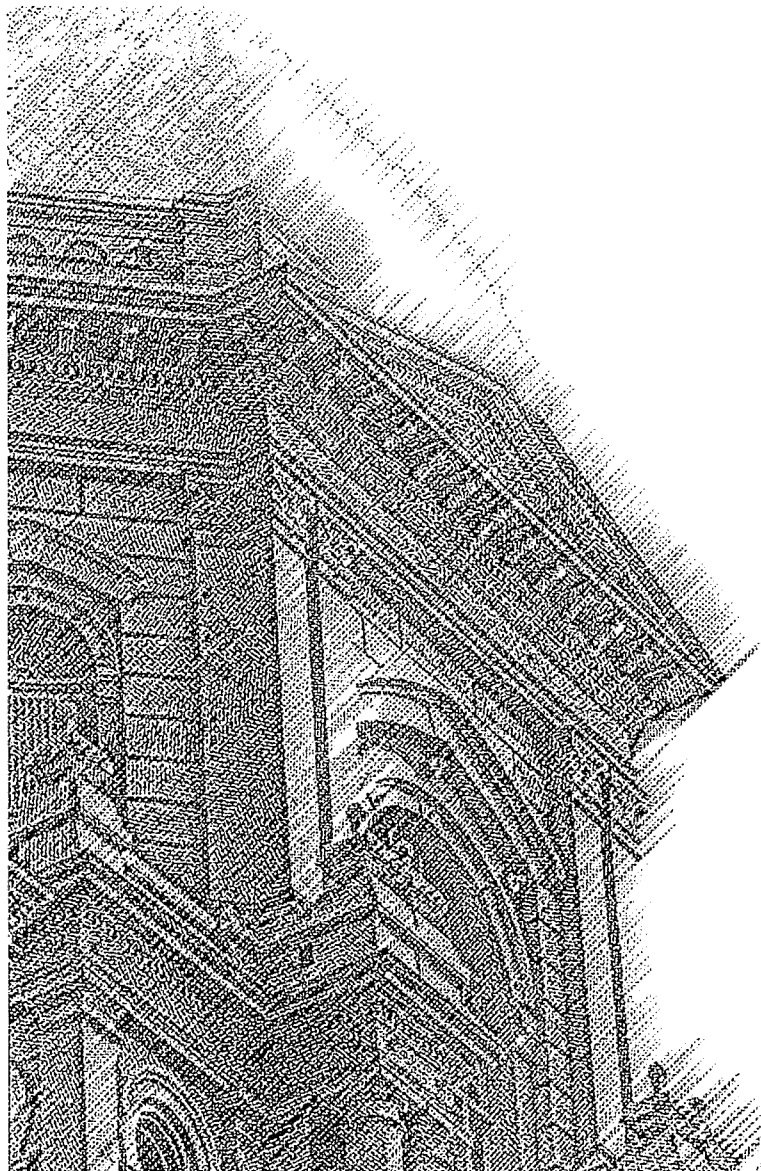


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N U M B E R 9

The University

Kenny Pledges to Endow New Library Collection

Patrick W. Kenny of West Hartford, Connecticut, has pledged \$100,000 to the University of Notre Dame to endow a library collection in Medieval studies.

Kenny, a 1964 graduate of Notre Dame, is executive vice president of the Frontier Insurance Group of Rock Hill, New York. He worked for 21 years at KPMG Peat Marwick before becoming chief financial officer for Aetna Life & Casualty, holding that position from 1988-1994. Before joining Frontier last August, he was senior vice president of corporate development for SS&C Technologies, Inc.

Kenny's pledge is a component of the University's \$767 million "Generations" campaign. Announced in May 1997, the campaign is the largest such endeavor in the history of Catholic higher education.

New Lectureship Memorializes Yoder

The University of Notre Dame has received a gift from Anne Marie Yoder, the widow of Notre Dame theology professor John Howard Yoder, to establish an endowed lectureship in her late husband's memory.

The lectureship, entitled the John Howard Yoder Dialogues on Nonviolence, Religion and Peace, will be administered by the Kroc Institute for International Peace Studies. According to Robert C. Johansen, acting director of the Kroc Institute, "We will be sponsoring lectures and activities that honor John's work, particularly as expressed in two popular courses that he taught frequently for the institute — Religious Roots of Nonviolence and Voices of Nonviolence."

Yoder, who had taught at Notre Dame since 1968, died a year ago on Dec. 30 after suffering a heart attack in his Decio Hall office. He had celebrated his 70th birthday with his family the day before.

A devout Mennonite who believed that nonviolence is an imperative for all Christians, Yoder resisted the notion that Christians should be assimilated into secular society and insisted that the Church is itself an entirely new society which embodies the forgiveness and self-sacrificing love of Jesus. His scholarship and teaching have profoundly influenced theological discussions about war, social justice, and the relationship between church and state. He is the author of several books, including *The Priestly Kingdom*, *What Would You Do?* and *The Politics of Jesus*.

Notre Dame Receives NEH Endowment Grant

The University of Notre Dame has received a \$450,000 challenge grant from the National Endowment for the Humanities (NEH) to support endowments for a faculty fellows fund for medieval and Irish studies and an acquisitions fund for northern medieval vernacular literature.

Under the terms of the grant, the University is required to raise \$4 in matching funds for each NEH dollar, thus generating \$2,250,000 for both endowments.

The Notre Dame grant was one of only 10 challenge grants awarded to colleges and universities by the NEH, and one of only three at the \$450,000 level.

Faculty Notes

Honors

Edward J. Conlon, Sorin Society professor of management, was appointed editor of the *Academy of Management Review* for a four-year term.

James T. Cushing, professor of physics, has been appointed to the editorial board of the journal *Physics in Perspective*. He delivered the lecture "The Fall from the Bacon-Descartes Ideal" to the physics department of Loyola University in Chicago, Illinois, on the occasion of his receiving an award as Alumnus of the Year, November 20. He has been appointed to the Program Advisory Committee of the Oak Ridge National Laboratory Radioactive Ion Beam Facility.

Brian E. Daley, Huisling professor of theology, has been invited to give the Martin D'Arcy Lectures at Oxford in 2001. The Martin D'Arcy Lectures are a series of lectures sponsored by Campion Hall, the Jesuit college at Oxford, in memory of Martin D'Arcy, S.J., the late Master of the Hall and a well-known philosopher.

Denis Goulet, O'Neill professor in education for justice, Department of Economics, received the "Citation of Excellence: Highest Quality Rating" from Anbar Electronic Intelligence for his article "Development Ethics: A New Discipline," published in the *International Journal of Economics*, vol. 24, no. 11, 1997.

William P. Hoyer, associate vice president and counsel and concurrent associate professor of law, was named to the Authors Committee of *West's Education Law Reporter*.

A. Eugene Livingston, professor of physics, has been elected to Fellowship in the American Physical Society.

Diana C.J. Matthias, associate professional specialist in the Snite Museum of Art, was selected by the National Art Education Association to receive the 1999 Western Museum Education Art Educator Award, which recognizes exemplary contributions, service and achievement in art museum education at a regional level.

Anthony N. Michel, Freimann professor of electrical engineering, received the Distinguished Member Award from the IEEE Control Systems Society in recognition of significant technical contributions and outstanding long-term service. He was re-appointed for 1999 as associate editor at large for the *IEEE Transactions on Automatic Control*.

Rev. Hugh R. Page Jr., assistant professor of theology, was elected to a three-year term as co-chair of the African-American Biblical Hermeneutics Section of the Society of Biblical Literature.

James H. Seckinger, professor of law, was appointed by the Supreme Court of Indiana to be a member of the Advisory Panel to the Indiana Commission on Continuing Legal Education and Attorney Specialization.

Billie F. Spencer Jr., professor of civil engineering and geological sciences, has been appointed to a five-year term on the editorial board of the *Journal of Structural Control*, the journal of the European Association for Structural Control. He was appointed the Schmidt Distinguished Visiting Professor at Florida Atlantic University in Boca Raton, Florida.

Activities

Klaus-Dieter Asmus, professor of chemistry and biochemistry, gave the invited lecture "Radical Induced Decarboxylation of Amino Acids" to the chemistry department of the University of Auckland in Auckland, New Zealand, November 13. He presented "On the Chemistry of Halogenated Aliphatic Oxy and Peroxy Radicals" at the AINSE/SFRR-Australia Conference in Melbourne, Australia, November 17. He gave the talk "Radical Induced Decarboxylation of Amino Acids" at the Heart Research Institute at the University of Sydney in Sydney, Australia, November 26. He delivered the invited lecture "On the Chemistry of Halogenated Aliphatic Oxy and Peroxy Radicals" and served as official faculty opponent in a Ph.D. exam at the Royal Technical University in Stockholm, Sweden, December 17-18.

Michael Baxter, C.S.C., visiting assistant professor of theology, gave the lecture "A Faith to Live and Die For" at the Inaugural Lecture for the Center for Christian Vocations at the University of Indianapolis in Indianapolis, Indiana, November 3. He served on the panel "Haves and Have-Nots: Growing Disparities in America" at the conference on God and Mammon, sponsored by Calvert House at the University of Chicago in Chicago, Illinois, November 7.

Gail Bederman, associate professor of history, presented the paper "'The Heart Sickens at Such a Narrative': The Trial of Madame Restell for Producing Abortion on Maria Bodine in July 1846" at the Social Science History Association in Chicago, Illinois, November 20.

Doris Bergen, associate professor of history, presented "Sex, Blood, and Vulnerability: Women Outsiders in German-Occupied Europe" for a conference on Social Outsiders in Nazi Germany, sponsored by the Harry Frank Guggenheim Foundation, in Madrid, Spain, December 3-6. She gave the talk "Controversies about the Holocaust" for a symposium on Historikerkontroversen at the Max-Planck-Institute for History in Goettingen, Germany, December 11.

Jianguo Cao, associate professor of mathematics, gave the invited lecture "Gromov Minimal Volume Conjecture for Manifolds with Non-Positive Curvature" at Purdue University in West Lafayette, Indiana, October 19.

Olivia Remie Constable, associate professor of history, presented the paper "Extranjeros, *Funduc*, and alhóndiga en Sevilla antes y despues de 1248" at the conference commemorating the 750th anniversary of the Christian conquest of Seville in Seville, Spain, November 26.

Edmundo Corona, associate professor of aerospace and mechanical engineering, presented the talk "Collapse of Cracked Rectangular Plates Under Uniaxial Compression" at the 1998 International Mechanical Engineering Congress and Exposition in Anaheim, California, November 19.

Tom Cosimano, professor of finance, presented the paper "An Examination of Retail Deposit Rate Setting by Large Financial Institutions," co-authored with **Connel Fullenkamp**, assistant professor of finance, and **Richard G. Sheehan**, professor of finance, at the Federal Reserve Bank of St. Louis in St. Louis, Missouri, October 16.

Jean A. Dibble, associate professor of art, art history and design, served as a juror for the annual undergraduate exhibition at Ohio University in Athens, Ohio, May 21. She presented the invited portfolios in 1998: "Murder" at the University of Kansas in Lawrence, Kansas; "Biblical Themes" at the School of the Museum of Fine Arts in Boston, Massachusetts; and "Frogman's Press" at the University of South Dakota in Vermillion, South Dakota.

Julia Douthwaite, associate professor of Romance languages and literatures, organized and chaired the day-long symposium "Cultural Studies and the Crisis in the Humanities: French Interventions, Faculty-Student Debates" and presented a lecture on her course "The French Revolution: A Cultural Approach" at the Center for Continuing Education at the University of Notre Dame, December 5.

Gregory E. Dowd, associate professor of history, presented the invited paper "Domestic, Dependent Nations: The Colonial Origins of an American Oxymoron" at the departmental history seminar at Michigan State University in East Lansing, Michigan, December 11.

Alan Dowty, professor of government and international studies, was a discussant at a special session on "The Dynamics of Israeli Attitudes to the Peace Process Over Time" at the annual meeting of the Middle East Studies Association in Chicago, Illinois, December 4.

Keith J. Egan, adjunct professor of theology, gave the lecture "Dark Night: Transformation of the Self" and a five-day workshop on "Eucharist as the Celebration of Carmelite Life" at the twelfth annual Carmelite Summer Seminar at Saint Mary's College in Notre Dame, Indiana, June 21-27. He

presented the workshop "Therese of Liseux: Doctor of the Church" at Retreats International at the University of Notre Dame, July 6-10. He gave the lecture "Searching for the Soul" in the series Landscape of the Soul at the Center for Spirituality at Saint Mary's College in Notre Dame, Indiana, September 10. He appeared as a panelist on the television program "On Forgiveness" in the Catholic Common Ground Series sponsored by the Cushwa Center at the University of Notre Dame, August 10. He was a speaker in the television series "Serve Our Schools" sponsored by the National Catholic Education Association, October 7, 14, and 21. He delivered the homily at the prayer service and co-chaired the National Conference of the Lilly Fellows Program in the Humanities and the Arts with **Phillip Sloan**, professor in the Program of Liberal Studies, at the University of Notre Dame and Saint Mary's College, October 8-10.

J. Massynbaerde Ford, professor of theology, presented "The Apocalypse, an Interdisciplinary Study with Special Reference to Apoc 14:6-20" at Andrews University in Berrien Springs, Michigan, November 17.

Mohamed Gad-el-Hak, professor of aerospace and mechanical engineering, delivered the fourteenth Freeman Scholar Lecture "The Fluid Mechanics of Microdevices" and chaired the session on Microfluidic Devices for Gases at the 1998 International Mechanical Engineering Congress and Exposition in Anaheim, California, November 15-20. He chaired the session on Control of Instabilities and delivered the presentations "Modeling Gas and Liquid Flows Through Microdevices," "Separation Control Using Lorentz Forces," and "The Use of MEMS-Based Sensors for Measuring Wall-Shear Stress" at the 51st annual meeting of the American Physical Society, Division of Fluid Dynamics in Philadelphia, Pennsylvania, November 22-24.

Teresa Ghilarducci, associate professor of economics and director of the Higgins Labor Research Center, was a speaker at the United Nations Habitat Meeting on Pension Funds and Global Housing Investment in Turin, Italy,

December 1. She spoke on "Social Security, Not for Seniors Only" as the Notre Dame Alumni Club Distinguished Hesburgh Speaker at the Ft. Lauderdale, Florida, Notre Dame Alumni Club in Ft. Lauderdale, Florida, December 4.

Mary Catherine Hilkert, associate professor of theology, presented the lectures "Sacramental Imagination: Contemporary Perspectives on Grace," "Is the Cross and Event of Grace?" and "Charism and Gender: Can We Speak of the Vocation of Women?" at the Festival of Learning at the Carmelite Monastery in Baltimore, Maryland, November 7-8.

William P. Hoye, associate vice president and counsel and concurrent associate professor of law, co-authored "Beyond the Camel's Nose: Institutional Liability for Peer Sexual Harassment on Campus" with William A. Hahn, published in *The South Carolina Law Review*, vol. 50, Fall 1998, pp. 55-91.

Roger F. Jacobs, associate dean and professor of law, was a member of the ABA Accreditation Inspection Team that visited Chapman University School of Law in Anaheim, California, October 18-21.

Carlos Jerez-Farran, associate professor of Romance languages and literatures, presented the paper "Eros y 'thanatos': Notas sobre la Influencia de Freud en 'El Público' de Garcia Lorca" at the Asociación Española de Semiótica VIII Congreso Internacional at the Universidad de Granada in Granada, December 17.

Ahsan Kareem, professor of civil engineering and geological sciences, chaired sessions on Stochastic Modeling and Computational Methods, presented the paper "Numerical Simulation of Probabilistic Velocity and Pressure Fields Around Bluff Bodies," co-authored by Da-hai Yu, and co-authored the paper "Simulation of Non-Gaussian Processes," presented by K. Gurley, at the third international conference on Computational Stochastic Mechanics in Santorini, Greece, June 14-17. He chaired the inaugural plenary keynote lecture session at the

second world conference on Structural Control, co-chaired the technical sessions "Active and Semi-Active Control and Devices" and "Wind Induced Response Control," presented the papers "Modeling and Control of Wind Induced Response of a TV Tower," co-authored with S. Dabat and F. Hann Jr., and "Active Control of Offshore Platforms," co-authored with **Johanes Suhardjo**, senior technical support consultant in the Office of Information Technologies, and co-chaired a working group on case studies and experimental verification on international test beds at the U.S.-Japan Joint Workshop/Seminar on Cooperative Research in Structural Control for Civil Infrastructure Systems in Kyoto, Japan, June 28-July 1. Two papers co-authored by Kareem and **Jeffrey C. Kantor**, vice president and associate provost and professor of chemical engineering, were presented at the workshop: "Realtime Model Predictive of Control of Structures Under Earthquakes," presented by Gang Mei, and "Initial Triggering and Semi-Active Control Strategies for Tuned Liquid Column Dampers to Suppress Wind and Seismic Response of Structures," presented by Swaroop Yalla.

Douglas W. Kmiec, professor of law, appeared on ABC's Nightline with Ted Koppel to discuss the constitutional process of impeachment, September 1998. He debated Professor Erwin Chemrinsky of USC Law School on the meaning of "High Crimes and Misdemeanors" at the USC Law School in Los Angeles, California, October 19. He interviewed on CBS National Radio on the history of impeachment — English common law through Andrew Johnson and Richard Nixon, October 21. He filed a brief as counsel of record for the Institute for Justice in the U.S. Supreme Court case of *Anderson v. Roe*, in favor of securing the privileges and immunities of U.S. Citizens as they relate to economic livelihood. He was invited to lead a panel discussion on "The Need to Re-Think — Maybe Even Repeal — the Independent Counsel Statute" with Jonathan Turley and William Eskridge at the Federalist Society Meeting held in conjunction with the annual meeting of the Association of American Law

Schools in New Orleans, Louisiana, January 6. He presented a paper on the Catholic doctrine of Subsidiary to the Law Professors Christian Fellowship Annual Conference in New Orleans, Louisiana, January 10.

Donald P. Kommers, Robbie professor of government and international studies and concurrent professor of law, delivered the paper "Autonomy Versus Accountability: The German Judiciary" at the 17th World Congress of the International Political Science Association in Boston, Massachusetts, September 1. He gave the talk "Kann das deutsche Verfassungsrechtsdenken Vorbild fuer die Vereinigten Staaten Sein? (Can German Constitutionalism Serve as a Model for the United States?)" to the German-American Lawyer's Association in Hannover, Germany, October 29; at Osnabrueck University, November 3; and at Erlangen University, November 9.

Lee Krajewski, Daley professor of management, presented the papers "Motivating Non-Majors in Operations Management" and "Services Management Research in Decision Sciences" at the National DSI Conference in Las Vegas, Nevada, November.

Robert A. Krieg, C.S.C., professor of theology, gave the invited lecture "Die vier Phasen der Guardini-Rezeption in Nordamerika" at the University of Berlin in Berlin, Germany, October 29.

Jay A. LaVerne, professional specialist in the Radiation Laboratory, gave the lecture "Fundamental Radiation Chemical Processes in High LET Particle Tracks" at the Nuclear Engineering Research Laboratory at the University of Tokyo in Tokai-Mura, Japan, November 16. He spoke on "Ion Beam Radiation Chemistry of Aqueous Solution" at the seventh University of Tokyo Nuclear Science and Technology Symposium in Tokyo, Japan, November 17; and at the Japan Atomic Energy Research Institute in Takasaki, Japan, November 18. He gave the lecture "Track Structure Effects in the Radiolysis of Water" at Los Alamos National Laboratory in Los Alamos, New Mexico, November 31.

Grant Mathews, professor of physics, presented the astrophysics colloquium "General Relativistic Hydrodynamics for Binary Neutron Stars" at the University of Michigan in Ann Arbor, Michigan, September 21. He presented the astronomy department colloquium "Where Have All the Baryons Gone? An Analysis of White Dwarfs in the Galactic Halo and the Hot Intergalactic Medium" and gave the astronomy seminar "General Relativistic Hydrodynamics for Binary Neutron Stars" at Indiana University in Bloomington, Indiana, October 5-6. He gave the invited talk "Towards Understanding the r-Process: A Summary of Recent Progress in Supernova r-Process Models and Computations of Nuclear Properties Far from Stability" at the Frontiers in Nuclear Astrophysics Workshop at Argonne National Laboratory in Argonne, Illinois, November 20.

Garth Meintjes, associate director of the Center for Civil and Human Rights in the Notre Dame Law School, presented the workshop "Control Unit Prisons" at the Stand Together for Human Rights conference, sponsored by the Midwest Coalition for Human Rights, the Children and Family Justice Center of the Northwestern University Law School, Amnesty International, City of Chicago Commission on Human Relations and the Stanley Foundation, at the University of Chicago in Chicago, Illinois, December 4-5.

Anthony N. Michel, Freimann professor of electrical engineering, presented seminars on the modeling and the qualitative analysis of hybrid and discontinuous dynamical systems in the Department of Mathematics at the University of Bremen in Bremen, Germany, November 3; at the Department of Mathematics of the Technical University of Vienna in Vienna, Austria, November 18; and in the Department of Electrical Engineering at the Technical University of Munich in Munich, Germany, November 26. He presented the papers "A Comparison Theory for the Stability Analysis of Discontinuous Dynamical Systems — Part I: Results Involving Stability Preserving Mappings" and "A Comparison Theory for the Stability Analysis of Discontinuous Dynamical Systems — Part II: Results

Involving Vector Lyapunov Functions" and chaired the technical session "Hybrid Systems: Stability" at the 37th IEEE Conference on Decision and Control in Tampa, Florida, December 16-19.

Peter R. Moody, professor of government and international studies, spoke on "The Rise of Communism in China" at the Forever Learning Institute in South Bend, Indiana, October 21. He delivered the paper "American China Policy in the 1990s: A Time of Drift" at a conference on Security of the Asia-Pacific Region and Peace on the Korean Peninsula at Chungnam National University in Taejon, Korea, November 4. He conducted seminars on American China policy at the Korean Institute for Defense Analysis and the Korean Institute for National Unification in Seoul, Korea, November 5. He spoke on American China policy at the Graduate School of International Studies at Pusan National University in Pusan, Korea, November 6. He delivered the paper "Democratization and Corruption" at the conference on Democratization and International Relations of the Republic of China at Tamkang University in Tamsui, Taiwan, November 14.

Steve Moriarty, associate professional specialist in the Snite Museum of Art and adjunct assistant professor of art, art history and design, presented the photographic exhibit "Women of El Salvador: Landscapes of War, Landscapes of Peace" and spoke at the opening at St. Mary's College in Notre Dame, Indiana, November 23.

Rev. Hugh R. Page Jr., assistant professor of theology, chaired the 1998 business meeting of the African-American Theology and Biblical Hermeneutics Group of the Society of Biblical Literature in Orlando, Florida, November. He coordinated the seventh annual colloquium of the Institute for Ancient Near Eastern and Afroasiatic Cultural Research and presented the paper "Sun, Moon, Storm, and Bipolarity — Reflections on J. Baldick's *Black God*" in Orlando, Florida, November. He established the Virginia L. Brown and Patricia B. Page Institute for Black Church Studies at Sharon Baptist Church in Baltimore, Maryland.

Charles Rosenberg, professor of art, art history and design, delivered the paper "Money Talks: Numismatic Propaganda in the period of Alfonso I d'Este" at the international conference Dosso Dossi e l'età di Alfonso I d'Este, Palazzina Mafisa d'Este in Ferrara, Italy, December 11.

Peter Schiffer, assistant professor of physics, gave the condensed matter seminar "Field-Induced Spin Glass to Liquid to Solid Transition in a Three-Dimensional Geometrically Frustrated Magnet" at Princeton University in Princeton, New Jersey, December 4.

James H. Seckinger, professor of law, designed, planned, and taught a Trial Advocacy Training Program for the Faculty of Advocates, Parliament House, Edinburgh, Scotland; the Carleton Law Association, Ottawa, Canada; Fish & Neave, New York, New York; Gunster, Yoakley, Valdes-Fauli & Stewart, Fort Lauderdale, Florida; Intensive Trial Advocacy Workshop, Osgoode Hall Law School, Toronto, Canada; McCarthy Tétrault, Montreal, Canada; Pennie & Edmonds, New York, New York; Skadden Arps Slate Meagher & Flom, New York, New York; and White & Case in their New York and Washington, D.C., offices. He designed, planned, and taught an Expert Witness Program for the Freshfields law firm in London, England; White & Case in New York, New York; and LL.M. students at Osgoode Hall Law School in Toronto, Canada. He designed, planned, and taught a Witness Examination on Discovery and at Trial Program for Tory DesLaurier & Binnington in Toronto, Canada. He designed, planned, and taught a Deposition Training Program for Fish & Neave, New York, New York; the General Counsel's Office of the I.R.S., Cincinnati, Ohio; McDermott Will & Emery at their Chicago and Washington, D.C., offices; Pennie & Edmonds, New York, New York; Schulte Roth & Zabel, New York, New York; and for Skadden Arps Slate Meagher & Flom, New York, New York. He served as a faculty member for the National Institute for Trial Advocacy Teacher Training Program at the Notre Dame Law School in Notre Dame, Indiana.

Esther-Mirjam Sent, assistant professor of economics, presented "Bounded Rationality on the Rebound" at the Erasmus Institute for Philosophy and Economics seminar in Rotterdam, the Netherlands, November 25.

Slavi C. Sevov, assistant professor of chemistry and biochemistry, presented the invited talk "Novel Organically-Templated Mixed-Valent Titanium Phosphates with Open Framework Structures: Hydrothermal Synthesis and Characterization" with S. Ekambaram at the national meeting of the Materials Research Society in Boston, Massachusetts, November 30–December 4.

Daniel Sheerin, professor of classics, presented the paper "The Multiplicity of the Archpoet (*Aestuans intrinsecus*)" at the 130th annual meeting of the American Philological Association in Washington, D.C., December 30.

Gregory L. Snider, assistant professor of electrical engineering, gave the invited talk "Quantum-dot Cellular Automata" at the International Symposium of the American Vacuum Society in Baltimore, Maryland, November 3; and at the 43rd annual conference on Magnetism and Magnetic Materials in Miami, Florida, November 9.

Billie F. Spencer Jr., professor of civil engineering and geological sciences, presented the invited lecture "Technological Frontiers in 'Smart' Protective Systems for Seismic Hazard Mitigation" at the workshop of the Sonderforschungsbereich 438 on Mathematical Modeling, Simulation and Verification in Material Oriented Processes and Intelligent Systems in Freising, Germany, December 7–9.

Lyn Spillman, associate professor of sociology, had an author-meets-critics panel on her book *Nation and Commemoration: Creating National Identities in the United States and Australia* at the annual meeting of the Social Science History Association in Chicago, Illinois, November 19.

Robert Sullivan, concurrent associate professor of history and senior associate director of the Erasmus Institute,

lectured on "The Birth of Modern Christianity, 1685-1815" in the series "Two Millennia of Christianity," sponsored by the Wethersfield Institute in New York, New York, November 12.

Carol E. Tanner, associate professor of physics, gave the physics colloquium "Journey to the Center of Cesium" at Central Michigan University in Mount Pleasant, Michigan, November 19.

Lee A. Tavis, Smith professor of business, Department of Finance, presented the paper "The Globalization Phenomenon and Multinational Corporate Developmental Responsibility" as a Hesburgh Lecture in Orlando, Florida, November 12.

Eugene Ulrich, O'Brien professor of theology, presented the invited paper "The Non-Intersection of Canonicity and Textual Fluidity in the Qumran Scriptural Corpus" at the annual meeting of the Society of Biblical Literature in Orlando, Florida, November 23.

Arvind Varma, Schmitt professor of chemical engineering, presented the papers "Complex Behavior of Self-Propagating Reaction Waves during Combustion Synthesis of Advanced Materials" and "Dynamics of Structure Formation during Electroless Plating of Thin Metal-Ceramic Composite Membranes," chaired the session "Future Directions in Reaction Engineering Research," and co-authored the papers "Ethylene Epoxidation in a Catalytic Packed-Bed Membrane Reactor," presented by David Lafarga, and "Kinetics of Rapid High-Temperature Reactions in Gas-Solid Systems," presented by Aleksey Pelekh, at the AIChE Annual Meeting in Miami Beach, Florida, November 15–20.

Sandra C. Vera-Munoz, assistant professor of accountancy, was invited by the KPMG Peat Marwick Foundation to participate as a panel member on "Multi-Cultural Issues" at the 1998 Ph.D. Project Accounting Doctoral Students Association Conference in New Orleans, Louisiana, August 16.

Publications

J. Matthew Ashley, assistant professor of theology, wrote *Interruptions: Mysticism, Politics, and Theology in the Work of Johann Baptist Metz*. Notre Dame, Indiana: University of Notre Dame Press, 1998.

Rev. Nicholas Ayo, C.S.C., associate professor in the Program of Liberal Studies, **Rev. James Flanigan, C.S.C.**, associate professor of art, art history and design, and **Josephine Massynghaerde Ford**, professor of theology, co-authored *Where Joy and Sorrow Meet* with Joseph Ross, Notre Dame, Indiana: Ave Maria Press, 1998, 181 pages.

Subhash Basu, professor of chemistry and biochemistry, co-authored "Purification and Characterization of Avian Glycolipid: b-Galactosyl-transferases (GalT-4 and GalT-3): Cloning and Expression of Truncated bGalT-4*" with Shib A. Basu, Sara Dastgheib, Sujoy Ghosh, Manju Basu, and Patrick Kelly, published in *Acta Biochimica Polonica*, vol. 45, 1998, pp. 451-467. He co-authored "Hydrophobic Nature of Mammalian Ceramide Glycanases: Purified from Rabbit and Rat Mammary Tissues" with Manju Basu, Sara Dastgheib, Mark A. Girzadas, Peter H. O'Donnell, Chris W. Westervelt, Zhixiong Li, and Jin-ichi Inokuchi, published in *Acta Biochimica Polonica*, vol. 45, 1998, pp. 327-342.

Peter H. Bauer, associate professor of electrical engineering, co-authored "2-D Delta Operator Formulated Discrete Time Systems: State Space Realization and its Coefficient Sensitivity Properties" with K. Premaratne, M.M. Ekanayake, and J.I. Suarez, published in *IEEE Transactions on Signal Processing*, vol. 46, no. 12, December 1998, pp. 3445-3450. He co-authored "New Tools for Localization of Limit Cycles in Recursive Block-Floating Point Systems" with K. Ralev, published in *Signal Processing*, vol. 69, 1998, pp. 169-175.

Scott D. Bridgham, assistant professor of biological sciences, co-authored "Hysteresis in the Temperature Response of Carbon Dioxide and Methane

Production in Peat Soils" with Karen Updegraff, John Pastor and Peter Wishampel, published in *Biogeochemistry*, vol. 43, 1998, pp. 253-272.

Daniel M. Chipman, professional specialist in the Radiation Laboratory, co-authored "Cavity Size in Reaction Field Theory" with Chang-Guo Zhan, published in *Journal of Chemical Physics*, vol. 109, no. 24, 1998, pp. 10543-10558.

Edmundo Corona, associate professor aerospace and mechanical engineering, wrote "Dome Reversal of Metal Beverage Containers," published in the *Journal of Pressure Vessel Technology*, vol. 120, November 1998, pp. 456-461.

Frederick J. Crosson, Cavanaugh professor emeritus of humanities, Program of Liberal Studies, wrote "Structure and Meaning in St. Augustine's *Confessions*," published in Garth Matthews, ed., *The Augustinian Tradition*. Berkeley, California: University of California Press, 1998, pp. 27-38. He wrote "Hume's Unnatural Religion," published in John C. McCarthy, ed., *Modern Enlightenment and the Rule of Reason*. Washington, D.C.: Catholic University of America Press, 1998, pp. 168-186.

Gregory E. Dowd, associate professor of history, wrote "The Pen Might Be Mightier than the Sword," a review of Jill Lepore, *The Name of War: King Philip's War and the Origins of American Identity*, published in *Reviews in American History*, vol. 26, no. 4, December 1998, pp. 656-662.

Guillermo J. Ferraudi, professional specialist in the Radiation Laboratory, co-authored "Photocatalyzed Oxidation of SO_3^{2-} by $\text{Co}(\text{dimethylglyoximate})(\text{SO}_3)_2^{3-}$ and its $\{\text{Co}(\text{dimethylglyoximate})(\text{SO}_3)_2^{3-}, \text{Cu}(\text{2,6-Me}_2\text{pyo}[14]-1,4,6\text{-triene-1,4,7,11,N}_4)^{2+}\}$ Adduct" with S.C. Gibney, published in *Inorganic Chemistry*, vol. 37, no. 23, 1998, pp. 6120-6124.

J. Massynbaerde Ford, professor of theology, wrote "The Christological Function of the Hymns in the Apocalypse of John," published in *Andrews University Seminary Studies*, vol. 36, no. 2, 1998, pp. 207-229.

Mohamed Gad-el-Hak, professor of aerospace and mechanical engineering, co-authored "Separation Control Using Lorentz Forces: Recent Experimental and Numerical Results" with Uwe Fey, Tom Weier, Gunter Gerbeth and Gerd Mutschke, published in *Bulletin of the American Physical Society*, vol. 43, no. 9, November 1998, p. 2024. He wrote "Modeling Gas and Liquid Flows Through Microdevices," published in *Bulletin of the American Physical Society*, vol. 43, no. 9, November 1998, p. 2091. He wrote "Fluid Mechanics from the Beginning to the Third Millennium," published in the *International Journal of Engineering Education*, vol. 14, no. 3, 1998, pp. 177-185.

James A. Glazier, associate professor of physics, co-authored "Networks of Droplets Induced by Coalescence: Application to Cell Sorting" with D.A. Beysens and G. Forgacs, published in D. Beysens and G. Forgacs, eds., *Dynamical Networks in Physics and Biology: At the Frontier of Physics and Biology*. Berlin, Germany: EDP Sciences/Springer Verlag, 1998, pp. 161-169. He co-authored "First Steps Towards a Comprehensive Model of Tissues, or: A Physicist Looks at Development" with A. Upadhyaya, published in D. Beysens and G. Forgacs, eds., *Dynamical Networks in Physics and Biology: At the Frontier of Physics and Biology*. Berlin, Germany: EDP Sciences/Springer Verlag, 1998, pp. 149-160.

Denis Goulet, O'Neill professor in education for justice, Department of Economics, wrote "La Verdadera Riqueza y la Productividad Real," published in *Educación, Ética y Economía en América Latina*. Mexico, D.F.: Editorial JUS, 1998, pp. 211-226. He wrote "Tareas y Métodos de la Ética del Desarrollo," published in *Educación, Ética, y Economía en América Latina*. Mexico, D.F.: Editorial JUS, 1998, pp. 183-210.

Paul R. Grimstad, assistant chairperson and associate professor of biological sciences, co-authored "Introduction of *Aedes albopictus* into a La Crosse Virus-Enzootic Site in Illinois" with Uriel Kitron, Jack Swanson, Michael Crandell, Patrick J. Sullivan, Justin Anderson, Robert Garro, and Linn D.

Haramis, published in *Emerging Infectious Diseases*, vol. 4, no. 4, October-December 1998, pp. 627-629.

Dirk M. Guldi, associate professional specialist in the Radiation Laboratory, co-authored "Intramolecular Energy Transfer in Fullerene Pyrazine Dyads" with G. Torres-Garcia and J. Mattay, published in *The Journal of Physical Chemistry A*, vol. 102, no. 48, 1998, pp. 9679-9685.

Gregory V. Hartland, assistant professor of chemistry and biochemistry, co-authored "Effect of Structure on Electron Transfer Reactions between Anthracene Dyes and TiO_2 Nanoparticles" with Ignacio Martini and Jose H. Hodak, published in *The Journal of Physical Chemistry B*, vol. 102, 1998, pp. 9508-9517.

Arnim Henglein, visiting professor in the Radiation Laboratory, and **Dan Meisel**, director of the Radiation Laboratory and professor of chemistry, wrote "Radiolytic Control of the Size of Colloidal Gold Nanoparticles," published in *Langmuir*, vol. 14, no. 26, 1998, pp. 7392-7396.

Gordon L. Hug, associate professional specialist in the Radiation Laboratory, co-authored "Photooxidation of Methionine Derivatives by the 4-carboxybenzophenone Triplet State in Aqueous Solution. Intracomplex Proton Transfer Involving the Amino Group" with Krzysztof Bobrowski, Halina Kozubek and Bronislaw Marciniak, published in *Photochemistry and Photobiology*, vol. 68, no. 6, 1998, pp. 785-796. He co-authored "A Computer-Controlled Nanosecond Laser System" with Michael D. Thomas, published in *Computers & Chemistry*, vol. 22, no. 6, 1998, pp. 491-498.

Carlos Jerez-Farran, associate professor of Romance languages and literatures, wrote a review of *The Spanish Gay Autobiography: Its Trials and Tribulations*, published in *Lesbian and Gay Studies Newsletter*, vol. 25, no. 3, 1998, pp. 15-16.

Erik A. Johnson, visiting research assistant professor of civil engineering and geological sciences, and **Billie F.**

Spencer Jr., professor of civil engineering and geological sciences, co-authored "Finite Element and Finite Difference Solutions to the Transient Fokker-Planck Equation" with S.F. Wojtkiewicz and L.A. Bergman, published in A. Bazzani, J. Ellison, H. Mais, and G. Turchetti, eds., *Proceedings of a Workshop: Nonlinear and Stochastic Beam Dynamics in Accelerators — A Challenge to Theoretical and Computational Physics*. Lüneburg, Germany: Deutsches Elektronen-Synchrotron, 1997, pp. 190-306. He and Spencer co-authored "Response of Stochastic Dynamical Systems Driven by Additive Gaussian and Poisson White Noise: Solution of a Forward Generalized Kolmogorov Equation by a Spectral Finite Difference Method" with S.F. Wojtkiewicz, L.A. Bergman and M. Grigoriu, published in *Computer Methods in Applied Mechanics and Engineering*, vol. 168, 1999, pp. 73-89.

Prashant V. Kamat, professional specialist in the Radiation Laboratory, co-authored "Photoelectrochemistry of Composite Semiconductor Thin Films. Photosensitization of the $\text{SnO}_2/\text{TiO}_2$ Coupled System with a Ruthenium Polypyridyl Complex" with Chouhaid Nasr and Surat Hotchandani, published in *The Journal of Physical Chemistry B*, vol. 102, no. 49, 1998, pp. 10047-10056. He co-authored "Ultrasonic Mineralization of a Reactive Textile Azo Dye, Remazol Black B" with K. Vinodgopal, Julie Peller, and Oksana Makogon, published in *Water Research*, vol. 32, no. 12, 1998, pp. 3646-3650.

Douglas W. Kmiec, professor of law, wrote "Statistical Sampling and the Census — You Can Count on Me, but will you?," published in *Preview of U.S. Supreme Court Cases*, November 1998.

James J. Kolata, assistant chairperson and professor of physics, co-authored "Fusion of a Neutron Skin Nucleus: The $^{209}\text{Bi}(^6\text{He}, 4n)$ Reaction" with P.A. DeYoung, et al., published in *Physical Review C*, vol. 58, no. 6, December 1998, pp. 3442-3444. He wrote "First Results from the Twinsol RNB Facility," published in *Revista Mexicana de Física*, vol. 44, suplemento 2, October 1998, pp. 92-96.

Donald P. Kommers, Robbie professor of government and international studies and concurrent professor of law, wrote "Kann das deutsche Verfassungsrechtsdenken Vorbild fuer die Vereinigten Staaten Sein?," published in *Der Staat*, vol. 37, 1998, pp. 335-347.

Paul McGinn, professor of chemical engineering, co-authored "Improved Flux Pinning Through Ce Additions in Melt Textured $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ " with S. Yeung, A. Banerjee, and J. Fultz, published in *Materials Science and Engineering B*, vol. B53, 1998, pp. 91-94. He co-authored "Effect of Mixing Nd, Eu, and Gd Rare Earth Elements on RE-Cuprate High Tc Superconductors" with J. B. Langhorn and M.A. Black, published in the *Journal of Superconductivity*, vol. 11, 1998, pp. 581-585. He co-authored "Improved Flux Pinning in Melt Textured $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$ and $\text{ErBa}_2\text{Cu}_3\text{O}_{7-d}$ Through Chemical Additions" with S. Yeung, published in the *Journal of Superconductivity*, vol. 11, 1998, pp. 587-593. He co-authored "Melt texturing of $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}/\text{Ag-Pd}$ composite tapes in low pO_2 " with M.A. Black, published in *Superconductor Science and Technology*, vol. 11, 1998, pp. 1222-1229. He wrote "Commercializing High Temperature Superconductors," published in *JOM*, vol. 50, no. 10, 1998, p. 15.

Anthony N. Michel, Freimann professor of electrical engineering, co-authored "Stability Analysis of Systems with Impulse Effects" with Hui Ye and Ling Hou, published in *IEEE Transactions on Automatic Control*, vol. 43, no. 12, December 1998, pp. 1719-1723. He co-authored "A Comparison Theory for Stability Analysis of Discontinuous Dynamical Systems — Part I: Results Involving Stability Preserving Mappings" and "A Comparison Theory for Stability Analysis of Discontinuous Dynamical Systems — Part II: Results Involving Vector Lyapunov Functions" with Bo Hu, published in *Proceedings of the 37th IEEE Conference on Decision and Control*, December 1998, Tampa, Florida, pp. 1635-1640, 3693-3698.

Thomas J. Mueller, Roth-Gibson professor of aerospace engineering, co-authored "The Influence of Leading Edge Separation on the Unsteady Response of a Thin Airfoil" with Denis A. Lynch III and Robert J. Minniti III, published in *Proceedings of the ASME Noise Control and Acoustics Division*, vol. 25, 1998, pp. 57-65.

William O'Rourke, professor of English, wrote "GOP Partisans Steer Impeachment Ship," published in the *Chicago Sun-Times*, December 19, 1998.

Rev. Hugh R. Page Jr., assistant professor of theology, wrote *Anduraru — Bulletin of the Institute for Ancient Near Eastern and Afroasiatic Cultural Research*, Special Edition #3, *Black Athena* and Beyond — Afroasiatic Cultural Research in the Third Millennium, December 1998. He wrote "Some Reflections on G.G.M. James' *Stolen Legacy* and its place in the *Black Athena* Debate," published in *Anduraru: The Bulletin of the Institute for Ancient Near Eastern and Afroasiatic Cultural Research*, Special Edition, no. 3, 1998, pp. 10-14. He wrote "The Afroasiatic Folklore Index (AFI) — Part 1.1," published in *Anduraru: The Bulletin of the Institute for Ancient Near Eastern and Afroasiatic Cultural Research*, no. 7, 1998, pp. 2-3. He wrote a review of A. Johnson and P. Jersild, eds., "Aint Gonna Lay My 'Ligion Down": African American Religion in the South, published in the *Journal for the Scientific Study of Religion*, vol. 37, 1998, pp. 369-370. He wrote a review of S.T. Barnes, ed., *Africa's Ogun: Old World and New*, published in the *Journal for the Social Scientific Study of Religion*, vol. 37, 1998, pp. 378-380. He wrote a review of Stuart Weeks, *Early Israelite Wisdom*. *Oxford Theological Monographs*, published in the *Journal of the American Academy of Religion*, vol. 66, 1998, pp. 474-478.

Samuel Paolucci, associate professor of aerospace and mechanical engineering, co-authored "Mean Flow Characteristics of Non-Boussinesq Mixed Convection Flow, with Sergey A. Suslov, published in *Bulletin of the American Physical Society*, vol. 43, no. 9, 1998, p. 2016.

Teresa Godwin Phelps, professor of law, wrote "Gendered Space and the Reasonableness Standard in Sexual Harassment Cases," published in the *Notre Dame Journal of Law, Ethics & Public Policy*, vol. 12, 1998, pp. 265-284.

Robert P. Schmuhl, chairperson and professor of American studies, wrote "Trail of Words," published in the *Chicago Tribune*, Books section, August 30, 1998, p. 3. He wrote the introduction in David Remnick, *The Red Smith Lecture in Journalism: How Muhammed Ali Changed the Press*. Kansas City: Universal Press Syndicate, 1998, pp. 4-5. He wrote "Mirrors for the Media," a review of Timothy E. Cook, *Governing with the News*, and Richard Reeves, *What the People Know*, published in *Commonweal*, November 6, 1998, pp. 28-29. He wrote "Presidential Character: Beyond Slippery Statements," a review of Robert Shogan, *The Double-Edged Sword: How Character Makes and Ruins Presidents, from Washington to Clinton*, published in *The Philadelphia Inquirer*, Books section, November 29, 1998, p. 3. He wrote "A Considerate Citizenry Confounds a Manic Media," published in *The Boston Sunday Globe*, "Focus" section, December 20, 1998, p. 2. He wrote "He'd Have Explained Bill Clinton," published in the *New York Post*, December 30, 1998, p. 19.

Mark A. Schneegurt, research assistant professor of biological sciences, and **Charles F. Kulpa Jr.**, director of the Center for Bioengineering and Pollution Control and professor of biological sciences, co-authored "Using X-ray Microprobes for Environmental Research" with K.M. Kemner, W. Yun, Z. Cai, B. Lai, H.-R. Lee, D.G. Legnini, W. Rodrigues, J. Jastrow, R.M. Miller, S.T. Pratt, and A.J.M. Smucker, published in *Part of the SPIE Conference on X-Ray Microfocusing: Applications and Techniques*, San Diego, California, July 1998, SPIE vol. 3449, pp. 45-54.

Mark R. Schurr, assistant professor of anthropology, wrote "Using Stable Nitrogen-isotopes to Study Weaning Behavior in Past Populations," published in *World Archaeology*, vol. 30, no. 2, 1998, pp. 327-342.

James H. Seckinger, professor of law, wrote "Impeachment and Rehabilitation 2nd Ed.," in *Materials for Intensive Trial Advocacy Workshop*, Osgoode Hall Law School, York University, Toronto, Canada, 1998. He wrote "Exhibits and Demonstrative Evidence," in *Materials for Intensive Trial Advocacy Workshop*, Osgoode Hall Law School, York University, Toronto, Canada, 1998.

Mihir Sen, professor of aerospace and mechanical engineering, and **Mohamed Gad-el-Hak**, professor of aerospace and mechanical engineering, co-authored "The Use of MEMS-Based Sensors for Measuring Wall-Shear Stress" with Peter Johansson and Lennart Löfdahl, published in the *Bulletin of the American Physical Society*, vol. 43, no. 9, November 1998, p. 1998. He, **Kwang-Tzu Yang**, Hank professor emeritus of aerospace and mechanical engineering, and **Rodney L. McClain**, associate professional specialist in aerospace and mechanical engineering, co-authored "Effect of Distance Between Fins on the Hydrodynamics in a Fin-Tube Heat Exchanger" with Ricardo Romero-Mendez, published in F. White and J. Baker, eds., *Proceedings of the ASME Fluids Engineering Division—1998*. New York, N.Y.: The American Society of Mechanical Engineers, 1998, pp. 3-10.

Slavi C. Sevov, assistant professor of chemistry and biochemistry, co-authored "Intermetallic Frameworks: Synthesis, Characterization, and Bonding of $K_{0.4}Cd_2$ and $Na_{26}Cd_{141}$ " with Evgeny Todorov, published in *Inorganic Chemistry*, vol. 37, 1998, pp. 6341-6345.

Maoyu Shang, adjunct research professor of chemistry and biochemistry, and **W. Robert Scheidt**, professor of chemistry and biochemistry, co-authored "Neutral Ligands for Selective Chloride Anion Complexation: (a,a,a,a)-5,10,15,20-Tetrakis (2-arylurea)phenyl)porphyrins," with Raymond C. Jagessar and Dennis H. Burns, published in the *Journal of the American Chemical Society*, vol. 120, 1998, 11684-11692. Shang and Scheidt co-authored "Axial Coordination and Conformational Heterogeneity of Nickel(II) Tetraphenylporphyrin Com-

plexes with Nitrogenous Bases" with Song-Ling Jia, Walter Jentzen, Xing-Zhi Song, Jian-Guo Ma, and John A. Shelnutt, published in *Inorganic Chemistry*, vol. 37, 1998, pp. 4402-4412.

Bradley D. Smith, associate professor of chemistry and biochemistry, co-authored "Anion Recognition Using Boronate-Ureas" with Martin P. Hughes, published in A.W. Coleman, ed., *Molecular Recognition and Inclusion*. The Netherlands: Kluwer Academic Publishers, 1998, pp. 515-518. He co-authored "Facilitated Transport of Carbohydrates, Catecholamines and Amino Acids through Liquid and Plasticized Organic Membranes" with Stephen J. Gardiner, Tracey A. Munro, Marie-France Paugam and Jennifer A. Riggs, published in the *Journal of Inclusion Phenomena and Molecular Recognition in Chemistry*, vol. 32, 1998, pp. 121-131.

Billie F. Spencer Jr., professor of civil engineering and geological sciences, co-authored "High Fidelity Numerical Solutions of the Fokker-Planck Equation" with S.F. Wojtkiewicz and L.A. Bergman, published in *Proceedings of the 7th International Conference on Structural Safety and Reliability*, Kyoto, Japan, November 24-28, 1997, pp. 933-940. He co-authored "Solution of the Fokker-Planck Equation in Higher Dimensions: Application of the Concurrent Finite Element Method" with W. Yi and L.A. Bergman, published in *Proceedings of the 7th International Conference on Structural Safety and Reliability*, Kyoto, Japan, November 24-28, 1997, pp. 859-865. He co-authored "Computational Issues Arising in the Solution of the Fokker-Planck Equation in Higher Dimensions: Use of Iterative Solution Methods" with S.F. Wojtkiewicz and L.A. Bergman, published in *Proceedings of the 7th International Conference on Structural Safety and Reliability*, Kyoto, Japan, November 24-28, 1997, pp. 851-858.

Robert Sullivan, concurrent associate professor of history and senior associate director of the Erasmus Institute, wrote "John Toland's Druids: A Mythopoeia of Celtic Identity," published in *Bullan*, vol. 4, Autumn 1998, pp. 19-41. He wrote a review of *Refor-*

mations: A Radical Interpretation of Christianity and the World (1500-2000) by Felipe Fernandez-Armesto and Derek Wilson, published in *America*, vol. 178, April 4, 1998, pp. 35-37. He wrote a review of *Varieties of Ultramontanisms*, edited by Jeffrey von Arx, S.J., published in *The Catholic Historical Review*, vol. 84, October 1998, pp. 717-718.

Richard E. Taylor, assistant professor of chemistry and biochemistry, co-authored "A Divergent Approach to the Myriaporones and Tedanolide; Enantioselective Preparation of the Common Intermediate" with Jeffrey P. Ciavarri and Brian R. Hearn, published in *Tetrahedron Letters*, vol. 39, 1998, pp. 9361-9364. He co-authored "A Formal Total Synthesis of Epothilone A: Enantioselective Preparation of the C1-C6 and C7-C12 Fragments" with Gabriel M. Galvin, Kerry A. Hilfiker and Yue Chen, published in *The Journal of Organic Chemistry*, vol. 63, 1998, pp. 9580-9593.

Eugene Ulrich, O'Brien professor of theology, co-authored "The Preliminary Edition of 4QPs-c (4Q85)" with Patrick W. Skehan and Peter W. Flint, published in *Revue de Qumrân*, vol. 18, no. 3, 1998, pp. 343-357.

Kwang-Tzu Yang, Hank professor emeritus of aerospace and mechanical engineering, co-authored "Fluid Mechanics and Heat Transfer in Zero-Mean Oscillatory Flows in Short Channels" with P. Li, published in R.A. Nelson Jr. and D. Kaminski, eds., *Proceedings of the ASME Heat Transfer Division — 1998 Vol. 1 Heat Transfer in Flowing Systems*. New York, N.Y.: The American Society of Mechanical Engineers, 1998, pp. 69-76. He co-authored "Experiments and Numerical Simulations of Swirling Fires Due to 2x2 Flames in a Channel with a Single Corner Gap" with Kohyu Satoh, published in R.A. Nelson Jr., K.S. Ball, and A.M. Zhang, eds., *Proceedings of the ASME Heat Transfer Division — 1998*. New York, N.Y.: The American Society of Mechanical Engineers, 1998, pp. 49-56.

Administrators' Notes

Honors

Karen I. Anderson, assistant director of development research, has been elected to a three-term on the board of directors of the Indiana chapter of the Association of Professional Researchers for Advancement.

Alan S. Bigger, director of building services, was named a member of the American Laundry and Linen College and was appointed to the faculty of the American Environmental Service College.

Michael A. Hupp, chief engineer for energy conservation, has been certified as an Energy Manager by the Association of Energy Engineers.

Publications

Alan S. Bigger, director of building services, co-authored "Appendix A: Custodial Requirements and Unique Factors" with J. Kirk Campbell, Paul Courtney, Jack C. Dudley, Jonathan L. Ford, Robert A. Getz, and Judy A. Stead, published in *Custodial Staffing Guidelines for Education Facilities*, The Association of Higher Education Facilities, 1998, pp. 143-152. He co-authored "Purchasing and Beyond: A Partnering Strategy to Survival in the 21st Century" with Linda B. Bigger, published in *Executive Housekeeping Today*, vol. 20, no. 1, 1998, pp. 9-10, 26.

Documentation

President's Address to the Faculty **October 29, 1998**

Dr. Nathan O. Hatch, Provost:

Good afternoon, colleagues and friends. Let me welcome you to this annual address of the president to the faculty of the University of Notre Dame. Following Fr. Malloy's remarks this afternoon, there will be a reception in the hall immediately outside. Let us open this assembly with a prayer from Thomas à Kempis:

Grant, O Lord, to all teachers and students to know what is worth knowing, to love what is worth loving, to praise what pleases You most, and to dislike whatever is evil in Your sight. Grant us with true judgment to distinguish things that differ and above all to search out and do what is well pleasing to You. Through Jesus Christ our Lord, Amen.

Ladies and Gentlemen of the faculty, I give you the president of the University, Father Malloy.

Reverend Edward A. Malloy, C.S.C., President:

Let me begin my reflections as I have traditionally done with a little bit of bragging, not on behalf of myself, but rather on your behalf, recognizing that it is a perilous enterprise to say representative things about the wonderful contributions that so many faculty are making across the University. But knowing that the danger is to err by not being as inclusive as possible, I do think it is a fitting reminder to recognize how much exciting work is being done and how fortunate we have been to gather the present array of faculty here at the University.

A special welcome and thanks to those who have assumed some of the major academic leadership positions this year in the life of the institution: Frank Incropera, the new Dean of the College of Engineering; Bill Westfall, the chair of the School of Architecture; Scott Mainwaring, who of course has been with us and now has become the

director of the Kellogg Institute; and Patrick Geary, who has now assumed responsibility as the director of the Medieval Institute. Joining them with fitting devotion are many other department chairs, assistants to deans and directors. The task that we assume collectively for academic administration is an extremely important one and sometimes people wonder about the manifest rewards. These jobs interrupt professional careers; they are very demanding; in a somewhat litigious age you sometimes develop expertise you never knew you needed; and occasionally you find that people that you've lived and worked with can be less than cooperative from time to time. But I think there are a lot of rewards for academic leadership. You can have an impact on the history of a department, of a college, of an institute or center, or as officers of the institution. It is because of the quality of the people we have been able to attract, including the ones that I mentioned, that I have such confidence as we look to the future positively and with great optimism.

Last night we had an outstanding event, namely, the dedication of a number of new endowed chairs and the installation for the first time of new people in established endowed professorships at the University. Listening to the comments of those who were admitted into that particular form of faculty participation, it was very moving to hear people describe not only their own career path but mention those who have mentored them along the way, through a strong relationship across the generations of scholarship. Listening to the array of expertise that was present at the dinner is a recognition at this particular time in our history that we can attract faculty of real reputation and confidence that we would not have been able to attract not that long ago. So it was a grand moment that began with a Mass celebrated at the Basilica with formal ceremonies after a reception and dinner.

I would like to offer a special word of thanks for the people who assist me directly. Matt Cullinan, who has been my assistant for a number of years, has also been finishing his doctorate in his-

tory. He just gave me a copy of his dissertation today, and has now moved on at the invitation of Nathan Hatch to be the assistant provost for academic outreach, which includes continuing education, distance learning, summer programs for talented high school students, and oversight for some continuing education efforts.

I would like to thank Mark Poorman, who I have appointed as my executive assistant, and Chandra Johnson, who will serve as assistant to the President. We've already formed a good working relationship, and I count on them for their advice and hard work during the coming years.

As we look at the various academic units I will offer a few reflections about a few of the things that I think are worthy of note. Let me begin with the College of Science.

For the past couple of years, under Frank Castellino's leadership, we have been building strength in modern molecular and cell biology. We have also established a center for transgene research. And we have brought a new cohort of professors onto the campus, including Martin Tenniswood, Crislyn D'Souza-Schorey and JoEllen Welsh. We've also seen some very interesting research on mosquito modification that professor Frank Collins is overseeing with his colleagues. With the addition of the Hank Aquatic addition to the biology building, as well as what is going on at Land O Lakes, WI, the research on invading fish in lakes that Professor Gary Lamberti is overseeing is very exciting. And finally, I note that Peter Schiffer in Physics was recognized with the Presidential Early Career Award, which is very competitive nationally.

We turn for a moment to the College of Engineering: in the earthquake engineering lab, Professors Bill Spencer and Michael Sain have been working in research on smart buildings that automatically adjust for catastrophic events; Professor Al Miller is working on anti-corrosion processing, which has very significant industrial application; Professor Kareem, president of the Wind Engineering Research Council, is working on tornadoes, an area

which is pertinent to our geographical region; and very recently, the recognition by the Department of Defense for the Quantum Cellular Automata team which includes Professors Bernstein, Lent, Porod and Merz, who were recognized for the research that is already underway.

In the College of Arts and Letters, we have been talking for a while about the role that the Erasmus Institute can play under Professor Jim Turner's leadership. We are well underway in this academic year, with the attempt to integrate Catholic intellectual tradition into mainstream scholarship on non-religious subjects, that kind of interplay between faith and reason, between explicitly religiously-based scholarship and so-called secular scholarship. We presently have nine residential fellows this year, two major conferences scheduled, a number of summer seminars will take place, and a book series is in the planning stage. I think this is a very important example of how we as a Catholic university can organize ourselves and create an excitement that has application not only to our particular context but across the academy. From the feedback I have received from some of the early participants, the indication is that these programs are of the very highest quality.

Two weeks ago, the Nanovic Institute on European Studies, which Professor Bob Wegs oversees, was dedicated. I know we wish Bob all the best in the recovery of his own health.

The Center for the Study of Public Policy was inaugurated in Washington, D.C. Peri Arnold and Tom Kellenburg have worked assiduously in getting that off the ground. There is a pervasive fear that our capital city is falling apart morally and physically. But as the center of our government and the capital of the most powerful nation in the world, it is important that we give our students an exposure to the inner workings, both the best and the worst of that, so that some percentage of our students consider careers in public service for the future. We do have a number of Notre Dame graduates serving in the Congress, in the ambassadorial

core, in some of the presidential advisory capacities, but I see no reason why we can't have our share of people running for public office at all levels, and serving in advisory capacities in the future. This new program will be instrumental in bring this good result about.

The honors program in the Colleges of Arts and Letters and Science that Neil Delaney and David Lodge have been overseeing, has really taken the next step forward. The program expansion is underway where we are moving from 160 to 240 undergraduate participants. This is an extremely attractive recruiting opportunity for us with the best and brightest high school students. This past summer we brought a number of high school students, some of whom clearly would not have applied to Notre Dame in the past, to Campus. They had a very exciting couple of weeks. All the indications are that we will not only get applications from many of them, but that we have a good chance of getting them to come because of the excitement of what happened in that interaction.

We have taken some great initiatives in Arts and Letters in the First Year Writing Program and with the establishment of the Writing Center. Stewart Greene and John Duffy have been involved directly in that activity. We've trained 25 volunteer undergraduate writing tutors, and established workshops on academic writing. We have tried to reflect about the culture of writing and rewriting. I think all of us, whatever our discipline, will be beneficiaries of a student body that writes with greater confidence and clarity.

In the College of Business Administration, one of the great things that has happened over the course of the last year is the effort that has been focused on strengthening the MBA program. In addition to the role that Carolyn Woo has played, Bill Nichols and Rebecca Mela have worked very hard on trying to bring the MBA program to the next level. For example, we have seen a 28 percent increase in enrollment while maintaining the same level of academic profile. The percentage of the

female members in the entering class has grown from 20 percent to 35 percent. The percentage of minority students has increased from 6 percent to 11 percent. So we are growing not only in size and quality but also in diversity, and that is a very helpful model as we look at our evolution as an institution across all of the academic units.

Within the Law School, I would like to highlight two things. One of these developments is the outstanding work of the Legal Aid Clinic that Tom Shaffer and so many other people helped to get established on Howard Street. Many faculty and students serve there, meeting a range of needs and interests relative to law of those who will be their clients in the future. The second is our international Center for Civil and Human Rights. If you think for example about the dilemma between England, Spain and Chile right now, with former President Pinochet and all of the things that bring to the surface the role of immunity from prosecution, and how this affects Rwanda, Burundi, the former Yugoslavia, Northern Ireland and many other places. The role of the Center for Civil and Human Rights and the kind of international perspective that they bring to the campus is visible when you see those who participate in these programs and the range of countries and cultures represented. I really do believe we can have a major impact on how we think collectively about the present world order.

In the School of Architecture, one of the great strengths has been the full year of study in Rome. We made a decision a number of years ago about a particular kind of classical orientation not without diversity but to be recognized as our major strength. The indications now are that architecture firms are looking for graduates from Notre Dame. This means that our school has a distinctive identity and our students are considered very well prepared.

The First Year of Studies plays an important role in the initiating experience to Notre Dame. One thing that I have had a chance to participate in with them in recent years is the honors convocation. I think that is a won-

derful motivator for students who have done well in their first semester of college. This room is filled with a sense of pride as more and more parents come here to celebrate with their daughters and sons. This program enables us to have a higher level of expectation and to create a sense of responsibility for those students who come to us as they think about the future. The First Year of Studies also has programs focusing on the high achievers.

One area where, across the board, we need to do a much better job, particularly among our undergraduate students, is to create a place where our students will study hard and have high academic aspirations.

The library has been very involved in a project which is largely completed, and one which is completely underway. There is a transition in the computer support system for the library, and now that we have opened up Flanner Tower and have been able to move some of the non-library functions out of Hesburgh Library to provide library space. In this way, we will not have to expand our library but can take better advantage of the space which is available in that large structure and in the branch libraries as well. Important things are taking place under Jennifer Younger's leadership.

You may know that John Kaneb is a Trustee of the University and was instrumental in establishing the Kaneb Teaching and Learning Center. But he has also come forward in a new way for what we are going to call the Kaneb Teaching Awards. They are designed to recognize excellence in undergraduate teaching, but not in limited numbers as is the case today, where one member from each college is recognized per year and at different levels for professional and graduate teaching as well as the teaching of first year students. In any given year, we will be able to recognize a cohort of outstanding undergraduate teachers across the colleges. Not only will there be a recognition ceremony, but the award to the individual honoree will include \$1,000.00 in cash and/or \$1,000.00 to one's professional discretionary ac-

count, so an awardee has a choice to use that money for purposes of pedagogical involvement of scholarly exploration or just take the cash. You want to decide ahead of time or not? I am sure all the winners are in here, so... [laughter] I am excited that this will not only build on the previous awards, but will create a climate where amidst all the multiple responsibilities of the faculty that undergraduate teaching will continue to have a very important pride of place.

The Alliance for Catholic Education that Tim Scully and his colleagues have taken so far so quickly now has 120 participants. And it is just phenomenal to see the quality of those who have been attracted to this program. These teachers take two to three summers of classes, and teach for two years in various settings, living in community under supervision from superintendents and principals. At the end of their commitment in recent years, they have received an MAT from the University of Portland, our sister institution. In the future, we will offer an M.Ed. from Notre Dame to these teachers. All of this and the new focus for the Institute for Educational Initiatives with Maureen Hallinan and Michael Pressley and their colleagues is a very exciting form of outreach. We have complained on occasion about the quality of grade and high school instruction in this country. We have a chance through ACE to make a huge difference, particularly in the Catholic school systems of the South, Southeast and Southwest. But I think we are going to have an influence on the way people think about educational training because of the experimental nature of what is going on here.

Let me say something briefly about the rankings in *U.S. News and World Report*. We moved up one place. This ranking is intended to evaluate the quality of undergraduate instruction and learning here. We are tied with Rice for 18th. As I have said before, we are in good company. The schools that are ahead of us and behind us are in fact in my judgment the best universities in the country and many of them among the best universities in the world. We are strong in the criteria

which they always manipulate a little bit, so that it is not a static evaluation system. We are strong in graduation and retention rate, selectivity and alumni giving. The two areas in which suffer the most are academic reputation and financial resources. I think academic reputation is driven by the graduate and professional programs, including the visibility of the faculty and the institution in the most elite academic circles. This subjective evaluation is rendered by presidents, provosts and directors of admissions. Financial resources in my judgment are not a true statistic, because of what is being divided by what. But if others have a better interpretation of how we can do better in both of those, I am more than happy to hear about them and I am sure that Nathan would say the same thing. I think we are making progress. The fact that we are perceived to be among the best undergraduate institutions in the country is a real plus and continues to have the disproportionate influence on family decision making about where they apply and where they think they are getting top value. For the first time we were also number 18th among the best values as national universities. How are value or quality rankings determined? It is by the net cost of the student factoring the quality ranking and then the average level of financial aid. How much subsidy do we provide relative to our pure price and then in what sense does that seem to be justified by the quality of what we provide?

I wish to turn to financial realities. We finished the 97-98 fiscal year with a net surplus of \$2.8 million. We also received \$18.5 million in unrestricted giving. How was that money distributed at the end that budgetary period? A little over \$2 million was provided for surveys and capitalization costs which new faculty members need in order to get them started in their research career on campus. Surveys are a kind of wish list from various academic units designed to purchase new instruments and provide a better working environment within an academic unit. About \$2.5 million went directly to financial aid endowment as we try to continue to build up our capacity in the long run to provide for the needs

of our students, while \$6 million was designated for expendable financial aid. For us to have that dollar figure of expendable funds has a huge immediate influence on the ability of students to come here who, in the past would have been admitted, but for whom Notre Dame was not affordable. About \$11.3 million was put into the plant fund for ongoing renovation and construction payments.

On June 30, 1998, the market value of our endowment was \$1.8 billion. Since that time the markets have experienced wide fluctuations in value and pricing. Our endowment has performed with appropriate benchmarks and still continues to be a top performer. Over the last five years endowment spending has increased about 75 percent. Our goal is to continue to strive for 5 percent spending rate. That debate goes on in every university in the country, about long range shrewdness and prudential judgment as opposed to the demands of short range needs.

In building the budget for this year, there were a number of obstacles that had to be overcome. We saw an 11 percent increase in health care premiums. We had to put in about \$400,000 for the wage supplement for the staff position reclassification project in a continuing effort to make our staff salaries as competitive as possible and as competitive as we can afford. We added about \$1.2 million to the operating budget to operate and maintain new buildings, about \$400,000 for EPA requirements and risk insurance, \$6.3 million for the campus computer workstation program completion and the expansion of International Studies. We also added about \$400,000 of supplementary funding for the Graduate School and we built \$1.6 million into the budget for student services, alumni relations and for our extensive development efforts as part of the Generation Campaign.

One of the great signs of progress as far as I'm concerned is our situation with regard to financial aid. The University commitment has gone from \$5.4 million to \$23 million per year over the last nine years. The average amount of University aid per student

at the undergraduate level has gone from \$3,800 to \$9,200, a very significant increase, and one to be very thankful for. The market value of our financial aid endowment is \$540 million, also a substantial increase from where we were before. We have contributed \$5.5 million to endow graduate fellowships and \$2.4 million to endow Law School fellowships. These distributions should enable us to be more competitive.

As of the last reporting, the Generations Campaign has brought in \$680 million in gifts and pledges. It is a wonderful place to be in, relative to our \$767 million goal. We can thankful that people have responded so quickly and so convincingly to the needs of the campaign. As we move toward the later stages of the campaign we will make every effort to fulfill all the goals that we have established. In the last financial year we received \$132 million in annual giving, which is also a sign of enthusiasm by our multiple constituencies for what is going on here at Notre Dame.

One of the things that I did for the summer meeting at Land O'Lakes of the Officer's Group was to discuss (and I also sent a copy around to the members of the Academic Council and all of the Trustees) the National Commission on the Cost of Higher Education Report, which was originally intended as a congressional slap in the face to higher education for just squandering the people's money. But the group that actually did the report did an outstanding job, I believe, and there is a lot of helpful information in there, including clarification of language. We have to do a much better job of describing to our constituencies (parents, benefactors, the broader society the citizens and so on) why higher education is so expensive, and why the inflation rate in higher education is so much higher than the average inflation rate as computed for the broader population. What we did at Land O' Lakes is review ourselves all of the elements that make up the building of the budget and the financial realities, to look at ourselves relative to our own history but also comparatively, how we are doing relative to other institutions. This report was very strategically significant in

clarifying so many factors. What are the cost drivers in higher education? The biggest one is people like you and me, our salaries, our benefits. The biggest cost in higher education in general is people. We have about 3,500 people per 10,000 students employed at Notre Dame. If you start figuring out relative to what the individual student or family pays how you cover how many of these salaries, it is a daunting challenge. Financial aid is another one, particularly for schools that use part of their operating budget to cover financial aid. Other costs include: facilities not only building them (often for us at least that is under benefaction), but the operating cost once they are in place; the costs of technology which are way above the cost of general inflation; federal and state regulations, which continue to go on; and also the increasingly upwardly mobile expectations for the kind of university that we want to be and to become. At Notre Dame student tuition and fees covers 55 percent of the unrestricted operating budget. The student tuition pays about 75 percent of the total cost of their education, about three-fourths. In other words everyone who comes here, if they paid the full rate, would still be subsidized by 25 percent in terms of the cost factors for the institution. That is why we need endowments and gifts and so on. So it is a very expensive enterprise to run a modern university.

I would like to share with you some thoughts about Campus infrastructure.

Those of you who are housed in Flanner Tower have given me very positive feedback about that new space not only for regular faculty and emeriti faculty, but also as a place where we can have conducive space for our institutes and centers, for Notre Dame Press, for our learned journals, and for the placement office. In fact when I walked around unannounced just to see what the building was like, what struck me about Flanner Tower is how quiet it was. I am sure there were wonderful things going on behind closed doors, but it was a very quiet environment. My hope is that that space will be conducive to the kinds of purposes that we hoped it would be used for.

The South Dining Hall, has been expanded and renovated and provides many choices for our students. The new 24-hour space, Reckers, provides a relaxed environment. The Rolfs RecSports Center was opened since the last time we were here and I know that is getting maximum use and especially so as the weather gets colder. You see the progress in the Eck Visitors Center/Alumni Office, and we hope to move into those building early in 1999. The new bookstore, which is going to have spectacular views back on the campus, as well as represent a significant improvement in the intellectual and cultural life of the campus, will open in mid-February. The Main Building — we expect to move back to that sometime in the summer — will continue to be a jewel, not only as a symbol of the institution but also the quality of space within it. You may have noticed the new building on Douglas Road which Ave Maria Press occupies. We did a trade between the University and the Holy Cross community. The old space that Ave Maria occupied was needed to expand the power plant because of the expansion of the campus. The Warren Golf Course will be ready sometime this coming summer.

Two weekends ago we dedicated the Keough Center at Newman House in Dublin, the new center for the Keough Institute for Irish Studies' new facility in Ireland. The Keough Center at Newman House is located in a building which has great historical significance in terms of Irish Catholic higher education history. Thirty students are studying there under the guidance of Professor Kevin Whalen. Seamus Deane was there for this great occasion which gives us a visibility and offers opportunities for study for scholars, graduate students and undergraduate students.

This February we will dedicate The Marian Kennedy Fischer building in London. It is a very attractive space in a central location in London. It offers us yet another venue for our international studies.

Having said all these things, which are more reportorial, let me settle into the last two components. One is chal-

lenges for this year and the other is ongoing issues.

A number of searches are underway. It is very hard to talk about searches because we acknowledge and thank those who have carried the burden of office and immediately become concerned with the search process itself. During transitions, the next person builds on the work and strength and vision of the predecessor.

We will have search processes this year for the new Law School dean, for the director of Notre Dame Press, for the director of the Kroc Institute, and for the director for the Center for Civil and Human Rights. Many of you, or some of you, are involved as members of these search committees. It is important that we get the right persons for these responsibilities. I am confident that we are a more attractive place and that the searches will be successful.

We are moving forward. The officers have approved the final proposal for the Performing Arts Center. We continue to explore the Science Teaching facility and its multiple needs and we are working vigorously on trying to get funding for that project. And we are also trying to get funding for the obvious need for more Arts and Letters office space for faculty. We have plans in each of these cases. It is not as if any one project is in direct competition with another. But rather the bigger in scale and the more dollars that are involved, the more energetically we have to work to get the funding. And some things are easier to sell to our benefactors than others. The very hardest thing to do is to get large scale projects like some of those we are talking about. Now I did not mention many other things that the deans and department heads and directors are advocating. It isn't as if this is the only thing we have on the horizon, but these particular projects have urgency and we have gone ahead with one and we are looking very energetically to find funding for the other two in particular.

We have had a transition in the Admissions Office as in many other areas. I think the challenges that we face today

in all levels of admissions continue to be very important ones to respond to not only because of the sophistication of the promotional material but also the combination of staffing, the way we network with advising counselors at various secondary schools, the way we reach out to good schools that we have networked with for minority recruiting purposes and so on. A lot of initiatives took place this summer. I am confident that we are building a better way of relating to the multiple kinds of institutions that we have had a good relationship with in the past and others that we may have had a cooler relationship with. I think our improved financial aid situation is probably the biggest change over time. We now we have the capacity for online admission, not only domestically but internationally.

We cannot lose our momentum in our efforts with regards to affirmative action, and I have talked about this many times in the past. Somebody asked me last year at the Faculty Senate whether I was in favor of affirmative action. I said I am in favor of affirmative action, I have said it 100 times and I look to statistical evidence to see whether or not we are making progress. The fact is that this topic is debated in public institutions, and it is debated relative to state and federal law. Obviously we are committed to acting within the law, but we are also committed to trying to realize our multi-cultural goals in ways that are appropriate to this institution. But let me make one reference here: at the last Board of Trustees meeting, completely independent of any role on the part of any member of the Congregation of Holy Cross, one of our Trustees, Mr. Patrick McCartan, came forward after he had discussed a proposal with the Academic Affairs Committee of the Trustees which has a number of faculty representatives. The following resolution, which I will read very quickly, was adopted unanimously. It clarifies a point that needed clarification.

Whereas part five, subpart e, of the statutes of the University of Notre Dame provides that the essential character of the University as a Catholic institution of higher learning shall be at all times

maintained and whereas part five etc. of such statutes provides that the University operations shall be conducted in such a manner as to make full use of the unique skills and dedication of the members of the Priests of Holy Cross Indiana Province, Inc., and whereas one of the most important and distinctive ways in which we evidence, maintain and sustain the Catholic character of Notre Dame is through the presence of the Congregation of Holy Cross in the University community as mandated by the governing statutes of the University. And whereas in recent years appointments and members of the Congregation of Holy Cross to the administration and faculty positions have been considered and characterized inaccurately and inappropriately as affirmative action appointments, now therefore be it resolved that appointments of qualified members of the Congregation of Holy Cross to administrative and faculty positions at the University shall not as a matter of policy be deemed, characterized or referred to as affirmative action appointments but rather as appointments made pursuant to and in recognition of those provisions of part five of the statutes of the University designed to ensure the presence of members of the Congregation of Holy Cross Indiana Province in the University community.

I would suggest to you that the wording of this resolution is superior to the affirmative action language we've used in the past for the recruitment of Catholic faculty as well.

Another challenge for this year is the Latino Hispanic Studies area. We are currently searching for the founding director of this program, and we have high aspirations for what we could create here. A number of people have come here as advisors to that process and I think there is a lot of enthusiasm across the campus for this.

All of us should be concerned as people with the international and domestic financial climate. There is no way that Notre Dame can prosper if people are in a negative mode about their financial and economic situations. That is true of parents, it is true of potential benefactors, and it is true of the broader citizenry. What goes on

in Russia and in Brazil and Japan eventually has an influence on our capacity to realize our goals, to be affordable and to get the financial support that we need for the multiple things that we are trying to achieve. We are not immune to all these realities. The world as an international market and economic reality is so interactive and money moves so fast that no one is immune.

I would like to simply remind the members of the faculty that about 10 years ago, Pope John Paul II issued a document entitled *Ex corde ecclesiae* that describes the nature and function of the Catholic university. There is an expectation that the concrete application of the general statements in the document would be developed at the national level by the bishops of each country. For nine years I have been serving on a committee of bishops and presidents which is attempting to develop a statement that would be appropriate and helpful in the American context for Catholic higher education. We thought we had such a statement. It went to the Catholic bishops, and it was approved by all but six votes. The statement was then sent to Rome, but recently word came back that there needed to be a more juridical document, which we had previously deliberately avoided. About a week ago, we received the document which I think is the worst version we have had anytime along the way. I realize not everybody would agree with me, but there is a strong consensus among Catholic presidents and others that I have talked to that this document is simply inadequate to the challenge. We have an opportunity between now and a year from this November to respond, straightforwardly and with our best wisdom, to this latest draft. I have asked the Academic Council, the Trustees and others to study and discuss this document. We will also examine the document with the other Catholic schools in this diocese, through regional meetings, with the Association of Catholic Colleges and Universities, with major Catholic universities, and with other groups. We will try to express very clearly, as we did before, why this particular statement is inadequate. I remain abso-

lutely convinced that the previous formulation was an excellent one and would serve us well. I think that we will find in the conversation that there is a lot of good will. There has been an intense effort in Catholic institutions to take seriously their mission. I think the conversation between bishops and institutions has been a very healthy one. The pressure comes mainly from the outside. I have been involved in this process long enough that I'm convinced that we will prevail in the end because I think there is a healthiness and a commitment to do things right that needs to be respected by any document. I don't think the present version does that.

I want to say something briefly about athletics. We have had a review by the NCAA which we passed with flying colors. We have an Athletic Affairs Committee on the Board of Trustees, which has done a very fine job in reviewing every dimension of our athletic programming, including our commitment to academics. This summer we had two unfortunate public events, which have been reported in a variety of ways. I have reviewed with Bill Beauchamp, Mike Wadsworth and the Officers and Trustees, the issues that have emerged, including matters that have to do with our expectations for the behavior of coaches. We have clarified mechanisms for feedback and our continuing expectations with regard to the behavior of student athletes. We are considered an exemplary institution in this regard, despite some minor failures along the way. I have absolute confidence that we are focusing in on the central and most important things, which have been stated very clearly in our statement on inter-collegiate athletics which described the kind of institution we want to be, what we expect from our athletic administrators, athletic coaches and our student athletes. We will continue to use that as our standard. We will continue to hold ourselves to the highest level.

I have asked Mark Poorman, my executive assistant, to chair a committee presently looking at everything that happens on campus during the summer months. We need to pay more attention to the social dimensions of

these programs as well as to our academic capacity, and the kind of multiple audiences that we could attract to the campus, including potential students, participants in various kinds of learning, as well as the things that are related to alumni, to young kids and so on.

We need to continue to work hard on how we can enhance the research climate and the effective recruitment and preparation of graduate students in a very difficult job market. If we are going to be a major participant in graduate research and scholarship, in the preparation of the next generation of faculty, or those who choose other career paths after their doctorate, we will have to pay close attention to the steps we need to take to advance in that regard. I am seeing real signs of progress and I am confident that with Jim Merz's leadership, the Graduate Council will continue to advise us and give us assistance in this regard. I think there has been a renaissance of commitment to effective teaching at all levels and preparing our graduate students to be effective teachers. I want to celebrate that but say that it's a neverending process for all of us, particularly as we welcome new faculty to the campus.

The phenomenon of undergraduate student intellectual life continues to be a puzzle. We have had some initiatives which I think have been very successful, but it is going to take everyone, the way we counsel students, the way we indicate the bright set of possibilities for competitive awards, the way we get to know them so that their recommendations for graduate and professional school are very personal, in the way that they model to each other, to the younger students what they might aspire to. We have students who have the capacity, so let's continue to strive to find the most effective ways of bringing out the best in them.

Lastly, I have talked to Nathan on occasion and also to many of you about the whole broad field of ethics. Notre Dame is at a time and a place where I think much of the academy looks to us for leadership in this regard. We have many people who do ethics, who are

trained to be professionals. We have some work in our institutes and centers, but I don't think we have yet found the most effective mechanism or set of support structures to give us the visibility as a place where the relationship between values, personal commitments and the concrete lives that we lead and the professional roles that we play come together. I believe that this is a campus full of the capacity to move in that direction and I would really hope that we could continue to highlight how Notre Dame is a place where ethical reflection is outstanding.

Finally, let me just say thanks to you. I really enjoy what I do. I find that Notre Dame is a place that when we say we need to do it, we get it done; where we've welcomed over 100 new faculty positions over the last decade; where we've seen the improvement in our physical plant; where we see great quality in the students we attract. We are making our mark but the feedback we get about academic reputation suggest to us that when it comes to participation in learned societies, when it comes to the role of leadership we can play in our discipline and on behalf of the scholarly endeavor of the nation, I think we still have a way to go. I believe that we are better than sometimes we are thought to be. And I think we are growing by leaps and bounds.

With confidence and with the good spirit of cooperation—I have found that from all of you—I think we can look to the future with great confidence. We have economic pressures. Other institutions are making great strides. If we are faithful to our identity and mission, if we can continue to have credibility with the constituencies that we serve, I think the best is yet ahead and I thank you for that.

Thank you very much.

University Committee on Libraries

September 16, 1998

The meeting was called to order at 7:30 a.m. the Morris Inn by Chairman John Halloran. Also in attendance were Harvey Bender, Kelly Gritten, Christopher Hamlin, Roger Jacobs, Philip Johnson, Alan Krieger, Laurence Taylor, Jennifer Younger, guest Barbara Walvoord and secretary Melodie Eiteljorge.

The minutes of the meeting of August 19, 1998 were approved as written.

Younger noted that prior to the meeting she sent out a URL address for her annual report online. She stated that the procedure was slightly different this year. Nathan Hatch asked deans and directors to discuss what is coming ahead rather than past accomplishments. She addressed three issues in her report: renovation and program planning; rising expectations and rising costs; and better tools for accessing information resources.

Younger next gave an update on renovation. The Libraries Program Planning Committee (LPPC) has been meeting weekly and has conducted site visits to Indiana University/Purdue University at Indianapolis (IUPUI), Emory University and the University of Southern California. At prior meetings of the University Committee on Libraries (UCL), Younger mentioned that she would form a second committee in the fall to serve as an advisory group to the LPPC. In thinking about membership for this second group, she thought perhaps the most appropriate source might be UCL with some expansion on a temporary basis for 1998/99.

Jacobs observed that there is a specific charge for UCL with a designated representative membership. To expand that might be out of our purview.

Bender recalled that the committee was changed a few years ago from a policy making body to an advisory body. In that capacity, he feels the

committee could be expanded on an ad hoc basis without breaking with the philosophy.

Taylor stated that part of the question is the purpose of the advisory group and whether or not they will be making specific recommendations. Bender responded that the ad hoc members could be non-voting members.

Jacobs noted that UCL is already a large group. To expand it seems a substantial effort. Younger agreed that expansion is not an absolute requirement. Her thinking was that it might be easier to bring others in rather than report to them separately. However, there are other vehicles for that. Halloran suggested that before we proceed we need more specifics on the number of people that would be added, the areas of the University to be represented, etc. Younger will look at various avenues and bring back a recommendation to the group.

Bender noted that there are two issues: first, whether or not UCL will accept the responsibility of serving as the advisory group; and, second, whether or not the group should be expanded. He suggested that we proceed with acceptance of the first part. Halloran agreed and noted that this charge may involve additional meetings. He called for a vote on acceptance of the charge. It was unanimously accepted.

Younger next gave some further updates. At a previous meeting it was suggested that UCL should express interest in the search for a director of the University Press. Younger will be meeting with Carol Mooney, who is head of the search committee, and she will mention this. She also reported that graduate students have received funds from a donor to purchase computers for a graduate student cluster in the Hesburgh Library. She will be working with them to find space.

Younger next introduced guest Barbara Walvoord, who is director of the Kaneb Center for Teaching and Learning.

Walvoord explained that the two-year old center's customers are faculty members of all ranks, teaching assis-

tants, administrators who teach -- indeed, anyone in the classroom. The facility is in DeBartolo, which is both centrally located and state-of-the-art.

There are two ways in which the work of the Kaneb Center and that of the libraries may be significantly connected. The first is that the center stands in a position to be a predictor and interpreter of how teaching and learning will look in the future. The second is that they are one of the providers of service to faculties and teaching assistants in their teaching roles.

The provision of service takes four directions. First, there is individual consultation with faculty members, and participation in that is increasing rapidly.

Second is workshops, which are usually off site. There are approximately ten workshops a year, both interdisciplinary and disciplinary.

Third, through the Catalyst program, the center works with departments, colleges and other kinds of units in the University in a variety of ways.

Fourth, the center participates in the governance life of the University.

In connection with all of these things, the Center disseminates a great amount of material through all means. They have a small library, and they do loan books. They have a web site and will be providing a listing of their books on the site at some point. They have been communicating with the libraries on how to handle this.

Walvoord next asked for questions.

Halloran asked in what ways the center has been involved with the libraries. Walvoord responded that they have come to the Hesburgh Library to discuss various issues. She has also served on a committee on orientation with Patrick Hall, the libraries' instructional services librarian.

Hamlin asked if it would be useful to have a place in the Hesburgh Library to highlight some of the center's books and make them available. Walvoord

replied that she often takes books with her to workshops and allows people to borrow them. Their borrowing system is very informal with an expected high rate of loss.

Jacobs suggested that having some duplicate books available in the library would extend the hours of availability and also provide a service point. Walvoord stated that she is exploring various options, including on-line reserve. She noted that the center also photocopies a lot of articles.

Walvoord distributed an article from *Change* magazine, November/December 1995: "From Teaching to Learning – A New Paradigm for Undergraduate Education," by Robert B. Barr and John Tagg.

Younger thanked Walvoord for joining the meeting. She next reported that she will be away from campus at the time of the next scheduled meeting, October 14. It was agreed that we will cancel the meeting rather than re-schedule for break week.

There being no further business, the meeting adjourned at 8:30 a.m.

Respectfully submitted,

Melodie Eiteljorge
Secretary

University Committee on Libraries

November 18, 1998

The meeting was called to order at 7:30 a.m. at the Morris Inn by Chairman John Halloran. Also in attendance were John Adams, Harvey Bender, Robert Coleman, Kelly Gritten, Christopher Hamlin, Roger Jacobs, Philip Johnson, Alan Krieger, Larry Rapagnani, Laurence Taylor, and Jennifer Younger; guest Bill Barry of Shepley Bulfinch Richardson and Abbott; library guests Joanne Bessler, Richard Jones, Lou Ellen Parent, and Marsha Stevenson; and secretary Melodie Eiteljorge.

The minutes of the meeting of September 16, 1998 were approved as written.

Younger distributed copies of an article on the Regenstein Library renovation, given to her by Robert Coleman. She also distributed copies of Professor Detlefson's request for information on the library renovation on behalf of the Faculty Senate and her reply.

Younger introduced library members of the Program Planning Committee (PPC) and welcomed Bill Barry, an architect from Shepley Bulfinch Richardson and Abbott.

Barry gave an update on the renovation project at Notre Dame. During the week of October 19 architects and committee members met with University administrators, graduate students and library staff in focus group sessions. Then, the week of November 16, they met with University faculty, undergraduate students, and additional library staff in more focus group sessions. The faculty sessions were organized by college.

Barry reported that there appear to be different patterns of use among groups. Some people take material outside and do not use the library building. In fact, some graduate students take material to Borders, where they enjoy the coffee, the atmosphere, the buzz of activity, etc. Some would like to stay in the building but are not comfortable with the present atmosphere. Some students are in the library for long periods of time and would like the opportunity to take breaks for coffee and catching up on CNN news. Beyond that, there is a very charged atmosphere about the renovation. Participants of the focus groups expressed appreciation for the opportunity to provide input.

Bessler asked if there was any discussion regarding service points. Barry responded that the concept of an information desk was brought up repeatedly. Staff also expressed an interest in that. There was consistent feedback about the need for general information.

Hamlin asked about the implications of faculty and students having different use patterns. He noted the Boyer Report, which discussed

making student work interact more with faculty research in terms of needs and aspirations.

Barry replied that he wonders if different patterns of use needs do bring on physical separation, which might not be good. He noted that some students talked about having a course to teach them how to use material in better ways. Perhaps we need spaces for collaborative work. Most important, we are not assuming a separation.

Bender asked if there are architectural challenges for security and staffing ability in a library that is open longer hours. He feels that 24-hour access is ideal, but are there implications? Barry replied that it is a matter of zoning the building. There is a desire for off-hour access, but not necessarily 24 hours a day.

Bender asked if there will be zones in the renovated building. Barry replied that this is something to consider, although it's not necessarily a given. Sometimes it's possible to make only certain areas of a building accessible for extended hours. In one of the graduate student focus groups, it was mentioned that a campus in California has underground space which provides opportunity for interaction during off-hours.

Rapagnani noted that Student Affairs recently completed a study of social space on campus. He asked if there are things that make Notre Dame different than other library projects with which the firm has been involved.

Noting that he would like to include Wendell Wickerham in such a discussion, Barry replied that for him the Hesburgh Library is an interesting building. It is a very strong diagram of a book tower above two floors.

Adams asked if only the main library will be renovated. Barry and Younger responded that physically only the Hesburgh Library will be included. However, as we look at the use of the Hesburgh building, we will also take into account the system as a whole. Adams noted that presently in the branches, if faculty want stu-

dents to read something, they must photocopy it and put it in the main library. There is no study space in some of the branches.

Bender asked if there were any structural surprises in the Hesburgh Library. Barry replied that there have been no real surprises thus far. He believes the building has survived well for its age and that it has been well maintained as a structure.

Coleman asked if there is a sufficient number of elevator banks for transportation of people and materials. He is surprised that there is no freight elevator to the tower. Barry replied that we will assess the need to maximize elevator capacity. In the original design of the building, the first two floors were for study space and interaction, while the tower was solely for books. That is one of the reasons there are few windows in the tower. When use of space changes, everything else is affected, including elevators and windows.

Coleman asked if, with space considerations, we might be able to reclaim the 14th floor. Younger replied that the question has been raised by several people. We will see what the demands are on the building and then determine whether or not it is worth raising the issue. Jacobs added that the 14th floor is well used for its present purpose in holding fly-ins. Barry noted that students also brought up the question of providing an observation deck which could be used in recruiting students.

Adams noted that the firm has had considerable experience with libraries. He asked if there are any common themes or methodology for a renovation.

Barry replied that the firm feels that an interactive, collaborative work method yields the best suggestions. The architects are using two tracks: assessing the existing structure and, parallel to that, listening to what program needs there are for a library at Notre Dame. At some point they will bring those parallel tracks together. This is a challenge. He expects that they will consider remote storage.

Other trends they see include increased consideration of the social aspect of being at a library. He sees the "coming together" of social interaction and libraries.

Jacobs observed that the term "food and drink in the library" has always in the past been preceded by "not." Experience has been that food and drink cause destruction and potential for damage. Yet he sees that it works at Borders or Barnes and Noble. Barry responded that it is a matter of control and zoning. Public libraries are taking this approach, with one area for food and one for books, but perhaps also something in between. We certainly do not want to bring food into the stacks, but that is a matter of control.

Bender asked if there ever has been a university library in conjunction with a Borders or a Barnes and Noble. Barry replied that he is not certain about any actual commercial merging, but it could happen. Younger noted that the new bookstore on campus will have a café and soft chairs for reading.

Halloran observed that this brings up the question of a collaboration between the Libraries and the new bookstore. Rapagnani noted that they are at opposite ends of the campus. Younger stated that there are some possibilities for collaboration. For example, we could allow students to drop off returned library books at the bookstore.

Rapagnani noted that he is interested in the concept of integration of access to information in a total sense – in library volumes, on the Internet and in other styles. Resnet was designed differently than main computer component areas. The OIT installed Resnet jacks in some other buildings across campus, including the Hesburgh Library. However, they simply guessed about where to put them. This might be a golden opportunity to harvest information about where it would be advantageous to plug in and to print. If that information is being gathered, he would appreciate receiving a copy.

Barry replied that the graduate students are particularly pleased about having space on the tenth floor with

printers. Jacobs asked if, in new renovation projects, networking is ubiquitous. Barry agreed that it is, and he doesn't believe there will be great obstacles in the Hesburgh building. The intention is to thoroughly network space, and he believes users would like to have access from just about everywhere. One question we perhaps should ask is if there should be a "click free" zone. Students sometimes like a space away from the constant clatter of computers.

Hamlin noted that the planning process mentions focus groups. He is not sure a focus group is the right way to determine the Libraries' purposes. Barry responded that the Program Planning Committee is listening to focus groups and to people in the Libraries. Younger added that we have a library mission statement. We expect to come up with more from the focus groups than can be met, and then we must put everything into priority order. The PPC will then bring back the priorities to UCL for discussion and validation.

Jacobs asked if there is a real challenge in meeting the needs of graduate students in a primarily undergraduate institution. Barry responded that a division does exist and that this will be a challenge. Rapagnani noted that, in the design of current clusters for both graduate and undergraduate students, it is now clear that their needs are different. Younger added that the needs of upperclass students may differ from those of underclass students as well.

Younger noted that, at the December 9 meeting, we must elect someone to serve as chair, since John Halloran will be on leave next semester.

There being no further business, the meeting adjourned at 8:35 a.m.

Respectfully submitted,

Melodie Eiteljorge
Secretary

Faculty Senate Journal

November 9, 1998

The chair, Professor Michael Detlefsen, called the meeting to order at 7:01 p.m. in the auditorium of McKenna Hall and asked Professor Richard McBrien to offer an opening prayer. The journal for the October meeting having been distributed in advance, Detlefsen asked for corrections and modifications. Minor ones had been reported to the co-secretary Peter Lombardo. Since there were no major ones or further minor ones, McBrien moved adoption, Professor Jean Porter seconded, and the Senate agreed.

The chair's report consisted of four points. His report is printed in full as Appendix A of this journal.

1. The chair released a statement which quoted a letter of May 14, 1998, from Director of Student Activities Joseph Cassidy in regard to the probationary status of the Women's Resource Center on campus. Detlefsen's statement was intended to provide information to the Notre Dame community about this status. The probation extends through the academic year 1999-2000.

2. The Senate has been asked, by a letter from Michael Danch, director of athletic facilities at the Joyce Center, to name four faculty members to be part of a committee which will advise on the proposed renovations of faculty exercise facilities on campus. Detlefsen suggested one person from the Benefits Committee and asked Senators for further suggestions, especially women faculty; he requested these names by the end of tonight's meeting.

3. In regard to the provost's annual report for the year 1997-98, the chair has received the statistical data in tabular form from the provost's office. The full report is not yet available, but interested faculty may see the data the Senate has received. Please contact the chair for this data.

4. The chair has sent a letter to the director of libraries Jennifer Younger in

connection with the proposed renovations of library facilities on campus, particularly the Hesburgh Library. Younger had asked the Notre Dame community for suggestions and participation in the planning process. Detlefsen, on behalf of the Senate, cited the lack of specific faculty involvement in the process and asked that she consider appropriate ways to involve and engage the faculty in this process.

Since there were no questions or comments on the issues in his report, the chair declared the Senate in recess for committee meetings for forty-five minutes. Upon reconvening at 8:00 p.m. the Senate again went into recess to hear the comments of its guest for the evening, University President Edward A. "Monk" Malloy, C.S.C., making his annual visit to the Senate. The Senate welcomed him warmly, upon his introduction by Detlefsen.

The following is a transcript, edited in cooperation with Fr. Malloy, of his comments, and the question and answer period which followed. The list of questions provided to the President before his appearance is printed as Appendix B of this journal.

Fr. Malloy: I have a little outline of a couple of things to bring up. First of all, not to try to reprise my talk, which unfortunately was delayed by illness, but to cover a couple of things that I think are relevant to some of the questions that I was asked, I would like to highlight matters related to University financing, in order to emphasize an economic structure within which we are operating today. If I could, I would like to remind you of a couple of points that I made in my talk because I think they are pertinent to some other matters.

If you look back on the 1997-98 fiscal year, as has happened in our modern history, we finished with a surplus. The whole budgetary system is intended to do that. Our surplus was \$2.8 million. If you combine that with the \$18.5 million of unrestricted giving, at the end of that budget period we had a sum of about \$21 million. But that is a little false, because we have expecta-

tions, built into the system that we have operated on, of things that we need to cover that are not part of the regular budget process. For example, in distributing the money at the end of the year about \$2.2 million went into surveys and capitalization costs. Surveys are the smaller scale items of renovation, particularly of academic facilities. Capitalization costs, for those of you particularly in Science and Engineering, are those to bring in a new faculty member and get that person established in their research. This is a very expensive proposition indeed. We have not up to now been able to put all of that into the operating budget as such, so we have historically tried to cover that at the end of the year. We put \$2.4 million into financial aid endowment, which is trying to sustain the momentum which has come off the campaign. And in a choice about how to have an immediate effect as well as a long range one, \$5.9 million went into expendable financial aid. The big challenge for us with regard to financial aid is how we can get a higher percentage of those who show need covered using the formula of parental contribution and a combination of internal resources plus loans and work study. We have been losing too many students historically because we didn't have enough financial aid resources from the inside, so the combination of both money going to the endowment plus expendable funds gives us a quicker response time to try and make up the deficit that we have known historically in regard to financial aid. And then the sum of about \$11.3 million went into the plant fund, a little low. In fact, I think you can make a very legitimate case in terms of the funding structure for the multiple projects that have been going on, that we have to play close attention to this because the plant fund gives us the resources to cover costs before the actual money comes in. Anyway, that is what we did with the money. And all of those, you could argue, could have been built into the operating budget but this is the historical system that has evolved. That is the report on 97-98.

When we began to build a budget for this academic year, one of the difficulties is that we have been operating with severe restraints in terms of how much additional tuition we can bring in, that is how much we can raise the percentage of the tuition increase. We have been operating with a goal of something approaching 5%. The Board of Trustees is very severe on us not going significantly beyond that percentage increase. When that happens, it means that all of the inherited costs that have to be accommodated in the budget give very little leeway, especially when those accumulate. What are some of the items? I listed them in more detail in my talk, but let me just indicate what they are:

- health care premiums go up, and we've tried to cover as much of that as we could;
- the multi-year staff reclassification project, which we've tried to build in over time, but that is a significant increase;
- obviously new maintenance for buildings, at least for those buildings that are not for profit. They have to be covered;
- additional EPA requirements that have to be addressed;
- the Campus Computer Workstation Program, which is an essential part, not only of what we are trying to do academically but also in terms of student life;
- the expansion of our International Studies Programs;
- additional funds for the Graduate School;
- for student services;
- and for Development as we enter the later stages of the present campaign.

Those are all matters that have to be covered in terms of additional expense from the relatively small increases in the budget from 1997-98 to 1998-99. There are of course wish lists that all the deans and directors have and many of the other units of the University, and that puts a severe constraint on the leeway that we have available.

I want to emphasize that there are very few if any universities today, especially with the intense criticism that has been received about the increase

of college costs, who see that anything beyond 5% is feasible. The only school that I know of that has increased tuition dramatically relative to their peers within the last year or two is Northwestern, and only time will tell whether that was the right move for them. But if you look at what we would call our peer institutions, for example the schools that are listed with us in the U.S. News and World Report categories, all of them have been trying to bring down even below us what their tuition increases are from year to year, so that is something we have to pay very close attention to. The reason I want to stress that is because we can be very successful in the campaign and be able to talk about building the endowment. All of that brings forward strength over time, but it doesn't necessarily in a given year provide the resources to be as energetic and creative in looking at new opportunities as might have been the case when we were going up 17% and 15% in tuition.

I stressed that increasing financial aid resources internally is one of the great success stories in the recent past. In the last 9 years we have increased our financial aid payout in a given year from 5 million to 23 million and the average undergraduate student financial aid has gone from \$3,800 to \$9,200 which is a significant increase. It makes us much more competitive than we would be otherwise. We've also been trying to build the endowment for financial aid in the Law School, the MBA School and in terms of graduate fellowships in the Graduate School. We have now special societies in the Law School and Business School to try and effect those worthy goals. But once again if you use the 5% rule, it means that in a given year you can estimate no more than earnings of \$50,000 off of a 1 million dollar endowment, so it requires very large sums to have a huge impact over time.

The Generations Campaign in the last reported figure, remembering that \$767 million was our goal, came in at \$680 million in gifts and pledges. Our largest dollar figure overall is in financial aid, which is reflected in some of the figures I have given you already.

We have seen a significant upturn within the last year or two in monies for endowed professorships. We are seeing I think a much better and more effective way of telling the story in regard to library collection development and also targeted funds for notions of centers and institutes. So we are working hard on trying to assure as we move to the later stages of the campaign that the dollars are distributed roughly according to the goals that were set out in the colloquy document itself, recognizing that over time other things have come on the scene as well.

At Notre Dame student tuition and fees cover about 55% of the unrestricted operating budget and they cover about 75% of the cost of delivering the education to an undergraduate student. I mentioned a document that the National Commission on the Cost of Higher Education put out, which I sent around to all the members of the Academic Council and others, and which is available easily if any of you who are not on the Academic Council wish to receive it. I think it lays out very well the need for precision of language, but also the difficulty of communicating to our respective audiences why college costs go up higher than the general rate of inflation and why so many people feel stretched and strained in terms of their family capacity.

All of this of course is to say, relative to the many positive points I made in my address, a lot of the things that we can brag about, a lot of areas where I think we can legitimately see progress being made, that it is always within the context of the international and national economy, which affects attitudes about giving, the rate of pay-off of pledges, the circumstances of individual families as they look at private as opposed to public education, and so on. As I look to the future I think we'll continue to see, barring a major catastrophe, that we can go over the top ahead of schedule on the campaign and that we can target in a special way those areas that have been underfunded up to now, but it still means that people are going to be more or less conservative in their spending and in their choice making about education

than they might have been a year or two or three years ago. That is all I am going to say with regard to matters that I brought up in my annual address.

Let me cover the questions that you asked in a different order than which I was given. I'd like to start with question #4 which has to do with alcohol. I'm glad I was asked this question because sometimes I have been so intensely involved in this conversation, not only here but at the national level, that I don't want to go too far in constantly harping on the same topic. I got involved originally in the broader question of substance abuse when I was on President Bush's Drug Advisory Council. Through that involvement I met all kinds of wonderful people and I learned how complex these kinds of issues are at the national level. The debates include discussion about prevention, education, therapeutic resources and about the violence that so often is connected to substance abuse in our country. We did spin off an organization called Community Anti-Drug Coalitions of America, when the presidential commission ceased to exist, and that group still exists and is doing wonderful work at the local level. Because I was involved, I then was invited by Joe Califano to get involved with the organization that he has called CASA which is connected to Columbia University in New York City. I chaired two groups of very interesting individuals who represented a broad cross-section of the national community. We had excellent staff doing much of the groundwork. We issued a report on alcohol abuse on college and university campuses, and tried to give a broad survey of what the issues were, what kind of changes that happened over time and got a fair amount of media attention. Then I was invited by Joe to chair a study on teenage substance abuse. Originally we were going to do it kind of symmetrically, college and then high school, but then the question was, what about all the kids who are not going to high school, and dropped out? They are on the streets and they already are in patterns of abuse. We got a fair amount of attention on that and it was a reminder that much of what we see in college comes to us out of high school and

even grade school. But even though there is a diverse set of substances being used and abused, particularly by young people, it remains the case that alcohol is the drug of choice. I happened to read today in the mail that I got a profile from Washington University in St. Louis, which is trying to take on this issue and which made a reference to what was going at the national level itself. In the last year we have seen a new manifestation of alcohol abuse, which is the riot, not the riot over the civil rights or against the war, but the riot for alcohol privileges, whether in certain locations or in general, and it is a very perplexing situation that colleges and universities are facing across the board. We have seen riots at Michigan State and Penn State and a whole host of very respectable and fine institutions. We have also seen stories about deaths often in fraternity and sorority circumstances at MIT, LSU, Rhode Island and Virginia and many other places as well.

So the question is, what can we do about that? First of all, I have served for four years at NIH in a final review panel in the section that deals with alcohol and alcohol related diseases and the research connected to it. That's a relatively small portion of the NIH budget which as you all know has gone up astronomically, but is still a fair amount of money. I found that through my participation there that there was a fair amount of skepticism on the part of researchers about the efforts that colleges and universities had underway, and whether they were being properly evaluated or not. So we were invited, I think at least partially because of the interest that Congress is displaying in this issue at this particular moment, to put together a group of presidents and researchers to examine at least in an ongoing conversation what the research tells us about matters of alcohol use and abuse by people in our traditional age group and what kind of strategies seem to be working and not working. The goal would be at the end to put out (this is two years from now when we hope to have a report) a document which would clarify the state of the question and do it in a way that at least this cross section of presidents

and researchers would find credible. So it is going to be an interesting thing. We have a meeting coming up in a couple of weeks at NIH in suburban Maryland.

In addition to that, I was invited to write an article in Presidency magazine, which the American Council on Education puts out. It is called "Taking the High Road on Alcohol Abuse." I review some of the circumstances and the sense of perplexity that university and college administrations have. Why take this issue on if you don't think there is a solution, unless there is some big public event that receives a lot of media attention? I'll be happy to leave a copy behind if anyone wants to look this over. I describe what I think that the approaches have been up to now, and then try to give some sense of whether the combination of all these approaches is moving us in the right direction. I wanted to try and motivate college and university leadership to take this on, because all of us would say from all the anecdotal experience that I have had that there are no places that I know that are immune unless they come out of a religious tradition that proscribes alcohol use entirely. I do not think that Brigham Young from all the evidence has a big problem, or that Bob Jones has a big problem, but if you move beyond these institutions where the religious tradition, and therefore all the policies that flow from that, proscribe alcohol under any circumstances every other school, Ivy League, the best of the privates, the community colleges, all who are dealing with traditional age students have a problem. The circumstances are different if you are dealing with these schools that don't have a residential campus, and that is a major dividing line. Presumably it's what happens at home, where you don't have heavy concentrations of students, either on or off campus. There are some significant changes that are reflected here as well. Women now drink to get drunk in rates equal to men. Nearly 40% of women and 50% of men engage in binge drinking, defined as more than 5 drinks in one setting, on the average campus. Students living in fraternity and sororities have the worst problems by far, three times worse

than students in other living circumstances. White males consume the most alcohol in a given week of any definable group. And of course the excessive use of alcohol is implicated in reported rapes, most violent crime and in the contraction of sexually transmitted diseases. But maybe most of all, which I think is of interest to all of us, there is a direct relationship between regular abuse of alcohol and inferior academic performance.

One set of possibilities which we have looked at and are engaged in here at Notre Dame has to do with educational programs of one kind or another, but it is not clear that education in and of itself leads to changes in behavior. That is one kind of approach that we can take. There are ways that we can try to establish alternatives and gain greater control over the forms that alcohol use takes in a given environment. Many campuses have bragged about the way they train bartenders, the way that they try to provide alternative forms of drink and food in circumstances where alcohol is consumed, and so on. But in my judgment the most critical factor is getting student involvement, trying to change the student peer culture against the force of advertising, and against the connection between alcohol abuse and the good life. If you are interested I will leave this with Mic and you can look it over at your leisure. I think that we are doing here all the things that I know of that any campuses that are trying to take this on in a serious way are doing. Sometimes the uniqueness of Notre Dame is explained as why we have a problem. And yet if you look at comparative terms, us and you name me a school, they've got a problem. It may be that the inducement to alcohol abuse takes a specific form here, but it is not clear that if we changed X, Y or Z, that we would suddenly either be a dry campus or a sober campus. I think our students are wonderful, most of the time they are great fun to live with and to teach, they are very inspiring in their generosity and their piety, but there's this anomalous side to life at Notre Dame which revolves around the abuse of alcohol. I think we have seen some signs of progress, not enough to suit me, and the Under-

graduate Committee of the Academic Council has taken this on as one of the issues to be explored. I hope that that continues to go on. I'm happy to do everything that I can to cooperate with any good ideas and put in place any programs that would be helpful. But I happened to have a sustained conversation today with a major leader in the military at the national level, and we were talking about how the military deals with this issue and how it struggles to find solutions with a comparable age group. So I guess my appraisal is, I think we can point to some areas of progress, more students who don't drink of choice, students who after some bad experiences choose to live a sober lifestyle, students who are trying to create better alternatives for their peer culture, and so on, but it is not clear to me that there is any formula, any one thing that we can do that will turn the thing around overnight. That's what I have to say about alcohol.

Question #5 - The Science Teaching Building; We have given the go-ahead for the combined components that we need to do for the Performing Arts Center. I might add that that's been a very complex and difficult project, and there are a number of people who when the cost got to a certain point would have chosen not to do it at all. I have been committed to that project, and I am pleased that we have been able to both put together the combined funding necessary and to give final approval to go ahead. That was the last major construction thing that had been hanging over the head of this administration. I am pleased that we have been able to put it together.

We have a dilemma, which has been identified and which has been partly alleviated by Flanner Hall coming on line, of Arts and Letters faculty space. I'm hopeful that we will get funding for such space and that we will be able to address that issue quickly rather than long term.

Among the major goals and projects of this community which has been identified and has won support from a broad cross section of interested parties, the number one building priority is a science teaching facility. It will cost, if

you include retrofitting Nieuwland Hall, \$125 million. Now, if you know somebody who has got \$125 million to give us, we will be ready to go tomorrow. Just taking the facility itself at \$85 million, if you can find me someone who has that money, we will do it tomorrow. Realistically, we have been able to put together some components of the \$85 million project. We will not do this project until we have a sufficient portion of the funding and we are convinced that the rest will come in due time, and it will not erode the plant fund in any significant way. The dilemma that we have with the many mega projects like the Performing Arts Center and the Science Teaching Facility is that we simply have to wait until our intense efforts at fundraising are successful. I think we have put together in the development operation a strategy for how we can put the component parts together, since it is unlikely that we are going to find anybody, at least we haven't found the person or family up to now, who would be willing to give the whole dollar figure to put the new facility in place, not to speak of the retrofitting of Nieuwland.

Question #7 is about retirement policy for tenured faculty: I have no idea about that, and nobody has brought it to my attention either from the faculty or the administration. I would suggest that when you meet with Nathan Hatch you ask him, because I simply don't know of any organized effort to have a specific policy for retirement for tenured faculty. I think up to now most of these cases have been handled by the deans on an ad hoc basis and as far as I know that will continue to be the case unless somebody comes forward with a fully developed set of proposals.

With regard to question #3 - Ex Corde Ecclesiae. I don't know how much you want me to go into this. It can be kind of boring if you are not really interested, but let me do a little history and then tell you where I think we are. I first got involved in this before I was president, so over twelve years ago, when there was an effort made to solicit comments about a proposed papal statement on Catholic higher educa-

tion. Eventually, there were a number of meetings in Rome. Prior to that, we gathered different combinations of people together. I remember being involved in a meeting on the top of the library (with presidents and some faculty members and administrators of major Catholic universities). Later, particularly when I got involved in the International Federation of Catholic Universities Board, it became clear to me that many of the groups of national institutions were doing similar kinds of things. When finally there were meetings in Rome which eventually lead to this papal document called *Ex Corde Ecclesiae*, "From the Heart of the Church," we had had a lot of input. One of the bits of input that we had not only internationally but from the American contingent was to insure that the document itself was essentially hortatory, and that it was said and built into the document that the implementation should happen at the national level through some mechanism of the national groups of bishops. In order to prepare an implementation document, the National Conference of Catholic Bishops established a committee of six bishops who were voting members and six presidents who are advisors and don't have a vote. They were assisted by a series of other advisors who have backgrounds in canon law and such plus the outgoing and the present presidents of the ACCU (Association of Catholic Colleges and Universities). Now, this group has been meeting for nine years. We have gotten to know each other pretty well over that span of time. What happened was there was a proposed draft submitted by the committee, then there were a series of meetings all over the country. This was the first effort by this committee to find something adequate to the American situation. We thought it was not very good, and that emerged in the conversation. One of the fruits of the reaction or at least the examination of the implications of *Ex Corde* was that most of the Catholic colleges and universities made a sustained effort to look at matters related to their mission and identity. I think that was all to the good and also to have conversation between themselves, their boards, their leadership, the local bishop, and regional and national

groups of bishops. Over time there was a refinement that happened and I became convinced that we had finally arrived at a wording that was adequate to the American context and that was a satisfactory offshoot of the spirit of *Ex Corde Ecclesiae*. It passed the Catholic Bishops Conference with all but six votes, and we thought this is a pretty good sign that there was a consensus in the American Catholic Church.

It turned out when it went to Rome there were three congregations that reviewed it — the ones on education, on the bishops and on canon law. Rome said that it wasn't juridical enough, that it was a good first draft. So that forced the American bishops to decide what to do. The leadership established a subcommittee that was composed entirely of canon lawyers to give a juridical spin to the implementation. This subcommittee then came back to the committee with a draft. We told them it was not very good. They then went back and worked and came back with another draft. We told them that this was worse. Then it was a choice of the bishop members of the committee about whether to send that draft out, that is the subcommittee's alternative and more juridical implementation of *Ex Corde*, to the American scene. That is what has been sent out.

Nothing will be done until a year from now, when the next business meeting of the Catholic bishops takes place. I know that what will happen between now and then is that we will go through the same round of reactions. I have asked the Board of Trustees to respond. I have asked the Academic Council to respond, which we did before. The Holy Cross affiliated colleges and universities will respond. The Catholic colleges and universities in this diocese will respond, and there will probably be a meeting of the major Catholic universities who will respond. I'm sure many of the learned societies will respond as well as individuals.

As became clear the last time around

there are groups within the Catholic community including within these Catholic institutions who think that the previous formulation that passed with all but six votes was not the proper one, and that this new formulation is closer to the direction that should obtain. There are members of our faculty here who clearly believe that that is the case. So it would be unfair for me to act as if my judgment or the judgment of the vast majority of the presidents of these institutions is the only valid point of view, but I still hold it. I believed initially the best thing that would happen is a decade of discussion. We are now in year nine, and by next November we will in fact have had a decade of discussion. I am now in favor of two decades of discussion, because I don't think there is any significant force in the American Catholic Church that would lead us to go in the direction proposed by the subcommittee. The bishops don't want it, the presidents surely don't want it, and I think that what's happened by way of conversation in the interval has been very healthy for everybody concerned. I also think that there needs to be a greater shrewdness about how to deal with Rome as a reality in the life of the Church, and I don't often see that forthcoming in some people who might play a more pivotal role in this conversation. However, I am an optimist by nature, and I believe that there will be such an overwhelming and clear reaction to the present formulation that it will force a reappraisal within the American Catholic Bishops Conference and hopefully in their relationship to Rome. The worst case scenario would be that this present formulation would be adopted. If this happened, I do not believe that the Board of Trustees would choose to include it in the by-laws of the University. Because we went through the canonical approval process to become an independent entity in 1967, it is the choice of the Board about whether to change its by-laws in this direction or not. It is not so clear in the eyes of some about institutions that did not go through the formal process. There was a thing called the McGrath Thesis, which said that Catholic institutions did not have to seek Roman permission to become

independent. The best case scenario is that we will be back where we were two years ago with a clear consensus between the bishops and the presidents about why for example the mandate is not desirable and/or necessary for the purposes suggested, and we'll simply go on trying with all of our energy to be faithful to our religious heritage and yet be a full fledged university at the same time.

The sixth question had to do with drug testing of staff. When I was involved at the national level in groups combating drug abuse, I came to know a lot of people who were involved with this matter of drug testing, including pre-employment drug testing in the workplace, and testing for cause after employment. What became clear to me is that when any significant number of employers do testing, that those who don't test become at significantly greater risk that the percentage of people that they've hired who will be drug users will be higher than it should be or that would be expected. If I could give you a bit of anecdotal history, I once did a tour of a major manufacturing plant in this area, and I asked them if they had pre-employment drug testing and they said they did. I said why have you gone in that direction? Because all of the other manufacturing plants in the area have was the answer; they were very aware that they would then get all of those who wouldn't pass muster in the other work situations. I said "Alright, you've implemented this, so how many true positives do you get on the average?" About 18%. In this local community we have been unusual among major employers in not doing pre-employment drug testing. It has put us at a disadvantage and at a greater risk than I think it is desirable to warrant, so the reason that we have been trying to move forward on drug testing for staff is so that we can in fact employ a staff that is reliable and that will not cause a greater risk for themselves or for the University community. The testing today is through hair sample, when it used to be through urine sample. The hair actually is much more reliable across the range of substances that might be abused and much less intrusive obviously for privacy questions

other than just the theoretical privacy of the whole person. It's a systemic question. There are good reasons to go in this direction. You can ask the question about testing faculty and administration, and I'd be happy to be tested myself if the Senate wants to advocate testing for faculty for equality purposes. I presume the reason that the faculty and administration have not been tested is that we think there are other processes that we use in the hiring that would give us sufficient check of people's character not to have to do this, but that's a question that could be debated.

Questions #1&2: I will deal with together, the Joe Moore trial and by implication the Dunbar case. With regard to question number one — it was given to me in the form — do you still beat your wife? That is, it had hypotheticals in it which were then used to ask a question. I don't think that was a good way to formulate it. I believe that questions about legal counsel and advice are entrusted to the Officers and the Board of Trustees. The Board of Trustees has had a chance for a thorough review not only of the Moore case but other legal cases, and I don't think it is an appropriate matter to discuss in this setting. I do think that the two cases raise the following issues: What do we expect by way of behavior of our coaches and what do we expect by way of behavior of our student athletes? I think there are causes of concern that have been brought to public attention with regard to both of those. So what have we done in response to that? We have an excellent Statement on Intercollegiate Athletics, which has been approved by a number of constituents. We have strongly reaffirmed this Statement as our operative standard in sustained meetings with Bill Beauchamp and Mike Wadsworth and with various members of the Officer group and the Trustees. We have had focused meetings with all of the coaches and with all of the student athletes, in which we have reaffirmed our expectations, not only for their individual behavior but for their responsibility for each other's behavior. We have put sanctions on anyone who invokes a kind of implicit code of silence, which is

easy to set into any kind of work situation. If someone is discovered to have known bits and pieces of stories and not have reported them, then that will be an integral part of their evaluation even to the point of dismissal. I was not happy that we had a raft of negative publicity, some of which was factual and some of which was not, but we have tried to respond to the systemic question, and I'm confident that the steps have been taken that need to be taken. I would remind you and anyone that we had gone through the full NCAA accreditation visit a couple of years ago and received very positive affirmation for every dimension of our athletic program. We have a Trustee committee on athletics which has done its own report and its own evaluation. We also have a faculty committee on athletics and I think each of these groups recognizes their responsibility for oversight and for assuring that we continue to strive to be a model. I would just say anecdotally that when I did a little taping of a thing with Dick Enberg of NBC, he said with no instigation from me that he had been around intercollegiate football his whole professional life and that when he thinks about a program that is a model in terms of his contact with the coaching staff and with the student athletes, he is convinced that Notre Dame continues to be such a model and he is proud to have an association with us by the coverage through NBC.

Question #8 about the Big Ten: The history is a simple one. The Big Ten through its leadership made an overture to our athletic director indicating that they wanted to move forward with a 12th team, and they would like to talk about Notre Dame being the 12th team in the Big Ten, which is kind of an anomaly, but that is what they wanted. Much of this conversation took place between the head of the athletic component of the Big Ten and our athletic staff, that is primarily Bill Beauchamp, Mike Wadsworth and some of the assistant and associate athletic directors. There was an agreement when this informal conversation began that we would not make public any proprietary information. If we did, they would close off the conversation. It was intended not to be a public one.

When Penn State went into the Big Ten, there was no public discussion about it at all before the final decision was made. It was probably inevitable that there be a conversation because there is so much media focus, not only on the Big Ten but on Notre Dame football. So, as the conversation unfolded and there was a presentation of various matters related to financing and standards, there was also the introduction of a membership in the CIC [Committee on Intercollegiate Cooperation] which is an acronym to talk about a series of academic consortia which are well developed within the Big Ten. The CIC also includes the University of Chicago, which used to be an athletic participant in the Big Ten, and the University of Illinois Chicago Circle. When the CIC issue came up we asked some of our deans who were former participants in Big Ten schools to put together a set of materials of evaluation of the CIC as a component part of the discussion. A very thoughtful set of materials was put together with that in mind.

The present state of the conversation remains informal and we will continue to gather as much data as we can. We had a thorough discussion at the Board of Trustees meeting of the pluses and minuses as far as we could put them down. I was the one who made the presentation, and I think it was fair to say that at the end of it nobody knew what my particular position was. Many people told me that they did not know whether I was for or against. And you are not going to know at the end of this either [laughter]. I expect that the Board of Trustees will receive a recommendation from the Officers at the February meeting, whether to proceed further to a formal conversation with the Big Ten. What are some of the factors? I don't want to talk about any detail at all, but I will simply indicate what anybody in a thoughtful mood could at least extract from what has been made publicly available;

- What is the level of academic aspiration of Notre Dame? Not only what is the level of aspiration, but what form would it take, particularly what form in the relationship between the undergraduate, the professional and the

graduate programs? I think that is a significant factor.

- What about the specific religious identity and mission of the institution? And what is the best way to carry that forward across time?

- How can we best identify our peer institutions? Some people do it for us by putting us in categories, and sometimes we do it in comparing financial data. I think we would have a range of opinion about what our peer institutions are in this room, as with any group of faculty or staff or administration.

- What kind of models of affiliation and consortia activity could we imagine? It is interesting that the conversation was entirely athletic up to a certain point, and then there was a kind of throw in of the possibility of consortia participation, which made it more than simply an athletic decision. It has academic ramifications, but it's also the case that there are a lot of untapped possibilities of consortia relationships that could be explored either with preexisting affiliations or starting from scratch and trying to put something new together, and people have talked about what some of that might entail.

- What is the future of intercollegiate athletics, and of intercollegiate football? Those are uncertainties. I think you could give a rational guess, five years out, ten years out, but I think those are pertinent considerations.

- What is the future of the television market, or any other delivery system? Maybe television won't be the way that fans will get their sports fix. But a lot of dollars will ride on that.

- What is now and what would be the future perception of our alumni and major benefactors about this possibility? I get letters, a lot of letters, and I think there is a very clear consensus at this point not only from the alumni who simply have thought about the athletic ramifications but also members of the alumni and benefactor pool who prize our distinctive niche or place in American higher education. That has to be taken into account.

So the answer is, we will continue the

conversation informally, and I would welcome any input that the Faculty Senate would like to give on this matter. I realize it is difficult if you don't have all the figures before you, but we agreed right from the start that we would not provide them. The Big Ten does not want that as part of the conversation in any public way. They are not really happy that this has been known publicly. But we will be faithful to the process and I will not make up my own mind definitively until the process is completed.

Question #9 and lastly, the question about the relationship between the undergraduate and graduate dimensions of Notre Dame as an institution: I would simply remind you that we are 75% undergraduate, 25% professional and graduate. That is the kind of institution we are. There are other schools that are predominantly graduate and professional. They are different than we are. The University of Chicago, John Hopkins, MIT, Cal Tech, Washington University, Harvard are different in their structure, and in their history, and in their visibility. So we have to take that into account. Nathan Hatch developed this phrase a number of years ago when he was vice president of graduate studies and research, "Small but superb," that our aspiration at the graduate level was to be small but superb, and I like it. I like the sound of that. And if you would ask me to summarize what I think we are capable of in this present era, I think it is being small but superb. I do not see any major reconfiguration of the percentages of students from what we are presently. There are many cost realities, and there are some graduate programs that we have not gotten into very far that are prohibitively expensive to start from scratch. Many of our peer institutions have larger departments than we have colleges, in certain areas of research. On the other hand, we have identified areas of graduate study that we can be outstanding in, that we can make our mark, that we can attract some of the best scholars in the world. We are going to have to recognize what our limits are, but if we can be focused in our efforts in the Graduate School, then we will be successful in attracting the

right mix of faculty and taking the next challenge that we face institutionally. It is interesting, as another side effect of this, that the University of Chicago and one other school that I can't think of tonight, has decided it needs more undergraduate students because its fundraising base is going to be too low in the future. It is really graduates of the undergraduate program that are the future benefactors in large numbers, rather than the graduates of the doctoral programs. What is the Ph.D. job market? If there were a national cabinet position of education, my suspicion is the minister of education would say it is absolutely irrational how many doctoral programs there are in this country across the board. But if you want to connect the present and potential job market and look at all the doctoral programs we have, it is not clear that we are going to have a lot of satisfied graduates, unless we can have the very top programs and reputation that would warrant their being hired by institutions when they finish.

I believe that the strategy that Nathan Hatch and others have articulated relative to academic centers of excellence, which is another way of saying small but superb, is the right strategy for Notre Dame at the Graduate School level. I saw a statistic that we are 156th in the total research dollars per year among American universities. I don't know if that is accurate or not, but it does suggest that we have a long way to go, even with the strengths that are manifest here presently before we would be even in the top echelons of graduate research grant-getting, and I think that's a critical key as we look to the future.

I want to see us maintain the excellence of our undergraduate commitment to instruction, all faculty expected to teach undergraduates as well as graduate students except in the Law School and places like that, but if we are going to not step back from the challenge that I think is ours maybe uniquely among modern Catholic universities, then we are going to have to be intensely committed to putting in place the infrastructure, the faculty and the support for out-

standing graduate programs. I think we are getting close to being able to realize that in more and more places in the University.

That's it! That's all I want to say this time around.

Detlefsen: With your permission, Monk, I will open the floor for discussion.

Malloy: Sure.

Detlefsen: I will recognize you if you will please raise your hand. Step to the microphone. Yes, Dick.

McBrien: Monk, I found your answers to many questions helpful, and I don't mean to imply that not all were very helpful and forthcoming. I have an interest especially in the third one on Ex Corde, and I thought your remarks were very helpful on that. Speaking as a member of the executive committee, and for the record, I want to just understand your position because of all the questions that were submitted to you the only one you found was inappropriately worded, and I think you said it was in the category of "when did you stop beating your wife," is the first, and although I did not redact this question, I reread it and I don't see it that way. It just said that there are reports, and if these facts are true, then... So I am not sure if you are saying that the facts are not true or that you cannot comment on whether the reports are true because of confidentiality. I can understand that. But I just want to understand for the record before we get into substantive questions about other matters. Since you singled that question out, you are not commenting on whether the reports are true or are you just saying only that confidentiality would prohibit you from commenting on it? Is that the proper understanding?

Fr. Malloy: Well, the question could have been phrased, "Are there reasons for examining the decision making process about legal matters in the University?" or something like that. What this question did is put in the public forum a set of hypotheticals which in a sense make the answer a different kind of answer. In fact, that particular case has not completed the

cycle through the legal process and I could not comment on that if only for that reason. But I also don't think that it is an appropriate forum for talking about how the University makes its decisions about legal matters.

McBrien: I can understand your position and I can respect it, but the fact of the matter is these reports have circulated throughout the campus, and there are many people who even cite the fact that the Law School faculty took a straw vote at their table in the University Club and voted 15-0 that if Notre Dame went forward it would lose, and it lost. To me the point is that there are faculty who are concerned, not to put you on the spot in a prosecutorial way, who are concerned about the harm that was done to the University by the outcome of this case and by the testimony that was developed in the case. The faculty or many of the faculty — and this is where the question comes from. It didn't come from me alone. These questions came in from the Senate as well as from outside. They were concerned about whether or not someone contrary to legal advice put the reputation of the University at risk. Now, if you are saying, and I totally accept this if you are, that that's a matter of confidentiality and maybe you are also saying that the question shouldn't have been raised, I can understand that too. But maybe you don't know so I'm announcing it to you, these reports are discussed and they are circulated, and people are interested in knowing if they are true. That's all, so I am not expecting any further answer, just a comment.

Manier: I'd like to ask you to compare faculty and student manuals and hearing procedures at Notre Dame. I'm particularly interested in issues under the heading of academic freedom. I've been a member of the Teaching and Research faculty at Notre Dame since 1959. I don't think the academic freedom of faculty at Notre Dame has been an issue in the interval 1959-1998. At least once, rumor had it, Notre Dame came to the aid of faculty whose academic freedom had been jeopardized at another institution.

However, "du Lac," "The Source," and

the procedures which put those documents into practice at Notre Dame appear not to extend the same protections to the academic freedom of students and student organizations at the University. Is that appearance correct? Is it consistent, or is it a coherent policy, to restrict the academic freedoms of students or student organizations — but not those of faculty or faculty organizations — if they allegedly "contravene" the moral teaching of the Catholic Church?

Fr. Malloy: Well, I don't know if that is exactly a question or not, but I would simply say that I think that we have a structure as a residential campus in which we try to be distinctive and faithful to our religious heritage and mission. I don't see that as being discrepant from our deep commitment to academic freedom in our classroom setting, or in the activities of our faculty. The development of policy and the capacity of students to pursue their own goals and purposes will always be related to the mission and purpose and ideals of the institution, and that will separate us from many of our peer institutions who have made no effort to do that. People will disagree about specific policies but the division of labor within the institution gives a high amount of authority to the Office of Student Affairs to oversee the policy development with regard to student life.

Quinn: Monk, I would like to go a little further on the question of drug testing. But first, thanks for what you did tell us. It had never occurred to me to think that if everyone else does drug testing, then we have to do that in self-defense, so to speak. Once you put it that way, it does seem to be a very sensible rationale. What I would like to ask, though, is what about the issue of a formal written policy on this because what I am concerned about is protecting the privacy of people. You know if you take out the hair, if you get the follicle too, you get DNA out of that and in this week's Newsweek there is an article on DNA testing which raises some alarming possibilities of building national DNA data banks for use in criminal law. I think we ought to be concerned about insuring that the

people who are tested don't lose privacy of information about their DNA and I wonder if you have any thoughts on that and how we can do that?

Fr. Malloy: I understand that that is an important point. Any kind of testing always has its unexpected side effects or potential misuse. I don't know where we are with regard to formalization of a policy. Much of that happens under Roger Mullins' auspices. What I try to do is comment on what I've learned at the national level from some of the groups that I have participated in and some of the conversations I've heard. As to what the future holds in store, I take it that we have to do, eventually, some kind of statement of what the policy would look like and what kind of announcement would be necessary to the people who are potentially to be employed by the University. As I understand it, the policies that have been in place in most situations are an announcement if you are going to seek an employment here, you will be tested and this will be the form the test will take, and these are the potential sources of further information that could be gained from the sample that you provide. In most cases it's for cause testing after hire and then there are various mechanisms to insure that that is done properly. There are circumstances in which the risk is high, like police officers and fire fighters and pilots and others, where the testing is regular, not for cause, because it is considered to be related to the responsibilities that one carries. I just take it for granted that as we move in this direction that we need to have a formalization of this policy and would have to review the component parts to make sure that it is comparable and that there are precedents elsewhere.

Eagan: This may be a little different angle from what we've had so far, but I think still a part of policy at the University. After the Baylor game, the Folk Choir did a very moving recital in the Basilica. Before, during and after the performance, appeals were made to give financial aid to a mission in Chile. The hat was passed around or the basket and probably \$2000.00 was collected. Now, I think it is interesting to recognize that this activity occurred

in a place that gives honor and glory to Our Lady. It's also been the location in the past few years where hundreds of millions of dollars have been put into brick and mortar. If the Notre Dame family is really convinced of the need to help the missions, would it not be appropriate to set aside some small percentage, part of one percent or so, of these enormous expenditures, for the use of the missions in Bangladesh, Africa and Chile?

Fr. Malloy: I don't know what to say to that, Bill. I will just have to ponder that as a possible route to take. I think it is important that we respond to crises like the Central American hurricane situation, to be a good neighbor to the many agencies in our community, not simply by the service we render but also by participation in the United Way in terms of some financial participation as an institution. But I think that's different from functioning as the banker for a community or as a philanthropic agency ourselves. So we are always trying to weigh the sources of funds that we have to put to internal purposes and then our neighborly and charitable response to the needs that exist outside of ourselves. As I understand it, particularly on home football weekends, we have a number of significant causes that we try to give some money for. That is a good thing to do, but do we need to do more? I'm sure that is worthy of more reflection.

Bayard: As a matter of practical actions that we can take to eradicate discriminatory practices in our lifetime by individuals and by departments, would you consider appointing a task force to come up with guidelines for individual behaviors, and then, secondly, would you be willing to take the money we saved in litigation, and put it into library collections and chairs for other academic programs? [laughter]

Fr. Malloy: I am willing to consider anything. That is all I will say.

Sterling: Thank you for your answer. Monk, I would like to ask you about your response to the relationship between undergraduate and graduate education. My question is this: would you be willing to consider modest

growth in the Graduate School? I ask that because I don't know that we can improve our standing as a research university without some growth. I am not talking about reversing percentages of the relationship between undergraduate and graduate, but would you be open to some growth in the Graduate School as a way of increasing our potential for research, as a way of trying to further our academic reputation, and if we hire additional faculty they will want more graduate students.

Fr. Malloy: Jim Merz, for example, has been an advocate of increasing the size of our graduate population in science and engineering to get closer to a critical mass for the number of faculty that we have and for the complexity of the kinds of projects that are being funded today. The big challenge in saying that we want to do, that is, being responsible in how we recruit at the graduate level and how we deal with those who are finishing their Ph.D., in assisting them in finding the kinds of employment that they want after they complete their degree requirements. It would be irresponsible of us, simply on grounds of institutional prestige, to grow the size of our graduate programs without doing those other things. It seems to me that as we put together — here's a good example: maybe if we have a department that has suffered because of this lack of investment or attention in its graduate program and it wants to really devote a lot of attention to it, then they should have the freedom to pursue that, in so far as we have the resources. If we have an area that we have a real strength in and we could multiply our impact by the addition of a few faculty and a number of graduate students and we can see what that will lead to in the end, sure, I think that would be a good thing. We don't have to add that many additional graduate students in order to multiply the quality of what's available here at the graduate level. I mean, is there a kind of core number of graduate students in a class to be effectively stimulating and so on? That's a good reason for increasing the size of the graduate program. What is not as inherently clear a rationale is: we need more graduate students to cover all of the undergraduate courses that we

need to cover. And that has been the carrying force of a lot of institutions. We can't reduce the size of our graduate programs because we have too many courses to cover. So it's in the midst of that kind of morass of different and variable factors that we would have to identify in what areas would additional graduate students make sense, how do we distribute the resources in order to attract the very best students available and then how can we test that all of that is leading to good results five or ten years from now?

Porter : Monk, thank you. To go back to your answer to question number one, I can understand and appreciate why you would not want to comment on the Moore case specifically, but I think we probably all agree that what the case has illustrated is the fact that decisions about litigation can have a very considerable impact on the University community as a whole. That being the case, I wonder if you would be willing to comment at all, even in very general terms, about the ways in which such decisions are made by the University or failing that, at least the criteria which govern making these decisions.

Fr. Malloy: We have a regular point of conversation between our on-campus legal counsel, an array of outside legal advisors, and the officers and leadership of the Board of Trustees. The more complex the case is, the more we try to bring in additional resources. We are also trying at any given moment to learn from the experience of other institutions which have medical schools or other areas of academic endeavor which tend to receive a lot of litigation. If you look at the legal fees of any modern university, from 25 years ago until today it is really astronomical. Modern universities are seen as deep pockets within the community and therefore there is a whole battery of lawyers who take cases on retainer and so on. We are always very alert to the reputation and common perceptions about the institution. I think all of us collectively have a responsibility for that, but when you make decisions about legal matters, there is always a degree of uncertainty

and we try to be as prudentially involved and informed as we can and sometimes if works out less than the best. That is all I have to say.

Porter: Thank You.

Detlefsen: Earlier you were talking about the capital campaign, and the fact that we have reached our goal. I have a more particular question about the part of the capital campaign that concerns me the most, and that is the part that deals with faculty development. How is that particular part of the campaign going, and what do you expect to be the final result?

Fr. Malloy: We have put a lot of attention in the last couple of years, particularly in the last 18 months, to try and be sure that we reach our goal in terms of endowed professorships for example, and with great success. We are also working very hard on trying to get some megagifts for a combination of resources for colleges and departments, for institutes and centers. I think the wisdom in fundraising circles is that if you can find the right potential benefactor and the right area of endeavor, you will be successful, as we have been in several scholarly areas like Medieval Studies or Irish Studies. This is a very difficult process. But I think, when the case is made, that we are going to see great progress. My hope is that no major academic unit of the institution when the campaign is completed would find that it did not get a fair share of the resources, and depending on the unit it will take a variety of forms: supplementary support for research, enhancing the quality of the graduate population, additional faculty positions, and so on. We have been strategizing with the Development Office (Nathan has been heavily involved in this) about how to achieve the underfunded goals of the Campaign. We were so successful in getting money for scholarships and fellowships, and in library development, both of which in previous campaigns had been undersubscribed that we probably took a little bit of the edge off some of the other priorities of the campaign. Once we recognized that, now we are seeing good results. Of course it helps to have one person giv-

ing six chairs. That makes a huge difference. We are going forward with great energy. I am confident that we can sustain the momentum and finally realize our multiple goals.

Detlefsen: So, you think it will be very successful?

Malloy: Yes, I do.

Lamanna: Could you tell us if any progress has been made in the establishment of a Latino Studies Program?

Fr. Malloy: You may know that there was a set of meetings here a couple of weeks ago where we brought together advisors who were heavily involved in Latino Studies from other institutions, especially people who were not movable themselves, to get advice about the search process for the director, and for a series of chairs. Some of the people who participated in that and some of the people that we have gone after as potential benefactors are very excited and some have, in fact, made commitments recently toward that goal. I am confident that we are going to see some very positive results, not only in the search for the first director, but also in correlative academic positions and the establishment of a visibility and presence that we've lacked since Julian Samora was on the scene.

Detlefsen: This will be the last question

Sullivan: Monk, thank you for your presentation. I am not a member of the Faculty Senate, but since the others have been able to speak, I can address you. You mentioned Nathan Hatch saying "small but superb," and it clicked in my memory that last year the Faculty Senate sent you a letter asking for more structured participation by the faculty in the governance of the University. Many of the issues that you touched today were issues that faculty could be very helpful on. I am wondering if Nathan has moved on that since in your response to the Faculty Senate you said you turned it over to him for his consideration.

Fr. Malloy: I don't know any particular proposals underway but you could surely ask him. I don't know when he comes to visit with the Senate, February? However, one of the things that I will just say in passing is that I think the progress that has been made in the committee structure of the Academic Council where there is a full freedom of the committees themselves to take on whatever agenda they think is appropriate and bring it to the attention of the full council is a step in the right direction, and sometimes there is more initiative there than others, but if I would point to one example where I think progress has been made in the last few years, that would be it

The chair reconvened the Senate and asked the members to join him in thanking the president for his remarks and comments. The Senate responded with a warm round of applause. Detlefsen called for adjournment, McBrien so moved, Preacher seconded, and the Senate adjourned at 9:30 p.m.

Respectfully submitted,

Peter J. Lombardo
Co-Secretary

Present: Affleck-Graves, Bayard, Cachey, Chetucuti, Cleveland, Cosimano, Detlefsen, Dowd, Eagan, Edwards, Fein, Green, Greene, Lamanna, Lombardo, Manier, McBrien, Munzel, O'Brien-O'Keefe, Paolucci, Porter, Preacher, Quinn, Ramsey, Renaud, Sheehan, Sterling, Thomas, Urbany, Wayne, Williams, Wolbrecht, Law, Rodriguez.

Absent: Borelli, Conway, Costa, Davis, Fraser, Rivera.

Excused: Asmus, Berry, Bigi, Deboer, Esch, Freeh, Gaffney, Hill, Jordan, Stroik.

Appendix A

Chair's Report

Tonight's report consists of four items.

(1) Since the October meeting, I have been contacted by a number of faculty requesting the exact language used in the May 14, 1998, letter from Joseph Cassidy, Director of the Student Activities Office, placing the Women's Resource Center on probation. To aid in the dissemination of this information to the faculty, I am releasing a statement quoting certain portions of Mr. Cassidy's letter. The letter itself is over three pages long. The core of the probation order itself, however, is contained in a single paragraph which I now quote.

"Before the beginning of the next academic year in August, the WRC must remove from its files all materials which relate to the availability of abortion services or which promote or encourage abortion. The WRC may not possess or distribute material which directly promotes or is value-neutral on the issue of abortion. Members of the WRC may not refer students to or provide information from individuals or entities that provide abortions, abortion counseling or other abortion-related services. We realize that from time to time interpretive questions may arise about the appropriateness of some materials. We ask that you bring these questions to me as Director of Student Activities prior to the display or distribution of these materials."

(2) Since the October meeting I received a letter from Mr. Michael Danch, Director of Athletic Facilities at the Joyce Center. He spoke of plans to renovate faculty exercise facilities in the Joyce Center and asked me to name a four person faculty committee to meet with a group from his office to help plan these renovations. I have asked Tom Cosimano, chair of the Benefits Committee, to name a member or members from his committee to serve on this group. I am also asking all of you for further names of faculty and/or staff to serve on this commit-

tee. I ask that you get your suggestions to me tonight so that I can make the appointments next week.

(3) At both the September and October meetings, you heard me speak of my communications with the Provost concerning the still as-yet-to-be-released annual report for 1997. Since the October meeting, I have been sent a partial report from the Provost's office. It consists of statistical data to be used in the final report. Since it may still be some time until that final version is ready, I would ask anyone interested in receiving a copy of the tabular data to contact me.

(4) Since the October meeting, Dr. Jennifer Younger, Director of University Libraries, sent a general memorandum to members of the university community concerning library renovations. With the approval of the Executive Committee, I have sent Director Younger a letter querying her about faculty representation on the group planning these renovations.

This concludes my report.

Respectfully,
Mic Detlefsen, Chair

Appendix B

Questions for Fr. Malloy

1. In your recent address to the faculty, you touched upon the recent age discrimination case filed against the university by former coach Joseph Moore. You did not, however, say anything to explain why the university decided to go ahead with the case. There have been persistent reports that the decision to go forward with the case was against the advice of lawyers both inside and outside the university. There have also been reports that several members of the Board of Trustees expressed strong criticism of this decision at their most recent meeting on campus. If these are the facts of the case, who persuaded you to go forward with the trial and for what reasons?

2. In your address to the faculty, you mentioned that you have taken steps to ensure closer supervision of the university's athletic programs, and particularly the football program. Please describe for us the specific steps you have taken.

3. You mentioned in your address to the faculty certain recent developments regarding "Ex Corde Ecclesiae." You also mentioned your disappointment with the particular alternative that was adopted as regards the church's role in higher education. Would you please expand on that and tell us what you think are the worst-case and best-case scenarios, and what the likely eventual outcome of this longstanding discussion involving Catholic university presidents, the U.S. bishops, and the Vatican?

4. In your recent address to the faculty, you said nothing concerning your longstanding concern regarding alcohol abuse at Notre Dame. Football weekends too often seem to turn into excuses for public intoxication of the worst sort—both on campus and in town. Should Notre Dame try to do something about this? If so, what?

5. In your address to the faculty last week, you made reference to the Science Teaching Building. It was unclear from your remarks there, however, just what the current status of the planning and financing for that building is and whether the project remains a top priority. Please clarify.

6. a. Drug testing constitutes an intrusion into the private lives of individuals. Apparently, the administration of the university sees a pressing and legitimate need for such intrusion. Can you explain what this pressing and legitimate need is? Also, if it is pressing and legitimate, why limit the testing to new employees only? And why include staff only and not all employees? And why test only once and not repeatedly?

b. According to Roger Mullins, a final policy on drug testing for employees is currently being drafted by the General Counsel's office. Despite that, drug

testing is already occurring. That means that drug testing for new employees has been begun without a formal policy being in place. What is the urgency that justifies this? Also, what exactly is it that's being looked for?

7. Since the federal government lifted a mandatory retirement age, the issue of retirements for faculty with tenure has taken on a different perspective. We know that development of a retirement policy has been a concern of the administration during the past few years. What is the current status of the University's attempt to formulate a retirement policy?

8. In your recent address to the faculty you said nothing concerning the matter of Notre Dame's possible entry into the Big Ten (and, with it, the CIC). What is the status of conversations and negotiations regarding this? What do you see as the principal advantages and disadvantages of such a move? Do you think that Notre Dame should, in fact, enter the Big Ten (and the CIC)?

9. When the university made the decision to strengthen research at Notre Dame, it made a commitment to graduate studies. However, some within the university (including some within its higher administration) seem to be of the view that graduate and undergraduate programs compete with one another. What is your view of the relationship between graduate and undergraduate programs and what particular advantages and/or disadvantages for undergraduate education do you see as the likely result of strengthening research and graduate education at Notre Dame?

Awards Received and Proposals Submitted

In the period November 1, 1998 through November 30, 1998.

AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	7	587,327	20	2,294,541	27	2,881,868
Facilities and Equipment	0	0	0	0	0	0
Instructional Programs	0	0	0	0	0	0
Service Programs	0	0	2	6,164	2	6,164
Other Programs	<u>1</u>	<u>65,700</u>	<u>1</u>	<u>8,000</u>	<u>2</u>	<u>73,700</u>
Total	8	653,027	23	2,308,705	31	2,961,732

PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	3	224,564	26	6,630,222	29	6,854,786
Facilities and Equipment	0	0	1	275,000	1	275,000
Instructional Programs	0	0	1	84,208	1	84,208
Service Programs	0	0	0	0	0	0
Other Programs	0	0	1	160,000	1	160,000
Total	3	224,564	29	7,149,430	32	7,373,994

Awards Received

In the period November 1, 1998, through November 30, 1998.

AWARDS FOR RESEARCH

Aerospace and Mechanical Engineering

Frank Incropera

Heat Transfer in Difficult-to-Machine Materials
Purdue University
\$29,260 12 months

Eric J. Jumper

Fluid-Optic Interactions II
Department of the Air Force
\$59,792 31 months

James J. Mason

Dynamic Fracture of Composites
Department of the Navy
\$39,472 36 months
High Speed Machining of Aluminum Alloys
ALCOA (Aluminum Company of America)
\$20,000 12 months

John E. Renaud

REU Supplement-NSF-NYI
National Science Foundation
\$10,000 60 months

Albin A. Szewczyk

Free-Oscillating Bluff Bodies
Department of the Navy
\$49,050 38 months

Biological Sciences

Frank H. Collins

Production of A. gambiae Strains with Eye Color Mutation
World Health Organization
\$29,938 12 months

Civil Engineering and Geological Sciences

Joannes J. Westerink

ADCIRC Model to the Texas Gulf Coast
Texas Water Development Board
\$21,000 12 months

Chemical Engineering

Paul J. McGinn

Melt Textured Superconductors
Purdue University
\$102,443 12 months

Albert E. Miller

A Surface for Anodized Aluminum with Low Cr (VI)
Department of the Navy
\$67,806 36 months

Chemistry and Biochemistry

Sharon Hammes-Schiffer

Simulation of Reaction Dynamics
Department of the Air Force
\$96,464 22 months

Richard E. Taylor

Practical, Iterative, Synthetic Methodology
National Science Foundation
\$85,000 24 months

Olaf G. Wiest

Pericyclic Reactions of Radical Ions
National Science Foundation
\$79,500 24 months

Cushwa Center for the Study of American Catholicism

R. Scott Appleby

Catholic Commission Work
Catholic Commission on Intellectual and Cultural
Affairs
\$935

Electrical Engineering

Douglas C. Hall, Gregory L. Snider, et. al.

Compound Semiconductor Oxide MOSFETs: Interface
Studies
Department of the Air Force
\$215,000 24 months

Michael D. Lemmon and Panos J. Antsaklis

Decentralized Supervision of Semi-Autonomous Systems
Department of the Army
\$90,000 20 months

Government and International Studies

Michael Coppedge

Patterns of Diffusion in the Third Wave of Democracy
World Society Foundation
\$17,000 12 months

Graduate School

Peter Diffley

NDSEG Fellowship for Tracy Kijewski
SCEEE Services Corporation
\$38,435 12 months

Physics

Howard A. Blackstead

Microwave and Optical Studies of HTSC
Purdue University
\$60,792 8 months

Bruce A. Bunker

Experimental Facilities Studies at Advanced Photon
Source

Department of Energy
\$200,000 10 months

Umesh Garg

Investigation: Isoscalar Giant Dipole Resonance in Nuclei
North Atlantic Treaty Organization
\$631 50 months

A. Eugene Livingston

Atomic Structure of Highly-Charged Ions
Department of Energy
\$82,000 12 months

Randall C. Ruchti

QuarkNet
Northeastern University
\$170,000 12 months

Steven T. Ruggiero

Transport Properties of YBCO Thin Films
Purdue University
\$63,250 8 months

Radiation Laboratory**Dan Meisel**

The Nox System in Nuclear Waste
Department of Energy
\$349,100 13 months

College of Science**Francis J. Castellino**

Walther Cancer Research Center
Walther Cancer Institute
\$900,000 24 months

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

The Publication of Four Volumes of Dead Sea Scrolls
Oxford Centre Hebrew Studies
\$5,000 26 months

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

Center for Pastoral Liturgy
Various Others
\$1,072 1 month

Center for Pastoral Liturgy
Various Others
\$5,092 1 month

AWARDS FOR OTHER PROGRAMS**Aerospace and Mechanical Engineering****John W. Lucey**

Industrial Assessment Center Program
Rutgers University
\$65,700 12 months

Biological Sciences**John H. Adams**

Graduate Training Support for Ohas Eunita Atieno
Burroughs Wellcome Fund
\$8,000 12 months

Proposals Submitted

In the period November 1, 1998, through November 30, 1998.

PROPOSALS FOR RESEARCH**Aerospace and Mechanical Engineering****John E. Renaud**

Cooperation Research with General Electric Corporation
General Electric Corporation
\$4,000 12 months

Flint O. Thomas and Robert C. Nelson

Wake Development and Structure in Adverse Pressure
Gradient
National Aeronautic and Space Administration
\$56,154 12 months

Biological Sciences**John H. Adams**

Antibody Inhibition of Plasmodium Falciparum AMA1
World Health Organization
\$15,000 6 months

Scott D. Bridgham and Gary A. Lamberti

Ecosystem Succession in Restored Wetlands
U.S. Department of Agriculture
\$510,207 48 months

Gary A. Lamberti

Marine Nutrients in Stream Ecosystems
U.S. Department of Agriculture
\$478,330 36 months

JoEllen Jones Welsh

Vitamin D and Osteoblast Apoptosis
U.S. Department of Agriculture
\$227,374 36 months

Jake F. Weltzin

Precipitation, Grass Invasions, and Savannas
University of Arizona
\$47,442 60 months

Civil Engineering and Geological Sciences

Peter C. Burns

CCD X-ray Detectors Applied to Mineral Structure Analysis
National Science Foundation
\$29,100 6 months

Jeremy B. Fein

Experimental Study of Bacteria-mineral Adsorption Reactions
American Chemical Society
\$90,000 36 months

Jeremy B. Fein and Peter C. Burns

The Effects on Bacteria on Uranium Mineral Formation
National Science Foundation
\$193,223 36 months

Chemistry and Biochemistry

Francis J. Castellino

Characterization of NMDA Receptor Antagonism by Conantokins
American Heart Association
\$67,500 36 months

Sharon Hammes-Schiffer

Chemical Reaction Dynamics in Complex Systems
C & H Dreyfus Foundation, Inc.
\$60,000 60 months

Victoria Ploplis and Francis J. Castellino

Characterization of Mice with Targeted Deletion of PC Allele
American Heart Association
\$99,176 24 months

Mary Prorok

Interaction of Conantokin with the NMDA Receptor
American Heart Association
\$150,000 36 months

W. Robert Scheidt

Core Conformation and Electronic Structure of Iron Porphyrins
North Atlantic Treaty Organization
\$6,100 24 months

Richard E. Taylor

Myriaporone 1: Synthetic and Biological Studies
Eli Lilly Company
\$24,000 12 months

Center for the Study of Contemporary Society

Grace D. Dawson and John F. Santos

Funding Education/Training of Geriatric-Care Personnel
Retirement Research Foundation
\$18,700 12 months

Electrical Engineering

Daniel J. Costello Jr.

Error Control Coding Techniques
National Aeronautic and Space Administration
\$149,710 24 months

Panos Antsaklis

Travel Grant for HS'99 - Hybrid Systems Workshop (Netherlands)
Department of the Army
\$10,000 12 months

Mathematics

Mark S. Alber and Michael Gekhtman

Geometric Methods for Nonlinear Evolution Equations
National Science Foundation
\$169,761 36 months

Viorel Nitica

Cohomology of Dynamical Systems
National Science Foundation
\$66,753 36 months

Hong-Ming Yin

Inductive Heating Analysis
National Science Foundation
\$37,308 36 months

Physics

Howard A. Blackstead and Paul J. McGinn

Ruthenate and Cuprate High Temperature Superconductivity
National Science Foundation
\$795,563 36 months

Study of Superconductivity
National Science Foundation
\$744,660 36 months

Theology

Mary Rose D'Angelo

Early Christian Sexual Politics and Roman Family Values
Association of Theological Schools
\$44,082 12 months

S. Blake Leyerle

Reconstructing Daily Life in a Byzantine Urban Monastery
Association of Theological Schools
\$36,878 12 months

PROPOSALS FOR FACILITIES AND EQUIPMENT

Computer Science and Engineering

Nikos Chrisochoides

Two-Tier Computation and Visualization Facility
Cornell University
\$275,000 60 months

PROPOSALS FOR INSTRUCTIONAL PROGRAMS

Anthropology**Rev. Patrick D. Gaffney, C.S.C.**

Assistant Professor in Japanese Anthropology
Japan Foundation
\$84,208

34 months

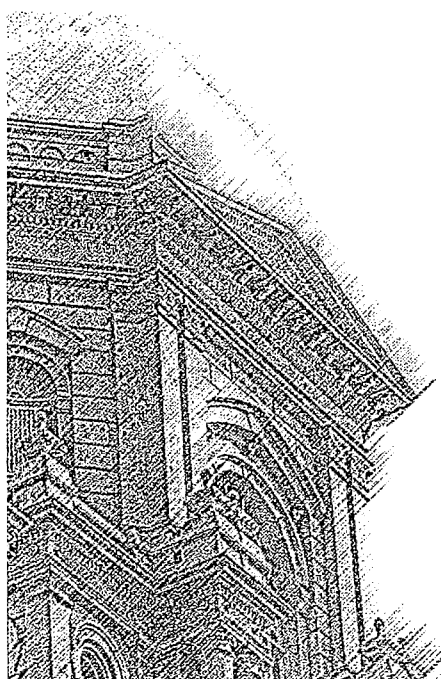
PROPOSALS FOR OTHER PROGRAMS

Computer Science and Engineering**Steven C. Bass, Lloyd H. Ketchum Jr., et al.**

EPICS - Engineering Projects in Community Service
Purdue University
\$160,000

36 months

Notre Dame Report



Volume 28, Number 9
January 22, 1999

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.

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