

# NOTRE DAME REPORT

---

## THE UNIVERSITY

---

303 *Gifts Announced*  
303 *OUC Reorganizes Units*

## ADMINISTRATORS' NOTES

---

309 *Honors*  
309 *Activities*  
309 *Publications*

## FACULTY NOTES

---

304 *Honors*  
304 *Activities*  
308 *Deaths*

## DOCUMENTATION

---

310 *Academic Council Minutes*  
    *September 20, 1994*  
310 *Academic Council Minutes*  
    *October 10, 1994*  
327 *Faculty Senate Journal*  
    *November 9, 1994*

## THE GRADUATE SCHOOL

---

332 *Current Publications and Other Scholarly Works*  
336 *Awards Received and Proposals Submitted*  
336 *Awards Received*  
337 *Proposals Submitted*

JANUARY 20, 1995 • NUMBER 9



## Gifts Announced

Notre Dame has received major gifts which will allow the University to continue implementation of the goals of the Colloquy for the Year 2000.

Among the recent gifts are:

- \$5 million (from an anonymous alumnus) to renovate and expand the School of Architecture building. Designed by New York architect Edward L. Tilton, the building was dedicated in 1917 as the main library and served that purpose until 1963. The renovation and expansion is scheduled to begin next summer and be completed by January 1997.

- \$5 million from alumni and brothers Thomas J. and Robert T. Rolfs for a center to provide enhanced recreational programs for students, faculty and staff. The center is among the new facilities recommended in the Colloquy final report. Among the many previous gifts to the University by the Rolfs brothers was Rolfs Aquatic Center, completed in 1985.

- \$1.2 million from the estate of Chicagoan Mary Frances McNamara to establish the McNamara Scholarship Fund in the Law School. A longtime Chicago Public School teacher who died last year at age 99, McNamara bequeathed the remainder of her estate to establish one or more funded scholarships in the Law School.

- \$200,000 (from an anonymous donor) to establish an endowment for the Snite Museum of Art's ethnographic art collection. The collection, housed in the Snite's Arts of the Americas, Africa and Oceania gallery, includes a variety of Mesoamerican, American Indian and African art and features one of the nation's finest collections of pre-Columbian Olmec Art.

- \$100,000 in grant funds from the Retirement Research Foundation to create a Legal Advocacy Clinic for the Elderly. Currently, some 15 percent of the caseload of the Law School's Legal Aid Clinic involves clients over age 55. This new arm of the clinic will enable interning law students to render increased assistance in cases involving Medicaid, Medicare, social security appeals, wills and trusts and other prevailing concerns of older clients.

- More than \$95,000 in grant funds from the Charles E. Culpeper Foundation to establish a preservation center for the University Libraries. Outfitted with new equipment for testing, cleaning and other physical treatment of library materials, the center will engage in preventive care, conservation, reformatting, mass deacidification and general preservation of the more than 2 million library volumes.

## OUC Reorganizes Units

During the fall the Office of University Computing reorganized its units. Currently they are: Administrative Information Services (Leo Judy, director), Enterprise Computing Services (Roger Gulbranson, director), and User Services (James Ostlund, director).

Enterprise Computing Services is the new unit, which was created by combining Networking Services and Systems and Operations. Its mission is to design, develop and implement large scale computing services for the campus. Ongoing systems and operations support also comes from this group.



# FACULTY NOTES

## Honors

**Yih-Fang Huang**, professor of electrical engineering, has been elected a fellow of the Institute of Electrical and Electronic Engineering (IEEE). The IEEE is the largest international professional society in the world with more than 600,000 members in over 150 countries. The fellow grade recognizes an individual's unusual distinction in the electrical and engineering profession and acknowledges his or her outstanding qualifications and experience. No more than 0.1 percent of the members each year can be elected to this grade. Huang's citation reads "for fundamental contributions to the set-membership identification for signal processing and control systems."

**James L. Merz**, Freimann professor of electrical engineering, was re-elected secretary of the IEEE Electron Devices Society for 1995. He was re-elected for a second three-year term as a member of the Administrative Committee (Ad Comm) of the EDS in San Francisco, Calif., Dec. 11.

**Walter Nicgorski**, professor in the Program of Liberal Studies, was elected to membership in the Catholic Commission for Cultural and Intellectual Affairs.

**Steven R. Schmid**, assistant professor of aerospace and mechanical engineering, was appointed student liaison and programs officer for Chapter 30 of the Society of Manufacturing Engineers.

**James I. Taylor**, associate dean of engineering and professor of civil engineering and geological sciences, was appointed to a National Academy of Sciences Transportation Research Board Panel on "Evaluation of Effectiveness and Impact of Training."

**Charles K. Wilber**, professor of economics, was elected a trustee of the Association for Social Economics and a member of its executive council for 1995-96.

## Activities

**Scott Appleby**, director of the Cushwa Center and associate professor of history, delivered the Taft lecture "Trends in American Religion" at the University of Cincinnati in Cincinnati, Ohio, Oct. 18. He spoke on "Teaching Religion in the Public Schools" before a meeting of the Indiana Civil Liberties Union in Indianapolis, Ind., Oct. 27. Appleby made a presentation on "American Catholicism and Higher Education" to faculty members at Messiah College in Grantham, Pa., Nov. 7. He delivered a lecture on "Fundamentalisms and Nation-States" at Pennsylvania State University in Harrisburg, Pa., Nov. 8.

**Hafiz M. Atassi**, professor of aerospace and mechanical engineering and co-director of the Center for Applied Mathematics, presented a paper titled "Effects of Nonuniform Flows on the Aerodynamics and Noise of Ducted Fans" at the NASA Lewis Research Center in Cleveland, Ohio, July 19-22. He presented a paper titled "Acoustic Interference in Unsteady Transonic Nozzle and Cascade Flows" with J. Fang and P. Ferrand at the seventh international symposium on Unsteady Aerodynamics and Aeroelasticity in Turbomachines in Fukuoka, Japan, Sept. 25-29. He presented a paper titled "Aerodynamics and Aeroacoustics of Nonuniform Flows: Application to Turbomachinery" at CERCA in Montreal, Quebec, Canada, Oct. 19. He presented a paper titled "The Inverse Problem in Aeroacoustic and Aerodynamics" with S. Patrick and W. Blake at the symposium on Active/Passive Control of Flow-Induced Noise and Vibration at the ASME winter annual meeting in Chicago, Ill., Nov. 13-18.

**Gary H. Bernstein**, associate professor of electrical engineering, presented a seminar titled "Aspects of Electron Beam Lithography for Nanostructure Fabrication" at Purdue University in West Lafayette, Ind., Dec. 7.

**Ikaros Bigi**, professor of physics, gave a High Energy Theory Seminar on "CP Violation in B Decays — Towards a New Paradigm" at KEK, Tsukuba City, Japan, Oct. 24, and at the Yukawa Institute, Kyoto University, Kyoto, Japan, Oct. 25. He presented an invited lecture "A Genuine QCD Treatment of Heavy Flavour Decays" at the international workshop on B Physics at Nagoya University in Nagoya, Japan, Oct. 28.

**Rev. David B. Burrell, C.S.C.**, Hesburgh professor of arts and letters and professor of philosophy and theology, gave the Hesburgh lecture "Christ and the Qur'an: Two Words of God" at Millsaps College, Jackson, Miss., Dec. 2.

**John E. Chateaufneuf**, assistant professional specialist in the Radiation Laboratory, co-authored the papers "Pulse Radiolysis to Study Intermolecular Interactions and Reactivity in Supercritical Fluids" and "Reactions of Dilute Solutes with Oxygen in Supercritical Fluids" presented at the American Institute of Chemical Engineers 1994 annual meeting in San Francisco, Calif., Nov. 13-18.

**Danny Z. Chen**, assistant professor of computer science and engineering, gave the invited talk "On the All-Pairs Euclidean Short Path Problem" at Geometry Day, a mini conference in computational geometry for researchers and students, in Ottawa, Canada, Oct. 29.

**Leonid Faybusovich**, associate professor of mathematics, gave an invited colloquium talk "Interior-point Methods for Control Applications" at the Research School of Information Science and Engineering in Canberra, Australia, Dec. 6.



# FACULTY NOTES

**Mohamed Gad-el-Hak**, professor of aerospace and mechanical engineering, delivered two talks titled "The Sensitivity of a Gas-Core Vortex in a Cyclone-Type Gas-Liquid Separator" and "Numerical and Experimental Investigation of the Evolution of Vortical Flow in Impulsively Started Square and Semi-Circular Cavities" at the American Physical Society Meeting of the Division of Fluid Dynamics in Atlanta, Ga., Nov. 20-22. He chaired the session on "Control of Turbulent Flow" during the same meeting. He presented a poster "The Modes of Gas-Core Vortex in a Cyclone-Type Gas-Liquid Separator" in the 12th annual Gallery of Fluid Motion in Atlanta, Ga., Nov. 20-22.

**Kimberly A. Gray**, assistant professor of civil engineering and geological sciences, served as the chair of the session titled "Laboratory and Analytical Methods" at the Superfund XV meeting sponsored by the Hazardous Material Control Resources Institute held in Washington, D.C., Nov. 30. She delivered an invited seminar titled "Radiolytic Transformation of Soil Contaminants: A Comparison of Gamma and Electron Beam Irradiation" to the Ionizing Radiation Division of the National Institute of Standards and Technology in Gaithersburg, Md., Dec. 1. She presented a paper titled "Monitoring Organic Removal for a Variety of Enhanced Coagulation Processes Using Pyrolysis-GC-MS" at the AWWA Enhanced Coagulation Research Workshop in Charleston, S.C., Dec. 6.

**Alexander J. Hahn**, professor of mathematics, gave the lecture "Elements of  $\Omega_n(v)$  as Products of Commutators of Symmetries" to the special session "Groups, Rings, and Forms" at the meeting of the American Mathematical Society at the University of Richmond in Richmond, Va., Nov. 11-13.

**Yih-Fang Huang**, professor of electrical engineering, gave a keynote speech titled "Artificial Neural Networks — Learning and Generalization" at the 1994 IEEE Asia-Pacific conference on Circuits and Systems in Taipei, Taiwan, Dec. 5-8.

**Ruthann K. Johansen**, associate professional specialist and assistant director of the arts and letters core course, presented the paper "In the Face of Shadows: Education on the Threshold of the 21st Century" at a symposium on Liberal Education in the 21st Century at Manchester College in North Manchester, Ind., Oct. 21.

**Ahsan Kareem**, professor of civil engineering and geological sciences, served as a member of the Technical Program Committee and chaired a session titled "Control Systems and Base Isolation" at the fifth U.S. national conference on Earthquake Engineering, under the auspices of the Earthquake Engineering Research Institution held in Chicago, Ill., July 11-15. He served on an NSF site visit panel to review an NSF Cooperative Program on Wind

Engineering Research at Texas Tech University in Lubbock, Tex., and Colorado State University in Fort Collins, Colo., July 13-15. He delivered a lecture titled "Nonlinear Stochastic Response of Ocean Systems to Environmental Loads" at the Office of Naval Research Workshop on Reliability of Nonlinear Ocean Structures Under Stochastic Loading which was organized by the Probability and Statistics and Ocean Engineering and Marine Systems groups of ONR in Arlington, Va., July 18-19. Kareem presented a paper titled "The Next Generation of Tuned Liquid Dampers" at the first world conference on Structural Control in Los Angeles, Calif., Aug. 3-5. He made a presentation on "New Directions in the Development of Semi-Active Liquid Dampers" at the second NSF coordination meeting on Research Initiative on Structural Control in Pasadena, Calif., Aug. 6-7.

**Eileen Kolman**, dean of the Freshman Year of Studies and concurrent assistant professor of mathematics, and **Louise Litzinger**, associate professional specialist in the Freshman Year of Studies, gave the paper "The Freshman Year of Studies at the University of Notre Dame" at the 18th annual conference of the National Academic Advising Association in Las Vegas, Nev., Oct. 10.

**Rev. Robert A. Krieg, C.S.C.**, associate professor of theology, presented the paper "Romano Guardini's Life and Work" and was conference organizer at the Romano Guardini Conference at the University of Notre Dame, Notre Dame, Ind., Oct. 7-8.

**James R. Langford**, director of University Press and concurrent assistant professor in the core course, chaired a lecture presentation by Nobel Laureate Elie Wiesel at Boston University in Chestnut Hill, Mass., Nov. 14. He accepted the dedication to him of the book *The Changing Face of Friendship*, at a publication party sponsored by the Institute for Philosophy and Religion at Boston University in Chestnut Hill, Mass., Nov. 15.

**Craig Lent**, associate professor of electrical engineering, presented a talk titled "Computing with Quantum Dot Molecules" at the workshop on Physics and Computation in Dallas, Tex., Nov. 16-20.

**John M. LoSecco**, professor of physics, presented the invited talk "Studying the Quark-Antiquark Force with Inelastic Pion Electron Scattering" at the High Energy Physics Seminar at the California Institute of Technology in Pasadena, Calif., Dec. 5.

**Scott Mainwaring**, professor of government and international studies, presented the paper "Electoral Rules, Party Discipline, and Institutional Engineering" and chaired a panel on party organization at the symposium Political Parties: Changing Roles in Contemporary Democracies at the Instituto Juan March in Madrid, Spain, Dec. 16.



# FACULTY NOTES

**Ralph M. McInerny**, Grace professor of medieval studies, director of the Maritain Center and professor of philosophy, gave the lecture "Family Resemblances" at the Women for Faith and Family Conference in St. Louis, Mo., Nov. 5. He lectured on "Literature and the Mystery Novel" at the Bloomington Public Library in Bloomington, Ind., Nov. 7. He presented "An Evening with Father Dowling" at the Tippecanoe County Library in Lafayette, Ind., Nov. 10. He gave a response to the presentation of the Maritain Award at New York University in New York, N.Y., Nov. 12. He gave the lecture "Thomas Aquinas College, Santa Paula, California" to the Cliff Hangers Club in Chicago, Ill., Nov. 16. He served as a judge for the Andrews University Architectural Project for Thomas Aquinas College at Andrews University in Berrien Springs, Mich., Nov. 22. He lectured on "Ethics" at Baylor University in Waco, Tex., Dec. 2.

**Anthony N. Michel**, McCloskey dean of engineering and Freimann professor of electrical engineering, chaired a technical session titled "Neural Network Applications" and presented with Derong Liu and Kaining Wang, assistant faculty fellow in electrical engineering, the papers "Asymptotic Stability of Systems with Partial State Saturation Nonlinearities" and "On Lyapunov Stability of a Family of Nonlinear Time-Varying Systems" at the 33rd IEEE conference on Decision and Control which was held in Lake Buena Vista, Fla., Dec. 14-16.

**Walter Nicgorski**, professor in the Program of Liberal Studies, lectured on "Nature, Political Order and Modern Democracy" in the Phoenix Institute at the University of Notre Dame, Notre Dame, Ind., July 5-29. He delivered a paper on "Rhetoric as a Test of Philosophy: Cicero's Practical Criterion" at the annual meeting of the American Political Science Association in New York, N.Y., Sept. 1. He lectured on "The Community, Politics and the Catechism" in the Sacred Heart Parish adult education program in Notre Dame, Ind., Nov. 20.

**Walter Nugent**, Tackes professor of history, spoke on "Custer in Context" on a panel at the Newberry Library in Chicago, Ill., Dec. 3.

**María Rosa Olivera-Williams**, associate professor of Romance languages and literatures, read the paper "La última noche de Dostoevski: La escritura del deseo o el deseo de la escritura" and served as chair and discussant in the session titled "Poesía Hispanoamericana III" at the XI annual Mid-American conference on Hispanic Literature, An International Symposium, at the University of Kansas in Lawrence, Kans., Sept. 8-10.

**Rev. Thomas F. O'Meara, O.P.**, Warren professor of theology, delivered a lecture titled "Schelling's Philosophy of Religion" in a series sponsored by the School of Philoso-

phy at the Catholic University of America in Washington, D.C., Nov. 11. He presented a paper-response at the Catholic Modernism Consultation of the American Academy of Religion in Chicago, Ill., Nov. 20.

**Samuel Paolucci**, associate professor of aerospace and mechanical engineering, presented a paper titled "Solidification by Convective Cooling with Void Formation" and chaired the sessions "Panel on Chaotic Heat Transfer" and "Panel on Unanswered Questions and Technological Limitations Related to the Characterization of Material Interfaces in Heat Transfer Research and Applications" at the 1994 international Mechanical Engineering Congress and Exposition held in Chicago, Ill., Nov. 6-11. He presented a paper titled "Comparison of Stability Results of the Natural Convection Flow in a Tall Vertical Cavity Under Different Thermal Approximations" and chaired a session on "Suspensions and Porous Media" at the 47th annual meeting of the Division of Fluid Dynamics of the American Physical Society held in Atlanta, Ga., Nov. 20-22.

**Wolfgang Porod**, professor of electrical engineering, was the program co-chair for the workshop on physics and computing titled PhysComp94 held in Dallas, Tex., Nov. 17-20. He co-authored the presentation titled "Quantum Cellular Automata: Computing with Arrays of Quantum Dot Molecules" with Craig S. Lent, associate professor of electrical engineering, and P.D. Tougaw, and he was a member of the closing panel discussion at that workshop. Porod presented an invited talk on "Quantum Cellular Automata: Computing with Arrays of Quantum Dots" at the Advanced Heterostructures Workshop held in Kona, Hawaii, Dec. 4-9.

**Irwin Press**, professor of anthropology, presented an invited paper titled "The Quality Movement in U.S. Health Care: Implications for Anthropology" at the annual meeting of the American Anthropological Association in Atlanta, Ga., Dec. 1.

**Terrence W. Rettig**, professional specialist and associate professor of physics, presented a paper titled "Hubble Space Telescope Observations of Comet Shoemaker-Levy 9 Subnuclei: Solid Bodies or Swarms?" at the 1994 Division of Planetary Science Meeting in Washington, D.C., Oct. 31.

**Joachim J. Rosenthal**, assistant professor of mathematics, gave the invited seminar talk "The Behavior of Convolutional Codes" at the University of Groningen in Groningen, The Netherlands, Oct. 6. He gave the invited colloquium talk "On the Algebraic Structure of a Convolutional Code" in the Department of Mathematics at the University of Eindhoven in Eindhoven, The Netherlands, Nov. 2.



# FACULTY NOTES

**Steven R. Schmid**, assistant professor of aerospace and mechanical engineering, gave an invited talk titled "Tribology Problems in Aluminum Ironing" at the ALCOA Technical Center in Alcoa Center, Pa., Dec. 15.

**Mark R. Schurr**, visiting assistant professor of anthropology, presented the paper titled "Assessing the Maize Consumption of Fort Ancient and Middle Mississippian Populations of the Ohio Valley" at the combined Southeastern/Midwest Archaeological Conference in Lexington, Ky., Nov. 9-12.

**James H. Seckinger**, professor of law, served as program director and a faculty member and gave a series of lectures on deposition techniques at the NITA/Wildman, Harrold, Allen & Dixon Deposition Program in Chicago, Ill., June 2-4. He was the program director and a faculty member and conducted a workshop on effective teaching techniques and gave a series of lectures on trial advocacy techniques at the NITA/Linklaters & Paines Trial Advocacy Program in London, England, June 18-25. He was program director and a faculty member for the NITA/Freshfields Trial Advocacy Program in London, England, July 15-22, and for the NITA/Slaughter & May Trial Advocacy Program in London, England, Aug. 1-6. At both programs he conducted a workshop on effective teaching techniques and he gave a series of lectures on trial advocacy techniques. Seckinger was the program director and a faculty member for the NITA/Faculty of Advocates Teacher Training Program for Scottish Advocacy Teachers at Parliament House in Edinburgh, Scotland, Sept. 8-9. He gave a presentation on using the NITA Method of Learning-by-Doing Skills Training for teaching the teachers and gave a lecture on effective teaching techniques. He served as program director and a faculty member and gave a series of lectures on advocacy techniques at the NITA/Faculty of Advocates Trial Advocacy Program at Parliament House in Edinburgh, Scotland, Sept. 11-17.

**Susan Guise Sheridan**, assistant professor of anthropology, presented an invited paper titled "Elemental Analysis of Iron Deficiency in a Medieval Nubian Population" in a symposium titled "From Paleoenvironments to Political Complexity: Advances in the Chemical Study and Interpretation of Anthropological Remains" at the 93rd annual American Anthropological Association meetings in Atlanta, Ga., Nov. 30.

**Billie F. Spencer Jr.**, associate professor of civil engineering and geological sciences, gave a seminar titled "Acceleration Feedback Control Strategies for Civil Engineering Applications" at George Washington University in Washington, D.C., Dec. 5.

**Dolores W. Tantoco-Stauder**, librarian, gave a "Cultural Presentation on Manila" to the selected delegates and their families, from the Catholic parishes in the Diocese of Fort Wayne/South Bend, in preparation for the January 1995 World Youth Day, a Pilgrimage with Pope John Paul II, in South Bend, Ind., Dec. 11.

**Eugene Ulrich**, professor of theology, was invited to speak on "The Dead Sea Scrolls and Their Context: Implications for Interpretation" for a panel on the ethics of "Scholarly Use of Material Without Provenience" at the annual meeting of the American Schools of Oriental Research in Chicago, Ill., Nov. 20.

**James C. VanderKam**, professor of theology, was invited to speak on "Early Israel through the Eyes of Martin Noth" for the Institute for Ancient Near Eastern and Afroasiatic Cultural Research in Chicago, Ill., Nov. 18. He spoke on access to discoveries of ancient materials for a panel on this subject at the annual meeting of the American Schools of Oriental Research and the Society of Biblical Literature in Chicago, Ill., Nov. 21.

**Arvind Varma**, Schmitt professor of chemical engineering, presented two invited seminars titled "Inorganic Membranes for Reaction and Separation" and "Optimal Distribution of Catalyst in Pellets" at the Chevron Research and Technology Company in Richmond, Calif., Dec. 15.

**Henry Weinfield**, assistant professor in the Program of Liberal Studies, read from his newly published translations of Stéphane Mallarmé at the University of Notre Dame, Notre Dame, Ind., Dec. 7.

**Karen J. White**, assistant professor of psychology, chaired the symposium "The Subjective Experience of Problematic Peer Relationships: Age and Gender-Related Implications for Intervention" and presented the paper titled "Predicting Depressive Symptomatology from Peer-Assessed Social Behavior and Perceived Social Support: Age and Gender-Related Considerations" at the annual conference of the Association for the Advancement of Behavior Therapy in San Diego, Calif., Nov. 12.

**Charles K. Wilber**, professor of economics, spoke on "Ethics and Capitalism" at a workshop sponsored by the Jerome Levy Economics Institute of Bard College in Annandale-on-Hudson, N.Y., Nov. 3.

**Anne Marie Wolf**, assistant professional specialist in the Freshman Year of Studies and concurrent adjunct instructor in Romance languages and literatures, presented the paper "International Study and the Academic Advisor" at the 18th annual conference of the National Academic Advising Association in Las Vegas, Nev., Oct. 10.



# FACULTY NOTES

---

**Eduardo E. Wolf**, professor of chemical engineering, presented an invited lecture titled "Scanning Microprobe Microscopy Studies of Catalyst Activation and Deactivation" at the Michigan Catalysis Society Meeting in Ann Arbor, Mich., Dec. 7. He presented a paper titled "Hydrogenation of Croton Aldehyde on Cluster derived Co Catalysts" co-authored with **Thomas P. Fehlner**, Grace-Rupley professor of chemistry, and **A. Patil** at the symposium on Novel Catalytic Materials of the Materials Research Society in Boston, Mass., Nov. 28-Dec. 1.

**Kwang-tzu Yang**, Hank professor of aerospace and mechanical engineering, presented the paper "A Phase Change Material-based Thermal Energy Storage Option for Household Refrigerators" co-authored with **Pankaj Mithal** at the 1994 international Mechanical Engineering Congress and Exhibition in Chicago, Ill., Nov. 6-11. He presented a collegewide seminar on "Fluid Mechanics and Heat Transfer in Zero-Mean Oscillatory Flows-Applications to Microelectronic Cooling" to the College of Engineering at the University of Michigan-Dearborn in Dearborn, Mich., Nov. 18.

## Deaths

**Thomas T. Murphy**, professor emeritus of finance and former dean of the College of Business Administration, Oct. 16. After earning bachelor's and master's degrees from Boston University, Murphy taught finance at Aquinas College in Grand Rapids, Mich., from 1939 to 1942. He then entered the Navy and served in the South Pacific during World War II as a lieutenant commander on the USS O'Bannon. He received two citations from President Roosevelt and subsequently was graduated from the Naval War College in Newport, R.I. Murphy taught for a year following the war at Holy Cross College in Worcester, Mass., then joined the Notre Dame faculty in 1946. He was on faculty until 1980. A specialist in business finance and investments, Murphy was a member of the President's Export Expansion Council, an advisory group to the U.S. secretary of commerce, and served on the graduate and undergraduate accreditation committees of the American Association of Collegiate Schools of Business.



# ADMINISTRATORS' NOTES

---

## Honors

Denis F. Ellis, executive chef of Food Services, was named chef of the year by the South Bend Chapter of the American Culinary Federation. The American Culinary Federation is the largest professional organization of chefs, cooks and pastry chefs in the United States, with more than 24,000 members.

## Activities

Walton R. Collins, editor of *Notre Dame* magazine, participated in the panel discussions "A Little Help from a Friend" and "Focus on Your Agenda: Get Answers to Your Questions" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

Richard Conklin, associate vice president for University Relations, co-led a roundtable discussion on "Public Service Announcements: Making Them Work for Your Institution" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

D'Juan D. Francisco, assistant director of alumni clubs, Alumni Association, served as a moderator at the session titled "Ready, Aim, Memberships" and led a roundtable discussion on "Assisting Alumni Clubs: Ways to Keep Volunteer Alumni Motivated" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

Carl T. Magel, director of Publications and Graphic Services, and Walton R. Collins, editor of *Notre Dame* magazine, along with Sandra Bate, director of Graphic and Editorial Services at Indiana University-Purdue University Indianapolis, organized and chaired the Communications Track at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

Dennis K. Moore, director of Public Relations and Information, served on a panel discussion and led a roundtable group on "Sports Information: PR vs. Athletics" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

Frances Shavers, assistant director of alumni clubs, Alumni Association, moderated the session "Profitable Alumni Travel for Small Universities" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

Timothy Truesdell, director of Development Research, presented "Are Your 'i's' Dotted and Your 't's' Crossed?: Policies and Procedures in the Development Office" at the District 5 20th annual conference of the Council for Advancement and Support of Education held in Chicago, Ill., Dec. 11-13.

## Publications

Alan S. Bigger, director of building services, wrote "A Blueprint for Construction: Building Buildings that Are Maintainable" which was published in the February 1994 issue of *Executive Housekeeping Today*.



## Academic Council Minutes September 20, 1994

**Members in Attendance:** Edward A. Malloy, C.S.C., Timothy O'Meara, E. William Beauchamp, C.S.C., Roger Schmitz, Timothy Scully, C.S.C., Patricia O'Hara, Nathan Hatch, Harold Attridge, Francis Castellino, Eileen Kolman, David Link, Anthony Michel, Robert C. Miller, Stacey Kielbasa, Frank Bonello, Cornelius Delaney, Michael Francis, Gary Gutting, Jean Porter, John Roos, Thomas Swartz, Mario Bottling, William Shephard, Andrew Sommesse, Hafiz Atassi, Stephen Batill, Carolyn Callahan, Edward Conlon, Douglas Kmiec, Dennis Doordan, Lorry Zeugner, Regina Coll, C.S.J., Kathleen Maas Weigert, Matthew Gasaway and Dyan Rohol (Sophia Jordan substituted for Richard McBrien)

**Observers in Attendance:** Andrea Midgett, Dennis Moore and Russell Pickett

**Guests:** William Sexton

Prof. O'Meara opened the meeting at 4:05 p.m. with prayer.

Fr. Malloy welcomed everyone and said that the purpose of this first retreat-like meeting for the 1994-95 academic year was to provide background information for discussions and decisions that the Academic Council would encounter this year. Today's meeting would be comprised of three presentations: the campus (or *framework*) plan, the next campaign, and the budget. Fr. Malloy then asked each member of the Academic Council to briefly introduce himself or herself.

**1. Election of the Executive Committee.** The council elected five members to the Executive Committee: Harold Attridge, Francis Castellino, Cornelius Delaney, Nathan Hatch and Kathleen Maas Weigert. Fr. Malloy named Hafiz Atassi, Carolyn Callahan and Stacey Kielbasa to fill three appointed slots. Richard McBrien, Timothy O'Meara and Fr. Scully serve ex officio, for a total of 11 committee members. Following last year's changes in the Academic Articles, Roger Schmitz will no longer serve as an ex officio member of the committee, though he will attend meetings during a transitional period.

**2. Appointments to Standing Committees.** Prof. Schmitz noted that several weeks ago Academic Council members were asked to indicate their preferences for three standing committees: Faculty Affairs, Graduate Studies and Undergraduate Studies. The results were tallied and presented to the Executive Committee. (See the attached list.) As far as possible, everyone was given his or her first choice. Each committee will elect its own chairperson from the elected council membership.

**3. Correction to *The Chronicle for Higher Education*:** A recent report in *The Chronicle for Higher Education* incorrectly listed the salaries of Notre Dame's top three officers. The correct salaries for 1992-93 were \$192,400 for Fr. Malloy, and \$177,200 for both Prof. O'Meara and Fr. Beauchamp.

**4. The Campus (*Framework*) Plan.** Fr. Beauchamp began his presentation by noting that it took at least a year to compile a review of the development of the University campus. The bulk of the work was done by the University's architects (Ellerbe Becket), Tom Mason, the personnel of the physical plant and himself.

Fr. Beauchamp called the two large documents before him *The Framework Plan* and *The Campus Plan*. One volume focuses on the history of Notre Dame's campus, the other looks to its future expansion. Fr. Beauchamp stressed the importance of the plan being a "living document." It is contained in a loose-leaf binder so that as decisions and changes are made, as new buildings are finished, etc., the document can be appropriately updated.

Fr. Beauchamp said that the plan begins with the identification of seven tenets that explain the historical construction of the campus: the ceremonial focus of Notre Dame Avenue; the axes, quadrangles, and focus points of the campus; the green belt (undeveloped land) surrounding the campus; a separation of pedestrian and vehicular traffic; the division of the campus into areas of usage (athletic, residential, academic, public, service); the separation of land owned by the University and land owned by the Holy Cross Community; and a consistency of form and materials in all of the buildings.

Fr. Beauchamp briefly mentioned the historical influences bearing upon campus development — first, the formative ideas of Fr. Sorin (1842-1900), and then Francis Kervick's campus plan (1900 to World War II). As Notre Dame has expanded, its center has shifted from the Main Building to various other locations. Today, with the added classrooms of DeBartolo Hall and the almost completed new Business Administration Building, the academic center of the campus has shifted south.

The University's academic zones, classroom density, residential density, social density and the condition of existing buildings were all charted in the Framework Plan. Fr. Beauchamp said that all of these factors were considered when attention was turned toward future campus expansion. For instance, when searching for additional space for faculty and laboratories, the planners first looked at possible sites for building in-fill, areas where the University can add onto an existing building, depending on its use and size.



# DOCUMENTATION

Fr. Beauchamp then turned his attention to those projects listed in the Colloquy that are currently planned, under way or completed: the renovation of the Main Building; the renovation and extension of the Architecture Building; the immediate building of two new residence halls and the subsequent conversion of Grace Hall to an administrative services building; the expansion of the Snite Museum; the expansion and renovation of the Stadium; the completion of the Early Childhood Development Center, which was recently dedicated; the completion of the new Business Administration Building; the building of a Center for Performing Arts; and the renovation or relocation of the Morris Inn.

Fr. Beauchamp conversed at length on the Colloquy's list. First, he said, the University should, by late spring, finish the new Business Administration Building. Meanwhile, construction of two new residence halls, located on the back nine of the golf course, will begin this winter. Upon completion of the Business Administration Building, the College of Business Administration will move out of its current space in Hayes-Healy and Hurley and into the new building. And sometime next summer, the School of Architecture will move into the vacated space in Hayes-Healy and Hurley while the Architecture Building is renovated. When the two new residence halls are completed, Grace Hall residents will move into them, and Grace Hall will undergo conversion to an administrative services building. When renovations are completed in the Architecture Building, the Main Building will be emptied into Hayes-Healy and Hurley and into the newly renovated Grace Hall.

Fr. Beauchamp pointed out that due to the addition of elevators, restrooms and enclosed stairwells, the renovation of the Main Building will yield 25 percent less office space than it now has. Not everyone who now resides in the Main Building will fit back into it. The overflow will be permanently housed in Grace Hall; other units from the campus will eventually be located there, as well.

Upon completion of this first phase of development, two additional residence halls (for a total of four) will be built to replace Flanner Hall. These residences will also be located on the golf course, which will begin to take the shape of a new quadrangle, with playing fields and available parking. Flanner Hall will be renovated for use by non-library units that are presently located in the Hesburgh Library and by other offices. Fr. Malloy interjected that, by emptying Flanner, office space will become available for emeriti faculty, graduate students and adjunct faculty. He stressed that though none of this is yet firmly decided, it is part of long-range thinking and planning. With the loss of the present golf course, a new one will eventually be built on property northeast of the intersection of Juniper and Douglas Roads, where Juday Creek limits extensive development.

Fr. Beauchamp then discussed reclaiming the ceremonial aspect of Notre Dame Avenue. The placement of each building flanking the street — such as the Post Office and the University Club — will be considered, plantings will be enhanced, sidewalks rebuilt, the front gate relocated, etc. Part of the strengthening of Notre Dame Avenue will be further development of the golf course quadrangle. A new conference/hotel facility will probably be built to replace the Morris Inn, which will be converted to another use. The new facility will not replace the Center for Continuing Education (CCE), though it may add some additional conference space. The CCE and the Morris Inn are considered a package. Any new hotel facility would be viewed in the same light.

It is also possible that a combination bookstore/welcome center will be in this quad. This would remove the current bookstore's traffic from the center of the campus. It was originally thought that the bookstore would be split into two buildings, one for academic books, one for Notre Dame paraphernalia. But after studying the issue, one building with separate wings and perhaps a coffee shop or cafe in the middle seems more probable. In this scenario, textbook service at rush times would not be offered in the bookstore, but instead would be located in Stepan Center for a few weeks each semester. However, Fr. Beauchamp repeated, the ceremonial entrance to the campus must be restored and enhanced. Toward that end, the University will be careful that visitors do not encounter a retail center as soon as they approach the campus.

Prof. Porter asked why a decision was made to house sweatshirts, souvenirs and books in the same building. Fr. Malloy responded that different universities have different combinations. Most marketing people think that the traffic patterns of patrons warrant having them together, on the same floor. People coming for one reason can then stay for another. Also, costs would be somewhat offset if the two components (books and souvenirs) were housed in one building with separated areas.

Fr. Beauchamp ended the formal part of his presentation by mentioning the possible future development of the east quadrangle, located due east of Galvin Life Sciences. He said there is enough space here to build the kind of science and engineering facilities described in the Colloquy report.

Before the floor was opened for questions, Fr. Malloy added that the University has tried unsuccessfully, for years, to get the county to move Juniper Road over to Ivy. The county also owns Douglas Road, and everything on the west side of Highway 31/33 is owned by other parties. These restrictions, in addition to the land owned by the Holy Cross Community, prohibit the University from expanding in some directions. Dean Castellino remarked that moving Juniper Road traffic over to Ivy is a great



idea, and wondered if the University has used all its leverage in the matter. Fr. Beauchamp replied that, though it is not a dead issue, he does not see it happening in the foreseeable future because of strong resistance by county officials.

Dean Castellino then asked about the possibility of parking garages. It is obvious, he said, that easily accessible parking for faculty, staff and students is going to disappear. Fr. Beauchamp answered that parking garages have been considered.

Prof. Swartz asked if any consideration has been given to the building of "jumbo" classrooms, which some departments periodically need. Fr. Beauchamp replied that though jumbo classrooms haven't been discussed in particular, one might eventually be found in the Performing Arts Center that will seat 700, though it would not be considered a lecture facility per se. Prof. Swartz followed with a second question regarding plans for medium size lecture halls that would hold between 250 and 350 students. He sees the need particularly when giving exams to 245 students in a room designed to hold 265. He feels it's a great temptation for students to be in such close proximity, yet he doesn't have another room into which to split the class. Prof. Schmitz answered that there are no plans for additional medium-size classrooms at this point. Fr. Beauchamp added that Stepan Center is a possibility when giving exams. Also, there will be an auditorium that seats 300 in the new Business Administration Building, and another auditorium that seats 250 to 350 in the Architecture Building.

Dean Castellino asked if classrooms in the new Business Administration Building will be dedicated solely to business classes. Prof. Schmitz replied that the new building will house all MBA, MSA and eventually Ph.D. courses in Business Administration. Classrooms that are now in Hayes-Healy and Hurley will remain in use though some of them may be used temporarily for office space during the aforementioned transitions. A recently completed classroom study indicates that the University needs 167 classrooms, which is the number that will be reached, after some planned renovations, very soon. That's even looking ahead to the additional courses and sections that are likely to evolve with the addition of 150 new faculty. The University has committed to stabilizing the classroom number at 167 classrooms, so that whatever is lost through renovation or relocation will be replaced somewhere else.

Prof. Batill remarked that he spends nearly half of a day per week walking to and from class. He cannot get close to a classroom building by driving there. The clustering of academic buildings and faculty office buildings contributes to such an exaggerated distance between his office and the classrooms where he teaches. He urged the

University to pay more heed to the placement of classrooms and faculty offices. Fr. Beauchamp replied that though there are exceptions, the University has paid attention to the problem.

Prof. Gutting added that over the years, the College of Arts and Letters has expanded to the point that one building now houses faculty offices, another building houses administrative offices and yet a third building is used for classrooms. He asked if there had been any discussion of a more integrated approach. Fr. Beauchamp answered that though some new buildings will be more integrated, there has been no general discussion of the issue. To redesign the use of existing buildings would be a possibility, he added, though probably prohibitively expensive.


Fr. Malloy added that arts and letters is really an odd case. Some of the disciplines, such as music or art, are in integrated buildings. And some colleges, such as science, are divided within their buildings by departments. Prof. O'Meara recalled that the division came about for arts and letters when faculty were housed in the basement of the library. He feels that the most important consideration is for graduate students to be in close proximity to the faculty.

Prof. Doordan asked about the report on the existing conditions of the buildings. Did Ellerbe Becket investigate the durability of the buildings? Fr. Beauchamp replied that when the Architecture and Main Buildings were tagged in need of immediate attention, it did not mean that they are in imminent danger from structural weaknesses. Rather, everything about each individual building was considered, from fire safety to structural safety. Those at the top of the list need the most work.

Prof. Roos asked if there is any thought toward the future development of the University's side of Highway 31. Fr. Beauchamp responded that with the exception of the golf course and the land right next to Carroll Hall, the land there is owned by the Holy Cross Community. Also, it is part of the green space that the University would like to preserve. Prof. Roos then suggested that the University consider the development of neighborhoods surrounding the campus, not as a negative, but as a positive opportunity to relate to the community. Fr. Beauchamp responded that the University has acted on this suggestion, for example, in its support of the purchaser of Notre Dame Apartments. Also, because the University wants to exert some control over what kinds of buildings go up in its "backyard," it has bought and is always interested in buying houses that go on the market east of the campus.

**5. The Next Campaign.** Fr. Malloy introduced Prof. William Sexton, vice president for University Relations, by commenting that the University is facing its most






daunting campaign challenge in history. Prof. Sexton began his presentation by noting that campaigns are everywhere, and campaign failure is happening more often because it is difficult to predict the reactions of groups of people and to estimate what their resources will be (and the economic conditions of their companies) when the time comes to ask for their support.

Prof. Sexton defined a campaign as a time when an organization stops, studies itself and articulates those needs that emerge from investigation. From there, a university makes a planned effort to stimulate its alumni and friends, to develop a sense of excitement, pride and determination, and to focus attention on the identified needs of the institution.

Prof. Sexton said that a fundamental question to be asked before a campaign is launched is, "Are there people out there, on whom you've done some research, who can support the kinds of funds you're after?" The best way to answer that question is to conduct a marketing survey, which Notre Dame did in late 1993 and early 1994. Though it closely followed a large survey of 15,000 alumni, the 1993-94 survey was small in size. It involved 160 "leadership" people who each contributed more than \$100,000 in the last campaign. The leadership survey asked contributors a number of questions regarding Notre Dame's quality of education; the University's strengths and weaknesses; its ability to communicate; the economic climate and its effect on potential fund raising; and opinions of the University's emerging list of priorities.



Survey answers indicated that teaching remains a very high priority to financial contributors; that the idea of a small but superb graduate school is catching on; that there should be more emphasis on people and programs versus bricks and mortar (which indicates a need for better communication about how the University accomplishes its educational goals); that our alumni were receiving too much literature trying to sell the University (this has already been dealt with); and that internationalization needs to be improved.

When asked what motivates people to contribute to the University, respondents in the survey indicated that individuals give to maintain a quality, value-and-Catholic-centered education, to assist others through scholarships, and in appreciation for the education they received. Donors do not give out of guilt, because they received a scholarship, or because they want Notre Dame to be the best graduate/research university in the country. Prof. Sexton said that right now the overriding emphasis of almost all contributors is the quality of their own undergraduate education or the education of their children or grandchildren. That creates emotion about the time they spent here and about their experiences of Notre Dame as well as those of their sons and daughters.

A key conclusion of the survey is that the next campaign must be couched in human terms. Individuals are willing to support graduate fellowships, professorships and the renovation of Main Building. They are generally unwilling to support "research" itself. Prof. Sexton said that graduate education and research need to be packaged in such a way that it explains how undergraduates palpably benefit from it. Also, contributors need to understand that by strengthening graduate education, Notre Dame will increasingly contribute to new knowledge, not just disseminate existing knowledge.

Prof. Sexton then shifted his presentation to campaign specifics. Six of Notre Dame's peer institutions are currently conducting campaigns of a billion dollars or more. (Harvard's goal is highest at \$2 billion.) Previous Notre Dame campaign targets have been set by what the market could bear, but the new campaign will be driven by needs. Its target will be based on needs that have emerged from Colloquy discussions. The campaign goal will approximate \$767 million.

Looking back at the Strategic Moment Campaign, Prof. Sexton noted that 751 individuals, families and corporations contributed 72 percent of the \$463 million that was raised. If those individuals whose gifts exceeded \$50,000 are included, more than 85 percent of the total is accounted for. In other words, Prof. Sexton said, the University is dependent on a relatively small group of people. The task now facing the Development Office of University Relations is to identify those individuals at the top of the new giving pyramid.

In the new campaign, the University will need 173 people to give \$1 million or more, which will account for 50 percent of all contributions. Development will need to identify 346 prospective donors to garner these 173 commitments. (200 prospects have been identified thus far.) But, Prof. Sexton noted, since not all 173 contributors at the top of the pyramid will give \$1 million, the University will need five gifts of \$15 million or more, 10 gifts of \$10 million or more, etc., to supplement the \$1 million gifts. The University will try, for example, to find one donor each for the science and the London buildings. As the base of the pyramid expands, the University will eventually approach four candidates for every confirmed contributor. By the time potential donors of \$15,000 and more are confirmed, 90 percent of the campaign will be accounted for.

Extensive planning for the campaign is already under way. A calendar of events leading up to its official inauguration in May 1997 has been set. (Incidentally, Prof. Sexton said, in the future Notre Dame will probably run a campaign every 10 years, each preceded by two years of self-examination, discussion and campaign planning.) Two new groups have been formed, and have already be-



gun meeting, to help with the new campaign. The President's Development Committee, made up of Trustee and Advisory Council members, operates basically as a steering committee for the campaign. The International Committee is comprised of people from around the world who represent Notre Dame in one capacity or another or who share an emotional connection with the University. This group should be an invaluable resource for networking with potential international donors, Prof. Sexton said.

Fr. Malloy interjected that establishing relationships with individuals and corporations from the international community is critical. It is often easier overseas to make a case for supporting graduate education, since many of the University's graduate students are internationals.

Prof. Sexton said that Golden Dome Productions has already completed a promotional video for the campaign. It will not be shown, except to potential large donors who are brought to the University for "fly-ins," until after the campaign is announced. The video tells the stories of people connected to the University; it is emotional, informative, entertaining and fast-paced.

Between now and May 1997, the University will work to put together a nucleus fund. A great portion of this fund will be raised during a series of 48 "fly in weekends" that will take place on the campus between now and the spring of 1999. Fly-ins bring together eight couples from across the country for an intensive weekend given to promotion, touring, video viewing, dining, attending Mass, and educational meetings with University officers, faculty and students. A week after the couples have been flown home, they are contacted and asked if they will, indeed, make a gift to the University. By the end of this academic year, Development hopes to have raised \$250 million toward the campaign. By the end of fiscal year 1996, the figure should be \$400 million, and \$500 million by the time the campaign is announced. Raising such a large nucleus fund prior to the announcement is essential if the campaign is to succeed, Prof. Sexton said.

During 1996-97, the University will host four to six major gift events, involving about 200 people. The campaign leaders, Fr. Malloy, Fr. Beauchamp, Prof. Sexton and members of the Development Office will then travel to 80 American cities, seeking contributions of \$25,000 and above from 60 to 80 individuals/families per city. Phonathons will begin in 1998 and continue until the year 2000. During this time 20,000 people will be called annually from Badin Hall by student assistants. Direct mail solicitations will also be used until the year 2000.

Finally, before he received questions from the floor, Prof. Sexton listed what will be some hard-to-fund campaign items: personnel, equipment and space needs of the li-

brary; graduate education and research in general; senior chairs; and an endowment for the University Press.

Dean Castellino asked about the percentage of unfulfilled commitments from the last campaign. Prof. Sexton answered that the Strategic Moment Campaign currently has outstanding commitments of around \$30 million. Over half of that figure is promised from one person; the University does expect to collect it. By way of explanation, Prof. Sexton added that sometimes donors' time-tables are interrupted by circumstances in their families and businesses over which they have little or no control.

Mr. Miller asked about the significance of contributors who are not part of the Notre Dame family. Prof. Sexton replied that three things must happen before securing a major commitment to the University: The prospect must have the financial resources; he or she must be involved with Notre Dame in some way; and he or she must see the University as promulgating values that they find personally important.

Fr. Malloy asked Prof. Sexton to say more on the competitiveness of fund raising and on the role athletics plays in Notre Dame's fund raising. Prof. Sexton remarked that very few private or state universities are not trying to raise money. Plus, there is increasing competition for money for primary and secondary education. Campaign success is not affected by the success or failure of Notre Dame's teams, Prof. Sexton said. Fund raising here has followed an upward trajectory for many years, even when the University was not enjoying great success in athletics. However, he added, success in sports lessens the amount of time needed to get to the point with some people.

Prof. Sexton then added that Notre Dame has six offices around the country: Atlanta, New York, Chicago, Los Angeles, Dallas and the Southwest (run out of the home office), and the Great Lakes Region (also out of the home office). Each office is adding an assistant regional director for the new campaign. Notre Dame has a very unusual, firm policy of not using volunteers for fund raising. Solicitations come only from members of the Development staff.

Prof. Batill asked if the annual fund campaign will run independently of the new campaign. Prof. Sexton answered that it will run independently in the sense that the University will not employ priorities of the campaign in its literature for the annual fund. (Though it may, however, run a mail campaign for a specific item that is hard to fund.) Monies raised for the annual fund do, in fact, count toward the campaign.

Prof. Batill then asked how departments can take advantage of opportunities not listed as campaign objectives that present themselves during the course of the cam-



paign. Prof. Sexton replied that a new program or project would not disrupt an already established priority, but would simply be added to the list of items for which the Development Office would seek funding. Prof. O'Meara added that any new idea would have to go through the entire process by which priorities are established — for example, through the Provost's Advisory Committee (PAC) for academic items.

Prof. Gutting asked about strategies for overcoming donors' reluctance to fund graduate education and research. Prof. Sexton replied that Development is actively identifying people in the Notre Dame community who have a background in graduate education and whose companies have significant research involvement, who will speak about the necessity of a strong graduate program at the University. There are potential donors who see the merit of graduate education and research in its own right, he said, and the University must find them. It must also solicit gifts from corporations and foundations that are not interested in undergraduate education only.

Fr. Malloy added that the University hosts Advisory Councils during each home football weekend. On Friday afternoons of each weekend, he delivers a kind of state-of-the-union address concerning the University; he also opens the floor for a question-and-answer session. He uses this time to describe the broader picture and goals of the University so that council members' appreciation will extend beyond their native interests. During the last five years, he has spent a large percentage of time talking about graduate education.

Prof. Sexton commented that even at universities where graduate students comprise a much larger portion of the student population, there is some resistance from donors to fund graduate education. Notre Dame's problem is not unique. Prof. O'Meara added that graduate education has been emphasized at meetings of the University's Trustees by having distinguished faculty from each college speak about their interests and the stimulation they derive from their creative work, and to tell why they encourage students to pursue graduate studies. It is easy to articulate the need for graduate education on the road, he said, with recent Notre Dame graduates, but it is much harder to translate that articulation into big gifts.

Prof. Gutting asked if the Catholic nature of Notre Dame works to our advantage for funding graduate and research education. Fr. Malloy replied that last summer, at the International Federation of Catholic Universities, many presidents of institutions from around the world told him, unsolicited, that Notre Dame is the only Catholic institution that can lead the way toward an intellectual life and academic development. He has tried, since then, to relay these encouraging words to bolster the support of

different constituencies. One fear that constituencies express repeatedly is that Notre Dame will suddenly change from being 75 percent undergraduate students and 25 percent graduate to exactly the opposite. That will not happen, he said. There is no support for it from anyone in the University community. The question, rather, is, "What does it mean to be small but superb, and what will it take to get there?"

**6. The University Budget.** Fr. Malloy gave the floor over to Fr. Beauchamp for the last presentation after reiterating that the University has only a few means of securing resources for all of the things it would like to do. One is fund raising. The other is through its annual budget, which is a function of income from tuition, room and board.

Fr. Beauchamp began his discussion of the budget by noting that last year was a very good one for the University. Each year a planned deficit of between \$350,000 and \$400,000 is built into the operating budget. However, the University never really anticipates a deficit because there will always be some lines that result in a positive balance for the year, such as unfilled faculty and staff positions. Of course, unanticipated expenditures pull the budget in the opposite direction.

The 1993-94 budget allowed for a \$390,000 deficit. However, the University ended the year with a positive balance of \$4,666,500. Toward this balance, additional revenue came from a few different sources, among which was undergraduate tuition. That source exceeded the budgeted amount by \$239,000 owing to a larger-than-expected undergraduate enrollment. However, the MBA program had a shortfall in tuition of about \$530,000.

Athletics brought in almost \$1 million above budget in revenues. The Joyce ACC netted more than \$500,000 better than budget. Though it had been felt that Bookstore revenue had peaked in recent years, the Bookstore brought in a surprising \$2.2 million over budget.

On the expenditure side, charges to the President's office exceeded the budgeted amount by \$343,500. Many items that are not on budget go through that office, such as educational benefits for faculty, which fluctuate from year to year, early retirements, postretirement benefits, and other special situations. The Provost's area was under budget in expenditures by more than \$1.2 million due mainly to unused funds in the benefits area. There was a shortfall of students in Graduate Studies, but that was offset by fellowships and the figures basically balanced. University Relations was over budget in several areas that were approved, such as intensive planning for the next campaign, the hiring of additional staff and the production of the campaign video.



Expenditures in the area of the Vice President for Business Affairs area were about \$2.75M less than budgeted, largely due to stable fuel costs. Even with the harsh winter, fuel costs did not rise, which left the University with a favorable balance. Student Affairs had a positive balance of \$531,300, largely due to unfilled positions and some positive balances in the security area.

Fr. Beauchamp then enumerated how the University used the year's balance. First, about \$1.7M was allocated for academic surveys, the renovation and ongoing maintenance of offices and building interiors. Academic Surveys are not built into the budget; they come out of whatever is left at the end of the year. If nothing were left, money to cover such expenses would come out of unrestricted gifts. After the surveys, \$500,000 went for capitalizations of new faculty. Again, capitalizations are not put into the operating budget, but come out at the year's end or from unrestricted gifts.

A little over \$100,000 was used to cover the deficit of the International Scholars Program, specifically the room and board portion of that program which is not fully covered by Peace Institute resources. An additional \$1 million was put into the Reserve for Endowment Spending Plan Subsidy, which is used to subsidize those endowments that have not yet accumulated enough earnings and growth to permit spending from them at a rate equal to that used for other endowments. The final \$1 million was put into an endowment for MBA scholarships.

Fr. Beauchamp then turned his attention away from the annual budget to report on unrestricted gifts received during 1993-94. The University received \$12 million in such gifts, about \$7 million of which came from the Sorin Society. Of these funds \$2 million was allocated for undergraduate financial aid. An additional \$1 million was put into a financial aid reserve, which is based on the recognition that student demographics are changing and that parents are demonstrating more financial need than before. In order to maintain the same number of Notre Dame scholars and minority students who receive scholarships, the University felt that an extra \$1 million would be needed this year.

Fr. Beauchamp said that the remaining \$9 million went to the University's Plant Fund. The Plant Fund exists in lieu of depreciation to cover physical plant repairs and replacements. It is also used for costs that are never fully covered when gifts are given for new buildings.

Fr. Beauchamp reported that more than \$4 million from the NBC football television contract was transferred to student financial aid — \$2.7 million to undergraduate scholarships, \$1 million to graduate fellowships, and \$500,000 to MBA scholarships. Last year's net post-season athletic revenues amounted to more than \$2.3M,

most of which came from Cotton Bowl appearance. Of this amount, about \$2.0M was allocated to academic financial aid and about \$300,000 to the athletic endowment. Another \$3.5 million, netted last year from licensing and marketing, also was allocated to academic financial aid. Fr. Beauchamp explained that the University got into licensing and marketing primarily to preserve copyrights and trademarks. However, the program has proven to be surprisingly lucrative. People can now buy a Notre Dame sweatshirt or hat almost anywhere in the country. Every time they do, Notre Dame receives a fee.

Fr. Beauchamp then explained the process by which the annual budget is formed. Needs of the academic units work their way through the usual channels to the provost who brings them before the Budget Committee, which is comprised of most of the officers of the University. Needs of other areas of the University, such as University Relations and Student Affairs, are also brought before the Budget Committee.

Prior to the first meeting of the Budget Committee, the University's non-tuition revenues, including those from such entities as Athletics, Food Services and the Bookstore, are projected for the upcoming fiscal year. Roughly speaking, the difference between those projections and the final list of needs, pruned and prioritized by the committee from the original lists, is the amount that has to be covered by tuition.

Fr. Beauchamp said that the University's Trustees expressed great concern several years ago about large tuition increases that were being imposed when financial aid was not keeping pace. As a consequence the University set out to reduce the increases, which it has done steadily for the last five years (10 percent in 1990-91, 9 percent in 1991-92, 8.5 percent in 1992-93, 7.9 percent in 1993-94, and 6.5 percent in 1994-95).

Fr. Beauchamp said that keeping tuition increases down has been greatly helped by the University's ability to bring down benefit costs, primarily for health care. There are many other factors that have contributed to the decrease in tuition increases. For example, in 1990, 2 percent was added onto tuition to cover new academic items or enhancements. That figure is now down to 0.8 percent. An area that drove tuition increases up in the past was the funding of the five-year computing development plan. Part of the cost was covered by tuition increases; specifically \$1 million per year was added to the budget for this purpose for five years.

Among the add-ons in the 1994-95 budget are those for additional media and computing equipment and services in DeBartolo Hall; for a business manager for the Snite Museum; for overseas programs to adjust for enrollment changes and exchange rates and for expanded facilities in



London; for graduate programs; for maintenance and utilities of new facilities; for an increase in grounds maintenance because of the growing size of the campus; for University Relations for the new campaign; and for library materials. The University is also adding \$100,000 to the library budget for the next three years to increase library staff salaries, which are low by regional standards.

At this point, Fr. Malloy interjected that a number of major universities are reporting substantial budget deficits. He asked what Notre Dame would do if the year ended with a \$15 million deficit. Fr. Beauchamp replied that \$15 million would be a big problem for the University. Any deficit would be covered out of the University's cash reserves, which right now are \$7 million. It would also be possible to use revenues from licensing and marketing to help cover a deficit. The University has some other reserves that are built in to cover building renewal and replacement needs, and there is a large power plant reserve. In the case of a large operating budget deficit, it might be possible to borrow against such reserves, Fr. Beauchamp said.

Dean Castellino said that he thinks Notre Dame is somewhat sheltered from such a catastrophic deficit because the University does not have a medical school struggling to recover patient costs. Not having a medical school has perhaps hurt the University in the past, he said, but it's a help today.

Prof. Swartz asked if there is a creative way of securing more money for the library rather than waiting for donors. Fr. Beauchamp replied that the University might be able to use budget add-ons plus fund raising to meet library needs over a period of time. Libraries and graduate education are two areas that merit special attention, he added. If the University can find a way to maintain sufficient discipline internally at building the budget each year, it might be possible to do some extraordinary things while still being parsimonious in overall budget building. A lot of discretionary funds have been poured into financial aid because the University simply cannot be competitive without financial subsidy. Libraries and graduate education need similar attention.

Fr. Beauchamp then talked briefly about the role of the Provost's Advisory Committee in prioritizing the needs expressed through the Colloquy and post-Colloquy studies. The objective is to meet needs insofar as possible without exceeding the total dollar goal of the next campaign. He noted that present plans call for adding about \$2 million to the annual budget each year for the next decade to cover recurring costs of the academic improvements recommended in the Colloquy studies.

Dean Castellino asked about the extent to which Notre Dame is dependent on tuition. Fr. Beauchamp replied that the dependency is high and that the main way to reduce that would be to get more of the University's operating budget covered by endowments. Though the University has \$900 million in endowments, almost all of it is for restricted purposes.

Prof. Porter said she sensed that University staff are paid very poorly. She asked if any consideration had been given to increasing staff salaries over the next few years. Fr. Beauchamp replied that the University's goal is for staff salaries to be competitive with local and regional salaries. He does not anticipate the University going beyond that in the near future. Prof. O'Meara added that the basic principle is: The University pays locally competitive salaries when the applicant pool is local. If the pool is national, as it is for faculty, the University uses a national bench mark.

The meeting adjourned at 9:40 p.m.

Respectfully submitted,

Roger A. Schmitz  
Secretary of the Academic Council

## Attachment

### Standing Committees of the Academic Council 1994-95

#### Faculty Affairs

Francis Castellino\*, Regina Coll, Edward Conlon, Dennis Doordan, Michael Francis, David Link\*, Richard McBrien\*, Anthony Michel\*, Jean Porter, Dyan Rohol\*\*, Lorry Zeugner

#### Graduate Studies

Hafiz Atassi, Gary Gutting, Nathan Hatch\*, John Keane\*, Douglas Kmiec, Robert Miller\*, John Roos, Timothy Scully, C.S.C.\*, William Shephard, Michael Sirtori\*\*, Andrew Sommese

#### Undergraduate Studies

Harold Attridge\*, Stephen Batill, Frank Bonello, Mario Borelli, Carolyn Callahan, Cornelius Delaney, Matthew Gasaway\*\*, Stacey Kielbasa\* \*\*, Eileen Kolman\*, Patricia O'Hara\*, Russell Pickett (observer), Thomas Swartz, Kathleen Maas Weigert

\* ex officio members of the Academic Council  
\*\* student members of the Academic Council



## Academic Council Minutes October 10, 1994

**Members in Attendance:** Edward A. Malloy, C.S.C., Timothy O'Meara, E. William Beauchamp, C.S.C., Roger Schmitz, Timothy Scully, C.S.C., Patricia O'Hara, Nathan Hatch, Harold Attridge, Francis Castellino, John Keane, David Link, Anthony Michel, Robert C. Miller, Richard McBrien, Stacey Kielbasa, Frank Bonello, Cornelius Delaney, Michael Francis, Gary Gutting, Jean Porter, John Roos, Thomas Swartz, Mario Borelli, William Shephard, Andrew Sommese, Hafiz Atassi, Carolyn Callahan, Edward Conlon, Douglas Kmiec, Dennis Doordan, Lorry Zeugner, Regina Coll, C.S.J., Kathleen Maas Weigert, Matthew Gasaway and Dyan Rohol (Margaret Egan substituted for Michael Sirtori)

**Observers in Attendance:** Dennis Brown, Andrea Midgett and Russell Pickett

**Guests:** John Lucey and Thomas Mueller

The meeting was opened at 3:05 p.m. with a prayer by Prof. O'Meara.

**1. Report by the chairperson of the Faculty Grievance Committee.** Prof. Fick sent word that there were no grievances last year; thus she had nothing to report to the Academic Council.

**2. Appointment of a panel of reviewers for appeals concerning alleged faculty employment discrimination based upon sex.** Prof. O'Meara announced that, in accord with the Frese settlement, after consultation with the Executive Committee he has appointed the following faculty members to the 1994-95 panel of reviewers for appeals concerning alleged faculty employment discrimination based upon sex: Ani Aprahamian, Frank Bonello, Neal Cason, Xavier Creary, Jeanne Day, Julia Knight, Michael Morris, Vera Profit and Arvind Varma.

**3. A proposal to initiate a London program for 20 engineering students.** Dean Anthony Michel, Prof. John Lucey and Prof. Thomas Mueller reported on this proposal, which had been distributed to the council prior to the meeting. (See Attachment.)

Prof. Mueller began by saying that the College of Engineering has long been aware of the University's interest in increasing the number of students in international study programs. For the last seven years the college has run a successful summer program in London; it is the only international program currently available in engineering. There is insufficient room in the engineering curriculum for foreign language courses, which limits additional international program sites. For these reasons, expanding the London program seemed logical.

Prof. Mueller said that almost all engineering graduates will either work for an international company or in some way be in contact with an international division of a company. It is therefore important to allow engineering students the experience of working in other cultures. Other engineering schools in other universities have foreign study programs, and such programs seem to be sought more and more by top students.

Engineering faculty members enthusiastically support the proposal. Their only question has been how to put the program together. During a revision of its curriculum, the Department of Aerospace and Mechanical Engineering realized that a more flexible curriculum could accommodate a semester-long London program. The London courses that would be offered, Differential Equations and Thermodynamics, are common to all areas of engineering so that the program could eventually be available to all engineering students, not just those in aerospace and mechanical programs. The college has a large number of faculty who can teach both courses, if necessary. The current plan is that the director of the program would teach one course and an adjunct at Imperial College in London would teach the other.

The budget for the program was based on several discussions between Prof. Mueller, Dr. Isabel Charles, Dean Attridge and Prof. Stacey Gutting. The college assumes that it may attract only 10 to 15 interested students the first semester, but is confident that the program will soon reach its 20 student maximum.

Prof. Lucey said that the summer London program typically has 20 to 25 students who take two technical electives and participate in a number of field trips. The students typically have been enthusiastic about the program.

Prof. O'Meara said that he brought the proposal before the Provost's Advisory Committee (PAC) to consider the financial aspects of the program. He had suggested that 11 additional students be admitted to the University to pay for the program, and he noted that since an equal number would be in London each semester, the total number of students in residence on campus would not increase. However, he told the council that this idea faced opposition by some members of PAC. The opposition was especially strong against increasing the number of University freshmen. Some members of PAC felt that if the program were funded, it should be as a regular *add-on* item in next year's budget. Prof. O'Meara asked the council to consider the more philosophical aspects of the proposal; PAC and the budget committee would consider financial aspects.

Dean Michel said that the proposal has the endorsement of the Engineering College Council. He believes that opportunities for international study will be increasingly



important for progressive engineering programs. He also believes that in the near future most other departments in the College of Engineering will want to follow the lead of the Department of Aerospace and Mechanical Engineering.

Dean Castellino expressed concern about financing, not so much for this one particular program, but for a possible explosion of international programs. He asked if engineering had considered assimilating its students into Imperial College, which would perhaps provide an even better cultural experience for them. Prof. Mueller answered that the British university calendar would not match Notre Dame's.

Fr. Malloy reminded the council of the post-Colloquy report on international studies. Dean Castellino replied that he had the report in mind, and that the University ought to have a plan on how it will approach an increasing number of foreign study programs.

Dean Michel reiterated that the engineering faculty is very enthusiastic about the proposal, which has gathered a great deal of momentum. They would like to see the proposal accepted as soon as possible. Perhaps a few students could be added to the campus enrollment to fund this proposal. Broader concerns about further increasing the number of foreign study programs could be addressed in another manner.

Prof. Bonello asked if engineering programs elsewhere have more flexibility than those at Notre Dame. Are they restricted to English-speaking countries for international study? Prof. Lucey replied that other universities are more flexible. He added that many incoming Notre Dame freshmen have several years foreign language experience and could perhaps handle a similar program in France or Germany. For now, though, the current proposal seems the best way to begin.

Dean Michel said that, looking to the future, engineering programs possibly could be imbedded into existing international programs to minimize costs. For example, the University of Innsbruck has a good microelectronics program. Perhaps Notre Dame could one day consider a cooperative arrangement with the Innsbruck program and electrical engineering.

Dean Attridge interjected that a major expansion of facilities in London must be planned within the next few years. The present University's leases there expire soon. The engineering proposal is an add-on that would stretch the current facilities to their limit. Though workable for now, eventually something will have to be done to accommodate any additional students.

Prof. Delaney asked whether a proposal of this type should have been referred to the Undergraduate Studies Committee for discussion and recommendations before being presented to the council. Fr. Malloy answered that the Executive Committee of the council ought to adjudicate which issues should be discussed in committee and which should be discussed by the council as a whole.

Fr. Beauchamp said that the current number of students in London, 160 to 180 per semester, works well. He asked if it had been considered, as an interim step, that engineering students be incorporated into the existing number of students in London, thereby not increasing the total number of students using the facilities. Dean Attridge replied that the Arts and Letters London program was started and developed by arts and letters faculty. Discussions with the College of Engineering were based on the principle that any additions to the London program would not impact negatively on arts and letters students enrolling in the program, which is already very competitive. Arts and letters is open to expanding undergraduate possibilities for international study, but they want to keep their already successful program strong.

Prof. Delaney added that many arts and letters students are greatly inconvenienced by current limits in the London program. Some students withdraw from Notre Dame, go to London through the University of Syracuse, and then reapply at Notre Dame.

Mr. Zeugner asked how the council should view the proposal in light of the post-Colloquy report on international programs. Should the program be considered as part of a package or as an individual program on its own. Fr. Malloy responded that the Academic Council is the best body to talk about the various questions that arise from the post-Colloquy report on international studies. For example, the University ought to be strongly interested in diversifying the participation of different colleges in international programs. International programs should not hinge solely on what is happening in arts and letters.

Dean Link said that a plan for dealing with proposals should be developed either by the council or a subcommittee of the council. The University should not move much farther without such a plan. However, he supported the engineering proposal because it is a small program and because it should begin as soon as possible, especially since faculty and students are eager to commit to it.

Mr. Miller asked for clarification: Would students who might eventually participate in the program from other engineering departments be offered the same courses? Prof. Lucey replied that each department would have to approve the courses. However, he felt that the courses offered in London would suit the entire college.



Prof. Swartz wondered if there would be any problem mixing arts and letters students, who must compete through a selection process for a place in London, with the engineering students who would not be so selected. He also wondered whether expanding international programs without expanding the University's enrollment base could eventually lead to the under utilization of campus facilities for all students other than freshmen. He recognized that the potential large enrollment in the Freshmen Year poses serious problems.

Prof. O'Meara said that the present London program was started several years ago by increasing the number of students on campus by the number going to London. The numbers being discussed for engineering are relatively small. Fr. Malloy added that the University has followed a rather consistent principle: Whenever a foreign studies program has been added, campus enrollment has been adjusted accordingly.

Prof. Roos asked if the present Arts and Letters London Program had reacted to the engineering proposal. Dean Attridge replied that Prof. Stacey Gutting, in particular, consulted closely with arts and letters and with engineering. Though arts and letters did not seek out the engineering program, the college thinks it is workable and will support it.

Fr. Scully said he considers it very important that the University minimize the incremental growth of its international programs at this point. The University needs to develop as comprehensive a plan as possible if it wants to see its numbers overseas doubled. There should be a strategy for how, when, and where to do that. However, he felt that the engineering plan is well designed, and he supported it. In this particular case, therefore, he would support an incremental move, though in general he does not wish to see the University creep in enrollment or program size until it has systematically considered what the impact will be in the long run.

Prof. Gutting said that though the funding involved is not a large amount, \$212,800 per year, which is the estimated cost given in the engineering proposal, is significant. He wondered how the priority of this proposal ranks relative to other possible uses of that amount, such as additional faculty positions. The proposal has some difficulties, especially with facility constraints and the meshing of arts and letters and engineering students. Prof. Borelli said that while he sees a need for a long-range plan, he cannot imagine there being a greater benefit for the cost than what engineering had proposed.

Prof. O'Meara explained that, according to the list of estimated costs given in the engineering proposal, \$150,000 of the total would go toward costs for all London students, not just engineering. Dean Attridge said the figure

represents the amount it would take for both dormitory space and adequate assembly/study space for all the students. Fr. Scully said that, nonetheless, those costs would not exist without added students. Prof. Lucey replied that it is a cost that should exist, regardless, because even without the engineering students there is not adequate living space for London students.

Mr. Miller asked for clarification: Would the \$150,000 for housing improve the quality of housing for arts and letters students and accommodate engineering students? Prof. Lucey said that would probably be true. The two existing buildings in London are fully utilized. To add engineering students, the combined programs would have to get a third building or go to an entirely different building, from which, presumably, everyone would benefit.

Prof. Callahan said that there seemed to be two trains of thought present: philosophical and practical. She affirmed the need for an international program expansion plan. She also recognized the current need that involves only a few students. She encouraged the council to look at the particular plan before them now, which she considered to be good, and to provide an opportunity to expose more students to a foreign culture.

Prof. Sommese said that he supports the proposal. He asked how many students are currently overseas and how those programs will get the money needed to expand. Prof. O'Meara replied that currently 12 percent of the University's undergraduates either are or have been in programs abroad; about 6 percent, or about 450, of the undergraduate students are away at one or both semesters during any one academic year; about 20 percent of each graduating class have been enrolled in international programs during their residence at Notre Dame. The goal is to double these figures over the next 10 years or so.

Prof. O'Meara repeated that while PAC supported the proposal philosophically, many members felt that the program should be financed as a regular part of the budget.

Fr. McBrien asked if PAC had had the same kind of sustained, wide discussion regarding the proposal that the council was currently experiencing. He felt that a proposal like this should go through a committee process, where questions could be raised and discussed and where the committee could search for answers. He asked specifically how Dean Attridge would vote on the proposal since it would have a direct impact on the existing Arts and Letters London Program.

Prof. O'Meara replied that PAC's discussion was indeed sustained and wide. He added that he did not agree with those on PAC who opposed an increase in enrollment to support the proposal. Dean Attridge replied that he is always in favor of foreign study programs. Though he was



# DOCUMENTATION

not satisfied that all intricacies had been worked out, he favored the engineering proposal.

Prof. O'Hara stated that she supports the proposal, but added that she was among those on PAC who opposed funding it through an increase in enrollment. She added that while the accretion of three students in a class seems minor, such accretions have led to the upward creep of undergraduate enrollment through the years. Problems are caused in the Freshman Year of Studies in terms of section sizes and available classes, and in Student Affairs in terms of available housing.

Dean Castellino interjected that the discussion in PAC regarding the implementation of the program centered mainly on the enrollment issue, not on alternative funding strategies, though he granted that the two subjects are strongly connected.

Ms. Kielbasa said that the Student Academic Council supported the proposal. Ms. Egan expressed her support for the proposal, adding that the intermingling of arts and letters students with engineering students in London would be a positive experience for both. Prof. Doordan also voiced his support of the proposal, based on architecture's very positive experience with an international study program. However, he expressed uncertainty about what exactly would be voted on by the Academic Council — the principle of having a program for engineering students in London, or how the program would be funded.

Prof. Porter asked if it would be appropriate for the council to refer the proposal to the Undergraduate Studies Committee. Prof. Shephard interjected that this would delay the implementation of the program by one year. Prof. Mueller added that students are waiting for an answer now so they can plan appropriately for the fall of 1995.

Dean Link said that sometimes what might be anticipated as having a negative impact can, in fact, have a positive impact. The start of the Arts and Letters London Program required that the Law School have 15 fewer students in the London building each semester. Though it was feared as being negative for the Law School, it has, in fact, strengthened it. The accommodation of the engineering students in London may now have a similar effect on the Arts and Letters London program. He said that he strongly favors more University students having a foreign experience. He urged the council to vote for the proposal and to let those who have funding responsibilities deal with how it can be accomplished.

Prof. Porter moved that the proposal be referred to the Undergraduate Studies Committee. She explained that she found the discussion baffling because there seemed to

be no clear sense of the impact of the proposed program on the existing arts and letters program, or of the method of funding. She realized that this action may delay the start of the program, but she felt that a delay might be warranted. The motion was seconded.

In the discussion that followed, Fr. Malloy asked what deadline needs to be heeded in order to avoid delaying the intended start of the program. Prof. Mueller said that students need an answer by the end of October 1994. Prof. Lucey added that October is a practical deadline; the students need to adjust their spring course schedules and they need to go through a selection process.

Dr. Weigert disagreed with Prof. Porter. She felt that the proposal had already been the subject of considerable discussion at the department, college and PAC levels, and she did not expect there to be any advantage gained by sending it to another committee. While a committee might take a broader view of the future of international expansion, that would not apply to this particular proposal.

Fr. Malloy called for a vote on the motion to send the proposal to the Undergraduate Studies Committee. The motion was defeated. He then asked Prof. O'Meara to clarify the specific proposal before the council. Prof. O'Meara said that the council should consider the principle of the proposal, not the funding of it. If the proposal is approved in this sense, he would once again discuss funding and enrollment issues with PAC.

Fr. Beauchamp said that if the proposal was approved and begun next year, there would be only two ways to pay for it: The student body would be increased, or the program would become a top priority item in next year's budget.

Prof. Delaney said that if the University were not committing the money for the proposal, the College of Engineering had no guarantee that by the end of the month the program would exist. Prof. O'Meara and Fr. Malloy agreed with him. Prof. O'Meara added that if funding were not approved, the program would not be installed at this time.

Prof. Roos said that approval by the council then would be similar to giving an authorization. The council would *authorize* the new program to take effect and others would be concerned about its funding.

Following these explanations, Fr. Malloy called the council to vote. The proposal was approved.

**4. Continuing discussion of post-Colloquy reports.** Fr. Malloy said that he wanted the council to engage in a systematic review of the post-Colloquy reports. The Executive Committee of the council recommended that the



report on architecture and the fine and performing arts be considered first. He asked Dean Attridge, who chaired the Committee on Architecture and the Fine and Performing Arts, to initiate the discussion by reviewing the key elements of the report.

Dean Attridge reminded the council that the final version of the report was submitted to them last spring, at which time several issues were raised. One discussion asked if there should be an overarching institution, school, college or other entity that would encompass all departments of the performing arts, art, art history and design, architecture, and the Snite Museum. The answer was no. The departments, at this stage of their development, are better accommodated either within their own college or in separate units, as they are now, and not as subordinate elements within a new entity.

Referring to three recommendations in Part II of the report, Dean Attridge said that the committee had some positive recommendations regarding organization. In particular, it was strongly recommended that an office be created that would coordinate artistic and cultural events. The creation of an Advisory Council for the Fine Arts was also recommended, as was the creation of a committee that would coordinate the efforts of the various units and departments.

Fr. Malloy summarized the three recommendations and asked for questions and discussion regarding the creation of an office, a potential funding issue; the creation of an Advisory Council, which normally would be done by officers or Trustees of the University; and the establishment of a permanent University committee, which would have to come through the Academic Council.

Prof. Hatch asked what would be the domain and interests of an Advisory Council for the Fine Arts. Dean Attridge replied that it would give the fine arts a somewhat higher profile and help form the dimensions of various programs. Prof. Hatch added that an Advisory Council perhaps could advise the students on their performance dimensions, development and growth.

Fr. Malloy reminded the council that there is a cost to the University in hosting Advisory Councils. He acknowledged that the councils serve the University well. They add focus, they bring in people who are very knowledgeable and current about specific areas of academic interest, and they often add to the University's list of benefactors. But it is costly to host, entertain and bring Advisory Councils to the University.

Dean Link asked if expanding the Snite Advisory Council to include people appropriate for the performing arts had been considered. He thought it an attractive idea for

such groups to meet together, and it could help reduce expenses. Dean Attridge replied that that was an option, though it would have to be done in such a way as not to make other units subordinate to the Snite. Mr. Miller said that based on his experience, there could be unhealthy competition between a Fine Arts Council and a Snite Council. Dean Attridge said that the thrust of the report was to coordinate more closely all of the units rather than set up competitive structures among them.

Regarding the recommendation for a permanent University committee, Fr. Malloy said that if establishing such a committee seemed the right thing to do, he would ask the Executive Committee to return to the council with a formal motion. Right now, he said, the council was simply reacting to the recommendation that a permanent committee be established.

Referring to the curriculum recommendations in Part III of the report, Dean Attridge reported that the committee regards the monitoring of curriculum and requirements at the undergraduate and masters level of the various arts units and departments as adequate. Unless there is a major reduction of the University's core curriculum for undergraduate students, the committee felt that the current fine arts requirement should be retained. The committee endorsed the development of graduate programs, particularly in the Department of Music, which seemed most ready to move in that direction. The final recommendation in Part III was another exhortation for collaboration on curricular matters among the various arts units.

Fr. Malloy said that it was important to move the recommendation concerning graduate development to the Graduate Studies Committee of the council. Dean Attridge replied that the recommendation for doctoral studies in music was not new. It was brought forward during the Colloquy study, and it has broad support within the College of Arts and Letters. Prof. Roos added that a chief interest of the Graduate Studies Committee of the council is to engage regularly in discussions of the future possible development of doctoral programs.

Commenting in general, Prof. O'Meara said that certain specific recommendations would have to come to the council for discussion before they could be implemented. He did not see acceptance of the committee's report as a whole as the council's current task.

Fr. Malloy added that it would be dangerous simply to give approval to each of this committee's recommendations in isolation from other post-Colloquy reports. He urged the council to decide now what would be the next step for the recommendations — which of them should be referred to PAC for further discussion, which should go to the officers and so on.



# DOCUMENTATION

Dean Attridge said that follow-up discussions of the committee's recommendations regarding graduate programs should take place in the Graduate Council. Prof. Hatch remarked that the issue would probably be discussed by two groups, the Graduate Studies Committee of the Academic Council and the Graduate Council.

Referring next to Part IV of the report, Dean Attridge reported that the highest priority item regarding facilities is the development of the Marie DeBartolo Center for the Performing Arts. Developing a doctoral program, expanding undergraduate programs, having appropriate space for instruments, providing appropriate lighting — all depend on the new facility.

Dean Attridge continued his report by focusing on the recommendations pertaining to students. Undergraduate merit scholarships, recommended by the committee, were a controversial issue that was discussed during the Colloquy process and discussed intensively by the committee itself. The committee recommends that there be endowed tuition scholarships in amounts up to \$5,000. Though the scholarships would largely be symbolic, they would help attract talented musicians and budding artists.

Fr. Malloy asked the Undergraduate Studies Committee of the council to consider in greater detail the issue of merit scholarships, especially in light of material that was presented to the council last year by Kevin Rooney and Joe Russo. He asked the Undergraduate Studies Committee to return to the council with a framework for a more thorough discussion of the matter. Currently, there is no consensus in favor of merit scholarships, as opposed to need-based scholarships, among the officers of the University, and there has been little support from the Trustees. The final report of the Colloquy recommended further discussion of the issue. Though in this particular case merit scholarships are linked with the fine arts, further discussion could be applicable for other groups that might ask for them.

Fr. Malloy asked Prof. Hatch how the establishment of a doctoral program in music would fit in with his sense of Graduate School needs. Prof. Hatch replied that he felt the recommendation to be very much in concert with Colloquy recommendations. Fr. Malloy said that those recommendations had already been built into fund raising. He wondered if increases in the operating budget might be used to address specific goals — as he had proposed in his recent address to the faculty.

Dean Attridge mentioned that one of the large-scale recommendations of the committee's report was that financial support for performances be increased dramatically, either within departments or at the University level. Specifically, it was recommended that endowed funds support visiting artists in various departments, a visiting-art-

ist series in music, and major performance events, such as opera, that could be brought to campus when appropriate facilities are available. It was also suggested that a fine arts fee for students be considered. This fee would be channeled into the departments to support visiting artists. All students who went to a performance school within the University would pay a minimal fee and would in turn receive automatic tickets to any performances that they would like to attend.

Fr. Malloy requested that the Undergraduate Studies Committee explore the idea of a Fine Arts fee in greater detail. Prof. O'Meara interjected that there may be no problem with this particular fee, but it might become an issue when other University groups began requesting similar fees for computer use, chemical use, etc.

Next, Dean Attridge moved to the final set of committee recommendations concerning library and equipment needs for the fine arts and architecture. He said that the recommendations in the report of the Ad Hoc Committee on University Libraries embrace the library needs expressed by his committee. He added, however, that the Department of Art, Art History and Design has major equipment needs. Communication and Theatre needs a capital outlay to maintain its materials, particularly in expensive medieval productions, and the Snite Museum needs equipment. Mr. Miller asked if much of the equipment need would be included in the building project costs of the new performing arts facility. Fr. Beauchamp replied that he does not know of the inclusion of any equipment in the new building project. Dean Attridge clarified that the committee's report was for equipment not included in the new facility. Some departments have equipment that can be moved into the new facility when it is ready, while other equipment will have to be purchased for the building.

Prof. O'Meara commented that recommendations in the committee's report seemed to be consistent with items listed in the table at the end of the report by the Colloquy Committee on Academic Life. In reviews of the post-Colloquy reports by the council and by PAC, he said, it is important to pay attention to the compatibility between the post-Colloquy recommendations and that table, which is already serving as a template for the next campaign. Any adjustments necessitated by the post-Colloquy reports should be made soon and presumably without major changes in the total figures.

After thanking Dean Attridge and other committee members for their work, Fr. Malloy reviewed what would happen next: PAC would refine in detail budgetary items and costs, for fund raising purposes and for operating budget discussions. Specific issues that required further discussion would be considered by appropriate standing committees of the council.



Fr. Scully also asked about Academic Articles that would have to be changed in the Faculty Handbook. Fr. Malloy said that either council committees or the Executive Committee would bring such changes to the council, for approval or discussion, in written form. This procedure would be followed for each report. Prof. O'Meara suggested that the chair of each post-Colloquy committee be given the responsibility of listing the items that require changes in the Academic Articles.

5. **Other items.** Dr. Weigert asked if the various standing committees of the council would briefly state their agendas. Prof. Delaney reported that the Undergraduate Studies Committee expects to devote most of its time to dealing with matters that arise from the post-Colloquy Curriculum Committee Report, which is yet to be finalized. The committee would also like to attend to intellectual life questions, and would like some updating on last year's recommendation for the Center for Teaching and Learning. Those goals will have to be prioritized with other items that are specifically assigned to the committee by the council.

Prof. Roos said that the Graduate Studies Committee will need to pay special attention to the post-Colloquy reports by the University Committee on Research, Scholarship and Infrastructure and by the Ad Hoc Committee on University Libraries. The committee thought it might be appropriate to discuss some aspects of international studies, and would like to meet with Dean Keane to discuss the development of a doctoral program in business. Prof. Roos added that the committee was beginning to get a sense of the plans for a doctoral program in music.

The Committee on Faculty Affairs had not yet met this year to consider an agenda.

The meeting was adjourned at 5 p.m.

Respectfully submitted,

Roger A. Schmitz  
Secretary of the Academic Council

## Attachment

### Proposal for an Academic Year Semester in London for Mechanical and Aerospace Engineers

*Submitted by Dr. John Lucey and Dr. Thomas J. Mueller,  
Department of Aerospace and Mechanical Engineering,  
May 23, 1994 (Revised June 29, 1994)*

#### Rationale for an Engineering Program in London

Since the end of World War II we in the United States have witnessed the growing independence of peoples and nations. Advances in transportation and communications in the last three decades have transformed the world into one large trading village. This globalization plus the rapid economic growth in Western Europe and Asia have led to the explosive increase of multinational corporations as well as upheavals in political and economic order in Eastern Europe and Latin America. All of these events have focused attention on the need for engineering professionals who are able to understand and succeed in cultures other than their own. Although Notre Dame has had international study programs during the academic year in the Colleges of Arts and Letters, Business and Law for many years, there has been no such program in the College of Engineering. International study programs for engineering undergraduates have, however, been in existence at other major universities for over 20 years. It is clear from talking to high school and college students that they fully realize what has happened in their lifetime regarding the globalization of business and industry. A result of this is that universities that do not offer international study programs for their engineering students will become less desirable for the top notch students we seek at Notre Dame. Furthermore, educators widely agree that international educational experiences not only help in recruitment and retention of top students, and enrich the curriculum but also enhance the institution's status and global perspective. Among the results of such programs are graduates who possess an expanded world view and international experience which opens new career possibilities.

A program in London will utilize experience gained with the Engineering Summer London Program which began seven years ago. Unlike the summer program, a semester program will be affordable by all students as a part of their normal educational expense. England is particularly suited to an engineering program because of the lack of a language requirement in the engineering curriculum makes a program in other countries more difficult to implement and the availability, in England, of unique technological facilities such as the Channel Tunnel, the Thames Flood Barrier, and the British Nuclear Fuels reprocessing facility. The students will also be able to visit several industrial facilities to observe and discuss the practice of engineering within the United Kingdom and the evolving European community.



# DOCUMENTATION

## ACADEMICS

Students would take two engineering courses (six credit hours) and from nine to twelve hours of humanities courses. The recently revised Mechanical Engineering and Aerospace Engineering curricula are flexible enough to allow a student, with some planning, to participate in the London program and graduate with his/her incoming class. The current curriculum for each degree program and the modifications to accommodate a London program in the fifth semester, are attached. The selection criteria for engineering students will be the same as for arts and letters students. The screening and selection process will be done by the engineering faculty and staff.

One engineering course will be taught by a regular Notre Dame faculty member who will also serve as program director. The other engineering course will be taught by an adjunct faculty member from London. Informal contacts with Imperial College indicate the availability of well qualified faculty for the second engineering course. If section sizes are to be maintained at current levels, it will be necessary to offer and staff no more than three additional sections of humanities courses.

## FACILITIES

With the addition of a classroom and seminar room at the Notre Dame Centre it is possible to accommodate 20 undergraduate students in the Spring or Fall semester. Additional housing will have to be acquired, preferably near the existing housing at 3/34 Leinster Gardens, Bayswater. Conversation with Peter Lowy of Vienna Hotels who manages the present housing indicates that this is not a significant problem. The Engineering and Arts and Letters students will be completely integrated in London as they are in the dorms at Notre Dame. Accommodations for the Notre Dame faculty member, likewise, should be readily obtainable.

## FINANCES

A rough estimate of associated expenses follows. Assumptions include:

1. Engineering Director teaching one course and managing engineering aspects of program.
2. Part time instructor for one engineering course.
3. Engineering program shares office staff with other programs.
4. Housing costs are based on financing the engineering program and expansion of housing (i.e., living space and social space) for the entire group of students in London.
5. There will be a one time expense for additional computers, possibly five additional Macs with printer and accessories, approximately \$20,000; not included in cost estimates given. Proposals will be sent to several companies to help raise these funds.
6. Salary for the Engineering Director (about \$30,000) will be in the Aerospace and Mechanical Engineering budget; not included in following cost estimate.

## New Cost Developed in Conjunction with Arts and Letters Program Office

Administrative Assistance (part time person); Included in facilities cost	
Student Housing Costs (see item 4)	\$150,000
Student Aides	\$1,000
Office Expense (Phone, Xerox, etc.)	\$5,000
Director's Flat	\$10,000
Council tax for Director's Flat	\$1,300
Transportation for 20 students	\$11,000
Library passes	\$1,000
Meal Money for 20 students @ \$650 each	\$13,000
Tours and Meal Events	\$2,000
Faculty Transportation	\$1,500
Two Arts and Letters Instructors and One Engineering Instructor (3 @ \$5000 each)	\$15,000
Benefits for British Faculty	\$2,000
<b>TOTAL</b>	<b>\$212,800</b>

We recommend that the cost of this program be financed by the admission of eleven (11) additional students beginning with the freshman class of 1995.

## The Need for Immediate Action

In order to begin the proposed program in London in the Fall of 1995, planning for both faculty and the recruitment of students will have to begin this August. Our returning sophomores in both Mechanical and Aerospace Engineering should be advised that a program in London is likely for Fall 1995. Past experience indicates that a letter should be sent to these students before they return to Notre Dame at the end of August. This provides the necessary time for the student to talk this program over with his/her parents. With PAC's permission, this letter can be sent early in August. A faculty member must also be recruited for this program. While this will not be a problem, advanced planning is absolutely necessary.

## Mechanical Engineering London Program

<b>First Semester</b>	
Math 125 Calc I	4
Chem 115 Gen Chem I	3
Phys 127 Gen Phys I	3.5
Hist or Soc Sci/EG 120	3
Engl 109/Fr. Sem. 180	3
Phys Ed	<u>0</u>
	16.5
<b>Second Semester</b>	
Math 126 Calc II	4
Chem 118 Gen Chem II	4
Chem 118L Chem Lab	0
Phys 128 Gen Phys II	3.5
EG 120/Hist or Soc Sci	3
Fr. Sem. 180/Engl 109	3
Phys Ed	<u>0</u>
	17.5



# DOCUMENTATION

## Third Semester

Math 225 Calc III	3.5
Phys 229 Phys III	3.5
ME 225 Mech I	3
ME 241 Engr Graphics	3
Theology/Philosophy	<u>3</u>
	16

## Fourth Semester

Math 226 Calc IV	3.5
MSE 225 Materials Science	3
ME 226 Mech II	3
ME/CE 236 Mech of Solids	3
ME 236L Mech Solids Lab	1
Philosophy/Theology	<u>3</u>
	16.5

## Fifth Semester (London)

Math 325 Differential Equations	3
ME 327 Thermodynamics	3
Literature/Fine Arts	3
History/Soc Sci Elective	3
Theology/Philosophy	<u>3</u>
	15

## Sixth Semester

ME 334 Fluid Mechanics	3
ME 334L Fluid Mechanics Lab	1
ME 335 Inter Dynamics	3
ME 437 Controls	3
ME Technical Elective	3
Technical Elective	3
Philosophy/Theology	<u>3</u>
	19

## Seventh Semester

EE 222 Electrical Science	3
ME 331 Measurement Lab	3
ME 339 Intro to Design	3
ME 439 Heat Transfer	3
ME 470 Design Project/ME Technical Elective	3
ME Technical Elective	<u>3</u>
	18

## Eighth Semester

EE 232 Intro to Electronic Circuits	4
EE 232L Electronics Lab	0
ME Technical Elective/ME 470 Senior Design Project	3
ME Technical Elective	3
Technical Elective	3
Technical Elective	<u>3</u>
	16

TOTAL CREDITS 134.5

## Aerospace Engineering London Program

### First Semester

Math 125 Calc I	4
Chem 115 Gen Chem I	3
Phys 127 Gen Phys I	3.5
Hist or Soc Sci/EG 120	3
Engl 109/Fr. Sem. 180	3
Phys Ed	<u>0</u>
	16.5

## Second Semester

Math 126 Calc II	4
Chem 118 Gen Chem II	4
Chem 118L Chem Lab	0
Phys 128 Gen Phys II	3.5
EG 120/Hist or Soc Sci	3
Fr. Sem. 180/Engl 109	3
Phys Ed	<u>0</u>
	17.5

## Third Semester

Math 225 Calc III	3.5
Phys 229 Phys III	3.5
ME 225 Mech I	3
AE 240 Intro to Aeronautics	3
Theology/Philosophy	<u>3</u>
	16

## Fourth Semester

Math 226 Calc IV	3.5
ME 226 Mech II	3
ME 334 Fluid Mechanics*	3
AE 250 Techniques of Measurement and Data Analysis	2
ME/CE 236 Mech of Solids	3
Philosophy/Theology	<u>3</u>
	17.5

## Fifth Semester (London)

Math 325 Differential Equations	3
ME 327 Thermodynamics	3
Literature/Fine Arts	3
History/Soc Sci Elective	3
Theology/Philosophy	<u>3</u>
	15

## Sixth Semester

AE 498 Special Topics in Aerospace	1
AE 366 Orbital Mechanics	3
AE 360 Aerodynamics II	3
AE 342 Aerodynamics Laboratory	3
ME 437 Controls	3
Aerospace Technical Elective	3
Philosophy/Theology	<u>3</u>
	19

## Seventh Semester

AE 440 Flight Mechanics/Design	3
AE 444 Aerospace Dynamics	3
AE 454 Propulsion	3
EE 222 Electrical Science	3
Fluids/Thermal Elective	3
AE 346 Aerospace Structures	<u>3</u>
	18

## Eighth Semester

AE 441 Aero Design	4
ME 439 Heat Transfer	3
Aerospace Technical Elective	3
Technical Elective	3
Materials/Structures Elective	<u>3</u>
	16

TOTAL CREDITS 135.5


\*May be used as an elective if student does not go to London.



## Faculty Senate Journal November 9, 1994

The chair, Rev. Richard P. McBrien, called the meeting to order in room 202 of the Center for Continuing Education at 7:02 p.m. and asked Professor Laura Bayard to pray. The October journal having been previously distributed, McBrien asked for corrections or emendations. Several typographical errors were noted. Professor Richard Sheehan asked about the wording of one section; the secretary revised it to clarify the meaning. The senate then voted to accept the journal as revised.

The chair's report is printed as Appendix A of this journal. Sheehan asked about McBrien's comment on the Faculty Board in Control of Athletics; it has been revising its procedures for two years, and this seemed long enough to him. Can't the senate push this more quickly? McBrien responded that the provost has indicated that the report will be forthcoming early in 1995, at which time the Academic Council will discuss it, along with the resolutions the senate has presented on this topic, probably the least popular subject in the Academic Council. The chair assured the senate he will keep tabs on it.

 The senate then dissolved itself into a quasi committee of the whole for the purpose of discussing the president's October visit to the senate for a stated period of time. This was to allow for informal discussion of the topic at hand without reference to a pending motion. The senate then went into a quasi committee of the whole, until 7:45 p.m.

Professor David Ruccio began the discussion by remarking that he had wanted this kind of opportunity to talk among ourselves about the role of the senate in view of the president's comments, and to talk about what he had said and had not said. As senators we were representatives of the faculty and we came to decisions for the faculty; on all other Notre Dame committees we were individuals. The senate was different. On point number two, he could not speak with any authority about some comments he had heard in regard to certain misstatements the president may have made. Professor Patrick Sullivan, C.S.C., said the president on several occasions recently, including in his faculty address and in his conversation with the senate, had referred to his service as a vice president of the University; to Sullivan's memory, Malloy was associate provost but not vice president. Does anyone recall precisely? Professor Edward Vasta believed the title of vice president and associate provost had existed here for years, but he was also unsure if Malloy had held it. McBrien said Professor Roger Schmitz had held the title, but not Fr. Malloy.

Professor Kathleen Biddick was struck by the mismatch of perceptions between what the president saw the senate doing, and what the senate saw itself doing. In a sense he proposed a "lay pastoral role" for the senate (teaching evaluation, hierarchy, etc.), but saw the senate now as limited to politics and grievances/benefits. He seemed simply to erase much of what the senate had done over the years. On issues like affirmative action, curriculum, TCE's, faculty have a role, and the senate does too, in fact a strong one. This is a perception problem and will be difficult to deal with. Professor William Eagan added that on the issue of affirmative action the onus should be on the department chairs to lead, and they are appointed by the administration.

It should not have been surprising to anyone that the president would advocate a different role for the senate, according to Porter. The senate had been challenging him for some years, and his unhappiness may be evidence that the senate was doing something right. It may have flaws, but it was the nearest thing Notre Dame has for formulation and expression of faculty opinion. Other bodies have important roles, but the senate's is very specific and it should not be sidetracked into a "pastoral" role. Further, she was confused by two points the president had made. First, she was amazed that the president did not know what assurances had been given to Rev. Oliver Williams, C.S.C., as far as notice of his dismissal terms was concerned. Second, had he spoken to all of the members of the faculty athletic board? Sheehan was also concerned about that point. He had talked to several members of the board who said the president had not met individually with them. Rev. William Beauchamp, C.S.C., chair of the board, certainly had done this, but not Fr. Malloy. What Sheehan called "trivialization of the senate" would ultimately lead to a loss of credibility for the president on major issues. The issues the senate focuses on were not simply benefits and grievances. The senate has been proactive; our compensation report has emphasized our relative high standing. We should focus on the role of the faculty in University governance, not the local option income tax. The president seemed to be saying that we can influence local government but not Notre Dame governance. His pointed reference to "where the action is" — in the Academic Council and PAC but not in the senate — was an effective trivialization of the senate's legitimate role, and that was bothersome. Professor Mario Borelli echoed Sheehan's comments.

Professor Randall Zachman felt that the senate was being effectively locked out by the president's comments. He has told the faculty where the action is, and it's not in the senate. It was almost as if he had said the senate was out of the loop. Does he believe this? It would be worth asking for clarification on this.



Porter returned to the dismissal of Fr. Williams. Since the president's comments on this issue were so at variance with Williams's memory of the events, would it be appropriate to let Williams know what the president had said and ask for his further comments? McBrien said that, if the senate agreed, he would send the October journal to Fr. Williams with an invitation to him to respond either in writing or in person. Since there was no objection voiced, the chair will follow this course. Eagan thought the most critical point in the October discussion was the president's lack of response to Professor Michael Detlefsen's remarks in defense of the senate's role vis a vis the administration.

Professor Edward Vasta noted that the senate had rarely used its power to mobilize faculty opinion. Three years ago, the senate did and brought the administration around to prevent bad publicity. But the senate can and should do more: boycotting dinners, faculty addresses, etc. Among the faculty, the senate has not been and is not now a respected and important body. It was time for the senate to regain the confidence of the faculty by being political, coolheaded and firm, and by recognizing the area of governance where the senate's role was and not overstep it. He felt the senate's complaint over the Scully appointment was not the senate's business; it was the administration's business and did not violate any line in the Academic Articles. Detlefsen disagreed with Vasta: There was a violation of the articles and the administration had to ask for a retroactive change to make the appointment legal.

Ruccio believed he never got an answer to his question to the president about what Fr. Williams had said was a "crisis" situation. The president said there was no crisis and challenged Fr. Williams' recollection. Ruccio still wanted to know what the rush was all about, and asked senators if anyone knew the answer. Borelli did not know the exact answer, but reported what Fr. Williams had told him: "Mario, you don't know the half of it."

The time for this discussion having expired, the senate resumed its session. The next item on the agenda was committee meetings, and the senate recessed for these.

When the senate resumed its meeting, it took up an executive committee resolution on athletics. Professor Ava Collins introduced it (no second needed) by saying it contained nothing new, but was intended to flesh out the changes suggested in the senate's resolution on the faculty board passed on September 7, 1994. Vasta commended the executive committee for clarifying how elected faculty members should comprise a majority of the board and by making the director of athletics an ex officio member without a vote. These changes will support the efforts of the elected faculty already on the board. The chair said the senate's action would go before

the Academic Council early in 1995. Professor John Broderick noted that the president in his October remarks strongly endorsed keeping the executive vice president as chair of the board, the subject of an earlier senate resolution. For Professor Stephen Batill the issue at the moment was to have elected faculty members constitute a majority of the board, but he wondered if there were enough faculty members knowledgeable enough to serve. The chair ruled that issue not germane to the discussion at this meeting, but only discussion of the implementation of what was previously approved would be allowed.

Professor Carolyn Callahan asked why not let the athletic director have a vote? If this recommendation was not part of the AAUP or Knight Commission guidelines which the senate used to justify its earlier resolution, wouldn't it be prudent to maintain that justification and not go beyond those guidelines? Sheehan reported that Colloquy discussions had also looked at this issue and came to no conclusion. But if the faculty board was truly an "oversight board," then to have the athletic director voting on matters in his own department would be a conflict of interest. However, the athletic director should serve as an ex officio member without a vote because he would bring extensive knowledge to the board's discussions as an important resource person. Callahan wondered why Notre Dame would want to have a unique situation where the athletic director would not have a vote; it seemed to her that no other school in Division 1-A operated this way. Sheehan responded that the current athletic director has always referred to Notre Dame as a special place. While he recognized Callahan's point, still it was a question of oversight. These changes the senate has proposed and is proposing may make the agenda less weighty and more modest, and this would be a cost. But it would be worth it to have the agenda controlled by elected faculty. Professor Neil Delaney believed the senate's earlier work had the force of the AAUP and Knight Commission behind it; stripping the athletic director of his vote would not. Sullivan called the question and Professor Henry Weinfield seconded. The senate voted 18-14 to continue the discussion.

Porter proposed to amend the resolution by striking the "a" clause in the "resolved" section, and Sullivan seconded. The senate then discussed the Porter amendment. She introduced it to try to clear up what seemed to be a sticking point in the original resolution. Borelli asked if the Knight Commission had a guideline on this, and Vasta responded that it had no specific reference on this point. Ruccio spoke against the amendment. The appropriate place to debate this was the Academic Council; they have the ultimate power to do this. But there is some reason to pass on this resolution intact to the council, to express our deep concern on this point. Sheehan agreed with Delaney; he would rather have the force with us.



Vasta said he and Professor Jerry Wei had spoken to several board members who have expressed concern about the athletic director voting. The principle Vasta urged was that academics should not be subordinate to athletics. The important issue was the change in the number of elected faculty members to constitute a majority. So, even if the athletic director retained a vote, if the other change was accepted, the elected faculty would still constitute a majority. Sullivan pointed out that the senate, to gain credibility, had to do its own homework and had to base its decisions on proper evidence, whether AAUP, Knight or peer institutions. This change did not measure up, and the amendment striking it should be passed.

The senate voted on the Porter amendment. It passed 34-2. The amended resolution passed 33-1 with two abstentions. The approved resolution is printed as Appendix B of this journal.

## STANDING COMMITTEES

1. **Academic Affairs** — Detlefsen, chair, said the committee will report to the senate by March on the grievance/appeals process at Notre Dame.
2. **Administration** — Porter, chair, said her committee will move a resolution later in this meeting, under "new business" in regard to the senate's earlier discussion of the president's October visit.
3. **Benefits** — the chair, Professor Supriyo Bandyopadhyay, reported three items of business. First, Eagan and one other volunteer will draw up a survey to be sent to retirees in regard to benefits; this survey will be presented for approval to the senate first. Second, the director of human resources, Roger Mullins, has expressed an interest in scheduling a conversation with the senate, as he has done in past years; the senate chair said any such request should come to him first, and will have to be approved by the executive committee after discussion. Third, Professor Paul Conway and Borelli will draw up a survey on the first year's experience with the preferred provider option (PPO); again the senate will get the survey first for approval.
4. **Student Affairs** — Sullivan, chair, reported on three items. First, is financial aid here adequate for the needs of our students? The committee will look for the facts. Second, the committee was concerned about the issue of "stall graffiti," the demeaning, hostile, harassing remarks posted on bathroom walls in some residence halls and the library; a subcommittee will investigate and report back. Third, time did not allow committee discussion of the recent verdict in the Rita case.
5. **Senate Self-Study Committee** — McBrien reported that the Lopez report will be forthcoming this week, and

perhaps the committee will be able to move forward with its work in December.

## NEW BUSINESS

Porter, on behalf of the Administration Committee, moved a resolution (no second needed) of formal response to the president's remarks to the senate in October. The committee approved this resolution 7-1, and saw it as an effective and efficient way to answer the president's comments and suggestions. The ad-hoc committee charged with drafting the response should submit its work to the senate by February 9, 1995, at which time the senate would decide what to do with it. It would not be bound to transmit the report, endorse it or print it.

Ruccio spoke against the resolution, saying the most effective response to the president's five limiting suggestions was silence; they should die an appropriate death. Sheehan disagreed, saying that if we expect the president to take the senate seriously, the senate should take the president's suggestions seriously. He deserved a formal response, and Sheehan hoped the senate's answer to his fourth and fifth points was, "It would not be fruitful to undertake these." We should respond in some fashion. Biddick agreed with Porter and Sheehan, saying this kind of response was a way to get at his misperceptions of the role of the senate; we would be defining the senate's role by the kind of response. Borelli thought the president deserved the courtesy of a response.

The senate voted to approve the resolution 35-3. The chair asked for volunteers to serve on the ad-hoc committee to draft a response to the president. The resolution is printed as Appendix C of the journal.

Borelli moved to adjourn, Porter seconded and the senate agreed to adjourn at 9:20 p.m.

**Present:** Bandyopadhyay, Batill, Bayard, Biddick, Borelli, A., Borelli, M., Bottei, Brennecke, Broderick, Brownstein, Callahan, Coll, Collins, A., Delaney, Detlefsen, Eagan, Esch, Gaillard, Garg, Gundlach, Hamburg, Huang, Lombardo, McBrien, Hartland, Munzel, Pickett, Porter, Radner, Ruccio, Sayers, Sheehan, Simon, Stevenson, Sullivan, Vasta, Wei, Weinfield, Zachman, Orsagh, Student Government Representative

**Absent:** Borkowski, Bradley, Collins, J., Doordan, Hyde, Mason, Rathburn

**Excused:** Bender, Conway, Jordan, Miscamble, Rai, Sommesse, Tomasch

Respectfully submitted,

Peter J. Lombardo Jr.  
Secretary



## Appendix A

Chair's Report  
November 9, 1994

1. Welcome to new Senate members: **Hilary Radner** (Department of Communication and Theatre); **Neil Delaney** (Department of Philosophy), *ex officio* representative from the College of Arts and Letters from the Academic Council; **Dennis Doordan** (School of Architecture); and **Gregory Hartland** (Department of Chemistry and Biochemistry in the College of Science) — all serving one-year terms.
2. The first Notre Dame Forum on Academic Life seems to have been a success. Many expressed appreciation for the presentations by Profs. Philip Gleason (History) and John Robinson (Law) on the development of Notre Dame as a university, and for the discussion that followed. The next Forum will be held on December 7, 7:30 p.m., CCE Auditorium. The topic is the role of science in a Catholic university and the speakers are Prof. Jack Furdyna (Department of Physics) and Prof. Maureen Hallinan (Department of Sociology).
3. The Faculty Senate's Executive Committee will meet with six officers of the university for two hours on December 2 to discuss matters of common interest. The six officers will be the President, the Provost, the Executive Vice President, the two Vice Presidents in the Provost's office, and the Vice President for Graduate Studies and Research. This meeting is at the invitation of the President to resume a traditional practice that had lapsed in recent years. I will have a report at our next Senate meeting on December 6.
4. Two members of the Faculty Senate have been invited by the Provost to participate in a discussion of promotion, tenure, and appeal procedures with the Provost's Advisory Committee (PAC) on December 7. This is by way of a follow-up to a motion passed by the Faculty Senate in the last academic year calling for a review of such procedures. The two senators are Prof. Jean Porter, chair of the Standing Committee on Administration of the University (from which the original resolution arose) and Prof. David Ruccio, a member of last year's Administration Committee and currently a member of the Standing Committee on Academic Affairs.
5. On behalf of the Executive Committee I have written a letter to the Provost regarding faculty review of deans, with special reference to the recent reviews done in the colleges of Engineering and Business Administration. The Executive Committee is seeking copies of the reviews to determine for itself whether allegations of significant discrepancies between the review and subsequent adminis-

trative action taken with regard to the College of Engineering are true, and in light of the relatively long delay between the completion of the review in Business and administrative action by the Provost. The letter to the Provost points out that if, for reasons of confidentiality, these reviews cannot be shared with the Faculty Senate, the Senate may decide to conduct its own survey of the faculties of both colleges. I have subsequently discussed the matter with the Provost and he asks, given the sensitivity of the matter, that we defer any action until the second semester.

6. The resolution passed by the Faculty Senate on September 7 regarding faculty input into the appointment and review of the two Vice Presidents in the Provost's office has been under consideration by the Executive Committee of the Academic Council, of which the Chair of the Faculty Senate is a member, and I have been assured by the Provost, who chairs the Academic Council's Executive Committee, that it will be placed on the agenda before the Christmas vacation, that is, at either or both of the November 30 and December 13 meetings of the Academic Council.
7. Because the Faculty Board in Control of Athletics is currently working on a review of its procedures, it seems reasonable for the Faculty Senate not to press for immediate action by the Academic Council on the resolution on intercollegiate athletics passed at our September 7 meeting. However, I have been assured by the Provost that the Faculty Board's work will be completed early in the new calendar year and that its report will be made available to the Senate. Thereafter, the Academic Council can consider both the report and the Senate's resolution together. You will note that there is a second resolution on intercollegiate athletics to be proposed by the Executive Committee this evening. The resolution simply proposes new wording in the Academic Articles that would be required to implement a principle already approved by the Senate in the previous resolution of September 7; namely, that elected faculty members should constitute a majority of the membership of the Faculty Board in Control of Athletics. If passed, the second resolution will be added to the first and forwarded to the Executive Committee of the Academic Council, for consideration early in the new calendar year.
8. Prof. George Lopez, a former member of the Faculty Senate who is currently on sabbatical leave, promises to have a copy of his report on faculty senates in peer institutions by the end of this week. I will ask the Ad Hoc Committee on the Senate Self-Study to examine the Lopez report immediately and to recommend to the Executive Committee whatever action the Faculty Senate should take on the matter.



## Appendix B

### Executive Committee Resolution on Athletics

Whereas the Faculty Senate has already recommended that the Academic Council amend the Academic Articles (IV, j) to provide that "a member elected annually from the elected faculty" serve as chair of the Faculty Board in Control of Athletics in lieu of the Executive Vice President, as presently stipulated; and

Whereas the same Faculty Senate resolution recommended that a new paragraph 26.4 be added in a new Article 26 of *The Academic Code*, a portion of which article 26.4 stipulates that "elected faculty members comprise a majority" of the Faculty Board in Control of Athletics; and

Whereas the present Academic Articles of the University (IV, j) stipulate that the Faculty Board in Control of Athletics is comprised of twelve members, only five of whom are elected faculty members; be it therefore

Resolved that the Faculty Senate recommends to the Academic Council that paragraph one of Article IV, j of the Academic Articles of the University be amended as follows: (a) in line two, in lieu of "nine" substitute "ten"; (b) in line four, after the word "faculty," add the words "two elected at large from the faculty"; (c) in line four, in lieu of "three" substitute "two."

### Article IV, Subsection (j) Faculty Board in Control of Athletics

The Faculty Board in Control of Athletics consists of the Executive Vice President, [who chairs the Board,]\* the Vice President for Student Affairs, the Director of Athletics, and nine [ten] other members, one elected by and from the faculty of each College, one elected by and from the Law School faculty, [two elected at large from the faculty,] three [two] appointed by the President from the faculty and one appointed annually by the President from the student body. Elected and appointed faculty members serve staggered, three-year terms and no such faculty member may serve more than two consecutive terms. [The Board is chaired by a member elected annually from the elected faculty.]\*

[\*Proposed amendment of Article IV,j, already approved by the Faculty Senate on September 7, 1994.]

## Appendix C

Whereas, the Faculty Senate was challenged by President Malloy in his October 10, 1994, remarks to this body to address five particular concerns, and

Whereas we believe that the President deserves the courtesy of a formal response,

Be it resolved that the Faculty Senate intends to respond formally to the President's five suggested "areas of our common life that the Senate might make a unique contribution to";

— that the chair of the Faculty Senate is hereby instructed to appoint an ad hoc committee to draft a formal reply to these five suggestions,

— and that this reply be submitted to this body for consideration and possible approval no later than the regularly scheduled meeting of February 9, 1995.



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

## Current Publications and Other Scholarly Works

Beginning with this issue, we are implementing several changes in the citation styles used for faculty publications. Two of the more noticeable changes are a new style of capitalization for titles and a new format for articles published in books. We hope that the new citation styles, which conform to The Chicago Manual of Style, will improve the clarity and consistency of faculty publication citations.

Current publications should be mailed to the Office of Research of the Graduate School, Room 312, Main Building.

### COLLEGE OF ARTS AND LETTERS

#### Art, Art History and Design

Dibble, Jean A.

- J. A. Dibble. 1994. Another kind of examination. 69th Annual International Competition. Philadelphia, Pa.: The Print Club, Center for Prints and Photographs. Xerographic print.

#### Communication and Theatre

Rutsky, Randolph L.

- R. L. Rutsky. 1993. The mediation of technology and gender: Metropolis, nazism, modernism. *New German Critique* 60 (Fall): 3-32.

#### Economics

Mirowski, Philip E.

- P. Mirowski. 1994. Confessions of an aging enfant terrible. *American Economist* 38 (2): 1-8.  
P. Mirowski. 1994. Review of Howard Margolis paraplans and barriers. *Journal of Economic Literature* 32 (4): 1857-1859.  
P. Mirowski and E. R. Weintraub. 1994. The pure and the applied: Bourbakism comes to mathematical economics. *Science in Context* 7 (2): 245-272.

Wilber, Charles K.

- C. K. Wilber. 1994. Economics. In *The modern Catholic encyclopedia*, ed. M. Glazier and M. K. Hellwig, 263-264. Collegeville, Minn.: The Liturgical Press.  
C. K. Wilber. 1994. Peace, development and the international economy in the post-cold war world. In *The challenge of peace: Ten years later*, ed. G. F. Powers, D. Christiansen, S.J., and R. T. Hennemeyer, 133-146. Washington, D.C.: United States Catholic Conference.  
C. K. Wilber. 1994. Review of Terence Hutchison, changing aims in economics. *Southern Economic Journal* 60 (April): 1096-1097.

- C. K. Wilber and K. P. Jameson. 1994. *An inquiry into the poverty of economics*. Beijing, China: Chinese Academy of Social Sciences. 312 pp.

- C. K. Wilber and K. P. Jameson. 1994. New preface to Chinese edition. In *An inquiry into the poverty of economics*, 1-5. Beijing, China: Chinese Academy of Social Sciences.

#### English

Costello, Donald P.

- D. P. Costello. 1993. God's lonely man: *Taxi driver* in script and screen. *Christianity and Literature* 42 (Spring): 403-418.

#### Government and International Studies

Lopez, George A.

- G. A. Lopez. 1994. Ethical dilemmas in the use of force in the post-cold war world. In *Peacemaking: Moral and policy challenges for a new world*, ed. G. F. Powers, D. Christiansen, S.J., and R. T. Hennemeyer, 175-188. Washington, D.C.: The United States Catholic Conference.

#### Philosophy

Burrell, David B., C.S.C.

- D. B. Burrell, C.S.C. 1994. Convictions and operative warrant. In *Theology without foundations: Religious practice and the future of theological truth*, ed. S. Hauerwas, N. Murphey and M. Nation, 43-48. Nashville, Tenn.: Abingdon.

- D. B. Burrell, C.S.C. 1994. Friendship with God in Alghazali and Aquinas. In *Changing face of friendship*, ed. L. S. Rouner, 43-56. Notre Dame, Ind.: University of Notre Dame Press.

McInerny, Ralph M.

- R. M. McInerny. 1995. Paradise. *Ellery Queen Mystery Magazine* (January): 24-32.

Sterba, James P.

- J. P. Sterba. 1994. *Contemporary social and political philosophy*. Belmont, Calif.: Wadsworth Publishing Company. viii + 136 pp.  
J. P. Sterba. 1994. *Earth ethics*. Englewood Cliffs, N.J.: Prentice-Hall. xi + 389 pp.  
J. P. Sterba. 1994. *Morality and social justice*. Lanham, Md.: Rowman and Littlefield. vii + 308 pp.  
J. P. Sterba. 1994. *Social and political philosophy: Classical western texts in feminist and multicuture perspectives*. Belmont, Calif.: Wadsworth Publishing. xiii + 539 pp.



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

## Program of Liberal Studies

Crowe, Michael J.

- M. J. Crowe. 1994. Bibliography of the publications of Sir John F. W. Herschel. In *John Herschel 1792-1992: Bicentennial symposium*, ed. B. Warner, 125-140. Cape Town, South Africa: Royal Society of South Africa.
- M. J. Crowe. 1994. John Herschel: Britain's first modern physical scientist. In *John Herschel 1792-1992: Bicentennial symposium*, ed. B. Warner, 57-69. Cape Town, South Africa: Royal Society of South Africa.
- M. J. Crowe. 1994. The John Herschel Correspondence Project. In *John Herschel 1792-1992: Bicentennial symposium*, ed. B. Warner, 117-191. Cape Town, South Africa: Royal Society of South Africa.

## Theology

Krieg, Robert A., C.S.C.

- R. A. Krieg, C.S.C. 1994. Romano Guardini's reception in North America. In *Kirche Sein*, ed. W. Geerlings and M. Seckler, 93-110. Freiburg, Breisgau: Herder.

Porter, Jean

- J. Porter. 1994. The moral life according to William Bennett. *Christian Century* (October):896-899.

Ulrich, Eugene C.

- E. C. Ulrich. 1994. The bible in the making: The scriptures at Qumran. In *The community of the renewed covenant: The Notre Dame symposium on the Dead Sea scrolls*, ed. E. Ulrich and J. VanderKam, 77-93. Notre Dame, Ind.: University of Notre Dame Press.
- E. Ulrich and J. VanderKam, eds. 1994. *The community of the renewed covenant: The Notre Dame symposium on the Dead Sea scrolls*. Notre Dame, Ind.: University of Notre Dame Press. xviii + 290 pp.

VanderKam, James C.

- J. C. VanderKam. 1994. Messianism in the scrolls. In *The community of the renewed covenant: The Notre Dame symposium on the Dead Sea scrolls*, ed. E. Ulrich and J. VanderKam, 211-234. Notre Dame: University of Notre Dame Press.

See under Ulrich, Eugene C. 1994. *The community of the renewed covenant: The Notre Dame symposium on the Dead Sea scrolls*.

Yoder, John H.

- J. H. Yoder. 1994. Walk and word: The alternatives to methodologism. In *Theology without foundations*, ed. S. Hauerwas, N. Murphy and M. Nation, 77-90. Nashville, Tenn.: Abingdon.

## COLLEGE OF SCIENCE

### Biological Sciences

Bridgham, Scott D.

- S. D. Bridgham. 1994. Review of Wetlands: Guide to science, law and technology, by M. S. Dennison and J. F. Berry. *Journal of Environmental Quality* 23 (5): 1119-1120.

### Chemistry and Biochemistry

Fehlner, Thomas P.

- Y. Nishihara, K. J. Deck, M. Shang, T. P. Fehlner, B. S. Haggerty and A. L. Rheingold. 1994. Synthesis of cobaltaborane clusters from  $[\text{Cp}^*\text{CoCl}]_2$  and monoboranes. New structures and mechanistic implications. *Organometallics* 13:4510-4522.

Pasto, Daniel J.

- D. J. Pasto, F. Cottard and C. Picconatto. 1994. The  $\text{C}_3\text{H}_5\text{O}$  radical system. Formation and reactions of the allyloxy and oxiranymethyl radicals generated by the photolysis of the allyl and 4,5-epoxy-2-methyl-2-pentyl-4-nitrobenzene-sulfenates. *Journal of Organic Chemistry* 59:7172-7277.
- D. J. Pasto and F. Cottard. 1994. A study of the regioselectivity of the radical addition of "RSAr" derived from the photolysis of *tert*-homoallyl and *tert*-alkyl 4-nitrobenzenesulfenates to substituted alkenes and alkenes. *Journal of Organic Chemistry* 59:4642-4646.

Smith, Bradley D.

- S. J. Steiner, J. T. Bien and B. D. Smith. 1994. Diphenylborinic acid is a strong inhibitor of serine proteases. *Bioorganic & Medicinal Chemistry Letters* 4 (20): 2417-2420.

Thomas, J. Kerry

- G. Zhang and J. K. Thomas. 1994. Pyrene radical formation in pulse radiolysis of liquid methanol. *Journal of Physical Chemistry* 98:11714-11718.

### Mathematics

Yin, Hong-Ming

- H-M. Yin. 1994. Blow-up versus global solvability for a class of nonlinear parabolic equations. *Nonlinear Analysis, Theory, Methods and Applications* 23 (7): 911-924.

### Physics

Bunker, Bruce A.

- K. M. Kemner, B. A. Bunker, H. Luo, N. Samarth, J. K. Furdyna, M. R. Weidmann and K. E. Newman. 1994. Atomic rearrangement at interfaces in ZnTe/CdSe superlattices. *Physical Review B* 50:4327-4335.



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

Furdyna, Jacek K.

See under Bunker, Bruce A. 1994. *Physical Review B* 50:4327-4335.

Glazier, James A.

J. A. Glazier and D. Weaire. 1994. Construction of candidate minimal-area space-filling partitions. *Philosophical Magazine Letters* 70 (5): 351-356.

Newman, Kathie E.

See under Bunker, Bruce A. 1994. *Physical Review B* 50:4327-4335.

Rettig, Terrence W.

C. S. Tegler, T. W. Rettig, D. A. Weintraub, Y. Pendleton, D. Whittet and C. Kulesa. 1994. Evidence for chemical processing of pre-cometary icy grains around pre-main-sequence stars. *Bulletin AAS* 29:1301.

W. R. Ward, J. M. Hahn and T. W. Rettig. 1994. Resonant trapping in a self-gravitating planetesimal disk. *Bulletin AAS* 28 (November).

Ruchti, Randal C.

M. J. Weber, P. Lecoq, R. C. Ruchti, C. Woody, W. M. Yan and R-Y. Zhu, eds. 1994. *Scintillator and phosphor materials*. Pittsburgh, Pa.: Materials Research Society.

Ruggiero, Steven T.

C. Zhong, S. T. Ruggiero, R. Fletcher and E. Moser. 1994. YBCO film growth on ultra-thin Ag layers. *Journal of Materials Research* 9 (11): 2761-2763.

Wayne, Mitchell R.

M. R. Wayne. 1994. The D0 tracker upgrade and projections for b physics. *Nuclear Instruments and Methods in Physics Research A* 351:77-83.

M. R. Wayne. 1994. Use of plastic optical fibers for charged particle tracking in high energy physics. In *Scintillator and phosphor materials*, ed. M. J. Weber, P. Lecoq, R. C. Ruchti, C. Woody, W. M. Yan and R-Y. Zhu, 27-38. Pittsburgh, Pa.: Material Research Society.

## COLLEGE OF ENGINEERING

### Aerospace and Mechanical Engineering

Gad-el-Hak, Mohamed

P. R. Bandyopadhyay and M. Gad-el-Hak. 1994. The modes of gas-core vortex in a cyclone-type gas-liquid separator. Twelfth Annual Gallery of Fluid Motion, The American Physical Society, Atlanta, Ga. Picture in a gallery.

M. Gad-el-Hak, G. Branger, G. Pineau and M. Coustaneau. 1994. Numerical and experimental investigation of the evolution of vortical flow in impulsively started square and semi-circular cavities. *Bulletin of the American Physical Society* 39 (9): 1962.

P. R. Bandyopadhyay, G. C. Pacifico and M. Gad-el-Hak. 1994. The sensitivity of a gas-core vortex in a cyclone-type gas-liquid separator. *Bulletin of the American Physical Society* 39 (9): 1958.

Nee, Victor W.

See under Yang, Kwang-tzu. 1994. *Chaos in heat transfer and fluid dynamics*, 19-25.

Paolucci, Samuel

V. S. Arpaci, N. A. Hussain, S. Paolucci and R. G. Watts, eds. 1994. *Chaos in heat transfer and fluid dynamics*. New York: American Society of Mechanical Engineers. vi + 115 pp.

S. Paolucci and S. A. Suslov. 1994. Comparison of stability results of the natural convection flow in a tall vertical cavity under different thermal approximations. *Bulletin of the American Physical Society* 39 (9): 1903.

O. V. Vasilyev and S. Paolucci. 1994. A dynamically adaptive multilevel wavelet collocation method for solving partial differential equations in a finite domain. *Bulletin of the American Physical Society* 39 (9): 1893.

X. Zhao, S. Paolucci, M. Sen and K-T. Yang. 1994. Effect of asymmetries on heat transfer in a bifurcating channel. In *Fundamentals of heat transfer in forced convection 1994*, ed. F. W. Schmidt and R. J. Moffat, 69-74. New York: American Society of Mechanical Engineers.

W. M. Judson, S. Paolucci and M. Sen. 1994. Temperature measurements on an aluminum alloy permanent mold casting process under production conditions. In *Fundamentals of phase change: Sublimation and solidification*, ed. P. H. Oosthuizen and P. G. Kroeger, 53-60. New York: American Society of Mechanical Engineers.

J. A. C. Humphrey, S. Paolucci and M. M. Yovanovich. 1994. Unanswered questions in heat transfer research: Technological limitations in the characterization of heat transfer at interfaces. In *Pamphlet No. 94-WA/HT-3*, 1-17. New York: American Society of Mechanical Engineers.

See under Sen, Mihir. 1994. *Transport phenomena in solidification*, 119-126.

Sen, Mihir

Z. Yang, M. Sen and S. Paolucci. 1994. Solidification by convective cooling with void formation. In *Transport phenomena in solidification*, ed. C. Beckermann, H. P. Wang, L. A. Bertram, M.S. Sohal and S. I. Guceri, 119-126. New York: American Society of Mechanical Engineers.

See under Paolucci, Samuel. 1994. *Fundamentals of phase change: Sublimation and solidification*, 53-60.

See under Paolucci, Samuel. 1994. *Fundamental of heat transfer in forced convection 1994*, 69-74.

Yang, Kwang-tzu

D. Mukutoni and K. T. Yang. 1995. Thermal convection in small enclosures: An atypical bifurcation sequence. *International Journal of Heat and Mass Transfer* 38 (1): 113-126.



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

- K. T. Yang. 1994. Recent development in field modeling of compartment fires. *Japan Society of Mechanical Engineers* 37 (4): 702-717.
- H. J. Huang, K. T. Yang and V. W. Nee. 1994. Simulation of nonlinear oscillations of laminar forced convection cooling with zero-mean oscillatory flow in an open channel. In *Chaos in heat transfer and fluid dynamics*, ed. V. S. Arpaci, N. A. Hussain, S. Paolucci and R. G. Watts, 19-25. New York: American Society of Mechanical Engineers.
- See under Paolucci, Samuel. 1994. *Fundamental of heat transfer in forced convection* 1994, 69-74.

## Chemical Engineering

- Carberry, James J.
- J. J. Carberry. 1994. Diffusion-reaction-decay on the grand and small scales. Proceedings of the Institute of Chemical Engineering (London) (January).
- J. J. Carberry. 1993. Our indebtedness to Bernard of Clairvaux and John Davidson. Trans. Institute of Chemical Engineering (London) (71):618 Part A.
- J. J. Carberry, N. Gunasekaran, R. Doshi and C. B. Alcock. 1994. Catalytic hydrogenation of propylene over perovskite type oxides  $\text{La}_{1-x}\text{Sr}_x\text{MO}_{3-\delta}$  ( $\text{M}=\text{Cr}, \text{Fe}, \text{Mn}, \text{Co}, \text{or Y}$ ). *Journal of Catalysis* (146):583.
- J. J. Carberry and S. Rajadurai. 1994. Kinetics of carbon monoxide oxidation on solid oxide solution and platinum on alumina - A comparative study. *Journal of Catalysis* (147):594.
- J. J. Carberry, N. Gunasekaran, N. Bakshi and C. B. Alcock. 1994. Surface characterization and catalytic properties of perovskite type oxides  $\text{La}_{0.95}\text{Ba}_{0.05}\text{MO}_3$  ( $\text{M}=\text{Mn}, \text{Fe}, \text{or Co}$ ). *Solid State Ionics* (73):289.
- J. J. Carberry, R. Doshi and C. B. Alcock. 1993. Effect of surface area on CO oxidation by the perovskite catalysts  $\text{La}_{1-x}\text{Sr}_x\text{MO}_{3-\delta}$  ( $\text{M}=\text{Co}, \text{Cr}$ ). *Journal of Catalysis* (18):337.
- J. J. Carberry, N. Gunasekaran, R. Doshi and C. B. Alcock. 1993. Carbon monoxide and methane oxidation properties of oxide solid solution catalysts. *Journal of Catalysis* (140):557.
- J. J. Carberry, N. Gunasekara, R. Doshi and C. B. Alcock. 1993. Methane coupling reaction on oxide solution catalysts. *Journal of Catalysis* (145):533.

## Civil Engineering and Geological Sciences

- Gray, Kimberly A.
- R. J. Hilarides, K. A. Gray, J. Guzzetta, N. Cortellucci and C. Sommer. 1994. Radiolytic degradation of 2,3,7,8-TCDD in artificially contaminated soils. *Environmental Science and Technology* 28 (13): 2249-2258.

- R. J. Hilarides, K. A. Gray, J. Guzzetta, N. Cortellucci and C. Sommer. 1994. Radiolytic degradation of dioxin on soil: Optimal conditions and economic considerations. *Environmental Progress* 13 (4): 263-268.
- Spencer, Billie F., Jr.
- B. F. Spencer, Jr., M. K. Sain, C-H. Won and L. M. Barroso. 1994. Analysis of structural control robustness: Reliability methods. In *Probabilistic structural mechanics: Advances in structural reliability methods*, ed. P. D. Spanos and Y-T. Wu, 504-517. San Antonio, Tex.: Springer-Verlag.

## Electrical Engineering

- Sain, Michael K.
- See under Civil Engineering and Geological Sciences; Spencer, Billie F., Jr. 1994. *Probabilistic structural mechanics: Advances in structural reliability methods*, 504-517.

## COLLEGE OF BUSINESS ADMINISTRATION

### Accountancy

- Simon, Daniel T.
- M. Ettredge, D. T. Simon, D. Smith and M. Stone. 1994. Why do companies purchase timely quarterly reviews? *Journal of Accounting and Economics* 18 (September): 131-155.

## LAW SCHOOL

- Shaffer, Thomas L.
- T. L. Shaffer. 1994. On religious legal ethics. *The Catholic Lawyer* 35 (4): 393-399.





Category	AWARDS RECEIVED					
	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	2	124,916	7	339,868	9	464,784
Facilities and Equipment	0	0	1	30,000	1	30,000
Instructional Programs	1	27,500	0	0	1	27,500
Service Programs	0	0	6	10,639	6	10,639
Other Programs	<u>0</u>	<u>0</u>	<u>1</u>	<u>20,256</u>	<u>1</u>	<u>20,256</u>
Total	3	152,416	15	400,763	18	553,179

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	3	497, 125	24	8,238,894	27	8,736, 019
Facilities and Equipment	0	0	3	570,369	3	570,369
Instructional Programs	0	0	3	886,548	3	886,548
Service Programs	0	0	0	0	0	0
Other Programs	<u>0</u>	<u>0</u>	<u>1</u>	<u>500,000</u>	<u>1</u>	<u>500,000</u>
Total	3	497,125	31	10,195,811	34	10,692,936

Pollard, M.	
Soybeans in the Prevention of Prostate Cancer	
Indiana Soybean Development Council	
\$69,575	12 months



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

## Law School

Shaffer, T.  
A Legal Advocacy Clinic for the Elderly  
Retirement Resource Foundation  
\$100,000 12 months

## Music

Buranskas, K.  
Solo Recitalist Fellowship Program  
National Endowment for the Arts  
\$6,000 4 months

## Physics

Dobrowolska-Furdyna, M.  
Optical Studies of Semiconductor Heterostuctures  
National Science Foundation  
\$100,000 53 months

## Theology

Ulrich, E.  
The Publication of Three Volumes of Dead Sea Scrolls  
Oxford Centre for Hebrew Studies  
\$4,731 24 months

## AWARDS FOR FACILITIES AND EQUIPMENT

### Electrical Engineering

Bernstein, G.  
Varian DF-5 200kV Ion Implanter  
Raytheon Company  
\$30,000

## AWARDS FOR INSTRUCTIONAL PROGRAMS

### Psychology

McCabe, S.  
Student Experiential Work with Homeless  
Retirement Resource Foundation  
\$27,500 12 months

## AWARDS FOR SERVICE PROGRAMS

### Center for Continuing Formation in Ministry

Lauer, E.  
Center for Continuing Formation in Ministry  
Various Others  
\$174 1 month

## Notre Dame Center for Pastoral Liturgy

Bernstein, E.  
Center for Pastoral Liturgy  
Various Others  
\$4,839 1 month  
Center for Pastoral Liturgy  
Various Others  
\$4,566 1 month  
Center for Pastoral Liturgy  
Various Others  
\$25 1 month

## Institute for Church Life

Cannon, K.  
Institute for Church Life  
Various Others  
\$1,000 1 month  
Institute for Church Life  
Various Others  
\$35 1 month

## AWARDS FOR OTHER PROGRAMS

### Civil Engineering and Geological Sciences

Kareem, A.  
International Conference on Wind Engineering  
National Science Foundation  
\$20,256 12 months

## Proposals Submitted

In the period November 1, 1994, through  
November 30, 1994

## PROPOSALS FOR RESEARCH

### Aerospace and Mechanical Engineering

Mueller, T.  
Inversion/Simulation Techniques Propeller Blade  
Response  
Department of the Navy  
\$161,792 24 months

### Anthropology

Sheridan, S.  
Chemical Analysis of Health and Nutrition in Ancient  
Nubia  
National Science Foundation  
\$202,660 48 months



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

## Chemical Analysis of Health and Nutrition in Ancient Nubia

AAUW Education Foundation  
\$36,800 12 months

## Biological Sciences

McAbee, D.

Hepatic Metabolism of Lactoferrin  
National Science Foundation  
\$778,014 48 months

## Civil Engineering and Geological Sciences

Kareem, A., Kantor, J.

Semi-Active Liquid Dampers  
National Science Foundation  
\$286,087 36 months

Kareem, A.

Reliability Analysis of Ocean Structures  
Department of the Navy  
\$99,538 36 months

## Chemistry and Biochemistry

Jacobs, D.

Energetic and Steric Effects in Ion/Surface Reaction  
Scattering  
Department of the Air Force  
\$110,540 36 months

Smith, B.

Carrier Molecules and Fusogenic Liposomes  
C. & H. Dreyfus Foundation, Inc.  
\$60,000 36 months

Miller, M.

Development of Chelating Agents Based on  
Alterobactin  
National Institutes of Health  
\$0 12 months

## Computer Science and Engineering

Lumsdaine, A.

High Performance Parallel Computing  
Supercomputer Center  
\$0 12 months

## Economics

Marsh, L.

Student Performance Relative to Individual Potential  
Department of Education  
\$58,003 9 months  
"Inefficient" Disequilibrium Models of the Housing  
Market  
U.S. Housing and Urban Development  
\$58,003 9 months

## Electrical Engineering

Lent, C., Porod, W., et al.

Architectures Compatible with Novel Quantum Devices  
Department of the Navy  
\$388,372 36 months

Merz, J., Bernstein, G., et al.

Silicon-based Nanoelectronics  
Advanced Research Projects Agency  
\$3,908,223 36 months

Bauer, P.

High Speed Delta-Operator Discrete Time Systems  
Department of the Navy  
\$125,904 24 months

## English

Dougherty, J.

Lilly Fellows Program in Humanities and the Arts  
Valparaiso University  
\$35,000 9 months

## Mathematics

Pillay, A.

Topics in Model Theory  
National Science Foundation  
\$209,429 60 months

Misiolek, G.

Geometry of Diffeomorphism Groups and Nonlinear  
P.O.E.'s  
National Science Foundation  
\$90,034 36 months

Dwyer, W., Taylor, L., et al.

Algebraic and Geometric Topology  
National Science Foundation  
\$415,215 36 months

Wilczynski, D.

Geometric Topology of Four Manifolds and Their  
Submanifolds  
National Science Foundation  
\$85,949 36 months

Stolz, S.

Curvature and Topology  
National Science Foundation  
\$101,071 36 months

Connolly, F.

Topology of Arithmetic Groups  
National Science Foundation  
\$126,192 36 months

Knight, J.

Recursive Model Theory  
National Science Foundation  
\$129,976 36 months



# THE GRADUATE SCHOOL OFFICE OF RESEARCH

## Office of Research

Snow, D.

Complex Homogeneous Manifolds  
National Science Foundation  
\$95,435 36 months

### Physics

Mathews, G., Wiescher, M.

Nuclear Astrophysical Probes of Matter  
Department of Energy  
\$377,752 36 months

Glazier, J.

Presidential Faculty Fellows Award  
National Science Foundation  
\$500,000 60 months

Tanner, C.

Precision Measurements of Transition Amplitudes in  
Cesium  
National Science Foundation  
\$296,030 48 months

### PROPOSALS FOR FACILITIES AND EQUIPMENT

### Aerospace and Mechanical Engineering

Renaud, J.

CAD/CAM Prototyping and Metrology Laboratory  
National Science Foundation  
\$111,758 12 months

### Biological Sciences

Martin, V., Boyd, S., et al.

Advanced Optical Imaging  
National Science Foundation  
\$97,500 30 months

### Computer Science and Engineering

Uhran, J., Henry, E.

Curriculum Enhancement and Distance Learning Via  
the Internet  
National Science Foundation  
\$361,111 36 months

### PROPOSALS FOR INSTRUCTIONAL PROGRAMS

### Center for Bioengineering and Pollution Control

Irvine, R.

Department of Education GAANNP Fellowships  
Department of Education  
\$807,000 36 months

Hyder, A.

NATO Advanced Study Institute Program  
Advanced Research Projects Agency  
\$50,000 12 months

### Classical and Oriental Languages and Literatures

Sheerin, D.

Multicultural Study of Classical Literature  
Lilly Endowment, Inc.  
\$29,548 24 months

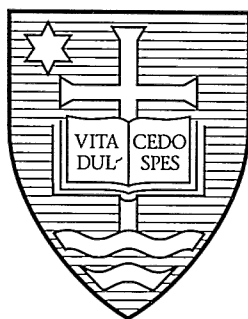
### PROPOSALS FOR OTHER PROGRAMS

### Computer Science and Engineering

Chen, D.

NSF Presidential Faculty Fellows Award  
National Science Foundation  
\$500,000 60 months





# NOTRE DAME REPORT

---

Volume 24, Number 9

January 20, 1995

**Notre Dame Report (USPS 7070-8000)** is an official publication published fortnightly during the school year, monthly in the summer, by the University of Notre Dame, Office of the Provost. Second-class postage paid at Notre Dame, Indiana. *Postmaster:* Please send address corrections to: Records Clerk, Department of Human Resources, Security Building, University of Notre Dame, Notre Dame, IN 46556.

Linda M. Diltz, Editor  
Marten Schalm, Designer  
Julie E. Rogers, Publication Assistant  
Gerard Jacobitz, Indexer  
Publications and Graphic Services  
415 Main Building  
Notre Dame, IN 46556  
(219) 631-5337

© 1995 by the University of Notre Dame, Notre Dame, IN 46556. All rights reserved.