

NOTRE DAME REPORT

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FEBRUARY 4, 1994 • NUMBER 10

Open Meeting for Faculty With North Central Accreditors

The 10-year accreditation visit by a team from the North Central Association will take place from Monday, February 21, 1994, to Wednesday, February 23, 1994. During the course of the visit, subgroups of the accreditation team will meet with various faculty, students and administrators of the University.

There will be an open meeting for any faculty who wish to attend on Tuesday, February 23, at 4:15 p.m. in room 210 of the Center for Continuing Education.

A meeting with students is scheduled for Monday, February 22, at 5:30 p.m. in the lecture room of the Center for Social Concerns.

Although the visitors are open to consider any issues persons may wish to discuss, the *Final Report of the Colloquy for the Year 2000* is the focus of the visit. We are also reviewed on our plan for the assessment of the student academic achievement which was published in the November 5, 1993, *Notre Dame Report* (pp. 122-124).

For your information, the members of the team are as follows:

- Dr. Alice B. Hayes, Executive Vice President/Provost, Saint Louis University
- Dr. Eldon Jay Epp, Harkness Professor of Biblical Literature and Chair, Department of Religion, Case Western Reserve University
- Dr. Celestino Fernandez, Vice President for Academic Outreach and International Affairs, University of Arizona
- Mr. Jack Lengyel, Athletic Director, U.S. Naval Academy
- Dr. Deborah L. Holmes, Vice President for Academic Affairs, Loyola University of Chicago
- Dr. Michael F. Kavanaugh, Professor and Head, Department of Technology, Southwest Missouri State University
- Rev. William B. Neenan, S.J., Academic Vice President and Dean of Faculties, Boston College
- Dr. Hunter R. Rawlings III, President, University of Iowa
- Dr. Marilyn J. Stokstad, University Distinguished Professor of Art History, University of Kansas
- Dr. Lorna P. Straus, Professor, Department of Anatomy and Biological Science, Collegiate Division, University of Chicago
- Dr. Dina A. Zinnes, Merriam Professor of Political Science, University of Illinois at Urbana-Champaign

The accreditation visit is being coordinated by Rev. Oliver F. Williams, C.S.C., associate provost (631-6858).

Whirlpool Expands MBA Programs

Whirlpool Corporation and Whirlpool Foundation will provide a total of \$700,000 to Notre Dame to fund significant expansion of both the Whirlpool Internship Program for MBA students and the Whirlpool Foundation endowment for MBA scholarships.

The gift, to be spread over seven years, will provide \$50,000 annually to fund a full tuition scholarship, with stipend, for a Hispanic MBA student interning with Whirlpool, plus internships alone for two more students. An additional \$50,000 per year will build the Whirlpool Foundation endowment, a permanent source of funding for the program.

Whirlpool and Whirlpool Foundation had provided \$350,000 for the internships and endowment over the past seven years. The new gifts double that support.

NBC Will Broadcast Home Football Games Through the Year 2000

The University and the National Broadcasting Company have renewed their agreement to telecast all Notre Dame home football games for an additional five years, giving NBC the rights to home games through the year 2000.

The current contract also covered a five-year period, beginning with the 1991 season and extending through 1995. The five-year extension, like the original pact, includes six games per year beginning with the 1996 season. And, beginning with the 1994-95 college basketball season and continuing through the new contract, NBC will televise four home basketball games each season.

The endowment is for general student aid and not for athletic scholarships. During this academic year, 30 undergraduates are receiving scholarships averaging \$5,000 as a direct result of the existing contract with NBC, and that number will grow to 120 students per year by 1995.

In addition, the University has committed \$1 million per year from the existing contract to endow doctoral fellowships in the Graduate School and \$500,000 per year to endow MBA scholarships in the College of Business. Earnings from the endowment in the Graduate School currently support 10 graduate teaching fellows in the College of Arts and Letters. The endowment for MBA scholarships, established in 1993, eventually will receive \$2 million from the existing contract revenues. Earnings from that endowment will be available for scholarships beginning with the 1994-95 academic year.

FACULTY NOTES

Honors

Louis J. Berzai, adjunct instructor in the Computer Applications Program, has been elected vice president of the Education Foundation of Data Processing Management Association (DPMA) for 1994. The DPMA Education Foundation is the research arm of DPMA for education development. The foundation was established in 1975 to meet the changing educational requirements of the Information Systems Profession, and to address the long-term education efforts essential to support the industry and DPMA members.

George B. Craig Jr., Clark professor of biological sciences, was awarded the Walter Reed Medal for distinguished contributions to Tropical Medicine at the meeting of the American Society of Tropical Medicine and Hygiene in Atlanta, Ga., Oct. 30–Nov. 3.

Kwan S. Kim, professor of economics and faculty fellow in the Kellogg Institute, was elected president of the Korea-America Economic Association for 1995.

Anthony N. Michel, McCloskey dean and Freimann professor of engineering, was elected vice president of Technical Affairs of the IEEE Control Systems Society. He was appointed a representative to the Neural Network Council of the Institute of Electrical and Electronics Engineers by the IEEE Control Systems Society. He is a member of the board of governors of the IEEE Control Systems Society and he serves as an associate editor-at-large of the *IEEE Transactions on Automatic Control*.

Charles Ephraim Parnell, professor emeritus of modern and classical languages, has been named Chevalier dans l'Ordre des Palmes Académiques (Knight in the Order of Academic Palms) "for services rendered to the French culture" by the prime minister of the French Republic Ministry of National Education, Academic Palms, decreed July 16. He received the certificate with cover letters from the French Embassy Cultural Services in New York and the Cultural Services of the Consulate Général of France in Chicago, Jan. 10.

Activities

John H. Adams, assistant professor of biological sciences, presented a talk titled "Polymorphisms of the *Plasmodium vivax* MP-1 Gene in Clinical Isolates from PNG" at the annual meeting of the American Society for Tropical Medicine and Hygiene in Atlanta, Ga., Oct. 31–Nov. 1. He presented an invited seminar titled "Genetic Polymorphisms of Malaria Parasites May Be Related to Altered Host Specificity" at the Department of Life Sciences at Indiana State University in Terre Haute, Ind., Nov. 8–10.

Nadia M. Alhasani, assistant professor of architecture, presented the invited lecture "The Land In-Between: The Middle East" at the First Presbyterian Church of South Bend, Ind., Dec. 8.

Gail Bederman, assistant professor of history, presented the paper "'Teaching Our Sons to Do What We Have Been Teaching the Savages to Avoid': Manhood, Race and G. Stanley Hall" at the American Historical Association annual meeting in San Francisco, Calif., Jan. 9.

Martin B. Berg, assistant professional specialist in biological sciences, presented an invited talk titled "Sex, Flies, and Water Pipes: Case Studies of Chironomids in Water Distribution Systems" at the annual meeting of the Entomological Society of America in Indianapolis, Ind., Dec. 12–13. He presented the paper "The Infestation of Domestic Water Supplies by Chironomids" at the 12th international symposium on Chironomidae in Canberra, Australia, Dec. 29–Jan. 27.

Hsueh-Chia Chang, chairperson and professor of chemical engineering, presented the invited seminar "Self-Similar Solutions in Interfacial Dynamics" to the Chemical Engineering Department at Carnegie-Mellon University in Pittsburgh, Pa., Jan. 25. He received a patent for "Process and Apparatus for Enhancing In-Tube Heat Transfer by Chaotic Mixing" with **Mihir Sen**, associate professor of aerospace and mechanical engineering, 1994.

Ziyi Danny Chen, assistant professor of computer science and engineering, gave the invited talk "Solving Shortest Path Problems on Interval and Circular-Arc Graphs" to the Department of Computer Sciences at Purdue University in West Lafayette, Ind., Oct. 25. He gave the presentation "Optimal Parallel Hypercube Algorithms for the Polygon Problems" at the Midwest Theory Day at Northwestern University in Evanston, Ill., Dec. 4.

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George B. Craig Jr., Clark professor of biological sciences, presented the invited lecture "The Elimination of *Aedes aegypti* in the U.S.A. Due to a Parasitic Protoman from *Aedes albopictus*" at the annual meeting of the Entomological Society of America in Indianapolis, Ind., Dec. 11-16.

Malcolm J. Fraser Jr., associate professor of biological sciences, presented reviews of grant proposals at the NIH study section session in Bethesda, Md., Oct. 13-15.

Bei Hu, assistant professor of mathematics, gave a presentation "Pontryagin Maximum Principle for Parabolic PDEs with Pointwise State Constraint" at a special session on Nonlinear Partial Differential Equations of the 100th AMS annual meeting in Cincinnati, Ohio, Jan. 14-15.

Seok-Jin Kang, assistant professor of mathematics, presented the talk titled "Generalized Kac-Moody Algebras and the Modern Function j " at the algebra seminar at Northwestern University in Evanston, Ill., Oct. 19, and at the Lie theory seminar at the University of Wisconsin at Madison, Wis., Nov. 22. He presented that same lecture as the Ellis Stouffer Colloquium at the University of Kansas in Lawrence, Kans., Dec. 9.

Lloyd H. Ketchum Jr., associate professor of civil engineering and geological sciences, was an invited participant in the workshop "Development of Ecological Tier Testing Schemes for Microbial Biotechnology Applications" sponsored by the U.S. Environmental Protection Agency and Environment Canada in Washington, D.C., Jan. 11-13.

Kwan S. Kim, professor of economics and faculty fellow in the Kellogg Institute, delivered a week-long seminar on "Industrial Policy in East Asia" held at the Autonomous University of Mexico and the U.N. Commission for Economic Development in Latin America and the Caribbean in Mexico City, Mexico, Oct. 24-31. He presented a paper titled "Economic Integration in Pacific Asia: Issues and Prospects" at an AEA/KAEEA session of the Allied Social Science meeting in Boston, Mass., Jan. 4.

Gary A. Lamberti, assistant professor of biological sciences, gave a seminar titled "Regulation of Stream Food Webs: Do Consumers or Resources Dominate?" at Loyola University in Chicago, Ill., Oct. 20-21. He organized the formal conference "Aquatic Insects in Unique Habitats" at the annual meeting of the Entomological Society of America in Indianapolis, Ind., Dec. 12. He presented the seminar "Intermediate Regulation of Stream Food Webs" at the Institute of Limnology, University of Uppsala, Sweden, Dec. 20, and served as external evaluator of a Ph.D. thesis, Dec. 21.

David M. Lodge, associate professor of biological sciences, gave a seminar titled "Species Invasions: Causes and Consequences" at the University of the South in Sewanee, Tenn., Oct. 25. He gave the seminar "Species Invasions: General Theory and an Aquatic Case Study" at Auburn University in Auburn, Ala., Oct. 29.

Rev. Richard P. McBrien, Crowley-O'Brien-Walter professor of theology, presented "The Future of the Church and Its Ministries" at the third annual National Ministries Conference of the New England Consultants in Ministry in Boston, Mass., Jan. 6.

Anthony N. Michel, McCloskey dean and Freimann professor of engineering, chaired a technical session titled "Neural Networks" at the 32nd IEEE Conference on Decision and Control in San Antonio, Tex., Dec. 15-17. Michel presented with **Kaining Wang**, assistant faculty fellow in engineering, and **Derong Liu**, the following papers at that conference: "Robust Stability: Perturbed Systems with Perturbed Equilibria," "Necessary and Sufficient Conditions for the Stability of Interval Matrices," "Controllability and Observability of a Class of Linear, Time-Invariant Systems with Interval Plants," "Analysis and Synthesis of Sparsely Connected Feedback Neural Networks" and "Robustness Analysis and Design of Sparsely Interconnected Neural Networks."

María Rosa Olivera-Williams, associate professor of Romance languages and literatures, read the invited paper "Un viaje en busca de la nueva ciudad: La nave de los locos de Cristina Peri-Rossi" at the session titled Feministas Unidas on "Las Máscaras del deseo femenino" at the Midwest Modern Language Association in Minneapolis, Minn., Nov. 5. She gave the lecture "Mujeres creadas por las fantasías de las mujeres" at the California State University in Long Beach, Calif., Nov. 12.

Joseph E. O'Tousa, associate professor of biological sciences, served as an ad hoc reviewer on Genetics (AHR-A1) Study Section at the National Institutes of Health in Bethesda, Md., Nov. 18-19.

Teresa Godwin Phelps, professor of law, presented the paper titled "Tolerance and the Catholic Church" at the annual meeting of the Association of American Law Schools in Orlando, Fla., Jan. 7.

Terrence W. Rettig, professional specialist and concurrent associate professor of physics, presented a paper titled "Spontaneous Polymerization as the Trigger for Cometary Outbursts" at the Division for Planetary Sciences Meeting of the American Astronomical Society in Boulder, Colo., Oct. 18. He was a guest observer at the United Kingdom 3.8m Infrared Telescope on Mauna Kea,

FACULTY NOTES

Hawaii, Dec. 1-3. The observations resulted in the detection of carbon monoxide ice and XCN in pre-planetary disks around young T Tauri stars.

Joachim J. Rosenthal, assistant professor of mathematics, presented the paper "On Decentralized Dynamic Feedback Compensation" at the 32nd IEEE Conference on Decision and Control in San Antonio, Tex., Dec. 15-17.

James H. Seckinger, director of the National Institute for Trial Advocacy and professor of law, served as program coordinator and a faculty member for the NITA/Denton Hall Advocacy Skills Programme in London, England, Dec. 14-15. He gave a lecture to the faculty on Effective Teaching Techniques.

Thomas L. Shaffer, Short professor of law, presided at a "breakfast with the author" session on his and Mary Shaffer's book, *American Lawyers and Their Communities*, during the annual meeting of the Society of Christian Ethics in Chicago, Ill., Jan. 8. He spoke on legal ethics in a session on "Responsibilities of the Academy for Moral Education" at that meeting.

Richard G. Sheehan, professor of finance and business economics, presented the paper "Judeo-Christian Values and the Market System: Religion and Economics" for the panel discussion at the conference to celebrate the sesqui-centennial of the College of the Holy Cross in Worcester, Mass., Nov. 12.

Stephen Tegler, visiting faculty fellow in physics, presented a paper titled "Spontaneous Polymerization as the Trigger for Cometary Outbursts" at the Division for Planetary Sciences Meeting of the American Astronomical Society in Boulder, Colo., Oct. 18. He was a guest observer at the United Kingdom 3.8m Infrared Telescope on Mauna Kea, Hawaii, Dec. 1-3. The observations resulted in the detection of carbon monoxide ice and XCN in pre-planetary disks around young T Tauri stars.

James C. VanderKam, professor of theology, gave a speech on "The Dead Sea Scrolls" to the workshop on Scintillating Fiber Detectors in Notre Dame, Ind., Oct. 26. He presented the papers "The Dead Sea Scrolls and Christianity" and "The Origins of the Qumran Community" at the conference on the Dead Sea Scrolls at Macalester College in St. Paul, Minn., Nov. 7-8. He presented "The Interpretation of Genesis 1 in the Book of Jubilees" at New Perspectives on the Dead Sea Scrolls: 1993-94 Skirball Conference at the Skirball Department of Hebrew and Judaic Studies at New York University in New York, N.Y., Dec. 19.

Arvind Varma, Schmitt professor of chemical engineering, presented an invited seminar titled "Optimal Distribution of Catalyst in Pellets" at the Research and Development department of Arco Chemical Company in Newtown Square, Pa., Dec. 2.

A. Peter Walshe, professor of government and international studies, presented a paper titled "Christianity and Democratization in South Africa: The Prophetic Voice within Phlegmatic Churches" at the School of Oriental and African Studies in London and at the conference on Christianity and Democratization in Africa in the Departments of Religion and Political Science at the University of Leeds in Leeds, England, Sept. 20-23. He lectured and conducted a seminar on "Democratization in Tropical Africa: The Context of Christian Mission" for the Africa Faith and Justice Network Conference of Mission Directors in Washington, D.C., Oct. 1.

Dariusz M. Wilczynski, assistant professor of mathematics, gave the talk titled "Topological and Algebraic Automorphisms of Rational Surfaces" in the Topology Seminar at Vassar College in Poughkeepsie, N.Y., Oct. 18. He presented the colloquium "Embedded Surfaces in Four-manifolds" at Rutgers University in Newark, N.J., Nov. 3.

Hong-Ming Yin, assistant professor of mathematics, organized a special session on Nonlinear Partial Differential Equations and gave a presentation titled "Semilinear Parabolic Equations with Prescribed Energy" at the 100th AMS annual meeting in Cincinnati, Ohio, Jan. 12-16.

Randall C. Zachman, assistant professor of theology, presented "Word and Image in the Theology of Martin Luther and John Calvin" at the Sixteenth Century Studies Conference in St. Louis, Mo., Dec. 10.

Academic Council Minutes November 17, 1993

Members in attendance: Edward A. Malloy, C.S.C., Timothy O'Meara, E. William Beauchamp, C.S.C., Roger Schmitz, Patricia O'Hara, Nathan Hatch, Francis Castellino, John Keane, Eileen Kolman, David Link, Anthony Michel, Richard Sheehan, Lynn Friedewald, Frank Bonello, David Burrell, C.S.C., Paula Higgins, Mark Pilkinton, John Roos, Thomas Werge, Mario Borelli, Robert Hayes, William Shephard, Arvind Varma, Carolyn Callahan, Edward Conlon, Carol Mooney, Kenneth DeBoer, Kathleen Maas Weigert and Randall Poole

Observers in attendance: Douglass Hemphill and Dennis Moore

Guests: Rosemary Lewins, O.P., William G. Gray and Thomas Gordon Smith

Prof. O'Meara opened the meeting at 3 p.m. with a prayer.

1. The minutes of the Academic Council meeting of September 29 were approved.

2. A proposal to offer a master's degree in Geological Sciences. (See Attachment A.) Prof. Hatch introduced this proposal, noting that it was developed by the Department of Civil Engineering and Geological Sciences and approved by both the College of Engineering Council and the Graduate Council. Observing that the proposed program precludes the need for additional faculty or increased teaching loads by offering several courses biennially, Prof. Bonello asked how this would affect class sizes and the availability of courses to students. Prof. Gray replied that since only a few students would be enrolled in a given course in any year, decreasing the frequency of course offerings would actually increase enrollment to a reasonable level. He added that issues regarding additional faculty and increased teaching load were resolved when the large survey classes formerly offered as Earth Sciences were dropped. A motion to approve the master's program was approved without dissent.

3. A proposal for autonomy for the School of Architecture. (See Attachment B.) Dean Michel introduced this proposal by referring to the significant growth realized by the School of Architecture in recent years, and the corresponding development of a strong sense of identity as a professional school distinct from other departments within the College of Engineering. In order for architecture to continue to develop, he felt it essential that the school be granted the same recognition and independent status that characterizes the top architecture programs in

the country. Prof. Thomas Gordon Smith concurred, noting that those schools which have been singled out by the NAAB (National Architectural Accrediting Board) for the excellence of their five-year professional degree programs in architecture all are organized autonomously within their universities.

Prof. Varma asked why such schools as Harvard, Princeton and Stanford were not included in the above group. Prof. Smith replied that those schools offer a four-year program with a broader, liberal arts orientation which leads to a bachelor's degree in architecture, not a professional degree. Accreditation comes not through those four-year programs, but through various graduate degrees which Harvard, Princeton and others offer. Notre Dame and the schools referred to in the proposal, on the other hand, offer a more rigorous five-year program which culminates in a professional degree. Responding to another question from Prof. Varma, Prof. Smith said that architecture's five-year orientation is the reason for the relatively small number of graduate students and faculty in the department. He added that although he expects the current number of graduate students to double within the next couple of years, the department prefers to keep the graduate program small and very defined.

Dean Castellino asked why the proposal stipulates that representation for the School of Architecture on the Faculty Senate be taken from the College of Engineering allotment. Prof. Smith said that engineering currently allots one senate seat to a representative from architecture. Prof. Sheehan observed that the proposal is in line with the concept of proportional representation which determines senate seats. Prof. Bonello wondered why the proposal includes no representation for the School of Architecture on either the Provost's Advisory Committee or the Academic Council. Prof. Smith said that such representation would exist through Prof. Schmitz — that is, through the person, designated by the provost, through whom the chair of the school would report. Prof. O'Meara added that this question of representation is one which will have to be addressed in the future. A contradiction exists if the Law School is represented and entities of approximately the same size, such as the proposed School of Architecture, are not. If the proposal is accepted, he continued, it will also be necessary in due course to reword portions of the Academic Articles to establish the role of Prof. Schmitz in the appointments and promotion procedure and perhaps elsewhere.

Prof. Shephard felt that the association with the College of Engineering had promoted a necessary exposure to conventional engineering subjects for architecture students. He wondered how autonomy would affect this. Responding that he and Prof. Gray have discussed this issue several times, Prof. Smith said the architecture program should have practical or applied engineering

courses rather than the fundamental or scientific ones commonly offered by the engineering college. He suggested that the best way to meet this need is to hire faculty within the School of Architecture who are experts in engineering and building methods and construction. Until such faculty expertise is developed, architecture students will continue to take courses taught by the College of Engineering.

Prof. Smith thanked Dean Michel for the support which the college has provided architecture within the past two years as the school has progressed toward autonomy. Fr. Malloy acknowledged the hard work of all parties in bringing things to this point, and expressed confidence in a bright future for Notre Dame's School of Architecture. The proposal to grant autonomy was subsequently passed by the council without dissent.

4. A resolution from the Faculty Senate to amend Academic Article IV.6. (See Attachment C.) Prof. Sheehan explained that this resolution from the Faculty Senate was developed to promote increased faculty representation, and also to respond to the perception that existing procedures for constituting the various elections committees have resulted in the arbitrary exclusion of faculty who want to be involved. The resolution would amend Academic Article IV.6 to provide that membership on the University Committee on Elections, as well as the equivalent committees in the colleges, the library and the Law School, be elected rather than appointed. Speaking as one who had initially developed the motion in the senate, Prof. Higgins interjected that much of the concern over the selection process stemmed from a feeling among several women faculty in the College of Arts and Letters that they were being vetted off lists. By the time the motion reached the senate floor, action had been taken within the college to alleviate this concern, but she felt it important to ensure through the proposed amendment that appropriate procedures continue to be followed. Fr. Malloy thought that such an amendment might be an effective way to stimulate increased faculty participation. Although he expressed support for the amendment, Dean Castellino questioned whether it would in fact increase participation. Dean Kolman observed that changing the process in itself did not make elected positions more attractive to faculty. Responding to the issue raised by Prof. Higgins, she also questioned whether electing members to the various Committees on Elections would make vetting any less likely. Prof. Sheehan thought that in most cases vetting was not used as a means of restricting participation but as a way to make the ballot manageable.

Prof. Varma argued that the proposed amendment does not go far enough. He felt that the entire process should be changed to ensure that all interested faculty are included and have the opportunity to remain on the ballot. While not disagreeing with the substance of Prof. Varma's

comments, Dean Castellino felt that the first issue to be decided is the Faculty Senate resolution as it now stands. He made the point that the entire election process could not take off until the colleges had some idea who was interested in being elected to the Elections Committees. That information, he said, should continue to be developed through the Faculty Senate. Dean Link said that in the Law School, faculty must petition the Elections Committee if they wish to be *excluded* from the ballot. Prof. Roos noted that Prof. Varma's suggestion would make elections committees unnecessary; if all faculty were eligible, no electoral lists would have to be developed and no possibility of vetting would exist. Prof. Varma added that through a two- or three-stage process, the leading candidates could emerge and the most representative people identified to serve in a given position. Prof. Hatch observed that one of the responsibilities of an election committee should be to seek out the best candidates to stand for election even though they may not come forward voluntarily.

Prof. Varma suggested that he work with Prof. Sheehan to develop an alternate version of Article IV.6 which represents the substance of the views expressed within the Faculty Senate and those expressed in this council discussion. A motion to table the original proposal and remand it to the Executive Committee for reconsideration was approved.

5. Revised constitution for the Medieval Institute. (See Attachment D.) Prof. O'Meara referred the council to the discussion of University institutes that took place during the October 19 meeting of the Academic Council. Changes to the constitution of the Medieval Institute have been made in accord with that discussion, and a revised constitution is now before the council for approval. There being no discussion or suggestions for further change, the motion to approve the revised constitution was passed without dissent.

6. Reports from standing committees.

a. Faculty Affairs. Fr. Burrell reported that at this time the Faculty Committee plans to work on two matters: (1) the use which the University is making of part-time and adjunct faculty, and (2) the appointment and promotion process for faculty. The objective with the latter is not to review the mechanics of appointments and promotions, but to look across the University at how departments handle mentoring and assessing the progress of young faculty from the point of hiring through the time of reappointment and tenure. This review, he said, may make it possible for departments and faculty to learn from each other. Prof. Callahan emphasized the importance of providing information more effectively to younger faculty to assist their progress. Dr. Weigert added that a similar review of library and special professional faculty will be conducted.

b. Graduate Studies. Prof. Roos reported that Dean Keane and Prof. Wilkie had met with the committee and discussed their preliminary thoughts concerning the doctoral program in the College of Business Administration. They indicated that the objective was to fund this program completely with restricted funds so that it would not compete with other doctoral programs for regular stipend funding. One of the challenges they discussed was that of developing a structure that would mesh traditional departments within the college into one doctoral program, perhaps through a system of tracks, rather than instituting separate doctoral programs in each department. The discussion provided some helpful background information to the committee and allowed the committee to give some feedback on faculty concerns.

Prof. Roos continued that a second major effort of the Graduate Studies Committee has been to survey the colleges concerning the appointment, mentoring and reappointment of graduate teaching assistants. The responses to date, he said, make it clear that a substantial number of courses are being taught by graduate students who have received no significant training, and the departments involved see no alternative given existing resources. While procedures exist for every other kind of academic appointment, graduate students are appointed simply by the department chair. Departments that do not use graduate students voiced support for enforcement of University-wide standards, while other departments said that the resources simply are not available to teach all the courses and also to train graduate students. Several departments said that the imposition of a University-wide standard would "wreck our program" and result in cancelling courses. Prof. Werge added that the committee hopes to be able to develop some guidelines from the survey responses that will help to address the inconsistency that exists among departments.

c. Undergraduate Studies. Prof. Bonello informed the council that the committee has finalized a proposal for the Center for Teaching and Learning Excellence and submitted it to the Executive Committee for inclusion on the Academic Council agenda. Secondly, the committee has met with the registrar to discuss student concerns about the fairness of DART times. The registrar expressed willingness to make changes to the current system of using a random number generator if the committee felt changes were necessary. The committee is trying to find out how much of a problem actually exists in this regard.

In another area, Prof. Bonello said that the committee has sent a letter to all the deans to assess their feelings about incorporating a research requirement in the undergraduate program. Responses thus far indicate a preference for the "weaker" version of the requirement, which would make research activity a necessary condition for gradua-

tion with honors. Finally, preliminary discussions have begun concerning the intellectual life of undergraduate students outside the classroom.

7. Reports from post-Colloquy committees.

a. University Curriculum Committee. Prof. O'Meara reported that elections and appointments have recently been completed, and the first meeting of the committee is scheduled for Monday, November 29.

b. Ad Hoc Committee on University Libraries. Prof. Schmitz reported that the committee has been formed, and relevant literature on recent trends and future directions of university libraries has been gathered. The first meeting of this committee is set for Tuesday, November 23.

c. University Committee on Research, Scholarship and Infrastructure. Dean Hatch reported that the first meeting of this committee is scheduled for the week of November 22. The first effort, he said, will be to make the scope of the committee's work focused enough to be manageable.

d. University Committee on International Studies. Dean Link reported that the committee has been formed and has met once.

e. University Committee on Architecture and the Fine Arts. Fr. Beauchamp said that in their first meeting, the committee members discussed what they saw as primary issues for the committee's agenda.

8. Further report on the ordinances to implement *Ex corde Ecclesiae*. Fr. Malloy reported that the responses to the *Ex corde Ecclesiae* ordinances are being prepared. At a meeting in Boston of 12 Catholic, research-oriented universities, a final statement was drafted which virtually all lay board chairs are prepared to sign. Once the drafts are signed, they will be made available to all faculty. A statement from the Holy Cross affiliated institutions has also been distributed for comment and should be ready shortly for signature by the presidents, provincials and superiors general. Fr. Malloy will attend a meeting in Washington of presidents and bishops which should present a good opportunity to discuss how the proposed ordinances are being received. He said that the final statement by the University is being prepared so that it can be sent to the Trustees for comment. Once that process has been completed, the University response and related documents will be made available to the University community so that everyone can see how our response evolved. Of the 230 Catholic colleges and universities, he said, roughly 98 percent are in agreement against the proposed ordinances.

DOCUMENTATION

There being no further business, the meeting was adjourned at 4:40 p.m.

Respectfully submitted,

Roger A. Schmitz
Secretary of the Academic Council

Attachment A

Proposed Masters Degree in Geological Sciences (MSc in Geological Sciences)

Core Courses:	Credits
GEOS 523 Paleoclimatology	3
GEOS 545 Biogeochemical Cycles	3
CE/GEOS 547 Geodynamics	3
GEOS 568 Environmental Isotope Chemistry	3
CE 525 Advanced Geostatistics*	3
Electives:	
GEOS 519 Surface and Subsurface Geophysics	3
CE/GEOS 528 Environmental Analysis	3
GEOS 634 Paleoecology	3
GEOS 635 High-Temperature Geochemistry	3
GEOS 638 Geolimnology	3
GEOS 640 Physical Properties of Fractures	3

* = Existing course.

Part of the rationale for the formation of the Department of Civil Engineering and Geological Sciences was to develop a graduate program in the Geological Sciences. We are proposing to initiate a modest Masters program in Geological Sciences to complement the Ph.D. program and which builds upon the current strengths of our department in Hydrology, the Environment, Earthquake Engineering, and Geochemistry. The ten new courses listed above will form the basis of the Masters graduate program in the Geological Sciences and are formulated such that they will be relevant to engineering and/or environmental graduate students within our department. Also, they will complement the existing graduate course offerings of the department. *Addition of these courses will require no new faculty or an increase in current teaching loads*, because the undergraduate and graduate curricula are structured so that courses need not be offered each year. Course descriptions stipulate when each course is to be taught (e.g., *Fall, Odd years*).

The above list of courses will allow potential Masters students in the Geological Sciences to have a reasonable choice of courses while still playing to the strengths of the department. At present, four of these courses are be-

ing offered with the 598/599 designation to test the cross-disciplinary attraction of potential GEOS graduate courses (Environmental Analysis; Biogeochemical Cycles; Environmental Isotope Chemistry; Geolimnology).

The structure of the Masters graduate program will involve a core curriculum of five (5) courses, of which a student will normally be required to take at least three (3). Five courses are being offered in the core course pool for two reasons: 1) A student who has already decided on a field in which to specialize will not be overly restricted; 2) Every Masters graduate student in Geological Sciences will be exposed to the strengths within our department.

In addition to completion of the core curriculum requirements, students may specialize, for example, in Environmental Geology, Hydrogeology, Geochemistry, Geophysics/Seismology by selecting a suitable combination of relevant courses from the list above, within the College, or within the University, to complement their thesis research — all students are expected to conduct thesis research. Finally, this Masters program in Geological Sciences will be governed by the CE/GEOS departmental Graduate Studies handbook.

Courses Offered — GEOS Graduate and Undergraduate

Odd Years:

Fall

351 Oceanography
403/503 Geochemistry
141 Physical Geology
523 Paleoclimatology
347 Igneous and Metamorphic Petrology
519 Surface and Subsurface Geophysics
547 Geodynamics
445 Field Trip
457/547 Sedimentation and Stratigraphy

Spring

454 Marine Geology
442/542 Surficial Processes
362 Environmental Geology
458 Geophysics
242 Mineralogy/Optical Mineralogy
568 Environmental Isotope Chemistry
462 Engineering Geology
640 Physical Properties of Fractures
142 Historical Geology
634 Paleoecology
342 Structural Geology

Even Years:

Fall

545 Biogeochemical Cycles
351 Oceanography
141 Physical Geology
445 Field Trip
347 Igneous and Metamorphic Petrology
635 High-Temperature Geochemistry
547 Geodynamics
457/547 Sedimentation and Stratigraphy
459 Paleontology
519 Surface and Subsurface Geophysics

Spring

528 Environmental Analysis
442/542 Surficial Processes
362 Environmental Geology
638 Geolimnology
242 Mineralogy/Optical Mineralogy
458 Geophysics
462 Engineering Geology
640 Physical Properties of Fractures
142 Historical Geology
342 Structural Geology

Attachment B

Proposal for Autonomy for the School of Architecture November 2, 1993

PROPOSAL

During the 1991-93 academic years, the School of Architecture conducted an experiment in concert with the Dean of the College of Engineering and the Office of the Provost to test the feasibility of breaking away from its position as an entity within the College. The goal of the School is to become an autonomous unit within the administrative structure of the University of Notre Dame.

That period of trial being over, and from the points of view of the School and the College, having been successful, the School of Architecture requests approval from the Academic Council to be officially recognized as a free-standing entity answering directly to the Office of the Provost. The following proposal articulates the status and administrative procedures that the School envisions.

On September 9, 1993, the College of Engineering Council voted unanimously in support of the School of Architecture becoming autonomous from the College of Engineering. Now the School of Architecture requests the Academic Council to consider this same proposal to achieve autonomous status within the University of Notre Dame.

Autonomy would put the School of Architecture in a position to excel as a professional school. This position would increase the level of respect for the program from professional and educational institutions and be more attractive to potential students and new faculty.

BACKGROUND

Architecture was first taught at Notre Dame in 1898 by a Chicago architect who commuted weekly to the campus. In 1906 a College of Architecture was established, but during WWI Architecture became a department within the College of Engineering. During the 1920s and 1930s the Department of Architecture was a member of the Beaux-Arts Institute of Design and produced several national prize winners. Since 1982 its designation has been as a School of Architecture. This follows the designation of 42% of American architectural programs. Since the mid-1980s the School has received pressure from its accrediting institution, the National Architectural Accreditation Board, to separate from the College of Engineering. The NAAB defines our School of Architecture as "the only selective private five-year program remaining within a College of Engineering."¹ The ambition for the School of Architecture to become independent goes back to the chairmanship of Frank Montana (1950-1972). In a sense, Architecture at Notre Dame has held a semi-autonomous position within Engineering for some time. Due to the substantial differences of its requirements from the criteria of Engineering, the School has enjoyed flexibility with hiring decisions, curriculum development, and long-term planning. In addition, the appeal of architecture as a subject has attracted donors who have generously supported graduate programs, building renovation, and special library acquisitions. Since the 1920s the program has been located in a separate facility, most conspicuously since 1964 in the former Lemonnier Library. Administration of the Rome Studies Program has also been handled by the School since its establishment in 1972.

Despite the position of relative independence, the School has not developed an internal administrative structure similar to a Collegiate one. The structure is still departmental. The understanding with the Office of the Provost is that if the School of Architecture becomes autonomous, no additional funds for administrative growth would be available initially. At first, the structure would remain roughly the same as it has been. There is a hope to develop a summer stipend for an assistant chairman in the short term.

¹ A letter from John Geronimo, Executive Director, NAAB, January 4, 1991, compares the School of Architecture to the following selective private five-year programs: Carnegie-Mellon, Miami, Rensselaer, Rice, Syracuse, Tulane, USC, Washington.

DOCUMENTATION

FACULTY AND STAFF

Since 1989, the School has added three tenure/tenure track positions to its ranks. The total number of positions is 16. Three and one-half of these are adjunct faculty in the Rome Studies Program. Although untenured, 1 1/2 of these adjunct positions are permanent, from the Italian point of view. The School of Architecture has one professional specialist position (furniture design), two secretarial positions and one administrative assistant position.

PROCEDURES FOR APPOINTMENT, REAPPOINTMENT
Procedures for appointment and reappointment of the School of Architecture Chairperson are as described for Chairpersons of Departments in Article II, Section 7 of the *Faculty Handbook*. The only exception is that the role of the Dean of the College is taken by the Vice President and Associate Provost.

Procedures for the appointment and reappointment of faculty for the School of Architecture are as described under Article III, Section 4 in the *Faculty Handbook*. The only exception is that the role of the Dean of the College is taken by the Vice President and Associate Provost. Present practices regarding the role and method of election of members to the Committee on Appointments and Procedures will be retained.

UNDERGRADUATE STUDENTS

The undergraduate student body currently numbers 220. Seventy of these students are freshman intents. The School generally experiences attrition of about 20% between freshman and sophomore years. Transfers into freshman and sophomore years have been increasing. Over the past several years, a growing number of students who transfer into the University indicate that they wish to take advantage of the unique offering of the School of Architecture curriculum. Although the current fourth year class numbers 30, the School perceives an increase at the lower division levels; the current sophomore class numbers 56.

GRADUATE STUDENTS

The School of Architecture offers Master's of Architecture degrees in two interrelated programs. The endowment supports seven graduate students pursuing a Master's of Architecture degree. The School of Architecture hopes to build the endowment to support a total of fifteen students. The Graduate Committee is exploring the possibility of accepting a limited number of students with a non-architectural Bachelor's degree to participate in a 3 1/2 year accredited Master's degree.

FACILITY

Since 1964, the School of Architecture has been housed in the former Lemonnier Library. Plans are underway to extensively renovate the School of Architecture building to correct antiquated infrastructure, respond to the needs of teaching and to symbolize the vitality of architectural instruction at Notre Dame. The project will begin during the 1994-95 academic year.

STUDENT AND FACULTY PERFORMANCE

Criteria for both student performance as well as faculty evaluation have been substantially increased. Over the past several years, expectations of faculty of the School of Architecture have risen to meet requirements associated with traditional academic fields; that is, faculty are expected to teach, build, research and publish. These multi-valent expectations are stimulating to students because faculty members serve as models for the scholarly as well as manual aspects of architecture.

BUDGETARY RAMIFICATIONS

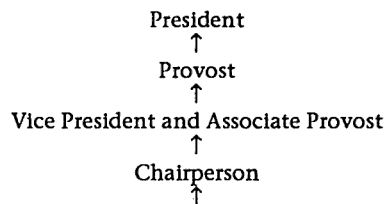
During the 1991-1993 period, all budgetary items were worked on directly with the Vice President and Associate Provost. This has involved the yearly budgeting process and financial administration of the Rome Studies Program. No additional budget funds are immediately necessary for the School of Architecture to function in an autonomous manner. Any future increase in funding depends on developments within the School and will be approved through the usual budgetary processes.

SIMILAR INSTITUTIONS

There are 94 accredited schools of Architecture in the United States and a great diversity in administrative structure exists among them. The model that the School of Architecture would like to emulate is that of an autonomous School of Architecture within the larger University structure. Of the "selective private, five year programs," all except Notre Dame are configured this way. The pattern is for the Chairperson or Dean to work with the faculty as a "Committee of the Whole." The Chairperson reports directly to the Provost. The following table articulates the basic structure the School of Architecture proposes:

DOCUMENTATION

Proposed Organization of the School of Architecture, University of Notre Dame



Potential Assistant Chairperson

Representation on University Committees and Councils

1. Committee for Admissions, Scholarships, and Financial Aid (Chairperson)
2. Committee on Collegiate Procedures (potential assistant chairperson)
3. Enrollment Projection Committee (chairperson)
4. Faculty Senate (1 person taken from present Engineering allotment)
5. Graduate Council (Chairperson, School Graduate Committee)
6. University Committee on Computing, Information Services (Chairperson School Computer Committee)
7. University Committee on Libraries (1 elected representative)

Director of Rome Studies Program

Parallel School Committees

CAP

Undergraduate Studies Committee

Elections Committee

"Committee of the Whole"

Graduate Studies Committee

Computing Committee

Library Committee
Honesty Committee
Facility Committee
Service Committee
Election Committee
Honesty Committee
Undergraduate Committee

Comparison of the Notre Dame School of Architecture to other Selective, Private, Five Year Programs

	Miami	Notre Dame	Rensselaer	Rice	Syracuse	Tulane	USC
Autonomous	Yes-since 1983	?	yes	yes	yes-since 1948	yes	yes
# of Undergraduates	350	225	220	120	345	325	400
# of Graduates	35	7	20	70	50	18	50
# of Faculty	24	16	18 full/ 6 part	12 full/ 20 part	30	33	20 full/ 13 part
Administrative Structure	President	please see proposal	President	President	President	President	President
	Provost		Provost	Provost	Vice Chancellor (Provost)	Provost	Provost
	Dean		Dean	Dean	Dean	Dean	Dean
	2 Grad Chairs/ 1 center chair			1 Undergrad/ 1 Grad Chair	1 Undergrad/ 1 Grad Head	Asst Dean/ Admissions	5 Admin Assistants
	Faculty		Faculty	Faculty	Faculty	Faculty	Faculty

Attachment C

Proposal Addressing Committee Membership from the Faculty Senate's Committee on Administration

Elections (Nominating Committee)

WHEREAS some faculty members feel that they have been unfairly excluded from the ballot for election to university committees by appointed Election Committees,

BE IT RESOLVED that Article IV, Section 6 of the Academic Articles be amended to read:

(In the following text, proposed deletions from the current version are struck through, and proposed insertions are enclosed in [brackets].)

Article IV Section 6/Elections Committees and Procedures

From each College faculty, from the Law School faculty, and from the Library faculty, the appropriate ~~Dean or Director~~ [Council or representative body] annually appoints [elects] an Elections Committee. Except when otherwise provided by these Academic Articles, faculty members to be elected to Committees of the University, of the College or of the Library are nominated by this committee and elected by the regular faculty of the College, School, or Library. The University Committee on Elections, consisting of one member ~~selected by the appropriate Dean or Director~~ [elected by the appropriate Council or representative body] from each of the Elections Committees and* one member of the Special Professional Faculty selected by the Provost's office, conducts elections for University at-large positions.

No fewer than two candidates, all of whom have expressed willingness to serve, are nominated for each position. A timely petition of ten members of the regular faculty suffices to add a name to the ballot. Each ballot contains appropriate biographical information and allowance for write-in votes. A plurality of votes elects.

Attachment D

The Medieval Institute Constitution
November 17, 1993

I. Statement of Purpose

The Medieval Institute at the University of Notre Dame, founded in 1947, exists to promote all aspects of medieval studies within the university community, to provide

programs for undergraduate students, to maintain and expand its central commitment to education at the graduate level (Master of Medieval Studies, Ph.D. in Medieval Studies), to support the work of its medieval scholars, faculty and students alike, through its library and microfilm holdings, and to utilize all feasible means to enrich its general contribution to medieval scholarship.

The Medieval Institute aims to break through the intellectual constraints of institutionalized disciplines. It attempts to encompass every aspect of Medieval Studies, welcoming specialties and methodologies of all kinds, while retaining special strength in the areas of medieval thought, religion, and culture.

II. Administration of the Institute

A. The Director

1. The director shall be appointed by the president of the University, on recommendations made by the provost of the university and the dean of the College of Arts and Letters. When a director resigns or retires, the dean shall appoint a committee of five persons, at least three of whom are Fellows of the Institute, who are to conduct the search. The dean will chair the committee, which is to make recommendations to the provost and the president of the university.

2. The director of the Institute reports to the provost through the dean of the College of Arts and Letters.

3. The director of the Institute shall have full responsibility for all its programs, budgets, and staff appointments, subject to the normal approval of dean and provost. The director shall appoint faculty members to serve on the Institute's various committees, after consulting with them about their interests.

4. The director's performance is to be reviewed every five years. The dean of the College of Arts and Letters shall appoint a committee consisting of three Fellows to conduct the review and report to the dean.

B. Members of the Institute

1. Members consist of faculty members whose teaching and research activities pertain to the work of the Institute.

2. Members have full access to the Institute's library and microfilm holdings, can participate fully in its programs, may serve on its committees, and are eligible to elect the Institute's Advisory Board from among the Fellows.

3. Members shall be assembled at least once each year to discuss the Institute's activities and plans.

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4. Members are appointed by the dean of the College of Arts and Letters on recommendation of the director and the Advisory Board.

C. Fellows of the Institute

1. Fellows consist of tenured faculty of the University who are members of the Institute, whose teaching and research activities pertain to the work of the Institute. Their status is equivalent to that of the Full Faculty Fellow (*Faculty Handbook*, III.3.b).

2. Fellows are nominated by the Institute's existing Body of Fellows and appointed for five-year terms by the president, on the recommendation of the provost, the College dean, the director of the Institute, and the chairperson of the department in which he or she is tenured.

3. The specific provisions of a Fellow's appointment to this special research faculty category are to be determined by the director, the chairperson of the faculty member's home department, and the dean, and are to be stipulated by the provost.

4. The Fellows are to gather at least once each semester to discuss future planning and present programs within the Institute. Only Fellows are eligible for election to the Advisory Board, and for appointment to search or review committees.

D. The Advisory Board

1. The Advisory Board consists of five Fellows elected annually by the members.

2. The director is to summon the Advisory Board at least once each semester to review the Institute's programs and future plans. The Board will also meet at the request of at least three Board members, who wish to have specific items discussed. Ordinarily the director is to supply an agenda in advance, made up of items that have come to his or her attention from all members. Internal minutes will be kept for the Board, and executive minutes will be distributed to all members as a way of keeping them informed.

3. The Advisory Board can serve, if necessary, as an appointments and promotion committee.

E. Graduate Studies

1. The director of the Institute is responsible for overseeing and implementing graduate studies, in conjunction with recommendations made by the Graduate Studies Committee.

2. The Graduate Studies Committee is constituted of at least four members appointed annually by the director.

3. The director and the committee are to establish and to follow the "Guidelines for Graduate Study."

4. A committee of three graduate students will be elected annually to represent student concerns to the Committee, and may be invited to attend appropriate committee meetings.

F. Undergraduate Studies

1. The director of the Institute shall appoint a director of undergraduate studies, who will report annually on his or her activities to the Institute's director.

2. The director of undergraduate studies will be responsible for the undergraduate curricula and for such support organizations as the Medieval Club.

G. The Library

1. The Library Committee will consist of the director of the Institute, the librarian, the bibliographer, and at least three other members appointed by the director.

2. The Library Committee will oversee the development of the collection in conjunction with the bibliographer and make library policy in conjunction with the librarian.

H. Publications

1. The Publications Committee will consist of the director of the Institute, the administrative assistant (who will normally chair the committee), and at least three other members appointed annually by the director.

2. The Publications Committee will oversee all the Institute's publication series and will make recommendations for publication to the Board of Notre Dame Press.

I. The Ambrosiana Microfilm Collection

1. The curator of the Ambrosiana Microfilm collection will be appointed by the director of the Institute and the director of the Hesburgh Library,

2. The curator will have responsibility for overseeing, publicizing, and preserving the microfilm collection, and will report annually to the two directors.

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III. Amendments

Amendments to this Constitution may be proposed to the Fellows by any member of the Institute. An amendment becomes effective with the approval of a two-thirds vote of the Fellows and the approval of the Academic Council.

* The original proposal from the Faculty Senate contained the following parenthetical insertion here: (until such time as one elective body represents all the Special Professional Faculty). The Executive Committee of the Academic Council felt that such a statement of possible future action should not be included in an academic article. Article IV may be amended further if an elective body representing all the Special Professional Faculty is formed in the future.

Academic Council Minutes December 7, 1993

Members in attendance: Edward A. Malloy, C.S.C., Timothy O'Meara, Roger Schmitz, Patricia O'Hara, Nathan Hatch, Harold Attridge, Francis Castellino, John Keane, Eileen Kolman, David Link, Anthony Michel, Richard Sheehan, Frank Bonello, David Burrell, C.S.C., Cornelius Delaney, Mark Pilkinton, John Roos, Thomas Werge, Mario Borelli, William Shephard, Hafiz Atassi, Arvind Varma, Carol Mooney, Kenneth DeBoer, Kathleen Maas Weigert and Randall Poole

Observers in attendance: Douglass Hemphill, Thomas Moe and Dennis Moore

Guests: Rosemary Lewins, O.P.

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

1. The minutes of the meeting of October 19 were approved.

2. A recommendation from the Undergraduate Studies Committee for a Center for Teaching and Learning Excellence. (See Attachment A.) This item was presented by Profs. Bonello and Delaney, co-chairs of the Undergraduate Studies Committee. Prof. Bonello began by noting that during the past few years, several faculty and student groups have recommended the establishment of a teaching and learning center. Although the quality of instruction and learning at Notre Dame is good, he continued, a center could address those shortcomings that do exist while at the same time generating more involvement in improving the quality of undergraduate education. Far from encroaching upon the primary responsibility of departments and colleges to ensure the quality of education and learning, the center would serve as a catalyst which would stimulate and reinforce those efforts. The Undergraduate Studies Committee favors a centralized organization as the surest way to guarantee that motivation and resources are present and that duplication is minimized. Of equal significance is the dialogue and interaction among departments and colleges which a centralized organization would encourage. Prof. Delaney commented that his skepticism about such a center changed to support when he saw what a centralized organization had accomplished at Harvard. The centralized organization of Harvard's teaching center provides a source of expertise and information in such a way that individuals and departments are encouraged to take advantage of the opportunities it presents. Fr. Malloy emphasized the importance of this matter and urged the council members to engage in a full discussion of it.

DOCUMENTATION

Dean Link remarked that the proposed center would be especially helpful to the Law School and other professional schools in which faculty frequently do not have a teaching background. He speculated further that as a long-term mission, a Center for Teaching and Learning Excellence at Notre Dame might provide a good service to educators from other universities as well. Dr. Weigert and Prof. Borelli spoke about the importance of a center as a means of emphasizing the University's institutional commitment to teaching and learning excellence. Dean Castellino pointed out the value of a center for incoming faculty and especially graduate students. Because the preparation of graduate students for teaching is such a widespread concern nationally, he felt that outside funding for such a program undoubtedly exists and should be explored. Prof. Roos added his support to the recommendation, noting that it would promote the sharing of information on how best to assist graduate student preparation while providing faculty a place to go for assistance. Mr. Poole stated that support for the proposed center is widespread among graduate students, and added that the Graduate Student Union has already taken steps to provide orientation for teaching assistants at the beginning of the academic year. Mr. DeBoer remarked that at a meeting of the Undergraduate Studies Committee undergraduate students, speaking for themselves and on behalf of the student government, were in favor of the proposal.

Prof. Mooney expressed reservations concerning the likely success of this initiative, which she said were compounded by a staffing structure which does not seem adequate to meet the task. In particular, she questioned whether a half-time director would be able to get the effort off the ground. If it is important to establish a center, she said, it should be organized in such a way that it will be able to provide the service it promises. Prof. Bonello responded that this point was well taken. Explaining the rationale behind the structure, he said the committee had looked at the three organizational models that exist elsewhere. Some are headed by a member of the regular teaching and research faculty, some by a professional in the field of education, and others through a compromise in which a regular faculty member serves as director with the assistance of an educational professional. The combination of a part-time director with faculty standing within the University community and an assistant with professional expertise in education was seen by the committee as the best model for Notre Dame.

Addressing the question of a centralized versus a decentralized organization, Dean Michel suggested that the size of Notre Dame argues in favor of a centralized entity. He added, however, that it is important to ensure that such a center be sufficiently flexible to accommodate the specialized needs of the various colleges. Prof. Sheehan noted that during the concluding meetings of the Colloquy for the Year 2000, several faculty had expressed

strong preferences for a decentralized organization as the best way to promote and permit innovation and alternatives at the department level. He suggested that the college councils should be given the opportunity to provide input before the Academic Council commits to a centralized structure. Responding to a comment by Prof. Varma, he argued that while it is important to move forward with the center, it is just as important to define the roles to be taken by the center, the colleges and the various departments. The college councils could help establish this division of responsibilities.

Dean Kolman pointed out that various committees all have evolved toward support of a centralized model for a teaching center. While not opposed to getting more input, she felt that several groups have already concluded that the recommendation as it stands is a good one, and it is probably time to get started. She observed that the proposed center could do no worse than fail to meet expectations; in any event, it would not reflect poorly on Notre Dame. Prof. Varma agreed, saying that if the organization of the proposed center is to be discussed further, such discussion should occur under a fixed time limitation. He added that the members of the Academic Council have been elected to represent their colleges rather than turn all questions back to the college councils. Prof. Shephard felt that unless there is a real likelihood of structural change resulting from further discussion, it would be appropriate to first start moving and then consult with the college councils concerning responsibilities. Prof. Roos agreed, stating that since the center would not either regulate activities or usurp authority, it is not necessary to go to the college councils first. Fr. Burrell observed that the choice of the terms centralized and decentralized is unfortunate, since it distorts the real issue. What is important, he said, is the principle of subsidiarity rather than centralized or decentralized organization. The important function of a center is to coordinate and focus ongoing efforts while encouraging new initiatives. The very existence of a center, he argued, will catalyze local efforts and foster the kind of dialogue that refines them and broadens their impact.

Although agreeing that the proposed center is a good thing, Prof. Hatch thought it unlikely that the requested annual budget of \$125,000 would be approved for next year in light of other academic priorities of the University. Dean Attridge concurred, observing that even though the idea is good and necessary, college councils would be more likely to make other issues their top priority. Prof. Bonello pointed out that in fact this amount is less than one-tenth of one percent of current expenditures, and it would also be shared among the four colleges, the law school and the graduate school. Furthermore, the potential impact of the center on the entire University certainly justifies the cost.

Fr. Malloy emphasized that questions of funding are not really the issue to be discussed by the Academic Council. The council does not stipulate the source of funding to support a decision, he said, but it clearly has the authority to assert to the officers of the University that action should be taken. However, the council's decisions come with a price, he noted, and this price is the reason that full discussion is essential. He pointed out that support for the proposed center is qualified. An argument often made in support, he continued, emphasizes the symbolic value that such an entity would bring to the University. A Center for Teaching and Learning Excellence would be a symbolic counterpoint to the emphasis on research reflected by the Office of Vice President for Graduate Studies and Research. Although few would oppose that argument or the idea of improving teaching, he emphasized that throughout the Colloquy discussions concerns had been expressed about the scope and scale to which a centralized center might evolve. The bureaucratization that tends to accompany centralized organizations, and the non-faculty specialists who might be appointed to fill the proliferation of offices and functions associated with a center, are definite concerns. Prof. Bonello responded that while such concerns are legitimate, the problems can be avoided. Although Harvard's center has grown to approximately seven full-time staff and a \$600,000 annual budget since 1976, the center at one of Notre Dame's peer institutions has been in existence for eight years and operates with two full-time staff and an annual budget of \$220,000.

Dean Castellino thought that it might be unwise to act quickly in committing resources to this proposal before the council sees what projects the Faculty Affairs and Graduate Studies Committees might propose. Dean Link remarked that because he shared Dean Castellino's previously stated belief that outside funding may be available, he thought it would be appropriate for the council to approve the recommendation in principle so that these sources can be pursued. Prof. O'Meara observed that there is a good possibility that endowment funds could be raised to support the center.

Prof. Werge asked what the balance would be between promoting improved teaching among faculty and graduate students and working with undergraduates on the learning dimension. Prof. Hatch and Dean Kolman replied that the emphasis at Harvard was almost exclusively on teaching, and primarily on graduate student teaching. Prof. Bonello said that the recommendation for Notre Dame was taken from the Stanford model, which devotes nearly equal effort to teaching and learning. Since it appears that this is the direction in which many centers tend to evolve, the Undergraduate Studies Committee felt that it would make sense to start with both teaching and learning in mind. Prof. Shephard thought that the program outlined in the recommendation is more than

could reasonably be accomplished by a new center. He suggested that a concentration on graduate and faculty teaching might be most appropriate at the beginning, with an expansion to undergraduate learning at a later time. Prof. Bonello responded that the recommendation did not seek to mandate activities, but rather to suggest potential areas which could be addressed as time and resources permit.

Fr. Malloy expressed the hope that the foregoing discussion would assist in the formulation of a more precisely stated proposal which would be brought back to the Academic Council for a vote. Such an action by this central academic policymaking group of the University would give the proposal a status that previous recommendations by committees were not capable of providing. At the request of Dr. Weigert, he asked the council for a voice vote on whether or not the proposal should be sent to college councils for input before further action. All voices opposed sending it to the colleges. The council then agreed to send the proposal and the points raised in the preceding discussion back to the Executive Committee so that an appropriately revised proposal could be brought before the council at a future meeting.

3. A proposal to amend Academic Article III, Sections 5a and 11. (See Attachment B.) Prof. O'Meara informed the council that the Provost Advisory Committee (PAC) had discussed the tenure issue represented in the proposed amendment to Section 5a for several months. The proposal was developed to resolve the "out of sync" phenomenon which arises when a tenure-track faculty member is appointed in January or, having been appointed in August, takes a semester leave of absence not counted for tenure purposes. In both cases, that individual now comes up for a tenure decision in January rather than May. The proposal corrects this by extending the probationary period by one-half year in such cases. The amended language proposed to Section 11, he continued, incorporates changes which bring the section into agreement with federal law concerning family and medical leaves.

Prof. O'Meara noted that during the course of discussion, the PAC learned that the practices for granting leaves of absence and stopping the tenure clock during the probationary period vary among the colleges. Although that issue is not addressed by this proposal, he said, it is a subject to which the council should return in the near future.

After a brief clarifying discussion, the proposal was approved by the council without dissent.

4. Reports by standing committees.

a. Faculty Affairs. Prof. Atassi said that the committee is gathering information on how to work within the ten-

ure procedures to decrease the anxiety and promote the development of young faculty. Secondly, the committee is looking at the issue of resources available to part-time faculty.

b. Graduate Studies. Prof. Roos reported that departmental responses to the committee's survey on appointment, mentoring and reappointment of graduate teaching assistants have been received and are now being analyzed by the committee. He thought that the next step would be to discuss the results of the survey with Deans Attridge and Castellino prior to deciding on a recommendation in January. Prof. Werge added that the task is complicated by the significant diversity in what departments indicate they are doing to prepare and develop graduate students.

c. Undergraduate Studies. Prof. Bonello said that to date 12 department chairs have responded to the letters asking for opinion on the two versions of increasing depth in undergraduate curricula through research requirements. In general, the responses favor the "weaker" model and express some concern about the demands on faculty time which the "stronger" version entails. Responding to a question from Prof. O'Meara, he said that the committee has also started to evaluate data which might indicate how many students would respond to a research requirement. The committee has also begun a discussion of efforts by the Office of Student Affairs and Student Government to improve intellectual life on campus. Once all parties have met, the committee will provide a report to the council.

5. Reports by post-Colloquy committees.

a. University Committee on Curriculum. Prof. O'Meara related that the committee began its initial meeting by extracting points raised from the Colloquy committee on academic life, continued by trying to elicit other ideas which should be discussed, and concluded that an executive committee was necessary to stimulate and frame discussion effectively. That committee will meet next week, he said, and the full committee will meet once more before the semester break. He added that input would be solicited from each college council. Dr. Weigert expressed concern over the May 1994 deadline by which the committee was to report on a proposed curriculum for the 21st century. Fr. Malloy observed that without a deadline, the conversation on such a subject could go on forever. What is needed in the spring, he said, is at least an interim report which would indicate where the process is and when the final report would be completed. The important thing is to do as much as can be done, he said, and to go beyond spring 1994 only if there are enough proposals for change to make more time essential.

b. Ad Hoc Committee on University Libraries. Prof. Schmitz said that the full committee has met once and engaged in an open discussion of a wide variety of needs and concerns. Following that meeting a steering committee has been established to set a specific agenda and to form subcommittees.

c. University Committee on Research, Scholarship and Infrastructure. Prof. Hatch reported that this committee has met once and developed four issue areas: capitalization and matching funds, "Project 19" equipment issues, graduate education and office infrastructure. Capitalization of new faculty is a significant issue, he said, since certain departments will lose 40 percent of their faculty within the next five years.

d. University Committee on International Studies. No report.

e. University Committee on Architecture and the Fine Arts. Dean Attridge reported that the committee is reviewing the relationships among the fine arts and architecture departments.

6. Other Business. With respect to the proposed ordinances concerning *Ex corde Ecclesiae*, Fr. Malloy reported that Notre Dame has signed the statement from the meeting of Catholic universities held at Boston College and the statement from Holy Cross Affiliated Institutions and is completing the draft of the University statement which will be sent to the Trustees. He expressed the hope that all of these statements would be sent to everyone soon, perhaps before Christmas. He was optimistic concerning the outcome of the discussion over the proposed ordinances, saying that he had sensed recognition among the bishops on the Bishops and Presidents Committee that a problem exists which will not disappear.

Fr. Malloy related that he attended a meeting of the leadership of several leading universities and colleges recently, in which the discussion focused on concerns about the future of higher education in America. Competition for students and the funds to educate them continues to be intense.

Fr. Malloy closed the meeting at 4:45 p.m. by thanking the council members for their work through the semester and wishing them a joyous Christmas season.

Respectfully submitted,

Roger A. Schmitz
Secretary of the Academic Council

Attachment A

Recommendation for a Center for Teaching and Learning Excellence

Consistent with the Report of the Task Force on the Quality of Teaching in a Research University, the Report of the Committee on Teaching by Doctoral Students, the Report of the Arts and Letters Committee on the Quality of Undergraduate Education, Back to Basics: Undergraduate Education at a National Catholic Research University, the Report of the Academic Life Committee of the Colloquy for the Year 2000, and the deliberations of the Graduate Studies Committee of the Academic Council, the Undergraduate Studies Committee of the Academic Council proposes that the University establish a Center for Teaching and Learning Excellence.

The Center is to establish programs and prepare materials to: (i) assist faculty in evaluating and enhancing their teaching performance; (ii) assist graduate students in developing teaching skills and discharging their teaching responsibilities; and (iii) assist students in their efforts to become more effective learners.

The Center shall have an advisory board consisting of a representative from each of the four undergraduate colleges, the Freshman Year of Studies, the Graduate School, and the Law School. The unit representatives are to be appointed by the deans of the respective units. The advisory board's functions are to assist in the selection of the Center's directors, provide consultation to the Center director on the Center's staffing and program development, periodically review the Center's performance, and facilitate interaction between the Center on the one hand and the colleges and departments on the other.

The Center is to be directed by a distinguished teacher-scholar selected by the Provost, in consultation with the advisory board, from the regular teaching and research faculty. The term of appointment should be no less than three years and no more than five years. The appointment will be on a half-time basis. The Center is to have additional staff sufficient to discharge its responsibilities. Administratively, the Center is to be a part of the Provost's Office; the Center director will submit an annual report to the Provost detailing activities over the previous year and plans for the forthcoming year.

The Center is to begin operation during the 1994-95 academic year. During the current academic year, the Provost or a member of his office is to begin activities to ensure this starting date — constitution of the advisory board, identification of office space, identification of fac-

ulty who might serve as director, selection of director, secure appropriate funding, survey of similar centers at other institutions, etc.

The budget for the first year of operation should be set in the vicinity of \$125,000. This is to include half-salary for the director (\$30,000), the salary of a full time secretary (\$20,000), salary of a professional specialist (\$25,000), programs (\$20,000), office supplies and equipment (\$15,000), materials (\$15,000).

Appendix A

Potential Activities for the Center for Teaching and Learning Excellence

- Videotaping and critiquing of classroom instruction.
- Conducting analysis of courses in progress with small groups of students.
- Providing information regarding the construction of syllabi and examinations.
- Helping departments create training programs for graduate teaching assistants.
- Developing workshops for international graduate students regarding the culture of the American university and American undergraduates.
- Publishing pamphlets that provide new teachers with information regarding such matters as the grading system, the final examination requirement, the ordering of textbooks, putting books on reserves, and reserving rooms for special sessions.
- Conducting an orientation for all new graduate teaching assistants prior to the opening of the school year.
- Organizing as needed remedial classes for prospective graduate teaching assistants in oral and written English as a second language during the academic year.
- Offering consultation services to those who wish to improve their teaching performance.
- Assisting departments on the creation of evaluation instruments for graduate teaching assistants.
- Implementing support as well as training programs which would allow teachers to exploit the state-of-the-art technology available in DeBartolo Hall.
- Maintaining a library of resource materials regarding university teaching.
- Organizing a workshop for faculty to discuss topics relevant to teaching.
- Providing assistance for institutional grant writing regarding teaching and learning.
- Administering university-wide teaching programs such as the Lilly Teaching Fellows program.
- Investigating in collaboration with the Office of Institutional Research the validity of the Teacher Course Evaluation.
- Organizing workshops for undergraduate students on topics such as time management, note taking, and test taking.

DOCUMENTATION

- Providing tutoring for undergraduate students on a group basis.
- Providing materials and assistance to undergraduate students to promote better writing.
- Providing materials and assistance to undergraduate students to promote better speaking skills (for example allowing students to videotape their own oral presentations with appropriate critique).
- Facilitating the use of supplemental learning strategies such as collaborative learning and computer-aided instruction.
- Developing an inventory of learning enhancement materials — videotapes, books, computer software, etc.
- Providing materials that would allow students to identify and strengthen their learning styles.

Attachment B

PROPOSED AMENDMENTS TO ARTICLE III, SECTIONS 5(a) and 11

(In the following text, insertions are enclosed in [brackets], and deletions are ~~struck through~~.)

Article III, The Faculty

Section 5/Tenure

Subsection (a) Qualification for Tenure

Tenure is permanence of appointment. Its principal purpose is the protection of academic freedom. Tenure may be granted and held only by members of the Teaching-and-Research Faculty holding University appointments at ranks other than Instructor. Tenure is granted only in writing, in a contract or letter of appointment.

Members who are appointed or promoted to the rank of Professor or Associate Professor, except in the Law School, will not be retained without tenure for longer than four years [(If that entails concluding with a Fall semester, then four and one-half years.)] total service at Notre Dame, including service at previous regular teaching-and-research ranks [other than Instructor]. Members who are appointed to or promoted to the rank of Assistant Professor will not be retained in that rank without tenure for longer than seven years of service [(respectively seven and one-half years)]. Members of the Teaching-and-Research Faculty in the Law School will not be retained without tenure for longer than seven years [(respectively seven and one-half years)].

The probationary periods specified in this subsection are increased by one year for each appointment extended pursuant to the University policy on primary caregivers. In no event, however, is a probationary period increased, under this policy or otherwise, more than a total of two years [(respectively two and one-half years)]. Nothing in this Subsection (a) prevents the offer of tenure to a member who has served less than the specified maximum probationary period.

Evaluation of a member for tenure should generally be guided by, among other considerations, the criteria for appointment or promotion to the rank of Associate Professor set out in Section 3. Granting of tenure will not, however, necessarily entail promotion to that rank for Assistant Professors.

Section 11/Leave of Absence

Consistent with its views on faculty services, the University recognizes the importance, for its own well-being, of faculty leaves of absence. The University does not, however, subscribe to rigid formulae for such leaves. Requests for a leave of absence must ordinarily be submitted to the Chairperson of the Department or other appropriate academic officer at least six months in advance of the beginning of the period of leave requested. Leave of absence is also granted ~~to members for reason of childbearing, incapacitating sickness, or serious disability~~ [as indicated in the Medical Leave of Absence policy and the Family and Medical Leave policy]. Leave of absence officially granted by the University with or without remuneration is counted as service for purpose of tenure and promotion unless otherwise expressly stipulated.

University Committee on Libraries November 2, 1993

The meeting was called to order at 12:30 p.m. in the office of the director of libraries by the chairman, W. Robert Scheidt. Also in attendance were Thomas Fehlner, John Halloran, Robert Miller, Marsha Stevenson, James Walton and secretary Melodie Eiteljorge.

The minutes of the meeting of September 24 were approved with corrections.

Robert Miller announced that Richard Jones began work on November 1 as the new music librarian. He was previously at the University of Wisconsin in Milwaukee. His office will be located in the Hesburgh Library until a music library is constructed.

The libraries recently received a substantial gift for information technology, part of which will go into endowment. The Library Executive Committee is discussing tentative plans for the remainder of the gift.

On behalf of the libraries, Sonja Jordan has submitted a proposal to the National Endowment for the Humanities for the second phase of the current NEH grant, "Program to Preserve the Contents of the Library of the Medieval Institute, University of Notre Dame," which is a micro-filming project.

The Advisory Council for University Libraries will meet on November 11 and 12 in conjunction with the dedication of 14 new endowments. The focus of this year's meeting will be electronic media. Because of time restraints, there will not be a reception on Friday afternoon as in past years.

The Library Administrators and Managers Group (LAM) is setting objectives for next year (1994-95).

It was agreed that at its next meeting, on January 10, the committee will discuss a forthcoming report from the libraries' Space Planning Task Force. In February the budget will be discussed; the possibility of serials cancellations may be an issue. Dates for meetings beyond January cannot be set until spring semester schedules are received.

Robert Scheidt asked about current trends in journals publishing. Miller replied that there seems to be somewhat of a decline in the number of new journals published each year, although there is no way of predicting whether or not this will continue.

Marsha Stevenson presented a question regarding access points for theses that are cataloged in UNLOC. In the past year several access points were added, resulting in some confusion in author searches, where advisors' names appeared. It was agreed that eliminating an access point to avoid the problem is prudent.

Stevenson also distributed information on FirstSearch, which is available on a trial basis through the internet through November 30. She urged committee members to try this product and to send comments and/or recommendations to her.

On April 18 the libraries will host a colloquium on "Libraries in Transition: the Human Element." Miller noted that this is an issue that libraries in general will need to address in the months and years ahead. The Notre Dame libraries (excluding law) currently employ approximately 131 staff, 37 faculty and 110 student assistants. In this area of statistics for the 107 ARL (Association of Research Libraries) member institutions, Notre Dame ranks 102 in professional staff and 90 overall. This is based on the number of employees. Miller has raised concerns about this to the provost. Scheidt asked Miller what he would consider a reasonable increase in numbers. Miller replied that five to 10 added positions would help significantly. One problem is that acquisitions and capital costs are so high that extra money is typically not available for salaries.

There being no further business, the meeting adjourned at 1:45 p.m. The next meeting is scheduled for January 10, 3 p.m., in the office of the director.

Respectfully submitted,

Melodie G. Eiteljorge
Secretary

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Current Publications and Other Scholarly Works

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

COLLEGE OF ARTS AND LETTERS

English

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P.M. Higgins. 1993. The Other Minervas: Creative Women at the Court of Margaret of Scotland. Pages 169-185; 269-277 in, K. Marshall, ed., *Rediscovering the Muses: Women's Musical Traditions*. Northeastern University Press, Boston, Massachusetts.

Philosophy

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R.M. McInerny. 1993. Ethics. Pages 196-216 in, N. Kretzmann and E. Stump, eds., *Cambridge Companion to Aquinas*. Cambridge University Press, Cambridge, England.
R.M. McInerny. 1993. Saints Preserve Us: The Catholic Mystery. Pages 148-150 in, Gorman, Greenberg and Segriff, eds., *The Fine Art of Murder*. Carroll and Graf Publishers, Inc., New York, New York.

Program of Liberal Studies

- Austern, Linda P.
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Chemistry and Biochemistry

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THE GRADUATE SCHOOL OFFICE OF RESEARCH

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- Cushing, James T.
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LAW SCHOOL

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Wang, Yicheng
Y. Wang. 1993. Spectrum of Anomalous Random Telegraph Noise. *Journal of Applied Physics* 74(12):7609-7611.

SCHOOL OF ARCHITECTURE

- Lykoudis, Michael N.
M.N. Lykoudis and J.A. Montgomery. 1993. Design: Civic Center and Public Library Design Proposal for Blacksburg, Virginia. Pages 230-231 *in*, *Building Classical*.
M.N. Lykoudis. 1993. Design: East Hampton Airport Terminal Design Proposal. Page 249 *in*, *Building Classical*.
S. Chrisman, M.N. Lykoudis and T.V. Noble. 1993. Introduction to Building America. Page 181 *in*, *Building Classical*.
M.N. Lykoudis. 1993. Design: New Acropolis Museum Design Proposal. Page 256 *in*, *Building Classical*.
R. Economakis and M.N. Lykoudis. 1993. Design: Two Guard Houses for the Tomb of the Unknown Soldier, Athens, Greece. Pages 94-97 *in*, *Building Classical*.

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Awards Received and Proposals Submitted

In the period December 1, 1993, through December 31, 1993

AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	5	772,924	8	482,586	13	1,255,510
Facilities and Equipment	0	0	1	86,250	1	86,250
Instructional Programs	0	0	0	0	0	0
Service Programs	0	0	0	0	0	0
Other Programs	<u>0</u>	<u>0</u>	<u>3</u>	<u>13,632</u>	<u>3</u>	<u>13,632</u>
Total	5	772,924	12	582,468	17	1,355,392

PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	10	1,751,277	16	6,396,600	26	8,147,877
Facilities and Equipment	0	0	2	231,932	2	231,932
Instructional Programs	1	49,687	1	171,525	2	221,212
Service Programs	0	0	1	60,365	1	60,365
Other Programs	<u>0</u>	<u>0</u>	<u>2</u>	<u>455,443</u>	<u>2</u>	<u>455,443</u>
Total	11	1,800,964	22	7,315,865	33	9,116,829

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Awards Received

In the period December 1, 1993, through December 31, 1993

AWARDS FOR RESEARCH

Aerospace and Mechanical Engineering

- Jumper, E.
Fluid-Optics Interactions
Department of the Air Force
\$40,000 12 months
- Dunn, P.
Combined-Effects Aerosol Experiments
Electric Power Research Institute
\$133,976 36 months
- Mueller, T.
Experimental Inversion and Simulation Propeller Blade
Department of the Navy
\$56,333 24 months

Biological Sciences

- Fraser, M.
Transposon Mutagenesis of Nuclear Polyhedrosis
Viruses
National Institutes of Health
\$103,145 12 months

Chemical Engineering

- Varma, A.
Optimal Catalyst Activity Distributions in Pellets
Union Carbide
\$22,500 12 months
- Inorganic Membrane Reactors
National Science Foundation
\$71,482 24 months

Chemistry and Biochemistry

- Miller, M.
Drugs and Delivery Systems for Opportunistic
Infections
National Institutes of Health
\$201,583 12 months
- Castellino, F.
Blood Coagulation Protein-Metal Ion-Lipid Interactions
National Institutes of Health
\$237,865 12 months
- Basu, S., Basu, M.
Glycolipid Metabolism in Normal and Pathological
Tissues
National Institutes of Health
\$170,331 12 months

- Jacobs, D.
Dynamics of Molecular Ion Scattering on Surfaces
National Science Foundation
\$60,000 17 months

Electrical Engineering

- Antsaklis, P., Lemmon, M.
Intelligent Supervisory Control through Discrete Event
System ID
Electric Power Research Institute
\$100,000 25 months
- Costello, D., Huang, Y., et al.
Image Transmission Over Low Bit Rate Noisy Channels
NASA - Lewis Research Center
\$50,795 12 months

Medieval Institute

- Gabriel, A.
Support of Scholarly Works
United Casualty Agencies
\$7,500 12 months

AWARDS FOR FACILITIES AND EQUIPMENT

College of Engineering

- Spencer, B.
Computer Aided Engineering Software for
Undergraduate Education
Aries Technology
\$86,250

AWARDS FOR OTHER PROGRAMS

English

- Slabey, R.
The United States and Vietnam: From War to Peace
Indiana Humanities Council
\$2,100 6 months

Kellogg Institute for International Studies

- Ros, J.
Free Trade: A Road to Progress?
Indiana Humanities Council
\$3,000 6 months

Business Affairs

- Thomson, L.
Round 5 Projects
Indiana Department of Environmental Management
\$8,532 12 months

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Proposals Submitted

In the period December 1, 1993, through December 31, 1993

PROPOSALS FOR RESEARCH

Aerospace and Mechanical Engineering

- Thomas, F., Nelson, R.
Experiments on the Flow Physics of High Lift Systems
NASA - Ames Research Center
\$219,512 36 months
- Atassi, H.
Aerodynamics and Aeroacoustics of Nonuniform Flows
NASA - Lewis Research Center
\$134,759 12 months

Biological Sciences

- Adams, J.
Molecular Analysis of P. vivax Erythrocyte Binding Proteins
World Health Organization
\$368,225 36 months
- Grimstad, P.
Arbovirus Surveillance Laboratory Service
Indiana State Department of Health
\$31,794 12 months
- Kulpa, C.
Biodegradation of TNT and Petroleum Constituents
Argonne National Laboratory
\$105,583 12 months
- Duman, J.
Plant Thermal Hysteresis Proteins
National Science Foundation
\$733,732 36 months
- Lodge, D.
Collaborative Research: Herbivory and Plant Resistance
National Science Foundation
\$568,310 36 months
- Eldon, E.
18-Wheeler Planning Grant
National Science Foundation
\$17,930 18 months
- Goetz, F.
Isolation of Progesterone mRNA from Perch Ovaries
National Science Foundation
\$339,395 24 months
- Carlton, R.
Control of Methane Release from Lake Sediments
National Institute/Global Environmental Change
\$153,602 24 months

Civil Engineering and Geological Sciences

- Gray, K.
Radiolytic Destruction of Dioxin on Soils
Oxychem Technology Center
\$72,102 12 months
- Rigby, J., Sauer, K.
Quantitative Image Analysis for Paleontological Classification
National Science Foundation
\$405,932 36 months
- Rigby, J.
Collaborative Research: Pele Hypothesis
National Science Foundation
\$546,677 36 months

Chemical Engineering

- Varma, A.
REU Supplement
National Science Foundation
\$5,000 12 months
- Hill, D.
Relaxation of Polymer Brushes
ACS Petroleum Research Fund
\$164,587 36 months

Chemistry and Biochemistry

- Tannor, D.
Wavepacket Studies of Transition State Dynamics
National Science Foundation
\$565,646 36 months

Electrical Engineering

- Sauer, K.
3-D Statistical Tomographic NDT
Electricite' de France
\$109,488 18 months

Physical Education

- Gelfman, M.
Individually Designed Exercise Programs
Department of Education
\$95,648 12 months

Physics

- Tanner, C.
Absolute Calibration of Parity Nonconservation Measurements
National Science Foundation
\$633,545 60 months

THE GRADUATE SCHOOL OFFICE OF RESEARCH

Poirier, J.

Cosmic Ray Research at High Energy
National Science Foundation
\$751,962 36 months

Bunker, B.

X-Ray Studies of Molecularly Thin Liquid Films
National Science Foundation
\$414,053 36 months

Biswas, N., Ruchti, R., et al.

Particle Production and Detector Development
National Science Foundation
\$476,717 12 months

Livingston, A.

Highly Charged Ions in an Electron Beam Ion Trap
National Institute of Standards and Technology
\$38,126 12 months

Bunker, B.

X-ray Scattering and XAFS Studies of Thin Liquid Films
Department of Energy
\$735,617 36 months

Ruggiero, S.

Single Electron Tunneling and Spectroscopy
Department of Energy
\$212,062 36 months

Sociology

Hallinan, M.

Tracking Effects on Black and White Students
Department of Education
\$247,873 18 months

PROPOSALS FOR FACILITIES AND EQUIPMENT

Civil Engineering and Geological Sciences

Rigby, J., Pyrak-Nolte, L., et al.

Acquisition of LASER Surface Scanning Equipment
National Science Foundation
\$95,082 18 months

Physics

Furdyna, J.

Apparatus for Excitation Spectroscopy
Department of Energy
\$136,850 24 months

PROPOSALS FOR INSTRUCTIONAL PROGRAMS

Chemistry and Biochemistry

Lappin, A.

Research Experiences for Undergraduates in Chemistry
National Science Foundation
\$49,687 12 months

O.S.I.P.A.

Borelli, M.

PWMEGS
Department of Education
\$171,525 23 months

PROPOSALS FOR SERVICE PROGRAMS

Chemistry and Biochemistry

Pasto, D.

Support of the 25th Reaction Mechanisms Conference
ACS Petroleum Research Fund
\$60,365 3 months

PROPOSALS FOR OTHER PROGRAMS

Center for Educational Opportunity

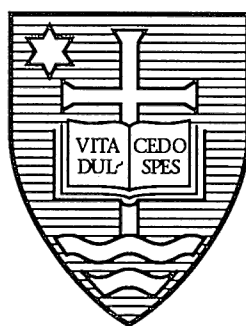
Outlaw, W., Smith, R., et al.

Educational Talent Search
Department of Education
\$355,763 12 months

Center for Social Concerns

McClory, E., Weigert, K.

Good Neighbors: A University, A Community and
Service — Learning
Department of Education
\$99,680 24 months



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