental ethics; Steve Smith, in the Law School, a former chair of the University of Colorado and a top scholar of Law and Religion; Martin Tenniswood, an endowed chair in biology, known for his work in cancer research; Bill Westfall, a distinguished architectural historian and a new endowed chair who will also chair the School of Architecture; and Michael Zuckert and Catherine Zuckert, both senior professors of political theory known for their outstanding scholarship and teaching. Prof. Hatch said that he was encouraged not only to

meet the newcomers but to see visibly how the Capital Campaign is already enhancing the University's faculty. He then mentioned several faculty searches that are or will soon be underway. In particular, Dean Link, who has served in his capacity at the Law School longer than any dean in the country, will step down from that post at the end of this academic year. A search committee, chaired by Prof. Hatch, has already been formed to seek his replacement. Searches are also underway for directors for the Kroc Institute of International Peace Studies, the Center for Civil and Human Rights, Notre Dame Press, and a new program in Latino/Hispanic Studies.

Prof. Hatch then asked Dean Castellino to speak on the College of Science's burgeoning program in Molecular and Cell Biology (MCB). Dean Castellino began by saying that he too was impressed at the luncheon for new faculty, where he saw in one room several individuals hired this year to work in MCB and related fields. He explained that building a program at Notre Dame in this discipline has been a primary goal of his since he became dean. At that time, an internal report was circulating that advised the University against building a MCB program. Given his own view of the future of life sciences, Dean Castellino could not accept the message of the report, so he set out to build a program. He felt that in twenty years it would be unacceptable for the University to be without any real strength in this area, a conviction that has borne him out.

The College of Science set about trying to build a MCB program in a variety of ways. First, they tried hiring assistant professors, which met with mixed success. Some very good additions were made, and some did not work out. The college then decided that an infrastructure must be built before a greater number of scholars would come. Today, the MCB program boasts an outstanding infrastructure that offers many core services for researchers at highly subsidized costs. It took a long time to get there, Dean Castellino said, but all along the way the infrastructure helped move the program ahead. Still,

the program met with only modest success until a decision was made a few years ago to emphasize the study of human disease from the point of MCB.

Following the untimely death of Prof. Craig, a well-known researcher in the area of vector biology, the College thought it would be appropriate to hire vector biologists with research emphasis in the MCB of malaria. This decision culminated last year with three significant hires: Frank Collins, Nora Besansky, and Dave Severson. Dean Castellino said that these hires were a very important, expensive step for the College. Not only are the positions themselves costly, but each individual required a large amount of capitalization to establish labs, and each lab required significant building renovations.

Dean Castellino and others then began to focus on another strong area in the study of human disease, a long-standing program that studies blood clotting and clot dissolving and how these functions interface with cancer, atherosclerosis, and other diseases. After some deliberation, the MCB program decided to seek major external funding to support targeted gene research in these areas. The result was a large grant by the W. M. Keck Foundation. The Keck Foundation receives numerous applications per month, but only awards about 20 grants annually. Only two Keck grants have ever been awarded for medical research, including the Notre Dame award, which was all for additional infrastructure. The Keck grant helped enormously. Today, MCB programs boast a really outstanding infrastructure that draws researchers in.

Following the Keck grant, the focus shifted to cancer research, another area of existing strength. A year ago, the Walther Cancer Institute awarded the program a \$2 million grant, including funds for a junior endowed chair and funds to help expand the hemostasis gene-targeting program to include cancer research. The program's commitment to the Walther Institute included trying to fill the University's Coleman Foundation Chair, held by

Prof. Pollard for many years. In the end, not only a new Coleman Chair but three other cancer researchers were hired. The effort has just received another major grant from the Walther Institute for around \$1.5 million dollars.

The expansion of the MCB program has required significant investments in the University's animal resource center, Dean Castellino said. For instance, he never thought that he would be personally involved with hiring veterinarians, but the program requires the expertise of veterinary pathologists and veterinary surgeons. Though they are hard to find because of competition from medical schools, two vets have been hired.

In closing, Dean Castellino said that what the University has been able to accomplish in terms of people and structures for the study of human disease is truly remarkable since Notre Dame does not have a medical school. He also said that the University, including the President and the past and current Provosts, has been extremely supportive of moving ahead with the program, though it has been expensive. But, he said, it is work the College of Science and the University can build on and will be proud of for a long time to come. The University's MCB program is strong today. Unproven, but strong. Several very good scholars are involved in a lot of joint projects in the program, and they should be productive well into the future.

Next, Prof. Hatch informed the Council that he recently hired a new Assistant Provost for Academic Outreach, Matthew Cullinan. Mr. Cullinan's challenge over the next few years will be to explore what Notre Dame should do about continuing education, distance learning, and summer programs for high school students. Most of the University's peer institutions have 400-600 high school students on campus each summer, doing serious work. These students often return to their summer host university for undergraduate work. Prof. Hatch said that Notre Dame ran an experimental program with 40 high school students last summer. A more full-fledged program

is something the University will probably need to move into within the next five years. A related question concerns the future building of a conference center and hotel.

**4. Reports from the three standing committees of the Academic Council.** Prof. Hatch asked the Council to break into three small committees to elect a chair and to establish an agenda for the year. Following dinner, the newly elected chairs briefly summarized their priorities.

Fr. McBrien, who was elected chair of the Faculty Affairs Committee, reported that his committee agreed on four projects, and a fifth if time allowed. First, the committee was given the project of evaluating the self-study performed last year by the Provost's Advisory Committee (PAC). Once Faculty Affairs has completed its evaluation, it will make a recommendation regarding endorsement or amendment to the full Academic Council. This project will be done by the full committee.

Next, a subcommittee led by Dr. Weigert will more clearly define the category of Special Professional Faculty and all items related thereto. Another subcommittee, led by Fr. Gaffney, will more clearly define the category of Non-Regular Faculty and all items related thereto. A third subcommittee, led by Prof. Detlefsen, will look into Adjunct Faculty and Faculty Senate representation. The fifth agenda item, which may or may not be addressed this year, will consider issues involving Library Faculty. Mr. Zeugner may lead this subcommittee.

Prof. Kulpa, who was elected chair of the Graduate Studies Committee, itemized their initial, lengthy list. He said that the committee will prioritize the items, and work on three or four of them this year. Two issues are carryovers from last year: completing guidelines for University centers, and health insurance for graduate students. Other possible topics include: the perceived need for facilities to enable faculty-graduate student interaction; academic reputation, and the many related factors surrounding it; interdis-

ciplinary courses for graduate students; graduate computer clusters; Teacher Course Evaluations (TCEs) for graduate student teacher assistants (TAs), to assist graduate students in professional development; funding for graduate and professional students, including support past four years, summer support, financial aid for professional students, and incidental expenses that graduate students incur during their study; the mentoring of graduate students; interdisciplinary scholarship, which overlaps academic reputation and graduate student interaction; the training of graduate students for academia and other types of jobs; and graduate recruiting.

Prof. Affleck-Graves reported that the Undergraduate Studies Committee, which he will chair, had already divided itself into three subcommittees. The first subcommittee, led by Prof. Walvoord, will focus on TCEs, as it has for the past two years. In addition to working on the forms themselves, the subcommittee will consider the broader evaluation of teaching over and above TCEs, asking how the University can best evaluate what students are learning in class, specifically in areas of content and curriculum. The subcommittee will propose that department chairs be provided a copy of a faculty member's historic TCEs scores, if the faculty member so requests. The subcommittee will also consider how the University can recognize outstanding teaching.

The second subcommittee, led by Prof. O'Hara, will deal with issues involving academic and residential life on campus. The subcommittee began work last year on a proposed Faculty Fellows Program, which should be brought before the full Council soon. The subcommittee will also consider the weekday distribution of classes and the ubiquitous Friday problem, as described by Fr. Malloy. And it will look at how the University can better foster the intellectual engagement of its students.

The third subcommittee, led by Dean Kolman, will continue working on two issues from last year: academic advising and mentoring. Almost all exit sur-

veys of Notre Dame graduates indicate that the University needs to pay more attention to academic advising. The second area, mentoring, could perhaps be greatly helped by the addition of more honors classes for undergraduates. Mentoring and providing greater intellectual stimulation for undergraduates overlap at various points; more honors courses might be one way to encourage both. This subcommittee will also consider questions of course and program access, including the opportunity for students to take second majors in colleges other than Arts and Letters, course availability across and within colleges, etc.

The Undergraduate Studies Committee will delegate two tasks. The University's Honesty Committee will be asked to evaluate itself and report back to Undergraduate Studies on its role and success or failure. And International Studies will be asked to report on the effectiveness, problems, etc., of its international programs.

There being no further business, the meeting was adjourned at 7:55 p.m.

## Faculty Senate Journal

October 13, 1998

**Present:** Affleck-Graves, Asmus, Bayard, Bigi, Borelli, Cachey, Chetcuti, Cleveland, Cosimano, Deboer, Detlefsen, Dowd, Eagan, Edwards, Fein, Gaffney, Green, Hill, Jordan, Lamanna, Lombardo, Manier, McBrien, O'Brien-O'Keeffe, Porter, Preacher, Quinn, Ramsey, Rivera, Sheehan, Sterling, Stroik, Thomas, Urbany, Williams, Wolbrecht, Law, Rodriguez.

**Absent:** Conway, Costa, Davis, Esch, Fraser, Freeh, Greene, Paolucci, Renaud, Wayne, Zachman.

**Excused:** Berry, Munzel.

The chair professor Michael Detlefsen called the meeting to order in Room 202 of the Center for Continuing Education in McKenna Hall and opened the session with a prayer. He then asked that any Senator who wished to offer the opening prayer at future meetings see him. The journal for the September meeting having been circulated in the October packet, Detlefsen called for corrections, additions, etc. The secretary Peter Lombardo reported that Professor A. Edward Manier had clarified his remarks in the text and asked the Senate to agree. Professor Gregory Sterling moved approval of the corrected journal, Professor Manier seconded and the Senate voted to approve.

In his chair's report, Professor Detlefsen touched on six topics. His full report is printed as appendix A of this journal. In brief, he reported that:

1. The Academic Council had discussed the Senate's proposal to add sexual orientation to the non-discrimination clause, but had only agreed to further discussion and debate. He asked for one volunteer each from the Senate's Administration, Academic Affairs and Student Affairs committees to advise him on this issue.

2. The Council had also begun discussion of the Senate's suggestions with regard to the *U.S. News* rankings, and contemplates endorsement either in December or January.

3. The Student Affairs Committee should make addressing the issue of the Women's Resource Center its top priority because of the volume of requests he gets from concerned faculty on this. The committee should report a resolution to the Senate by early 1999.

4. His report to the Board of Trustees Academic and Faculty Affairs Committee was well received. It contained brief discussions on the turmoil in the intercollegiate athletics area, tenure issues and the possible entry into the Big Ten. The Trustees have asked for a Senate report on this last issue by the end of December, so Prof. Detlefsen asked the Academic Affairs Committee to report a resolution at the December meeting.

5. Despite various requests from the Senate, the provost has still not issued the annual financial reports for 1996-97 and 1997-98. However, he has agreed to make the information in those reports available to the Faculty Senate by the end of October, even if the reports have not been fully prepared for publication.

6. The Law School has still not responded to his repeated requests for election of a representative to the Senate. Prof. Detlefsen will call the Law School Dean once more and if the Law School does not respond by the end of the month he will assume it does not wish to be represented in the body.

Prof. Richard Sheehan asked Prof. Detlefsen to characterize the response of the Notre Dame Trustees to his report, especially on athletics. The chair replied that the nature of the meeting did lend itself to voicing opinions. The Trustees, however, did seem interested in what the Senate was trying to find out through its inquiry. But they were more interested in the Senate's work on tenure and possible entry into the Big Ten, especially its academic ramifications.

The Senate then broke for committee meetings and reconvened at 8:00 p.m., at which time Prof. Detlefsen called for committee reports.

### A. Academic Affairs

The chair, Prof. Sterling, reported that their first order of business was to meet with Vice President and Associate Provost Jeff Kantor and the deans to discuss endowment-related topics (in conjunction with the Senate's Benefits Committee) and the Senate's various proposals to raise our standing in the *U.S. News* rankings; later in the semester the provost will join these discussions. The committee also began its discussion on joining the Big Ten; they have gathered some data but it is premature to say much more. They expect to meet the request presented by Trustee Patrick McCartan for a report on the Big Ten by the end of December.

### B. Benefits

The chair, Prof. Thomas Cosimano, continued the report on endowment spending, and said members of both committees are working on the *U.S. News* issue and endowment spending. They have met with Dr. Kantor already to discuss estimates of the cost and sources of funding to raise Notre Dame's ranking; Dr. Kantor was very helpful in cost estimates for staff, office space, etc. The committees know that over 10 years the goal is to increase faculty by 150. What will it cost to bring on one new faculty member in a particular college? The cost will vary by college, they also know, so these issues will take time and effort. Potentially, Notre Dame's cost for the program could be \$22 million over ten years for 150 new faculty members, with an additional \$50 or \$60 million for staff, office, laboratories, equipment, etc.

On the sources of funding, there are three ways to raise the funds for the program: spending on the current endowment, a capital campaign to raise the endowment itself, and increase tuition. Currently, the University spends \$50 million of endowment (4% per year of a moving average), and the target is 5% which would increase the available money by \$20 or 30 million

annually over the next five years (dependent on stock market performance). Some of this money would go toward faculty, but not all.

The committee is also drafting a series of questions for Roger Mullins, director of human resources. He will be invited to attend an open committee meeting to respond to the questions, and the committee will report back to the Senate.

### C. Administration

The chair Ikaros Bigi said Prof. William Ramsey has volunteered to advise the chair on the issue of sexual orientation in the non-discrimination clause. The committee discussed the framework of the alcohol policy, drug testing issues, and an invitation to Fr. Bill Beauchamp, C.S.C. On the alcohol issue, the committee has material now to be able to discuss the framework for a monitoring mechanism for the policy passed last year, but does feel the need for some outside expertise on how to set up this kind of monitoring system. The statement in the Faculty Handbook that faculty are eligible to use the University's employee assistance program is not technically accurate; however, the few faculty who have requested such service have never been turned down. Perhaps the committee may decide to ask specifically for faculty inclusion in this, or establish another system. On the issue of drug testing for employees, this applies to "new hires" only, and there appears to be no plan to extend it. However, the written policy has still not been published, although the mechanism is in place and is being used already. The committee is asking: what is being looked for, how sensitive are the tests, and should the committee continue to pursue the issue? They have no conclusions yet.

Most of the committee's time was spent reviewing its October 5 meeting (a summary is printed as appendix B of this journal). The committee talked about guidelines for the letter to Fr. Beauchamp. They wanted the meeting to be friendly and non-confrontational but also wanted to use the occasion to confirm or deny the rumors about the Moore case and the University's han-

dling of such an issue that have been floating for months. The central issue will be how the legal questions are dealt with at the top by the Administration, and that this should not be seen as only an athletic department issue. They debated on raising other issues like the non-discrimination clause, but wish to limit themselves to one item.

In Senate discussion, Prof. Detlefsen asked Prof. Bigi to clarify who would be drug tested. He replied only new hires; it is not in any sense random drug testing of employees, according to the information received from Mr. Mullins. Prof. Manier stated that drug testing whether by urine or blood could provide more information about an individual than simply drug use; there should be some specific point made that the data base so created, while useful to law enforcement, should not be used in that manner. Prof. Bigi said their information was that hair would be sampled, and Prof. Manier said this would provide DNA evidence. On the issue of inviting Fr. Beauchamp, Prof. Manier continued, the Senate should anticipate as an answer that any information about the conduct of a case is protected by attorney-client privilege, and thus he would not be free to respond. Prof. Bigi said they were prepared for this, but still wanted to know why, with reportedly so little chance to succeed, the University chose to go forward with the case. The process of decision-making at the top was what the committee was seeking to understand. There is such "wonderment" at this and so little understanding.

Prof. William Eagan pointed out that the University already has a contract with a local firm to conduct drug tests. Prof. Bigi agreed, saying there was no written policy yet but there was implementation of drug testing for new hires taking place. The committee will seek to learn why there was such a rush to do this.

### D. Student Affairs

The chair Prof. Ava Preacher said the Women's Resource Center is their first priority. The committee has invited Joe Cassidy, the director of student

activities, to a committee meeting to discuss the Center's probationary status and has sent him a list of questions. He has not yet responded. The Women's Resource Center officers, with their advisor Dean Eileen Kolman, were invited to attend tonight's committee meeting but were not able to be present. If Mr. Cassidy does not respond positively, the committee will ask Vice President of Student Affairs Patricia O'Hara to attend.

The committee's second topic is the honor code. Is it a student-oriented policy or faculty-oriented, or administration-oriented? Is it, as Prof. Stuart Green pointed out, excessively legalistic? The committee will investigate its origins and development, and perhaps suggest changes to make it more productive. The committee also formed a subcommittee to look into the uses and form of the TCE's. Prof. Manier will assist the chair on the sexual orientation issue.

Following committee reports, Prof. Detlefsen asked for new business. There was none. Prof. Sterling moved to adjourn, Prof. Sonja Jordan seconded and the Senate agreed at 8:25 p.m.

Respectfully submitted,

Peter Lombardo  
Co-Secretary

## Appendix A

### Chair's Report

Tonight's report consists of six items. (1) At its meeting of September 28th, the Executive Committee of the Academic Council voted to forward the Senate's resolution on inclusion of sexual orientation in the university's non-discrimination clause to the full council without recommendation. The full council took up that resolution at its meeting of October 8th. At that meeting, President Malloy introduced a motion calling for postponement of action pending fuller discussion of the issue. The motion passed unanimously and an approximately one hour long discussion ensued. It was agreed that the issue needs further researching.

To assist with that research, I am asking the chairs of the Committee on Administration, the Academic Affairs Committee and the Student Affairs Committee to name a representative tonight to help prepare for the Academic Council's November meeting. (2) Also at its meeting of September 28th, the Executive Committee of the Academic Council discussed the Senate's report and resolutions regarding the USNWR ratings and what lessons regarding academic improvement Notre Dame might take from them. Senators Greg Sterling and Tom Cosimano (of last year's Academic Affairs Committee) agreed to attend the meeting as my guests and, in that capacity, they addressed various questions and concerns that Executive Committee members had regarding the resolution.

At the suggestion of Provost Hatch, it was agreed that senators Sterling and Cosimano would consult with the Provost's office to produce a refinement of the report and its resolutions that might better facilitate consideration and action by the Academic Council. Senators Sterling and Cosimano expressed their willingness to do this and, in light of that willingness, I, as representative of the Faculty Senate, agreed to the plan. It is intended that the consultation be completed by December or January and that a refined version of the report and/or its resolutions should soon thereafter be brought to the Council for its endorsement.

(3) Since the September meeting, I have been contacted by approximately twenty faculty (both on and off the Senate) urging the Senate to address the matter of last year's action by the Office of Student Affairs to put the Women's Resource Center on probation. You may recall that in my report at the September meeting, I mentioned similar contact during the summer. You may also recall that the chair of the Student Affairs Committee reported at the September meeting that the committee was making this their top priority for the present year. In light of this most recent activity, I am asking the Student Affairs Committee to keep this as their first priority this

year and that they prepare a motion to present to the full Senate at its December meeting.

(4) On October 1st, I met with the Academic and Faculty Affairs Committee of the Board of Trustees to report on (i) continuation of initiatives of the 97-98 Senate and (ii) proposed activities of the 98-99 Senate. My report included note of the actions of the Executive Committee of the Academic Council described in items #1 and #2 above and a summary account of the undertakings proposed by the various standing committees of the Senate at its September meeting. Committee members showed most interest in (a) the inquiry of the Committee on Administration concerning the recent goings-on in the Department of Intercollegiate Athletics, (b) the proposal by the Academic Affairs Committee to review the effectiveness of tenure as an institution at Notre Dame and (c) the proposal by the Academic Affairs Committee to investigate the academic consequences of Notre Dame's possible entry into the Big Ten. There was an active discussion of these matters that lasted nearly an hour and involved several members of the committee. The discussion closed with the chair, Patrick McCartan, asking for a report and recommendations from the Senate concerning the possible entry of Notre Dame into the Big Ten membership by the end of December. I therefore call upon the Academic Affairs Committee to prepare a report and/or recommendations to bring to the Senate for action at its December meeting.

(5) Acting on the request of various senators (including some at the September meeting), I contacted Provost Hatch concerning the status of the annual reports for 96-97 and 97-98. The Provost told me that he hoped to have these done soon and that he could make the basic information available to anyone concerned by the end of the month. I encourage him to complete the report as soon as possible and to send any significant partial material along to me as soon as it is ready. He agreed to do so.

(6) Following the September meeting, I once again contacted Dean David Link of the Law School concerning the lack of a Senate representative from the Law School. Dean Link's assistant replied that he (Dean Link) would be contacting me regarding this matter. To date, however, I have received no further communication regarding the matter. If I have not heard from him by the end of the month, I will consider the matter concluded in this way: the Law School does not wish to have a representative on the Faculty Senate for the 98-99 year. I will report any further developments to you at the November meeting.

This concludes my report.

Respectfully,  
Mic Detlefsen, Chair

## Appendix B

### Administration Committee Meeting Summary

The Committee on Administration met Monday, October 5, to discuss which conclusions to draw from the Moore lawsuit and the blow to the University's reputation it has caused. It took note of the front page article that appeared in the October 3 issue of the South Bend Tribune and in particular of the Commentary by D. Haugh "Who was minding the store?" in the Sports section of October 2.

By consensus the committee adopted the following rationale and course of action:

— Since the embarrassment to the whole University has emerged in the public domain, a public forum is needed to express the concerns of the faculty as a whole about the decision making of the University's Administration.

— For that purpose, the Committee for Administration sends an invitation to Fr. Beauchamp, executive vice-president, to attend a meeting scheduled at a time convenient for all parties. All members of the Faculty Senate are welcome to attend.

— At this meeting questions can be asked of Fr. Beauchamp concerning the decision making of the University's Administration using the Moore lawsuit as a concrete example.

— A list of questions will be forwarded to Fr. Beauchamp before the meeting. Among the questions will be:

(1) What did the University's legal counselors, inside and outside the University, advise regarding settlement out of court or going forward with the trial?

(2) If, as one hears from reliable sources, the legal counselors advised against going to trial, who made the decision to override the legal advice, and why?

(3) If the decision against an out-of-court settlement was driven by the fear that Joe Moore would embarrass the University by spreading the contents of the settlement, why did the University not rely on a secrecy agreement in such a settlement, as is quite common?



## Awards Received and Proposals Submitted

In the period October 1, 1998, through October 31, 1998.

### AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	2	70,000	18	820,705	20	890,705
Facilities and Equipment	0	0	1	9,252	1	9,252
Instructional Programs	1	35,897	0	0	1	35,897
Service Programs	0	0	2	4,810	2	4,810
Other Programs	<u>1</u>	<u>119,200</u>	<u>3</u>	<u>36,646</u>	<u>4</u>	<u>155,846</u>
Total	4	225,097	24	871,413	28	1,096,510

### PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	10	5,135,410	44	10,743,693	54	15,879,103
Facilities and Equipment	0	0	0	0	0	0
Instructional Programs	2	2,157,921	2	836,458	4	2,994,379
Service Programs	0	0	0	0	0	0
Other Programs	<u>1</u>	<u>178,750</u>	<u>1</u>	<u>246,102</u>	<u>2</u>	<u>424,852</u>
Total	13	7,472,081	47	11,826,253	60	19,298,334

## Awards Received

In the period October 1, 1998, through October 31, 1998.

### AWARDS FOR RESEARCH

#### Aerospace and Mechanical Engineering

**John E. Renaud and Stephen M. Batill**  
 REU Supplement-Simulation Uncertainty  
 National Science Foundation  
 \$10,000 12 months

#### Biological Sciences

**Greg Dwyer**  
 Host Heterogeneity and Evolution of Host-Pathogen Systems  
 Princeton University  
 \$118,982 12 months

**Gary A. Lamberti**  
 Cooks Run Project  
 U.S. Department of Agriculture  
 \$3,000 12 months

**Jeffrey Schorey**  
 Complement Proteins and Mycobacterial Pathogenesis  
 ALA  
 \$25,000 12 months

Role of Complement Proteins in Mycobacterial Infection  
 FFF  
 \$31,271 22 months

**JoEllen Jones Welsh**  
 Vitamin D3 Mediated Tumor Regression  
 Department of the Army  
 \$36,711 24 months

**JoEllen Jones Welsh and Carmen J. Narvaez**  
 Role of VDR Phosphorylation in Vitamin D-Induced Apoptosis  
 Department of the Army  
 \$115,095 36 months

#### Civil Engineering and Geological Sciences

**Robert B. Fleischman**  
 Feasibility of Concrete Elements in Navigation Structures  
 U.S. Army Corps of Engineers  
 \$10,000 3 months

**Billie F. Spencer Jr.**  
 Java-Based Virtual Laboratory  
 MCEER  
 \$30,000 12 months

#### Chemical Engineering

**Joan F. Brennecke**  
 SC CO<sub>2</sub> Soluble Ligands  
 Department of Energy  
 \$102,583 36 months

#### Chemistry and Biochemistry

**J. Kerry Thomas**  
 Collaborative Research Project  
 NEC Corporation  
 \$20,000 12 months

#### Cushwa Center for the Study of American Catholicism

**R. Scott Appleby**  
 Catholic Commission Work  
 CCICA  
 \$735

#### Economics

**Charles Craypo and Lynn Y. Unruh**  
 The Impact of Nurse Staffing on the Quality of Patient Care  
 National Institutes of Health  
 \$32,240 14 months

#### Electrical Engineering

**Peter H. Bauer**  
 Variable Bit Rate Control of Distributed Sensor Networks  
 National Science Foundation  
 \$124,088 36 months

**Daniel J. Costello Jr.**  
 Error Control Coding Techniques  
 National Aeronautic and Space Administration  
 \$40,000 12 months

#### Freimann Life Science Center

**Mark A. Suckow**  
 IPA Agreement Dated 09/10/98  
 VAMC  
 \$13,000 14 months

#### Mathematics

**Matthew J. Dyer**  
 Geometry and Representation Theory from Coxeter Groups  
 National Science Foundation  
 \$76,000 36 months

#### Radiation Laboratory

**Dan Meisel**  
 The NO<sub>x</sub> System in Nuclear Waste Material  
 Argonne National Laboratory  
 \$32,000 3 months

**Theology****Eugene C. Ulrich and James C. Vanderkam**

The Publication of Four Volumes of Dead Sea Scrolls  
Dead Sea Scrolls Foundation  
\$10,000 50 months  
The Publication of Four Volumes of Dead Sea Scrolls  
National Endowment for the Humanities  
\$60,000 24 months

**AWARDS FOR FACILITIES AND EQUIPMENT****Psychology****Steven M. Boker**

SGI Workstation  
NCAA  
\$9,252 12 months

**AWARDS FOR INSTRUCTIONAL PROGRAMS****Center For the Study of Contemporary Society****Sheridan P. McCabe**

Student Experiential Program of Work with Homeless  
Retirement Research Foundation  
\$35,897 12 months

**AWARDS FOR SERVICE PROGRAMS****Center for Pastoral Liturgy****Sr. Eleanor Bernstein, C.S.J.**

Center for Pastoral Liturgy  
Various Others  
\$3,707 1 month  
Center for Pastoral Liturgy  
Various Others  
\$1,103 1 month

**AWARDS FOR OTHER PROGRAMS****Alliance for Catholic Education****Rev. Timothy R. Scully, C.S.C.**

Learn and Serve America: Higher Education  
Corporation for National Service  
\$119,200 14 months

**Department of Athletics****Jannifer Crittendon**

Minority Girls Sports Clinics  
NCAA  
\$3,100 9 months

**Government and International Studies****Scott P. Mainwaring**

Fellowship for Vivian T. Dutari  
Inter-American Foundation  
\$22,880 13 months

**Graduate School****Peter Diffley**

Local 32B-J Scholarship for Christine Siscaretti  
Local 32B-J T. Shortman Fund  
\$10,666 61 months

**Proposals Submitted**

In the period October 1, 1998, through October 31, 1998.

**PROPOSALS FOR RESEARCH****Aerospace and Mechanical Engineering****Thomas J. Mueller**

Indiana Space Grant  
Purdue University  
\$40,000 12 months

**Joseph M. Powers**

Pulsed Detonation Engines  
University of Iowa  
\$332,289 60 months

**John E. Renaud**

REU Supplement - NSF-NYI  
National Science Foundation  
\$10,000 12 months

**Steven B. Skaar**

A Control Strategy for Holonomic/Nonholonomic Robot  
Systems  
Yoder Software Inc.  
\$50,000 24 months

**Art, Art History Design****Charles M. Rosenberg**

Assistant Professor in Chinese Art History  
Chiang Ching-kuo Foundation  
\$187,600 36 months

**Biological Sciences****John H. Adams**

Molecular Analysis of Apical Organelles of Plasmodium  
National Institutes of Health  
\$341,215 12 months

**Frank H. Collins**

Experimental Parasitology and Vector Biology  
National Institutes of Health  
\$272,828 12 months

**David R. Hyde**

Molecular and Genetic Analysis of RdgB in Photoreceptors  
National Institutes of Health  
\$292,186 12 months  
Vertebrate Models of Dominant RdgB Mutations  
Foundation for Fighting Blindness  
\$320,352 36 months

**David M. Lodge**

Waterfowl Herbivory  
Institute for Wetland and Waterfowl Research  
\$14,000 12 months

**Joseph E. O'Tousa**

Genetic Analysis of Retinal Degeneration  
National Institutes of Health  
\$273,782 12 months

**Martin Tenniswood and JoEllen Jones Welsh**

Control of Apoptosis by IFG-1 in Prostate and Breast  
National Institutes of Health  
\$148,429 12 months

**Kevin T. Vaughan**

Disruption of Dynein-Mediated Membrane Transport  
Foundation for Fighting Blindness  
\$188,832 36 months

**JoEllen Jones Welsh**

Regulation of Osteoblast Apoptosis by Vitamin D  
Department of Agriculture  
\$55,478 12 months

**Civil Engineering and Geological Sciences****Robert B. Fleischman**

Feasibility of Concrete Elements in Navigation Structures  
U.S. Army Corps of Engineers  
\$10,000 12 months

**William G. Gray**

Thermodynamically Constrained Models for Multiphase  
Systems  
National Science Foundation  
\$248,644 36 months

**Stephen E. Silliman**

Laboratory Study of the Capillary Fringe  
U.S.-Israel Binational Science Foundation  
\$34,960 36 months

**Chemical Engineering****Marya Lieberman, Craig S. Lent, et al.**

Molecular Electronics Based on Quantum-Dot Cellular  
Automata  
DARPA  
\$1,619,186 24 months

**Paul J. McGinn**

Epitaxy in Ceramic Thick Films  
National Science Foundation  
\$293,387 36 months  
Epitaxy in Ceramic Thick Films  
National Science Foundation  
\$293,387 36 months

**Paul J. McGinn, Howard A. Blackstead, et al.**

Combinatorial Synthesis of Microwave Ceramics  
National Science Foundation  
\$393,639 36 months

**Chemistry and Biochemistry****Elliot D. Rosen and Francis J. Castellino**

Coagulation Initiation in Full Deficient Mice  
National Institutes of Health  
\$296,896 12 months

**Olaf G. Wiest**

Molecular Electronics Based on Quantum-Dot Cellular  
Automata  
University of Illinois at Urbana  
\$0 12 months  
Request for Computing Resources to the ABB  
University of Illinois at Urbana  
\$0 12 months  
Electron Transfer Catalyzed Repair of Thymine Dimers  
Skin Cancer Foundation  
\$10,000 12 months

**Computer Science and Engineering****Edwin Hsing-Mean Sha**

New Scheduling and Graph Transformation Techniques  
National Science Foundation  
\$276,726 36 months

**Institute for Educational Initiative****Maureen T. Hallinan**

Changing High School Class Schedules  
Spencer Foundation  
\$35,000 12 months

**Electrical Engineering****Patrick J. Fay**

Direct Digital Synthesis with InP E/D HEMTs  
Department of the Navy  
\$772,576 36 months  
SBIR: High Powered InGaP PHEMT  
Kopin Corporation  
\$120,000 24 months

**GEM Program****E. George Simms Jr. and Christendath Mahadeo**

GEM/AMOCO Foundation (MERRI)  
Amoco Foundation  
\$249,970 60 months

## Romance Languages and Literatures

**Theodore J. Cachey Jr.**

Italian Language and Culture Video Courseware Archive  
National Endowment for the Humanities  
\$259,612 16 months

## Mathematics

**Amarjit S. Budhiraja**

Infinite Time Horizon Problems in Nonlinear Filtering  
National Science Foundation  
\$74,922 36 months

**Karen Chandler**

Special Linear Systems in Algebraic Geometry  
National Science Foundation  
\$93,532 36 months

**A. Alexandrou Himonas and Gerard K. Misiolek**

Partial Differential Equations  
National Science Foundation  
\$187,493 36 months

**Bei Hu**

Partial Differential Equations and Applications  
National Science Foundation  
\$63,718 36 months

**Julia F. Knight**

Computable Structure Theory  
National Science Foundation  
\$25,118 36 months

**George McNinch**

Modular Algebraic Representation Theory  
National Security Agency  
\$26,000 24 months  
Modular Algebraic Representation Theory  
National Science Foundation  
\$79,996 36 months

**Juan C. Migliore**

Liaison, CM Intersections and Minimal Free Resolutions  
National Security Agency  
\$41,101 24 months  
Liaison, CM Intersections and Minimal Free Resolutions  
National Science Foundation  
\$66,889 24 months

**Liviu Nicolaescu**

Seiberg-Witten Equations on 3-Manifolds  
National Science Foundation  
\$88,923 36 months

**Dennis M. Snow**

Complex Homogeneous Manifolds  
National Science Foundation  
\$102,806 36 months

**Sergei Starchenko**

Structures Definable in O-Minimal Models  
National Science Foundation  
\$87,955 36 months

**Hong-Ming Yin**

Partial Differential Equations  
National Science Foundation  
\$37,306 36 months

## Physics

**David P. Bennett**

MACHO Project Research  
University of California at Berkeley  
\$36,000 12 months

**Jacek K. Furdyna, Joseph E. O'Tousa, et al.**

Spin Semiconductor and Biomolecular Hybrid Structures  
Research Foundation of SUNY  
\$1,505,828 60 months

**James A. Glazier**

Experimental Study of Dynamics, Rheology and  
Avalanches  
National Science Foundation  
\$632,991 60 months

**Walter R. Johnson**

Relativistic Atomic Structure Theory  
National Science Foundation  
\$407,214 36 months

**Walter R. Johnson and Ulyana I. Safronova**

Transition and Autoionization Rates  
Lawrence Livermore National Laboratory  
\$66,362 12 months

**James J. Kolata, Ani Aprahamian, et al.**

Nuclear Structure Research  
National Science Foundation  
\$3,596,054 36 months

**Steven T. Ruggiero**

Tunneling in Fullerenes and Fullerene Fragments  
National Science Foundation  
\$479,547 36 months

## Psychology

**Gabriel A. Radvansky**

Situation Models and Cognitive Aging  
National Institutes of Health  
\$172,361 12 months

**Cindy Bergeman**

Longitudinal Family Study of Optimal Aging  
National Institutes of Health  
\$339,075 12 months

**David A. Smith**

Parental Discord, Depression, Children's Adjustment  
National Institutes of Health  
\$226,938 12 months

## PROPOSALS FOR INSTRUCTIONAL PROGRAMS

## College of Arts and Letters

**John G. Borkowski and Kathleen Maas Weigert**

Leadership for the Common Good  
Department of Education  
\$298,728 36 months

### Center for Study of Contemporary Society

#### Sheridan P. McCabe

Student Experiential Program of Work with Homeless  
Retirement Research Foundation  
\$35,897 12 months

### College of Engineering

#### John J. Uhran Jr. and Joy J. Vann-Hamilton

Alliance for Minority Participation Coalition  
Western Michigan University  
\$537,730 60 months

### Office of Special Instructional Projects and Activities

#### Dorine Blake-Smith and Mario Borelli

Upward Bound  
Department of Education  
\$2,122,024 60 months

### PROPOSALS FOR OTHER PROGRAMS

### Aerospace and Mechanical Engineering

#### John W. Lucey

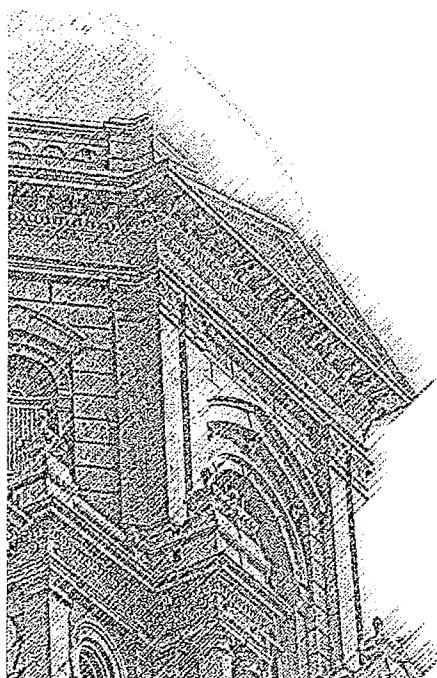
Industrial Assessment Center Program  
Rutgers University  
\$178,750 12 months

### GEM Program

#### E. George Simms Jr. and Christendath Mahadeo

The GEM/NSF/Sloan Foundation Faculty Enhancement  
Project  
Sloan Foundation  
\$246,102 24 months

# Notre Dame Report



**Volume 28, Number 8**  
**December 11, 1998**

*Notre Dame Report* is an official publication published fortnightly during the school year, monthly in the summer, by the Office of the Provost at the University of Notre Dame.

Melissa Pluta, Editor  
Marten Schalm, Designer  
Erin Gallavan, Publications Assistant  
Hilary Baldwin, Indexer  
Publications and Graphic Services  
502 Grace Hall  
Notre Dame, IN 46556-5612  
(219) 631-4633  
e-mail: [ndreport.1@nd.edu](mailto:ndreport.1@nd.edu)

© 1998 by the University of Notre  
Dame, Notre Dame, IN 46556.  
All rights reserved.