

notre dame report

contents

the university

- 71 Preaching and Liturgy
Program Established
- 71 Galvin Life Science
Expansion
- 71 Advisory Council
Members Appointed

faculty notes

- 72 Appointments
- 72 Honors
- 72 Activities

administrators' notes

- 76 Appointments
- 76 Activities

documentation

- 77 President's Address to Faculty
- 84 Minutes of the 206th Graduate Council
Meeting April 27, 1983
- 85 --Appendix I. General Policy on the
Admission to and Functions of the
Graduate Faculty
- 86 TIAA-CREF Notice on Merged-Gender
Annuity Tables
- 87 Opening Mass Homily
- 89 Summer Session Activities Policy

advanced studies

- 91 Information Circulars
- 91 --Humanities
- 92 --Science
- 98 --Engineering
- 100 --Law
- 101 --Computer Sciences
- 102 --General
- 111 Current Publications and Other
Scholarly Works

83-84

October 18, 1983

number 3

the university

preaching and liturgy program established

Notre Dame has received a \$1.2 million gift to establish a special program for preaching and liturgy in its Department of Theology.

The John S. Marten Program in Homiletics and Liturgics, made possible by John S. Marten, owner of the Marten House in Indianapolis, will expand the Theology Department's present curriculum to include additional courses devoted exclusively to preaching. The program will bring to Notre Dame scholarly specialists in homiletics, endow a visiting professorship for a distinguished homilist, and explore the homiletic potential of telecommunications technology. In regard to the last, WNDU-TV, a commercial South Bend television station owned by the University through a separate corporation, now has an uplink and is capable of distributing programs by satellite.

galvin life science expansion

The University will construct a \$3 million addition to its Galvin Life Science Center for expanded research needs. The structure will adjoin the east side of the Galvin Life Science Center and provide an additional 10,044 square feet in one story and a basement level. Construction is expected to begin this fall and take 12 to 18 months to complete. Expanded research in the Department of Biology has necessitated an addition to house research animals and equipment.

advisory council members appointed

The following persons were appointed by Rev. Theodore M. Hesburgh to University Advisory Councils:

Arts and Letters Advisory Council -- John Rogers Madden, chairman of the board of the First National Bank of LaGrange, Ill., and Peter C. Murphy, president of the Murphy Company, Springfield, Ore.

Science -- Thomas M. Mintz, chief executive officer of Sargent-Welch Scientific Company, Skokie, Ill., and Dr. John T. Horney, West Paces Ferry Medical Clinic, Atlanta.

Engineering -- Michael J. Birck, president of Tellabs, Inc., Lisle, Ill.; Edward H. Mertz, chief engineer, Buick Motor Division of General Motors, Flint, Mich., and Richard E. Lyon, Jr., vice president, Exxon Engineering, Florham Park, N.J.

Law School -- Martin O. Miller II, Davis Saunders and Miller, Metairie, La.; James J. Clynes, Jr., Treman & Clynes, Ithaca, N.Y., and Francis M. Gregory, Jr., Sutherland, Asbill & Brennan, Washington, D.C.

Libraries -- Maurice J. DeWald, managing partner, Peat, Marwick, Mitchell & Co., Newport Beach, Calif.; Franklyn J. Deisch, Jr., Nappanee, Ind., and Jack F. Gibbons, president of Central Funding, Inc., Columbus, Ohio.

Snite Museum -- William K. McGowan, Jr., president of Fidelity Bank of Indiana, Carmel, Ind.; Mrs. John T. Higgins, Birmingham, Mich.; Richard L. Champlin, South Bend, Ind., and Mrs. Robert W. Galvin, Rolling Oaks Farm, Barrington, Ill.

Institute for Pastoral and Social Ministry -- Mr. and Mrs. Joseph A. Neufeld, DePere, Wis.; Mr. and Mrs. F. Michael Geddes, Phoenix, Ariz., and Mr. and Mrs. James H. Clemens, Paola, Kan.

Vol. 13, No. 3

Oct. 18, 1983

Notre Dame Report (USPS 707-080) is an official publication published fortnightly during the school year, monthly in the summer, by the University of Notre Dame, Department of Information Services. Second-class postage paid at Notre Dame, Ind. Postmaster: Please send address corrections to: Editor, Notre Dame Report, c/o Rm. 212, Administration Building, Notre Dame, IN 46556

© 1983 by the University of Notre Dame, Notre Dame, Ind. 46556. All rights reserved.

faculty notes

appointments

Joseph G. Sandman, director of foundation and corporate relations, has been named the University's director of development by William P. Sexton, vice president for public relations, alumni affairs and development. Sandman, whose appointment was effective Sept. 15, succeeds Michael A. Mancuso, Jr., who resigned recently to become vice president for University relations at Marquette University.

honors

Ravi Singh Achrol, visiting assistant professor of marketing, and David L. Appel, associate professor of marketing, received two awards for a coauthored paper presented at the American Marketing Association's Educators' Conference, Aug. 14-17. The paper, "New Developments in Corporate Strategy Planning" won the Best Competitive Paper award in the Marketing Strategy, Planning and Control and Special Markets track, and subsequently was selected as the overall Best Competitive Conference Paper.

Eileen T. Bender, assistant professor of English, was awarded a supplemental travel grant to attend the final conference of the Creating Connections Project held in Warrenton, Va., Oct. 12-14.

Alejandro Foxley, professor in the Kellogg Institute for International Studies, was elected as a member of the Executive Committee of the Association Internationale des Sciences Economiques (International Economic Association) for a three-year term.

Louis Hasley, professor emeritus of English, was elected in May for his third one-year term as president of the Board of Directors of Forever Learning Institute, South Bend, Ind., a school for older adults.

Ralph McInerny, Grace professor of medieval studies, director of the Medieval Institute, and director of the Maritain Center, was elected to the Board of Directors of the Fellowship of Catholic Scholars, 1983-85.

Guillermo O'Donnell, Helen Kellogg professor of international studies, senior faculty fellow of the Helen Kellogg Institute for International Studies, and professor of government and sociology, was elected as a member of the Program Committee of the 13th World Congress of Political Science, to be held in Paris, France, August 1985.

Kenneth F. Ripple, professor of law, was selected for promotion to the grade of Commander of the Judge Advocate General's Corps., United States Naval Reserve, Aug. 15. He was reappointed to the Diocesan High School Appeals Board, Diocese of Fort Wayne-South Bend, Sept. 9.

Eugene Ulrich, associate professor and director of graduate studies in theology, was awarded a grant from the American Philosophical Society for research in Jerusalem, Aug. 15-24, with a view toward publishing three biblical scrolls from Qumran.

F. Ellen Weaver, assistant chairwoman and assistant professional specialist of theology, has been chosen to serve on the Awards Committee of the College Theology Society for 1983-84.

activities

Jose Anadon, associate professor of modern and classical languages, delivered a lecture entitled "La Primitiva Novela Americana" at the University of Concepcion, Chile, on July 15.

Panos J. Antsaklis, assistant professor of electrical engineering, presented a paper entitled "Feedback Controller Parameterizations: Causality and Hidden Modes" at the Measurement and Control (MECO '83) IASTED International Symposium, Athens, Greece, Aug. 29 - Sept. 2.

David L. Appel, associate professor of marketing, presented a paper entitled "New Developments in Corporate Strategy Planning" at the American Marketing Association Educators' Conference held in Dearborn, Mich., Aug. 14-17. He presented an invited talk entitled "The Role of Marketing in Achieving the College's Mission" at Bluffton College in Bluffton, Ohio, on Sept. 2.

Joseph Blenkinsopp, professor of theology, delivered a paper, "Second Temple Quakers: The Haredim of Isaiah 66 and Ezra 9-10," at the annual meeting of Catholic Biblical Association, St. Paul, Minn., Aug. 15-18.

Raymond M. Brach, associate professor of aerospace and mechanical engineering, attended the Design of Production Engineering Technical Conference in Dearborn, Mich., Sept. 11-12, and presented a paper entitled "Identification of Vehicle and Collision Impact Parameters."

Roger K. Bretthauer, professor of chemistry, was an invited participant at the Gordon Research Conference on Glycoproteins and Glycolipids held at Holderness School, Plymouth, N.H., on Aug. 1-5. He spoke of "Effects of Phospholipids on the Synthesis of Dolichol Pyrophosphate N-Acetylglucosamine in Lung Microsomes."

Francis J. Castellino, Kleiderer/Pezold professor of biochemistry and dean of the College of Science, presented the Society of Fellows Lecture entitled "Structure-Function Relationships of the Fibrinolytic System as Revealed through Studies with Monoclonal Antibodies" at the Scripps Clinic and Research Foundation, La Jolla, Calif., on Sept. 12. He presented the same seminar at Cutter Laboratories, Berkeley, Calif., on Sept. 13.

Y.L. Chan, assistant professor of aerospace and mechanical engineering, presented a paper entitled "Laminar Natural Convection in Shallow, Open Cavities" at the 21st National Heat Transfer Conference held in Seattle, Wash., July 24-27.

Kevin J. Christiano, assistant professor of sociology, presented a paper entitled "Protestants and 'Papists': Religious Diversity and Urban Subcultural Conflict at the Turn of the Century" in the session on "Conflict and Change" at the 45th annual meeting of the Association for the Sociology of Religion, held at Mercy College of Detroit, Mich., from Aug. 28-30. Christiano has also begun a one-year term on the association's nominations committee.

Fred R. Dallmayr, Dee professor of government, presented a paper entitled "Pluralism Old and New: Foucault on Power" at the 79th annual meeting of the American Political Science Association in Chicago, Ill., Sept. 1-4. He also chaired a panel on "Literary Production and Political Praxis," and served as discussant at panels on "Rationality, Language and the Unconscious" and on "The National Populist State" at the same meeting.

Evelyn A. Early, assistant professor of anthropology, presented a seminar entitled "Mothers' Acceptance of Oral Rehydration" based on research done during the John Snow Public Health Group of Boston and the Egyptian Ministry of Health Joint Project, in Cairo, Egypt, Aug. 20.

Andres Fontana, assistant faculty fellow in the Helen Kellogg Institute for International Studies, participated as a discussant in sessions at a conference on "Political Systems and Democratization," Asociacion de Estudios de la Realidad Argentina (AERA), Buenos Aires, Argentina, Aug. 1-5.

John F. Gaski, assistant professor of marketing, organized a Special Session, "Marketing in the Soviet Union and China," at the American Marketing Association Educators' Conference, Dearborn, Mich., Aug. 14-17, and presented a paper, "Current Russian 'Marketing' Practice: A Report on the 1982 AMA Study Tour of the Soviet Union."

Philip Gleason, professor of history, served on a National Endowment for the Humanities review panel on Sept. 8-9. The panel evaluated proposals submitted under the General Research Program in the fields of history and social science.

André Goddu, assistant professor of liberal studies, delivered a paper on "A Realist Interpretation of the Hypothetical Reasoning of the Middle Ages -- A Tentative Proposal" at the Seventh International Congress of Logic, Methodology and Philosophy of Science held at Salzburg, Austria, July 11-16. For the Lutherfest held at Wheaton College, Wheaton, Ill., Sept. 19-21, he presented a paper entitled "Lutheran Responses to the Copernican Reformation."

Robert Huckfeldt, assistant professor of government, presented a paper entitled "Social Contexts, Political Environments, and the Dynamics of Voter Preference" (coauthored with John Sprague of Washington University) at the 1983 Annual Meeting of the American Political Science Association in Chicago, Ill., on Sept. 1.

Edward Kilmartin, professor of theology, delivered a talk entitled "Critique of Methodology in Approach to the Relationship Between Christian Ministry and Spirituality" at the convention of Societas Liturgica, Vienna, Austria, Aug. 25. He gave a presentation, "Reflections on Giovanni Battista Montini's Discourses and Writings on the Second Vatican Council (1959-1963)," at the International Study Meeting of the Instituto Paolo VI, Milan, Italy, Sept. 23-25.

James J. Kolata, associate professor of physics, was an invited participant in the Sixth High Energy Heavy Ion Study and Second Anomalon Workshop, Berkeley, Calif., June 26 - July 1.

Janet A. Kourany, adjunct associate professor of philosophy, presented a paper entitled "Notes Toward a Meta-Meta-Methodology of Science" at the World Congress of Philosophy held in Montreal, Quebec, Canada, Aug. 21-27.

Catherine LaCugna, assistant professor of theology, gave a presentation entitled "God" for the Theology and Life Colloquium at the Center for Social Concerns, Notre Dame, Ind., Sept. 14. "Contemporary Challenges to Theism" was the title of a talk she delivered at a meeting of the Graduate Theological Union, Notre Dame, Ind., Sept. 22. She also presented a series of three lectures entitled "Theological Methodology" for the Institute for Clergy Education, Holy Cross Junior College, Notre Dame, Ind., Sept. 28.

Jean Laporte, associate professor of theology, delivered a lecture, "La Place des Femmes dans l'Eglise Ancienne" at Laval University, Quebec City, Quebec, Canada, May 23. He gave a presentation on "Sacrifice and Forgiveness of Sin in Philo of Alexandria" at the Ninth International Conference of Patristic Studies, Oxford, England, Sept. 7.

Thomas P. Leff, assistant professor of communication and theatre, presented two papers, "Brecht's Galileo: Epic Theatre or Historical Essay?" and "Space and Closure: A Post-Modern View," at the Center for 20th-Century Studies, University of Wisconsin-Milwaukee, during a residency there as an associate fellow, June 12 - Aug. 14.

Mitchell Lifton, professor and chairman of communication and theatre, chaired a faculty colloquium and delivered an invited address entitled "The Private Eye, the Public Purse, and the Cutting Edge" to the faculty and Fellows of Porter College, University of California at Santa Cruz, May 18.

A. Eugene Livingston, assistant professor of physics, presented an invited principal paper entitled "Fast-Ion Spectroscopy of Highly-Ionized Atoms" at the 1983 Symposium on Atomic Spectroscopy at Berkeley, Calif., Sept. 12-16.

Scott Mainwaring, assistant professor of government and assistant faculty fellow in the Kellogg Institute for International Studies, presented a paper entitled "The Catholic Youth Workers Movement (JOC) and the Emergence of the Popular Church in Brazil, 1958-70" at a conference on "The New Catholic Church in Latin America" at the Kellogg Institute, Notre Dame, Ind., April 21-23.

Rev. Patrick Maloney, C.S.C., associate professor of music, sang "The Star-Spangled Banner" at Comiskey Park in Chicago, Ill., on Aug. 13.

Rev. Richard McBrien, Crowley-O'Brien-Walter professor and chairman of theology, gave two presentations, "Ecclesiology" and "Magisterium," at the Pelton Institute, Notre Dame, Ind., May 6. He spoke on "Effective Parish Management: Key to Successful Ministry" at a College of Business Administration workshop, Notre Dame, Ind., June 13. "Church and Ministry" was the title of a class and lecture he presented at the University of Portland, Ore., June

14-15. He also gave a lecture on "Models of the Church" for the Institute for Clergy Education, Holy Cross Brothers Center, Notre Dame, Ind., Sept. 16.

Mark A. McHugh, assistant professor of chemical engineering, along with Val J. Krukonis, President, Phasex Corporation, presented an AIChE Advanced Seminar entitled "Processing with Supercritical Fluids" at the AIChE 1983 Summer National Meeting in Denver, Colo., on Aug. 31.

Ralph McInerny, Grace professor of medieval studies, director of the medieval institute, and director of the Maritain Center, presented a lecture entitled "Maritain and Catholic Political Thought" at the American Political Science Association meeting, Chicago, Ill., Sept. 1.

Rev. Donald McNeill, C.S.C., gave a presentation (with Mary Hawley '81) on "The Church and Social Concerns" for the Theology and Life Colloquium at the Center for Social Concerns, Notre Dame, Ind., Sept. 28.

James L. Melsa, professor and chairman of electrical engineering, presented a graduate seminar entitled "Digital Transmission of Speech" at the University of Virginia, Charlottesville, on Sept. 22.

Asokendu Mozumder, associate faculty fellow in the Radiation Laboratory, presented a paper entitled "Theoretical Aspects of Calorimetric Measurements of Energetic Heavy Ions using Liquefied Rare Gases" at the Japan-U.S. Cooperative Research Conference on Liquefied Rare Gas Calorimetry at Berkeley, Calif., Oct. 3-7.

Thomas J. Mueller, professor of aerospace and mechanical engineering, attended the Third International Symposium on Flow Visualization held in Ann Arbor, Mich., Sept. 6-9. He presented an invited lecture entitled "Recent Developments in Smoke Flow Visualization." With Robert C. Nelson, associate professor of aerospace and mechanical engineering, he presented a paper (coauthored with J. Kegelmann and R.J. Zehentner) entitled "A New Single Filament Smoke Tube Injection Device."

Walter Nicgorski, chairman and associate professor in the program of liberal studies, presented a paper on "Leo Strauss and Liberal Education" at the panel on "Liberal Education and Civic Responsibility" at the annual meeting of the American Political Science Association in Chicago, Ill., Sept. 3.

Guillermo O'Donnell, academic chairman in the Kellogg Institute for International Studies and professor of sociology and government, delivered a paper entitled "Democracy in Argentina? Some Macro/Micro Issues" at the conference on "Prospects for Democracy in Argentina," organized by the Argentine Association of Social Science Studies (AERA), Buenos Aires, Argentina, July 6-9. He also presented a paper, "Notes on the Comparison of Argentine and Brazilian Political Cultures," at the conference on "Challenges for Development in the Periphery: The Case of Brazil," organized by the Stanford-Berkeley Center for Latin American Studies and the Research Instituto of Rio de Janeiro, Brazil, July 22-25.

Fabio W. Reis, faculty fellow in the Kellogg Institute for International Studies, presented a paper entitled "Democracy and the Problems of a 'Critical' Theory of Politics" at a conference on "Aspects of Democratic Theory" at the Inter-University Centre, Dubrovnik, Yugoslavia, March 28 - April 12. He was a discussant at a conference on "Etats Generaux des Recherches Latino-Americaines en France" in Paris, France, May 27-29. Reis also delivered a paper, "Political Change in Brazil: Prospects of the Democratization Process," at a meeting entitled "Opportunities and Limits of Peripheral Industrial Society: The Brazilian Case" held at Instituto Universitario de Pesquisas do Rio de Janeiro, Brazil, July 18-20.

Kenneth F. Ripple, professor of law, was an invited faculty member for the Indiana Judicial Conference and delivered the annual constitutional law lecture entitled "October Term 1982: An Assessment for the State Judiciary," Indianapolis, Ind., Sept. 16.

Eugene Rochberg-Halton, assistant professor of sociology, presented a paper entitled "Remembrance of Things Present" at the 1983 Society for the Study of Symbolic Interaction Meeting, Detroit, Mich., Sept. 2.

Robert P. Schmuhl, assistant professor of American Studies, presented a talk entitled "What the Craft Case Means" at the meeting of the Michiana Chapter of Women in Communications, Inc., in South Bend, Ind., on Sept. 14.

Robert H. Schuler, professor of chemistry and director of the Radiation Laboratory, presented a paper entitled "Time Resolved Raman Spectroscopy of Free Radicals" at the 16th International Symposium on Free Radicals held at Brussels, Belgium, Sept. 12-16.

M. Katherine Tillman, associate professor in the program of liberal studies, presented an invited response-paper at the conference on "Dilthey and Phenomenology," Pennsylvania State University, University Park, July 29-31. She also gave an invited response-paper to the keynote address of the 150th anniversary celebration of the Sisters of Charity, BVM, in Dubuque, Ia., Aug. 6.

Anthony M. Trozzolo, Huisking professor of chemistry, presented an invited lecture entitled "The 'Critical Mass' in Research Groups" before the Younger Chemists Committee Forum, 186th National Meeting of the American Chemical Society, Washington, D.C., Aug. 30.

He also delivered the Chevron Lectures in Chemistry at the University of Nevada, Reno, Sept. 21-23. Trozzolo's four lectures on "Cyclic Photochemistry" were part of the inaugural series and served as part of a graduate special topics course.

Eugene Ulrich, associate professor and director of graduate studies in theology, delivered an invited paper entitled "Characteristics and Limitations of the Old Latin Translation of the Septuagint" at a symposium on "The Use of the Versions for Textual Criticism" at the triennial joint meeting of the International Organization for Septuagint and Cognate Studies and the International Organization for the Study of the Old Testament in Salamanca, Spain, Aug. 26 - Sept. 2. He also participated in the Executive Committee Meeting and served as chairperson for one of the sessions.

Rev. Joseph L. Walter, C.S.C., associate professor of chemistry and chairman of preprofessional studies, presented a talk on "Advice for the Unsuccessful Applicant to Medical School" at the Indiana Advisor's Conference, Indiana University Medical School, Indianapolis, Ind., Sept. 7.

James White, professor of theology, taught classes on Baptism and Eucharist at the Proclamation Conference, Nashville, Tenn., July 11-14. He presented two papers, "The Development of the 1972 United Methodist Eucharistic Rite," and "John Wesley's Sunday Service and Methodist Spirituality," at the Bicentennial Consultation, "Wesleyan Theology and the Next Century," at Emory University, Atlanta, Ga., Aug. 17-20.

Rogert Wilken, professor of theology, delivered a lecture entitled "The Lives of the Saints and Early Christian Ethics" at the Ninth International Conference of Patristic Studies, Oxford, England, Sept. 6.

K.T. Yang, professor of aerospace and mechanical engineering, presented a lecture, "Modeling of Turbulent Buoyant Flows in Aircraft Cabins," at the 1983 Annual Conference on Fire Research, Center for Fire Research, National Bureau of Standards, Gaithersburg, Md., Aug. 23.

John H. Yoder, professor of theology, participated in a panel discussion on "Arms and Peace Movements in East and West" at the Fifteenth International Conference on European Problems, Notre Dame, Ind., Sept. 25-28.

administrators' notes

appointments

Kitty Arnold has been appointed director of Career and Placement Services, previously named the Placement Bureau. She succeeds Richard Willemin who has retired.

Paul Doyle, ND '36, has been named acting manager of the Center for Social Concerns and coordinator of the Urban Plunge program.

Lynn Lawrence, graduate student in the MSA program, has been appointed coordinator for Service and Social Action projects at the Center for Social Concerns.

Sharon Murphy, graduate student in government and international studies, has been appointed coordinator for Peace Opportunities at the Center for Social Concerns.

Patrick Utz has been appointed director of Counseling and Psychological Services.

activities

Carole Havens, assistant director for User Services in the Computing Center, presented a paper entitled "Running a Micro Lab: Beyond the Technical" at the Eleventh User Services Conference sponsored by ACM SIGUCCS in New Orleans, La., Oct. 5.

William J. Hickey, Jr., director of University Food Services, was a guest speaker at Calkins and Company's 75th Anniversary Seminar held at Gould Center, Rolling Meadows, Ill., Sept. 28. His presentation was on "How We as Food Service Professionals Affect the State of the Art."

documen- tation

president's address to faculty

(Address given by the Rev. Theodore M. Hesburgh, C.S.C., President, University of Notre Dame, at the General Faculty Meeting, Oct. 4.)

This is the thirty-second time that I have addressed our faculty at the beginning of the school year. I doubt that there are very many here today who were present at my first talk in 1952. But no matter. Universities are continuities. People come and go, but the central endeavor to form the young to face and dominate the future continues.

Institutions are most effective when their faculties are conscious, committed to a vision, and unified in what they are doing together. As I insisted in my talk to you last year, our uniqueness and identity as an institution are our best assurance of survival in the difficult decades ahead.

This uniqueness and identity are not something that we can take for granted, vaguely assume, or even assume simply because the President speaks about it on every occasion possible. I am sure there are those in our midst, I hope not many, who would welcome an embargo on the mention of Notre Dame as a Catholic university. They would say, "Let's just make it a great university and let it go at that." But that would certainly sacrifice our essential uniqueness and, I am sure, greatly diminish the enormous support that has come our way in recent years precisely because we are unique.

We are being supported because those who support us generously believe we are engaged in a unique and needed endeavor, one never quite realized in past centuries, one almost extinct worldwide a century ago, one only being tried seriously in a very few places on earth today.

This year, for the first time ever, the American Council on Education and the Association of Colleges and Universities of Canada are meeting together in Toronto to discuss the theme: Shaping the Future. I have been asked to deliver the keynote address on "The Moral Dimensions of Higher Education," not I assume because I am thought to represent a nondescript educational institution in the Midwest, but because it is assumed that the President of an outstanding Catholic university might be assumed to speak quite readily on the subject of moral goals and problems in higher education.

I would like to share with you some of the ideas I will share with them. If there are reporters present, I would consider the following embargoed until formally given in Toronto on October 13. I believe this courtesy is routinely observed when requested.

One might question at the outset why, as we consider the possibility of our academic institutions to shape the future, I would presume to speak of the moral dimensions of higher education and some of the impending ethical questions that attend such a consideration. We have all been schooled in the proposition that the life of the university is the life of the mind, the free search for truth and its dissemination to the upcoming generation. This is at first glance an intellectual, not a moral task.

I think it is fair to say that education, lower or higher, involves more than the mind. We are educating human persons, that most marvelous of all visible realities. Jacques Maritain, the late French philosopher, said of the person:

"What do we mean precisely when we speak of the human person? When we say that a man is a person, we do not mean merely that he is an individual, in the sense that an atom, a blade of grass, a fly or an elephant is an individual. Man is an individual who holds himself in hand by intelligence and will. He does not exist only in a physical manner. He has a spiritual superexistence through knowledge and love; he is, in a way, a universe in himself, a microcosm, in which the great universe in its entirety can be encompassed through knowledge; and through love, he can give himself completely to beings who are to him, as it were, other selves, a relation for which no equivalent can be found in the physical world. The human person possesses these characteristics because in the last analysis man, this flesh and these perishable bones which are animated and activated by a divine fire, exists 'from the womb to the grave' by virtue of the very existence of his soul, which dominates time and death. Spirit is the root of personality. The notion of personality thus involves that of totality and independence; no matter how poor and crushed he may be, a person, as such, is a whole and subsists in an independent manner. To say that man is a person is to say that in the depths of his being he is more a whole than a part, and more independent than servile. It is to say that he is a minute fragment of matter that is at the same time a universe, a beggar who communicates with absolute being, mortal flesh whose value is eternal, a bit of straw into which heaven enters. It is this metaphysical mystery that religious thought points to when it says that the person is the image of God. The value of the person, his dignity and his rights belong to the order of things naturally sacred which bear the imprint of the Father of being, and which have in Him the end of their movement." (Principes d'une politique humaniste, Paris: Paul Hartmann, 1945, pp. 15-16)

In educating those persons who will form the leadership of all the other great institutions in our present and future, the family, church and state, the great business organizations and labor unions, the military, the many voluntary organizations that so enrich our lives and our professions, we must face the reality that our universities and colleges are perhaps the most important element in shaping the future. How we educate these student-persons will have an all-important influence on what our future will be.

How we educate, this is perhaps the greatest moral dilemma of all, because there is all too little agreement among us as to what is right or wrong in what we are purporting to do. We have many hints from the past.

Plato speaks of knowledge as a completion and a concomitant to virtue. Concomitant perhaps, but I think all of us would agree that while knowledge is power, it is power for good or evil, not necessarily virtue. Knowledge acquired at our best universities was the entree for the young leaders in President Nixon's White House, but after the Watergate debacle, they admitted that they learned how to use methods that were effective, but not to ask whether what they were doing was right or wrong. Augustine, a well-educated man who sowed his share of wild oats before becoming Bishop of Hippo and a saint, described education as working towards ordo amoris, putting order into what we love. I suspect that this insight, like others in his Confessions, came somewhat later than during his formal education as a Rhetorician.

Thomas Aquinas is in the same line, saying that the truly educated person is the one who knows the right things to have faith in, to hope for, and to love.

Matthew Arnold speaks of studies that will quicken, elevate, and fortify the mind and the sensibility. I like that and I would hope that our future leaders would lead better if their minds and sensibilities are quickened, elevated, and fortified. However, as I look at universities today, my own included, I would say as an honest moral judgment, "Easier said than done." Martin Buber and Ghandi, too, to cite two more modern observers of the educational scene, speak of the education of character as the only worthy outcome. Another modern, Robert Hutchins, described education: "the prime object of education is to know ... the goods in their order." Again, I must repeat, easier said than done. What agreement is there, in most faculties, on the "order of goods."

William Bennett, chairman of the National Endowment for the Humanities, cites some of these in a recent paper and adds one more, Robertson Davies, who outdoes them all. He says: "The purpose of learning is to save the soul and enlarge the mind." (Address delivered at the Annual Meeting of the Association of Catholic Colleges and Universities, Washington, D.C., Feb. 1, 1983.) If I might speak for the Church, I would frankly admit that it has its hands full in the effort to save souls and probably envies the universities in their easier task of enlarging the mind.

What do we do when students are not particularly excited about enlarging their minds, but would prefer to learn how to operate effectively as chemical engineers in a worldwide oil company, lawyers with a lucrative practice, say tax law, accountants in one of the big eight firms, or physicists in a national weapons laboratory? It may be our moral dilemma, but it is theirs, too. The rub is, we are the educators, we establish the curriculum, we teach the courses, we demonstrate what we think is all-important in a total education, giving wholeness of knowledge, not bits and pieces.

Again, I trust that I am not overstating the ultimate moral dilemma that faces us, how we educate, but there it is, notwithstanding Plato, Augustine, Aquinas, Arnold, Buber, Ghandi, or even Robertson Davies. Their vision is, I fear, far from our reality.

In the horrible jargon of modern youth, they would say we ought to "get our act together," but I doubt we will do whatever that means unless we can at least agree on something not too popular in modern universities and colleges: defining what we are really trying to do, what we most fundamentally believe higher education to be, what we deeply believe these future leaders should learn from us.

Doing this will require something even more unpopular in modern universities and colleges: spending a few moments to consider transcendentals like the true, the good, the beautiful, and the moral imperatives that flow from them, if indeed they are very relevant to what we are educating young persons to be, what will really qualify them to lead us out of the present wilderness into a better future. This will require more than simply useful knowledge, in the most pragmatic sense of "useful." I need not insist here that if we, the faculty, do not see the road ahead fairly clearly, it is unlikely that we will surmount this moral dilemma in time to help our present students become effective leaders in a world of considerable moral confusion.

Let me begin with something that we will all agree with, I hope, whatever we think about Plato and Aristotle or whatever we print in our catalogues. In simplest terms, I assume that we all agree that we are mainly, but not exclusively, concerned with the first of those transcendentals, truth. We all want to grow in knowing the truth, which is a road to wisdom, as well as knowledge, and which indeed does make us free. We cannot be like Pilate who asked the Lord, "What is truth?" and then walked away before getting a response.

Whatever else we do, we spend most of our lives seeking truth, about our world, about ourselves, about God, about how we go about knowing truth on a wide variety of levels, scientific and technological, really the easiest because mathematics is a precise language, then learning humanistic truth through literature and history, the social sciences like anthropology, sociology, political science, and economics, again with mathematics a helpful aid in these latter approaches to truth. Then we learn, too, through art and music and, perhaps most of all, through poetic intuition. At the core of all, we know there is, of course, philosophy which puts it all together, hopefully, in some meaningful synthesis. If we want to go still further in seeking truth, and here I speak of my own profession, we study theology which I did for six years after college. We call it all truth, and indeed it is, although we come to it by many paths of learning, the more, the better, if we are looking for wholeness of knowledge, not just tidbits of this or that truth, quarks at the heart of matter or black holes amid the galaxies. I am fascinated by both of these searches, but not exclusively so.

The pursuit of truth is what makes our profession most exciting and what gives most coherence to our institutions. James Billington, Director of the Woodrow Wilson International Center for Scholars, recently said at Catholic University in Washington:

"The pursuit of truth is the highest form of the pursuit of happiness -- and the surest way to keep us from the pursuit of one another. Truth is noncompetitive; the discovery of one can benefit all. Truth is bigger than all of us, and can be pursued by each of us wherever we are with whatever we have at hand.

"The open, unlimited search for truth is a major source of hope for a free society -- not because it offers easy answers, but because it offers a shared enthusiasm that threatens no one and can involve everyone. Only in the life of the mind and spirit can the horizons of freedom still be infinite in an era of growing physical limitations." (Commencement Address, the Catholic University of America, Washington, D.C., May 21, 1983.)

It would seem to me that the pursuit of truth is a good shared goal with which to begin to reorient and revivify our institutions as we attempt to shape the future through our students. At least, it has been the inspiration of all of our lives, and we should be able to inspire our students to see it as the best and continuing result of their higher education. The pursuit of truth and full transmission of truth is at heart what makes educators and education interesting, even exciting, and at its best, fulfilling and inspirational. Universitas, which gave the name to our institutions, means pursuing truth in its fullness.

If you are still with me thus far, let me add another thought or two to the general theme, with the help of two good friends. We may think that our moral concern for shaping the future through our students is a modern concept. Hanna Gray of the University of Chicago puts the same idea in historical perspective:

"People tend to think of the Renaissance as a period of self-conscious new beginnings. The humanists thought it possible that they might produce great reform in the world ... Their educational thinking was the vehicle by which they criticized the society of their own time: its ethical values, its culture. The humanists believed that the kinds of knowledge and of scholarship and of advanced education, which characterized the university system of their own day, were too academic, too narrow, too pedantic, too specialized ... From their critique of what was wrong with contemporary thought and scholarship in the university, the humanists concluded that by contrast an education in the liberal arts was that form of learning most relevant to the development of people who would become masters of their own world and leaders toward an improved future. They thought it was not enough to know what ethics was; they believed it important to know how to apply ethics, how to become more moral, how to shape the will -- and not only the intellect -- of morally aware and active human beings." (The Liberal Arts Revisited, Henry Lecture, University of Illinois, pp. 14-15.)

I read the Henry Lecture after practically completing this address and all I could think was: Plus ça change, plus c'est la même chose. The Renaissance educational problem is our own today, only the stakes are higher in our modern world, as I will demonstrate later on.

Hanna Gray's thought is put into modern context by Ambassador Charles Malik when he delivered the Pascal Lectures at the University of Waterloo, Ontario, here in Canada in March of 1981.

"The fundamental spirit of the whole university is determined by the humanities. Philosophically and spiritually, where the humanities stand, the entire university stands, administrators, professors, and students, (individually and, what is more dominant, in their meetings, in groups) their view of the nature and destiny of man, the general outlook on life and being, the interpretation of history, the fundamental orientation of the mind, the formation of personal character and the fixing of basic attitudes and habits, the nature of good and bad and right and wrong, the meaning and purpose of human existence, the whole spirit which stamps the individual human person -- all of these radiate in the first instance, not from the sciences, but from what is taught and presupposed in the humanities The scientist himself, both when he takes courses in general education as an undergraduate student, and

from the general climate of opinion of the university, is stamped in his mind and character by the pervasive spirit of the university."
(A Christian Critique of the University, Inter-Varsity Press, Downers Grove, Illinois, p. 70)

Hanna Gray writes as a historian. Charles Malik as a philosopher, a student of Whitehead at Harvard and Heidegger at Freiburg. They are saying the same thing, I believe. All truth is important, but some truths are all-important. Education is the key to the future, but it had better include education in what is most important in life.

I found Gray and Malik, not just in these few words, but in their total lectures, quite helpful in the quest with which I began: trying to find some intellectually and morally coherent philosophy of education that can help us shape the future through the students we educate in our institutions. Our best goal is not just to educate in a thousand different ways -- although we will do that too -- but to give a vision of truth, a zest for the pursuit of truth, along all the avenues to truth, that might well lead these young persons to nobility of spirit and a commitment to do what each can do to create a world of greater justice and beauty as well, in a word, to educate persons really capable of shaping the future, not dull and drab practitioners of what is and has been and still needs changing.

Perhaps I am being too idealistic, but I do believe, after living all of my life since age seventeen in a university, that students do react positively to a great vision of what they and their world might become. If we really want to shape the future, the operative question is: Do we want to shape it in truth, justice, beauty, the good and, yes, in love, too? If we are unclear or less than enthusiastic about this, who will follow the uncertain trumpet? Certainly not our students. We all know we are decent people, totally engaged in a noble quest. But let it not be forgotten that how we think, what we do is so much more important than what we say. Every act of ours is teaching. Our words are only buttressed by our deeds, and our deeds are inspired by our convictions. If we are not deeply concerned about truth, justice, beauty, the good as we know it, how will they be?

Perhaps I can cap this discussion of our greatest moral challenge as educators by making it concrete in seeing how we might face the greatest moral problem confronting humanity today or ever. Weak tea will not do here. I speak of the nuclear threat to humanity.

I could speak of a whole series of other ethical challenges that face us: How to preserve excellence in a time of retrenchment (the Carnegie Commission has the ultimate word on this one); how we preserve our freedom while seeking new and massive funding from business enterprises; how we respond to the legitimate desires of women and minorities when there are so few openings on our faculties; how we effectively reach out to potential poor and minority students when student aid is shrinking; how we balance vocationalism and the humanistic concerns in higher education; how we relate to Third World yearnings for development and human rights; how we sustain support for the fine arts in our institutions when all the emphasis is on computers which are basically uncreative -- I know that computers have composed symphonies, but spare me from listening to them; how we concern our business and engineering students in not just being consultants, but creative managers of greater productivity without which we will not make it in the world markets; how we inspire our lawyers to work for justice, whatever the cost, not just for profit whatever the manipulation of the law involved; how we graduate physicians who care about people, whose deep personal concerns transcend cat-scans and electro-magnetic machines; how ultimately we reproduce ourselves, not practicing celibacy as regards the most important cohort to come and the one with the least attraction today, great teachers. All of these are fundamental moral concerns for our educational endeavors. I could say something about all of them, but just let me address the most important, the nuclear dilemma. If we do not learn and teach our students how to cope with this primordial nuclear problem, we need not worry about all the others. After total nuclear conflagration, all human problems are moot.

I am often asked, "Why the sudden concern? The nuclear threat has been with us for 38 years since the obliteration of Hiroshima and Nagasaki. Somehow we have survived."

I believe the sudden concern stems from the current accelerating trend to utter disaster which has, during the past 38 years and increasingly in the past two or three years, been escalating upwards. We now have available a million times the destructive power of those primitive yet devastating bombs that ushered in the Atomic Age in Japan. There are now four tons of TNT equivalent available for every man, woman, and child on earth. It is not just theoretically there, it is targeted, poised on a delivery system, hair-triggered to a very fallible computer, and there is a decision time of ten or fifteen minutes, much less on the field of battle, and there will be practically no time for decision once these systems are placed in space.

To give some small sense of the rate of escalation, we have been told in recent years that the Russians are escalating wildly which they have been doing, one new SS-20 a week aimed at Europe, while we have presumably been sitting on our hands. Well, while we have been sitting on our hands, we have developed the MX with ten warheads, the Triton submarine with new super accurate missiles, the Pershing II, the cruise missile, the B-1 bomber, and the upcoming Stealth bomber which will make the B-1 obsolete. What would we have done if we were not sitting on our hands?

All the movement, on both sides, has been massively upward and destabilizing an already touchy situation, and all of this is happening in a very troubled political climate, where arms control talks go nowhere, and the leaders of the super powers have not met since President Carter signed the SALT II Treaty -- still unratified, in Vienna. As the little girl, Samantha, who visited Russia at Andropov's invitation last summer, asked: "If both sides say they will not start a nuclear war, why do they both continue to build more weapons?"

Never before has humankind -- mostly mankind -- had in their hands the power to destroy the total work of creation, fourteen times over, in a few moments, even accidentally. The newer weapons are greatly destabilizing, because they are either non-verifiable, like mobile SS-20's or cruise missiles that evade radar and defense systems, or they are offensive, first strike, like MX, rather than defensive and deterrent. The military on both sides are jittery and for good reason. Once the nuclear barrier is breached, for whatever reason, even no reason, or mistake, it is bound to escalate. As a Russian scientist recently put it: "These are not weapons because weapons are to defend yourself and if you defend yourself with this weapon, you are dead." "Neither," he added, "is nuclear war, war in any rational Clausewitzian sense. Wars are won, but in nuclear war, there is nothing left to win, all is death, destruction, and devastation, your country and ours and probably most others."

It has to be the worst sin, the worst blasphemy, to utterly destroy God's beautiful creation, Planet Earth, the gem of our solar system, and all we have created here, so painstakingly, in a few thousand years; all our institutions that we have labored to perfect, all learning, all science and technology, all art, all books, all music, all architecture, every human treasure, everything, but especially millions of men, women, and children, all their future and all futures, utter obliteration at worst, a return to the Stone Age at best.

It has to be utter insanity for rational creatures to have painted themselves into such a corner, to have created such a monster. But in freedom, what we have created, we can uncreate, dismantle, and we must.

It will require, most of all, hope that it can be done, the beginnings of serious, high-level conversations, with creative options on the part of the super-power leaders. All movement must be reversed -- downward for a change -- done mutually and done in a totally verifiable manner. This is not a Russian or American problem. It is a threat that profoundly affects every human being on earth.

Fred Kaplan, in a recent book, The Wizards of Armageddon, portrays the efforts of the intellectuals who have elaborated American nuclear policy while rotating between the Departments of Defense and State and the national think tanks. After almost 400 pages of record, he concludes:

"They performed their calculations and spoke their strange and esoteric tongues because to do otherwise would be to recognize all too clearly and constantly, the ghastliness of their contemplations. They contrived their options because without them, the bomb would appear too starkly as the thing that they had tried to prevent it from being, but that ultimately it would become if it ever were used -- a device of sheer mayhem, a weapon whose cataclysmic powers no one had the faintest idea of how to control. The nuclear strategists had come to impose order -- but in the end only chaos still prevailed." (The Wizards of Armageddon, Simon and Shuster, 1983, pp. 390-1)

Is it conceivable that universities and colleges who traditionally have been rational and objective critics of our society, local and global, can be silent in the face of the nuclear threat? Is it possible that our students can prepare to be future leaders and still not learn from us the dimensions of this threat, the moral problems, and possible solutions? It is mainly of their futures that we speak. Our lives are on the downside.

I have spoken of the pursuit of truth as our greatest moral imperative. There is no truth about the world and humankind today that does not become darkened in the shadow of the thermonuclear mushroom.

What to do? Many things. While the problem is fundamentally geo-political, politicians are mostly concerned with what their constituents are saying, especially if it is loud and clear and universal. I fully realize that our opportunities for political action far transcend that of those in controlled societies, especially behind the Iron Curtain. But even there, one finds great and, I think, sincere concern. One would have to be crazy not to be concerned. Again, as a top Russian scientist told me: "I'm really worried about your computers, and ours are worse."

Each of us and each of our institutions must do what we can do best, and there are some things we can do together. The nuclear problem involves the expertise of all our faculties and departments.

The physicians are best organized at the moment. After their international meeting last year in Cambridge University, the three American leaders, two of them Notre Dame graduates, joined three Russian medical colleagues to discuss the medical effects of nuclear war on Soviet national television.

At their Amsterdam third international meeting this year, Dr. Bernard Lown, the Harvard co-founder of IPPNW said in his message:

"We can and must instill a sense of moral revulsion to nuclear weaponry and to the Orwellian term, 'deterrence' which is but a sanitized word for indiscriminate and colossal mass murder. Our goal should be the widest conditioning of an anti-nuclear instinct as potent as hunger. Moral arousal, I believe, will help tilt the perilously balanced scale in world affairs towards survival.

"President Eisenhower predicted that there will come a day when the people will generate such a mighty popular groundswell for peace that governments will be forced to get out of their way. Such a day is no longer remote for it is beckoned by the unleashing of the deepest forces imbedded in humankind when threatened with extinction."
(IPPNW Report, Vol. I, No. 2, p. 15)

I am presently attempting to bring worldwide scientific and religious leaders together -- making common cause for the first time since Galileo -- against the nuclear threat.

The scientific statement, signed by 36 National Academies of Sciences at the Vatican in September 1982, is very explicit, calling for moral judgment from religious leaders and indicating some possible first steps towards the ultimate elimination of all nuclear weapons. The statement was reproduced in full in the most popular technological review in the USSR, with a circulation of 3,000,000. Something can be done, even there, if one tries.

Our students especially must learn that they are not powerless. The groundswell is there in the Freeze Movement, but this is just a first step and the whole movement needs more creative direction and focus. We have launched a new course at my University this semester involving at least ten different departments. We are also founding a new Academy of Peace at our Ecumenical Institute for Advanced Theological Research in Jerusalem, under the Presidency of Landrum Bolling. Many other universities are similarly involved.

I must close now. I would not want the urgency of what I have just said to exemplify one moral dimension of our educational endeavor today, to overshadow -- even though it almost must -- the long-range moral concerns about which I spoke earlier in this talk. As one said in another connection, "It's difficult to discuss wetlands ecology when up to one's hips in alligators," but, unfortunately, we must do all at the same time, the urgent and the long range. Indeed, if we are to shape the future, we must educate as best we can, part of which endeavor will be to concern ourselves and our students that if we act as we should, there will still be a future, despite the current run-away nuclear threat.

End of speech. With all of you, too, I would like to finish where I began. Because we are a unique institution, deeply committed to values and to all things human, as well as divine, we are in a unique position to speak with a special voice, to be a light in a world often dark, to be especially open and receptive to all that is true and good and beautiful, even from outside our long Christian tradition. Our task is to unify what is divided, to encompass rather than exclude, to be Catholic with both a large and small "c," but to know always what and where we are, to what we are most deeply committed, and to pass on a proud tradition while adding to it. We can do no more, but certainly no less either.

minutes of the 206th graduate council meeting

april 27, 1983

The chairman called the meeting to order at 3:30 p.m. on April 27, 1983 in the Hayes-Healy Board Room. Absent were Acting Dean Robert E. Burns, replaced by Rev. Robert J. Austgen, C.S.C.; Dean Francis J. Castellino, replaced by Prof. Daniel H. Winicur; Dr. Donald F. Castro, excused; Dean Frank K. Reilly, replaced by Prof. Yusaku Furuhashi; Prof. David L. Cohn, excused; Prof. Fred Dallmayr, excused; Prof. Thomas L. Theis, excused; Prof. Thomas J. Mueller, excused; Mr. Dennis H. Staffebach.

I. Minutes of the 205th Meeting

The minutes of the 205th meeting were approved as circulated.

II. Admission to and Functions of the Graduate Faculty

In the absence of Dean Francis J. Castellino, chairman of the Subcommittee on the Admission to and Functions of the Graduate Faculty, Dr. Robert E. Gordon asked Dr. Calvin M. Bower, a member of the subcommittee, to present its report. Dr. Bower said that his subcommittee had recommended against the institution of a process to review members already present on the graduate faculty. He also said his subcommittee had suggested some revisions of the procedures for admission to the graduate faculty. Specifically, this subcommittee proposed that appointment to the graduate faculty be made by the Vice President for Advanced Studies. Only in a case of negative decision by the Vice President that the respective department chairman may, if he chooses, appeal to the Graduate Council. The subcommittee further proposed, in addition to other functions currently reserved to the graduate faculty, that the function of "serving on graduate committees" be added to the list. Discussion on this point brought forth the clarification that faculty members who are not members of the graduate faculty be allowed to serve only on graduate examination committees, and that they be excluded from "serving on other graduate committees at any level."

A question was raised concerning the eligibility of nonregular faculty for graduate faculty appointment. It was agreed that normally, only full-time members of the regular teaching and research faculty are eligible, with exceptions to be made for distinguished nonregular faculty members.

A motion to accept this report including the clarification as related above, concerning service on graduate committees, was seconded and accepted. The revised text of this report is appended to these minutes (Appendix I).

III. Database Services in Graduate Education

Mr. Robert C. Miller, director of University Libraries, briefly spoke of the situation of database services to graduate students in the University. He agreed that graduate students should have some familiarity with research tools and techniques, including the computer-based bibliographic searching technique. Although database service exists at Notre Dame, it is not free to the user. Mr. Miller felt that the cost, which could be small in some cases, but forbidding in others, could prevent graduate students from learning and using this new technique. He recommended that the University accept the obligation to ensure the availability of this service to graduate students; and, until this is done, that departments set aside at least a minimal amount of money from their budget for this purpose.

Various questions were asked and suggestions made related to this proposal. It was pointed out, for instance, that most grants cover database search costs and the problem exists probably only with the searches not related to grants. Some members shared the feeling that some source of funding should be sought to make this service available to students, but they were reluctant to support this until they had a full picture of what the service might cost the University. The Zahm Travel Fund to provide travel support to graduate students to collect research materials was also invoked as a possible funding model for database service. As there were no further comments, the chairman brought the discussion of this topic to a close and moved on to the next item on the agenda.

IV. Admission to Graduate Faculty

The Graduate Council accepted the following members for admission to the Graduate Faculty: Dr. Thomas L. Doligalski, assistant professor, aerospace and mechanical engineering; Dr.

Cornelius Ivory, Dr. Mark A. McHugh, Assistant professors, Chemical Engineering; and Dr. David J. Kirkner, assistant professor, civil engineering.

V. Admission to Degree Candidacy

The Graduate Council approved the list of applicants for admission to graduate degree candidacy as submitted (Appendix II).

VI. Chairman's Remarks

National Academy of Science Appointment: Commenting on the recent appointment of Prof. George B. Craig, Jr., to the National Academy of Sciences, the chairman said it was a milestone in the history of the University and an indication of how well our scholarly endeavor is being accepted in the country.

CGS-UMI Dissertation Award: The University was invited to nominate one candidate for this award. The fields considered for this year include the mathematical and physical sciences.

Graduate Admissions: The chairman expressed his concern over the slow rate at which applications had been processed by departments. He urged departmental graduate admission committees to act swiftly, saying that the institution which made the first offer would have an edge.

Admission of Summer Session students to the academic year: The chairman gave reasons for keeping admission to the Summer Session a separate process from admission to the academic year.

Review of academic programs: Dr. Gordon referred to the review of academic programs as called for by the PACE Report. He informed the Graduate Council that all academic departments and units in the University, including libraries, centers and institutes would be reviewed, not just graduate programs as had been the case of the first round of reviews. Dr. John R. O'Fallon will be responsible for administering these reviews which will begin in the spring of 1984.

Dr. Gordon concluded his remarks with thanks to all members, in particular to outgoing members, for their contribution to the work of the council and to the Graduate School. He wished everyone a good summer.

Appendix I. General Policy on the Admission to and Functions of the Graduate Faculty

The criteria for membership in the Graduate Faculty are possession of a doctoral degree or its recognized equivalence in the discipline, and evidence of active engagement, or high degree of potential, in graduate research and scholarship. Normally, only full-time members of the regular teaching and research faculty are eligible for appointment to the Graduate Faculty.

To initiate an appointment, the departmental chairman forwards a recommendation through the dean of the college to the Vice President for Advanced Studies. A current curriculum vitae should be attached. The chairman's letter should review and comment upon the extent and quality of experience, or potential, of the candidate.

The dean then submits this recommendation, along with his or her own comments to the Vice President for Advanced Studies. If the Vice President approves, he then sends a letter of appointment to the successful candidate.

In the event of a negative decision by the Vice President, a departmental chairman may appeal to the Graduate Council. This body then decides on the issue by a two-thirds majority vote. In its deliberations, the council may request additional information concerning the candidate.

Functions reserved to the Graduate Faculty are direction of student theses and dissertations, chairing graduate examination committees, serving on graduate committees, voting in elections restricted to the graduate faculty, and serving on the Graduate Council. One need not be a member of the Graduate Faculty to teach courses at the graduate level.

tiaa-cref notice on merged-gender annuity tables

As a result of the U.S. Supreme Court's July 6 decision in Norris v. Arizona Governing Committee, Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF) is moving as quickly as possible to obtain approvals for adoption of merged-gender mortality tables for use in determining annuity benefits resulting from future premiums paid to TIAA-CREF annuities.

In the Norris case, which "applies to all employer-sponsored pension plans," the Supreme Court stated that "The use of sex-segregated actuarial tables to calculate retirement benefits violates Title VII whether or not the tables reflect an accurate prediction of the longevity of women as a class." The use of sex-segregated actuarial tables results in unequal monthly benefits for similarly situated men and women, because such tables reflect the longer average life expectancies of women.

However, the Court reversed the lower court rulings that sought to have men's and women's benefits equalized retroactively. The Norris holding requires only that "all retirement benefits derived from contributions made after the decision today must be calculated without regard to the sex of the beneficiary."

At the time of the Norris decision, the Supreme Court sent the two related cases involving TIAA-CREF back to lower federal courts for resolution consistent with the Norris ruling. These two cases are Spirit v. Long Island University and TIAA-CREF, and Peters v. Wayne State University and TIAA-CREF.

In commenting on the Norris decision, TIAA-CREF chairman Tom Edwards said, "It is my judgment that this long-awaited opinion by the nation's highest court will require adoption of merged-gender ("unisex") mortality tables for use in determining benefits resulting from future contributions to TIAA-CREF annuities."

Retroactivity Not Required

Edwards welcomed the Supreme Court's finding that "a retroactive remedy would have had a potentially disruptive impact" on employers and pension plans. He emphasized that the decision, described by the Court as "prospective only," will not affect benefits now being paid, or any future benefits resulting from premiums paid prior to the effective date to be determined by the lower court.

Edwards pointed out that TIAA and CREF annuity contracts now accumulating future benefits provide for changes in annuity purchase rates applicable to future premiums, and that merged-gender rates will not take sex differences into account in determining the monthly annuity benefits to be purchased by future premiums. This will mean that men and women of the same age will receive equal monthly benefits for equal premiums paid on the new basis.

Conforming TIAA-CREF Plans

In the Norris case the Court ordered the State of Arizona to amend the program at issue to comply with its ruling by Aug. 1, 1983. In the coming lower court reconsideration of the TIAA-CREF cases, TIAA-CREF will seek a court-approved plan for amending its annuities as soon as possible along with a timetable for implementing the change to merged-gender annuity rates for future premiums.

"We expect the court-approved future date for conforming TIAA-CREF pension and Tax-Deferred Annuity plans to Norris to allow sufficient time for the implementation of merged-gender tables," Edwards said. "But if the lead time provided by the court is not sufficient, we'll take whatever steps are necessary to bring TIAA-CREF annuities into compliance as of the court-approved date. And we will, of course, be keeping participating institutions and participants up-to-date on further developments as they occur."

opening mass homily

(Homily preached by Timothy O'Meara, provost of the University, in Sacred Heart Church on Sunday, Sept. 18, at the Mass opening the 142nd academic year.)

My dear friends,

Father David Tyson has just read what is perhaps the most enigmatic and fascinating of all of the parables of Jesus. In the late 1930s when I was in school, scripture classes consisted in learning Matthew, Mark, and Luke by heart and, while I have forgotten most of the verses, I still vividly remember the exhortation: "Make friends with the mammon of iniquity so that when you shall fail they may receive you into everlasting dwellings." Today's translation is less dramatic but no less confounding.

The parable is simply told. The owner of a large estate entrusts his property to his steward. The steward, either through incompetence or embezzlement, mismanages his master's estate and is eventually exposed. He doesn't panic. He coolly evaluates his predicament and uses the last few hours of his stewardship to win friends for the bleak days ahead. Then comes the brief and provocative climax. Either the master or Jesus, we are not quite sure, praises the steward - praises him, not for swindling to be sure, but for his shrewdness in bringing all of his resources into action in time of crisis. The enigma is not only that he is praised but, indeed, that he is praised for continuing to misuse his master's wealth.

In today's competitive world when we are conditioned to adapt to just about anything, most people still find it difficult to forgive an untrustworthy steward: a banker who has mismanaged our investments; whoever has absconded with thousands of taxpayer's dollars in our twin city of Mishawaka; a student who pays for a professionally-turned-out term paper or thesis; a scholar who blatantly plagiarizes; a researcher who fabricates data for personal advancement; a professor who manipulates ideas or takes personal advantage of a student; an administrator who makes decisions to protect vested interests. Whether we forgive the person or not, we are certainly not ready to give praise, not for shrewdness, not for any reason at all.

And so this morning's story first distracts us and then provokes us into searching for all of its parabolic meanings.

We see this dialectic at work in the original narrator, Luke himself, writing as he did some forty years after Jesus told the story. This morning's gospel is made up of two parts, the parable itself, followed by several brief sayings which seem to interrupt the narrative. These most likely were made at some other time, and were not intended as an explanation of the parable. They take the form of a series of morals concerning the use of money:

Use money to make friends who will ultimately welcome you into the tents of eternity.

If you can be trusted in little things, you can be trusted in big things;
If you cannot be trusted in little things, you cannot be trusted in big things.

You cannot be slave to God and to money - you cannot serve two masters.

Thus the tenor of this morning's gospel changes rapidly from the seemingly permissive note of the parable to some rather emphatic and uncompromising conclusions.

Saint Jerome's explanation three centuries later was this: According to the custom in Jesus' day a steward, by the nature of his position, could use his master's resources to make a profit for himself, provided he gave a fair return to the master. The unjust steward was only taking a cut in his own profits, not the master's, when he tried to buy his friends in the latter part of the parable.

Others have viewed the steward as a sort of Robin Hood giving alms to the poor, in this case to the debtors.

Ronald Knox doubts whether we are meant to interpret the parable more closely than this: give alms to the poor while you still have time.

The parable can also be viewed metaphorically as a proclamation of a reality beyond our understanding, as a proclamation of the Kingdom of God. To make this point we must start by referring to the good Samaritan. These days the words good and Samaritan are almost

synonymous, but not so to those who listened to Jesus. The Samaritans were detested more than the pagans - they were the scum of the earth - for they had returned to idol worship after they had been assimilated by the Assyrians. So to call a Samaritan good was to say the unsayable. Something like telling Ronald Reagan that "so-and-so is a good communist" or a liberation-theologian that "what's-his-name is a good capitalist." Just as the parable of the good Samaritan says the unsayable so this morning's parable, by commending a person who has broken all commonly accepted standards of trust, conceives the inconceivable. And by conceiving the inconceivable proclaims a reality, the Kingdom, beyond our understanding. So ingrained are our instincts when it comes to the security of our possessions that the point of this parable, the point of conceiving the inconceivable, can be made in any culture, not just in a culture familiar with the relationship between the Jews and the Samaritans. Viewed in this way the parable of the unjust steward is a more radical proclamation of the Kingdom than the parable of the good Samaritan.

For all these interpretations, and there are more, what lesson does the Church want us to learn today, the 25th Sunday after Pentecost? If we look for a single common theme to all of today's readings, then it surely must be on stewardship. Jesus chastised the children of light, the stewards of the Kingdom of God on Earth, for their passivity, their inertia, their lack of initiative in pursuit of the Kingdom compared to the unjust steward's active pursuit for survival. T.S. Eliot sympathetically describes the predicament of the children of light:

In our rhythm of earthly life we tire of light -
We tire of distraction or concentration, we sleep and are glad to sleep,
Controlled by the rhythm of blood and the day and the night and the seasons.
And we must extinguish the candle, put out the light and relight it;
Forever must quench, forever relight the flame.

The prophet Amos confronts us with a more biting indictment. What hypocrites we are! When will the Sabbath be over that we may add to the shekel and fix our scale for cheating! Is our religion so separate from our actions? Good stewardship. Not with hypocrisy, not in blind observance of the law. Good stewardship. Not just for the chosen people - but for all people - for the authorities Paul prayed for were Roman rulers. So today we pray

for the leaders of our country,
for those in high places in the Church,
for all in positions of responsibility,
for students, that they make proper use of the opportunities and talents
with which they have been blessed,
for scholars and researchers, that we may tirelessly conceive the inconceivable,
say the unsayable,
for professors and rectors, that we may be ever conscious of the awesome
responsibility of educating young men and women,
for all of us that we may increase in faith, hope and charity so that our daily
lives more perfectly reflect our ideals.

Like the unjust steward, we must use the things of the world in seeking the Kingdom. Like the pragmatic steward, we must be astute and apply all our resources in total commitment to the search. But unlike the steward, who was interested in his immediate survival, we must be guided not by the ways of the world but by the principles of light.

Let us relight the flame! With Saint Augustine let us envision two cities here on Earth, the city of God and the city of Man, "intermingled as they have been from the beginning and are to be until the end of time. The earthly one has made for herself, according to her heart's desire, false gods out of any sources at all, even out of human beings, that she might adore them with sacrifices. The heavenly one, on the other hand, living like a wayfarer in this world, makes no false gods for herself. On the contrary, she herself is made by the true God that she may be herself a true sacrifice to him.

"Both of these cities alike make use of temporal goods, and both are equally afflicted by temporal ills - but how different they are in faith, how dissimilar in hope, how unlike in love!"

(Readings: The Lord God spoke against those who buy the poor for money. Amos 8:4-7;
Let prayers be offered to God for everyone. 1 Timothy 2:1-8; You cannot be slaves of both God and money. Luke 16:1-13.)

summer session activities policy

(The provost recently appointed a committee to draw up policies governing the use of campus facilities by outside groups during the summer. The committee was chaired by Rev. John L. Van Wolvlear, C.S.C., and the following persons were members: Rev. E. William Beauchamp, C.S.C., Donald Dedrick, Robert E. Gordon, Rev. Michael J. Heppen, C.S.C., and Thomas J. Mason. The committee's recommendations were approved by the officers of the University on Sept. 20, and the following policy statement adopted.)

All on-campus (public) events affecting any resource of the University must be recorded and cleared through the Calendar Office of the Center for Continuing Education.

The Dean of Continuing Education has the authority to veto any activity perceived as incompatible with the University's general ambience as a Catholic educational institution or with on-going programs scheduled at the same time. Appeals will be heard by the Committee on the Utilization of University Facilities (for On-Campus Extracurricular Activities).

The Committee on the Utilization of University Facilities (for On-Campus Extracurricular Activities) is hereby established. This committee reports to the provost.

- Composition: Representation from Advanced Studies, Student Affairs and Business Affairs.
- Functions: To review annually the total program of on-campus extracurricular activity with particular attention to its impact on all facilities and systems and on the academic ambience of the University.
- To make recommendations regarding the general scene as well as the continuance or discontinuance of any specific programs or activities.
- To listen to appeals of decisions made by the Calendar Office and/or Office of Student Residences regarding proposed scheduling.

The Office of Student Residences has the responsibility for:

- The final decision on housing for any specific activity proposed for the campus. Appeals of decision are to be heard by the Committee on the Utilization of University Facilities.
- Preparation of a set of "house rules" applying to all individuals using University housing. The rules are to be made a part of a written contractual relationship with any group envisioning use of University housing.
- The collection of reports on the general deportment of each group using University housing so as to facilitate the annual review of all such activity by the Committee on the Utilization of University Facilities.
- Fine-tuning the segregation of housing for academic programs from that provided for other types of activity, both in space and time.

The following policy changes are in effect:

- Halls occupied by summer students are to be staffed, insofar as possible, by a rector, assistant rector and a sufficient number of R.A.'s.
 - The hall manager concept which has worked well in the past in those halls occupied by conferences and other visitors to the campus is to be continued.
-

Youth group activities will be scheduled on campus only after the Dean of Continuing Education and the Director of Housing are convinced that:

- a. The proposed activity is compatible with all aspects of the University environment and,
- b. Arrangements for adequate and responsive supervision have been made for all times while the group is to be on campus.

No extracurricular group whose activities involve buildings other than the ACC, CCE or the Morris Inn is to be scheduled in the final week of the Summer Session or after Aug. 15 except as specifically authorized by the Committee on the Utilization of University Facilities.

advanced studies

information circulars

Additional information on all circulars listed may be obtained by calling Extension 7432. Please refer to the circular number.

humanities

University of Pennsylvania Mellon Postdoctoral Fellowships in the Humanities

No. FY84-126

Program:

Annual stipends of \$17,500 will be awarded to younger scholars who, by September 30, 1984, will have held the Ph.D. for not fewer than three and not more than eight years. Research proposals are invited in all areas of humanistic studies.

Deadline:

December 1, 1983

For Further Information Contact:

University of Pennsylvania
Dr. Paul E. Watson, Chairman
Humanities Coordinating Committee
16 College Hall/CO
University of Pennsylvania
Philadelphia, PA 19104
(215) 898-4940

(From 1983 ARIS)

American Political Science Association Congressional Fellowship Program for Political Scientists

No. FY84-096

Program:

Stipends of \$16,000, plus travel allowance, are available for a ten-month internship assignment in Congress. Eligible applicants

are political scientists who have completed their Ph.D. within the last fifteen years (or near completion).

Deadline:

December 1, 1983

For Further Information Contact:

American Political Science Association
Catherine Rudder, Director
Congressional Fellowship Program
1527 New Hampshire Avenue, NW
Washington, DC 20036
(202) 483-2512

(From 1983 ARIS)

American Political Science Association Graduate Fellowships for Black Students

No. FY84-097

Program:

The purposes of this program are to identify and aid prospective black American political science graduate students; to encourage other institutions to provide financial assistance to these prospective students.

Deadline:

December 1, 1983

For Further Information Contact:

American Political Science Association
Catherine Rudder, Director
Congressional Fellowship Program
1527 New Hampshire Avenue, NW
Washington, DC 20036
(202) 483-2512

(From 1983 ARIS)

American Sociological Association Problems of the Discipline Small Grants Program

No. FY84-106

Program:

Grants, normally limited to \$2,500, are available for research that shows relevance for some problem of importance to sociology as a discipline.

Deadline:

November 15, 1983* and June 15, 1984

science

North Atlantic Treaty Organization Collaborative Research Grants

No. FY84-121

Program:

The purpose of this program is to stimulate collaborative research carried out by scientists in university, government and other non-profit research institutes in different member countries of NATO. Grants of average \$4,000 are made for a period of one year (renewable) for travel and living expenses abroad; exchange visits abroad of two months' duration are allowed. The research project must be specific, should be carried out jointly by scientists in at least two different member countries, and must rely on other support for its basic costs (salaries, equipment, consumables). Most fields of civil science are eligible for support, emphasis being given to fundamental aspects rather than to technological development, although projects in the basic and applied sciences with promising applications are now increasingly funded.

Deadline:

November 30, 1983, March 31 and August 15, 1984

For Further Information Contact:

North Atlantic Treaty Organization
Scientific Affairs Division
B-1110 Brussels
Belgium

(From 1983 ARIS)

National Institutes of Health National Heart, Lung, and Blood Institute Extramural Programs

No. FY84-065

Mission:

The National Heart, Lung, and Blood Institute plans, conducts, and supports research, clinical trials, and demonstrations relating to the causes, prevention, diagnosis, and treatment of heart, blood vessel, lung, and blood diseases.

General Programs:

I. The Heart and Vascular Diseases Programs include the following:

For Further Information Contact:

American Sociological Association
William D'Antonio
Executive Officer
1722 N Street, NW
Washington, DC 20036
(202) 833-3410

*All submissions which are too late for one deadline will be carried over to the next review period.

(From 1983 ARIS)

Foundation for Child Development Program for Young Scholars in Social and Affective Development

No. FY84-111

Program:

Grants in the range of \$10,000 - \$15,000 will be made to young scholars investigating the social and affective development of children. Applicants must hold a doctoral degree in the social and behavioral sciences or an equivalent graduate degree. Proposals may be for an empirical study, a theoretical contribution, pilot work for a larger undertaking, analysis of previously collected data, or the development or refinement of research techniques. Highest priority will be given to studies that address the processes of development, and while the emphasis of the program is on social-behavioral and affective processes, studies dealing with linkages between these and cognitive processes will also be considered.

Deadline:

December 1, 1983

For Further Information Contact:

Foundation for Child Development
Ms. Heidi Sigal
Program Officer
345 East 46th Street
New York, NY 10017
(212) 697-3150

(From 1983 ARIS)

- a. The Etiology - Arteriosclerosis and Hypertension Program supports basic animal and clinical research in the etiology and pathogenesis of arteriosclerosis and hypertension.
 - b. The Lipid Metabolism Program supports research in the structure, metabolism, and functions of lipids and lipo-proteins as they relate to arteriosclerosis.
 - c. The Clinical Applications and Prevention Program supports research into the prevention of heart and vascular diseases, such as health promotion-disease prevention activities, community intervention, health education research, and behavioral medicine.
 - d. The Epidemiology and Biometrics Research Program supports studies of heart and vascular diseases, as well as biometrical and statistical analyses of research relating to the NHLBI programs and are supported in populations within the United States and in other countries.
 - e. The Cardiology - Cardiac Diseases Program supports clinical and laboratory investigations on the manifestations, mechanisms, diagnosis, and therapy of various types of heart disease and pathophysiological processes common to all forms of heart disease.
 - f. The Cardiology - Cardiac Functions Program supports research in basic and applied cardiovascular areas that are primarily nonclinical.
 - g. The Research Training and Development Program supports the development of investigators for research in the area of heart and vascular diseases. This program includes the Special Emphasis Research Career Award: Diabetes Mellitus, the Minority Hypertension Research Development Summer Program, and the Preventive Cardiology Academic Award.
2. The Lung Diseases Program include the following:
 - a. The Structure and Function Program supports basic and applied clinical and nonclinical research on the lung and respiratory system, including respiratory function, nonrespiratory function, structure, and growth and development.
 - b. The Airways Disease Program focuses on research on chronic obstructive pulmonary diseases, asthma, cystic fibrosis, bronchiolitis, and other airway diseases.
 - c. The Interstitial Lung Diseases Program supports research on the fibrotic and immunologic lung diseases, pulmonary vascular diseases, and respiratory failure.
 - d. The Prevention, Education and Manpower Program plans, conducts, and directs a program for the development of trained researchers, and also designs, develops, operates, and coordinates programs to facilitate or implement the transfer of knowledge gained through research into clinical practice. This program includes Pulmonary Academic Awards to schools of medicine or osteopathy for the dual purpose of improving curricula in pulmonary medicine and of fostering research and careers in the field.
 3. The Blood Diseases and Resources Programs include the following:
 - a. The Thrombosis and Hemostasis Program supports basic and applied research on all aspects of the coagulation and fibrinolytic systems, including the biochemistry and physiology of clotting factors and inhibitors, platelets, and the vessel wall. Included in this program is the interrelation between these systems and other plasma protease systems, such as the kinin and complement systems.
 - b. The Red Blood Cell Disorders Program includes research on bone marrow function, on the collection and purification of erythropoietin, and on the thalassemias and their treatment, including clinical investigation of chronic iron overload and the use of iron chelation therapy for patients who require repeated transfusions for treatment of thalassemia major.
 - c. The Blood Resources Program supports research related to blood banking, improvement of methods of blood fractionation, development of new fractionation products, improvement of the storage of blood and blood products, proper use of blood components in therapy, development of blood substitutes, and elimination of the hazards of blood transfusion.
 - d. The Sickle Cell Disease Program supports basic, clinical, and applied research aimed at increasing understanding of the pathophysiology of sickle cell disease. Basic research is directed at globin synthesis, cell membrane function, blood flow characteristics, conformational and structural studies of sickle hemoglobin, and investigation of antisickling agents.
 - e. The Research Training and Development Programs are directed toward the development of investigators for research in such areas as thrombosis, hemostasis, red blood cell disorders, sickle cell disease, blood resources, and blood-bank-related sciences for the purposes of prevention, detection, and treatment of diseases and disorders of the blood.

f. The Special Emphasis Research Areas (SERA) for the Development of Investigators in Blood-Transfusion Sciences encourages qualified investigators at various stages of professional development to receive training that would direct, or redirect, their research interests and investigative skills toward the blood-transfusion sciences.

Special Projects, Programs or Awards:
Specialized Centers of Research
National Research and Demonstration Centers

Additional Information:
Contact the appropriate Division Chief at the following address:

National Heart, Lung, and Blood Institute
Bethesda, MD 20205

NOTE: Subsequent issues of the Notre Dame Report will contain additional circulars on the extramural programs of NIH's Bureaus, Institutes, and Divisions.

National Institutes of Health National Institute of General Medical Sciences Extramural Programs

No. FY84-064

Mission:

The National Institute of General Medical Sciences (NIGMS) support research and research training in the basic medical sciences and related natural and behavioral sciences which have significance for two or more Institutes, or which are outside the general area of responsibility of any Institute.

General Programs:

1. The Cellular and Molecular Basis of Disease Program is devoted to a greater understanding of the function of living cells in terms of ultrastructure, on the premise that many forms of human disease are the direct result of disturbed or abnormal function of cells. Investigations receiving support are concerned with the biophysical and biochemical description and analysis of molecular events in normal and diseased cells, and the structure and function of cell organelles and membrane processes at molecular and sub-molecular levels.

2. The Genetics Program is directed toward better understanding of the processes and mechanisms of inheritance in health and disease. Its ultimate objectives are the prevention and improved treatment of human genetic ills, including diseases with a strong hereditary factor, such as diabetes, atherosclerosis, hypertension, and schizophrenia.

The Genetics Research Centers foster interaction among scientists involved in basic and clinical research and facilitate the clinical evaluation of research findings.

3. The Pharmacological Sciences Program supports a wide spectrum of research aimed at providing an understanding of the biological and chemical processes involved in the action of therapeutic drugs, from the synthesis of new drugs, to basic studies on the molecular and cellular mechanisms of action to controlled clinical studies in man.

The Pharmacological Sciences Research Centers consist of multidisciplinary groups of basic scientists and clinicians, involved in multifaceted approaches to a common problem.

4. The goals of the Physiology and Biomedical Engineering Program are to strengthen the scientific base of those areas of clinical and physiological research for which the Institute is responsible, and to foster the application of engineering science to the solution of significant physiological and biomedical problems. This program includes a Physiological Sciences Section and a Biomedical Engineering and Instrument Development Section.

5. The Minority Access to Research Careers (MARC) Program was set up to help minority institutions train greater numbers of scientists and teachers in biomedical disciplines. To achieve this goal, four methods of funding are used: faculty fellowships, visiting scientists, honors undergraduate research training, and predoctoral fellowships.

Research Manpower Development:

1. The Medical Scientist Training Program is designed to assist medical schools and their universities in the operation of interdisciplinary programs of combined scientific and medical training for highly motivated students of outstanding research and academic potential.

2. The Pharmacology Research Associate Program is intended for promising investigators who have made a commitment to pharmacological sciences by training or research, or who have backgrounds in clinical or basic sciences and wish to acquire specialized experience in the field of pharmacology.

Special Projects, Programs or Awards:

New Investigator Research Awards in
Anesthesiology and in Trauma/Burn Research
Shared Instrumentation Grants

Additional Information:

Contact the appropriate Program Director at the following address:

National Institute of General
Medical Sciences
Westwood Building
Bethesda, MD 20205

NOTE: Subsequent issues of the Notre Dame Report will contain additional circulars on the extramural programs of NIH's Bureaus, Institutes, and Divisions.

**National Institutes of Health
National Institute of Neurological
and Communicative Disorders and Stroke
Extramural Programs**

No. FY84-129

Mission:

Programs of the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) focus on the identification, encouragement, and support of research aimed at improved diagnosis, treatment, and prevention of disorders of the nervous system, the neuromuscular apparatus, the ear, human communication, and the special senses of taste, smell, touch, and pain.

General Programs:

1. The Communicative Disorders Program includes research on all aspects of hearing, equilibrium, speech, language, and the special senses. Support is provided for studies on anatomical, physiological, biochemical, behavioral, pathological, and clinical bases for normal or impaired hearing, balance, speech, voice, language, taste, touch, and smell.
2. The Fundamental Neurosciences Program includes those areas of research related to nerve structure and function (membranes, synapses, neurotransmitters) and the basic disciplines (neuroanatomy, neuromuscular biology, etc.). Also included is work on the development of various types of prostheses and on behavioral studies related to sensory deprivation, the limbic system, and central processing.
3. The focus of the Neurological Disorders, which includes clinical, applied, and basic studies, is on a variety of disorders that affect the nervous system. The program develops and supports research in disorders of early life including: cerebral palsy, metabolic disorders, autism and learning disorders; disorders of adult life including Parkinson's Disease, Huntington's Disease, and the dementias; and demyelinating disorders including multiple sclerosis and amyotrophic lateral sclerosis.
4. The Stroke and Nervous System Trauma Program supports research in stroke, head injury, central nervous system tumors, spinal cord injury, plasticity, and regeneration at the basic, applied, and clinical levels. Stroke research includes all aspects of cerebral vascular disorders including pathogenesis, incidence, prevalence, epidemiology, prevention, diagnosis, and therapy.
5. The Biometry and Field Studies Contract Program activities include studies of incidence, prevalence, and costs of neurological and communicative disorders, including head and spinal cord injury, multiple sclerosis, epilepsy, and stroke.

Special Projects, Programs or Awards:
Clinical Research Centers

Teacher-Investigator Development Award
Supporting Activities

For Further Information Contact:

Director, Extramural Activities Program
National Institute of Neurological and
Communicative Disorders and Stroke
Federal Building, Room 1016
Bethesda, MD 20205
(301) 496-9248

NOTE: Subsequent issues of the Notre Dame Report will contain additional circulars on the extramural programs of NIH's Bureaus, Institutes, and Divisions.

**National Science Foundation
Condensed Matter Theory Program**

No. FY84-084

Program:

Grants are available for theoretical research on condensed matter, involving studies of phase transitions and critical phenomena, kinetics of condensed matter systems far from equilibrium elementary excitations, linear and nonlinear lattice dynamics, defects, surfaces, electronic and magnetic states, transport and optical properties, and macroscopic quantum properties such as superconductivity and superfluidity.

For Further Information Contact:

National Science Foundation
Division of Materials Research
Condensed Matter Sciences Section
David R. Penn or Fa Y. Wu
1800 G Street, NW
Washington, DC 20550
(202) 357-9737

(From 1983 ARIS)

**National Science Foundation
Low Temperature Physics Program**

No. FY84-083

Program:

Grants are available for experimental research on condensed matter that requires low and/or ultra-low temperatures, and the study of phase transitions and critical phenomena; the occurrence and nature of superconductivity among ordered or disordered alloys and compounds; non-equilibrium superconducting properties of weak link and Josephson junction devices; superfluid properties of the isotopes of helium; and these and related phenomena as they pertain to systems of reduced dimensionality and reduced crystalline perfection.

For Further Information Contact:

National Science Foundation
Division of Materials Research

Condensed Matter Sciences Section
Donald H. Liebenberg
1800 G Street, NW
Washington, DC 20550
(202) 357-9787

(From 1983 ARIS)

National Science Foundation Mathematical Science Postdoctoral Research Fellowships

No. FY84-080

Program:

Approximately thirty fellowships, with a monthly stipend of \$2,300, will be available for appropriate research in pure mathematics, applied mathematics and operations research, and statistics. Support is for two nine-month academic years and six summer months, for a total of 24 months of support. Applicants must be citizens of the United States as of January 1, 1984; have earned a doctoral degree in one of the mathematical sciences or have had research training and experience equivalent to that represented by a Ph.D. degree; have held the doctorate for no more than five years as of January 1, 1984; and will not previously have held any other NSF postdoctoral Fellowship. An allowance of \$2,000 will be provided to the Fellowship institution in partial reimbursement for expenses incurred in support of the research and a special allowance of \$3,000 will be provided to aid in defraying costs associated with the research.

Deadline:

November 15, 1983

For Further Information Contact:

National Science Foundation
Directorate for Mathematical and
Physical Sciences
Division of Mathematical and
Computer Sciences
Mathematical Science Section
William G. Rosen, Section Head
1800 G Street, NW
Washington, DC 20550
(202) 357-7341

(From 1983 ARIS)

National Science Foundation Solid State Chemistry Program

No. FY84-082

Program:

Grants are available for experimental research on design, synthesis, and high-yield preparation of new materials for emerging science and technology; chemical reactivity of, within, and upon solids; new methods of solid-state synthesis; and physical properties of solids.

For Further Information Contact:

National Science Foundation
Division of Materials Research
Condensed Matter Sciences Section
Fred E. Stafford
1800 G Street, NW
Washington, DC 20550
(202) 357-9787

(From 1983 ARIS)

National Science Foundation Solid State Physics Program

No. FY84-081

Program:

Grants are available for experimental research on metals, semi-conductors, and insulators in the crystalline state, the amorphous state, and intermediate states of disorder, involving studies of phase transitions and electronic, magnetic, and lattice structures and their excitations.

Deadline:

December 1, 1983

For Further Information Contact:

National Science Foundation
Division of Materials Research
Condensed Matter Sciences Section
Adriaan M. de Graaf, Section Head
or John B. Van Zytveld
Room 404
1800 G Street, NW
Washington, DC 20550
(202) 357-9737

(From 1983 ARIS)

National Science Foundation Unsolicited Research Proposals

No. FY84-074

Program:

Grants are available for research that is directed toward a better understanding of how organisms regulate their metabolic and physiological activities, reproduce, grow and age and, in physical and chemical terms, how these life processes occur at the molecular, subcellular and organismal levels.

Program areas and contacts are as follows:

Biochemistry Program, Huber Warner,
Program Director, Room 329,
(202) 357-7945

Biophysics Program, Kin-Pin Wong,
Program Director, Room 329
(202) 357-7777

Genetic Biology Program, Philip D.
Harriman, Program Director, Room 329,
(202) 357-9687

Cellular Physiology Program, Judith H. Willis, Program Director, Room 332, (202) 357-7377

Cell Biology Program, John S. Cook, Program Director, Room 332, (202) 357-7474

Developmental Biology Program, Clifton A. Poodry, Program Director, Room 332, (202) 357-7989

Regulatory Biology Program, Bruce Umminger, Program Director, Room 332, (202) 357-7975

Metabolic Biology Program, William van B. Robertson, Program Director, Room 325, (202) 357-7987, a deadline of December 1, 1983 and June 1, 1984

Deadline:

November 1, 1983, February 1, and July 1, 1984

For Further Information Contact:

National Science Foundation
Directorate for Biological, Behavioral
and Social Sciences
Division of Physiology, Cellular and
Molecular Biology
James H. Brown, Acting Division Director
Room 325
1800 G Street, NW
Washington, DC 20550

(From 1983 ARIS)

**National Science Foundation
U.S.-India Cooperative Science Program**

No. FY84-090

Program:

Members of the U.S. or Indian scientific communities and institutions are eligible for this Program to support scientific activities considered to be of significant value to the U.S. and India. Activities may be divided into five categories:

- Cooperative Research Projects
- International Travel
Deadline: December 1, 1983 and March 1, June 1, September 1, 1984
- U.S. Guest Scientists in India
- Binational/International Conferences and Workshops
- Exchange Visits with Senior Scientists
Deadline: March 15 and September 15, 1984

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs

Division of International Programs
Africa and Asian Section
Osman Shinaishin, Program Manager
Room 1208
1800 G Street, NW
Washington, DC 20550
(202) 357-9402

(From 1983 ARIS)

**National Science Foundation
U.S.-Pakistan Cooperative Science Program**

No. FY84-091

Program:

This program also supports Cooperative Research Projects, International Travel, U.S. Guest Scientists, and Conferences and Workshops as described in the U.S.-India Program (FY84-090). There are no exchange visits to Pakistan.

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs
Division of International Programs
Africa and Asian Section
Osman Shinaishin, Program Manager
Room 1208
1800 G Street, NW
Washington, DC 20550
(202) 357-9402

(From 1983 ARIS)

**National Science Foundation
U.S.-United Kingdom Cooperative
Science Program**

No. FY84-086

Program:

Grants are available to scientists who reside in the U.S. and are permanently affiliated with American research institutions. The purpose of the program is to promote mutual cooperation between scientists. Three types of activities are supported:

- Cooperative Research
- Joint Seminars
- Long-Term Research Visits

Deadline:

November 1, 1983

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs
Division of International Programs
Marilyn Rurak, Program Manager
Room 1201
1800 G Street, NW

Washington, DC 20550
(202) 357-7554

(From 1983 ARIS)

Weizmann Institute of Science Postdoctoral Fellowships

No. FY84-127

Program:

Fellowships that provide a 12-month stipend (adjusted to the cost-of-living index), a relocation allowance, and one-way air fare, are available in the various fields of chemistry, biology, mathematics, physics, and science teaching. Candidates must have a Ph.D. It is advisable that applicants contact in advance a sponsor in one of the research departments of the Institute as applications are to be endorsed by the relevant department.

Deadline:

November 15, 1983* and May 15, 1984

For Further Information Contact:

Weizmann Institute of Science
Feinberg Graduate School
P.O. Box 26
Rehovot 76-100
Israel

*The November 15 deadline is for fellowships starting in April, 1984; and the May 15 deadline is for fellowships starting in October, 1984.

(From 1983 ARIS)

engineering

American Society of Civil Engineers B. Charles Tiney Memorial ASCE Student Chapter Scholarship

No. FY84-103

Program:

Scholarships for tuition assistance to needy and deserving college students who are studying in the field of engineering will be awarded to any freshman, sophomore or junior member of an ASCE Student Chapter.

Deadline:

December 1, 1983

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson
Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

(From 1983 ARIS)

American Society of Civil Engineers Engineering Research Initiation Grants

No. FY84-100

Program:

A grant of \$16,000 will be awarded to a member of the Founder Societies for a research project in a field of mutual interest to the Founder Society and to the Engineering Foundation. The grant is directed toward young full-time engineering faculty members who are without research support. The applicant must hold a full-time regular academic appointment; have been awarded the doctor's degree not longer than two academic years prior to submission of proposal; and have gained several years of industrial or postdoctoral experience and is within his/her first two years as a full-time member of the faculty.

Deadline:

December 1, 1983

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson
Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

(From 1983 ARIS)

American Society of Civil Engineers Freeman Fellowship

No. FY84-105

Program:

Fellowships are available for young engineers in research work to apply towards expenses for experiments, observations and compilations to discover new and accurate data that will be useful in engineering. Traveling scholarships are also available which are open to members under 45 years of age, in any grade of membership, in recognition of achievement or promise, or for the purpose of visiting engineering works in the United States or abroad, where there is a good prospect of obtaining information useful to engineers.

Deadline:

December 1, 1984*

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson
Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

*In even-numbered years a similar grant is offered by the American Society of Mechanical Engineers.

(From 1983 ARIS)

**American Society of Civil Engineers
J. Waldo Smith Hydraulic Fellowship**

No. FY84-104

Program:

A \$2,000 fellowship (offered every third year) is offered to a graduate student for one full academic year plus up to \$1,000 as may be required for physical equipment connected with the research.

Deadline:

December 1, 1984

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson
Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

(From 1983 ARIS)

**American Society of Civil Engineers
O.H. Ammann Research Fellowship
in Structural Engineering**

No. FY84-101

Program:

A \$2,000 stipend will be awarded to a member of the Society in any grade, or applicants for membership, for research that supports the creation of new knowledge in the field of structural design and construction.

Deadline:

December 1, 1983

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson
Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

(From 1983 ARIS)

**American Society of Civil Engineers
Samuel Fletcher Tapman ASCE Student
Chapter Scholarships**

No. FY84-102

Program:

Scholarships of \$500 are available for award to members of ASCE Student Chapters for any undergraduate freshman, sophomore or junior of an ASCE Student Chapter.

Deadline:

December 1, 1983

For Further Information Contact:

American Society of Civil Engineers
D.J. Rowson

Manager, Student Services
345 East 47th Street
New York, NY 10017-2398
(212) 705-7667

(From 1983 ARIS)

**National Science Foundation
Engineering Research Equipment Grants**

No. FY84-076

Program:

Grants ranging from \$10,000 to \$150,000 are available to individual research workers, research groups, engineering departments and engineering colleges. Only that equipment which is essential for the conduct of the proposed research, or would greatly improve the quality of the expected data, or would greatly accelerate the progress of the proposed investigation should be requested.

Deadline:

December 15, 1983

For Further Information Contact:

National Science Foundation
Directorate for Engineering
Janice Apruzese, Staff Associate
Room 1115
1800 G Street, NW
Washington, DC 20550
(202) 357-9834

(From 1983 ARIS)

**National Science Foundation
Engineering Research Initiation Grants**

No. FY84-075

Program:

Grants for recently appointed Assistant or Associate Professors are available to initiate academic engineering research. Proposals may be submitted in any research area normally supported by the Engineering Directorate. The four divisions of the directorate are: Electrical, Computer and Systems Engineering; Chemical and Process Engineering; Civil and Environmental Engineering; and Mechanical Engineering and Applied Mechanics. Two categories of support are available: Category A which supports research conducted exclusively in an academic environment with grants up to \$48,000 for 24 months of support; and Category B which supports Industry/University Cooperative Research with a possible additional \$48,000 being provided for the industrial portion of the project. An additional amount of up to \$6,000 may be awarded to academic institutions for the purchase of instruments or research equipment if the institution provides equal matching funds. Applicants must have held a qualifying faculty appointment for not more than three years (five years for Category B)

on December 1, 1983 and have not received research support as a principal or co-principal investigator under a grant or contract from the Federal government as of December 1, 1983.

Deadline:

December 1, 1983

For Further Information Contact:

National Science Foundation
Directorate for Engineering
Janice Apruzese, Staff Associate
Room 1115
1800 G Street, NW
Washington, DC 20550
(202) 357-9834

(From 1983 ARIS)

law

Department of Justice Crime Control Theory and Policy

No. FY84-069

Program:

The purpose of this program is to support 1) policy experiments or quasi-experiments structured to obtain empirical evidence of the success or failure of innovative approaches to sanctioning; 2) criminal career research directed toward a thorough understanding of the onset, length, and nature of criminal careers; 3) national-level studies aimed at measuring the relative gains in crime reduction generated by the different levels of sanctions found in U.S. jurisdictions; 4) policy analyses designed to stimulate the likely effects of new and untried sanctioning approaches based on our present knowledge of criminal behavior and the criminal justice system; and 5) perceptions research investigating why the assessment of sanction risk or sanction cost differs greatly among various subpopulations, whether these differences affect the propensity to engage in unlawful activity, and how the criminal justice system can communicate sanction threats more effectively.

Deadline:

December 9, 1983

For Further Information Contact:

Department of Justice
National Institute of Justice
Office of Research and Evaluation Methods
Crime Control Theory and Policy Program
Joel H. Garner, Program Manager
Room 900
633 Indiana Avenue, NW
Washington, DC 20531
(202) 724-7635

(From 1983 ARIS)

Department of Justice Classification, Prediction, Methodology Development

No. FY84-068

Program:

The purpose of this program is to support studies which 1) advance methods for developing more useful offender classification systems and which include one or more criminal justice system tests of the new methods; 2) evaluate or extend the usefulness of some existing offender classification system; or 3) develop a new methodological technique for advancing criminal justice research and evaluation to include a specific criminal justice application. The analyses of existing data bases are encouraged in all of these applications.

Deadline:

December 14, 1983

For Further Information Contact:

Department of Justice
National Institute of Justice
Office of Research and Evaluation Methods
Classification, Prediction, Methodology
Development Program
Richard S. Laymon, Program Manager
Room 1205
633 Indiana Avenue, NW
Washington, DC 20531
(202) 724-7635

(From 1983 ARIS)

Department of Justice Performance and Productivity Measurement

No. FY84-067

Program:

The purpose of this program is to support studies in performance measurement issues which will ultimately improve productivity in criminal justice agencies and promote constructive dialogue about performance between agency managers and their oversight bodies and interested constituencies. In general, the research should be empirically-grounded and contribute to the development of some perspective on performance measurement in any sector of the criminal justice system -- police, prosecution, public defense, courts, and corrections.

Deadline:

November 23, 1983

For Further Information Contact:

Department of Justice
National Institute of Justice
Office of Research and Evaluation Methods
Performance Measurement Program
Edwin Zedlewski, Program Manager
Room 900

633 Indiana Avenue, NW
Washington, DC 20531
(202) 724-7631

(From 1983 ARIS)

computer sciences

National Science Foundation Equipment Grants for Computer Research

No. FY84-078

Program:

Support is available for the purchase of special-purpose equipment for computer science and computer engineering research. The equipment should be necessary for the pursuit of specific research projects and must be required by more than one research project and be of such a nature as to be difficult to justify for one project alone. The total cost must be at least \$10,000. Significant cost-sharing is required.

Deadline:

December 1, 1983

For Further Information Contact:

National Science Foundation
Directorate for Mathematical and
Physical Sciences
Division of Mathematical and
Computer Sciences
Computer Sciences Section
John R. Lehman, Program Director
Room 339
1800 G Street, NW
Washington, DC 20550
(202) 357-7349

(From 1983 ARIS)

National Science Foundation Scientific Computing Research Equipment for the Mathematical Sciences

No. FY84-079

Program:

Support is available for the purchase of computing equipment for research in the mathematical sciences for U.S. graduate-degree-granting institutions with departments or research programs in mathematics, applied mathematics, or statistics. The total cost must be at least \$10,000.

Deadline:

December 1, 1983

For Further Information Contact:

National Science Foundation
Directorate for Mathematical and
Physical Sciences
Division of Mathematical and
Computer Sciences
Mathematical Science Section
Alvin I. Thaler, Program Director

Room 304
1800 G Street, NW
Washington, DC 20550
(202) 357-9764

(From 1983 ARIS)

National Science Foundation Scientific Research Support in the Computer Sciences

No. FY84-077

Program:

Grants are available for research to increase the store of knowledge and enhance understanding of the scientific aspects of major problems confronting the nation in the areas of computer research. Program areas are the following:

- Computer Systems Design Program: Principles of computer systems design relating to the structure of computer systems or the process of systems design. Topics include, but are not limited to: computer system architecture; distributed computer systems; integrated hardware/software systems; performance measurement and evaluation; fault tolerant system; logic design; computer graphics; man-machine interaction; and VLSI design methodology. Contact: John R. Lehman, Program Director, Room 339, (202) 357-7349.
- Intelligent Systems Program: Computer-based systems which have some of the characteristics of intelligence. Relevant areas include pattern recognition, pattern generation, knowledge representation, problem solving, natural language understanding, theorem proving, and others which relate to the automatic analysis and handling of complex tasks. Contact: Program Director, Room 339, (202) 357-7345.
- Software Engineering Program: The structure and design process of computer software, especially verification, testing, portability, reliability, and human interfacing to numeric and non-numeric software systems. Areas of emphasis include: program validation and testing; software tools; human factors in software design and use; computationally-oriented analysis; the design and construction of high quality portable software for scientific research; and experimental implementation where that is an integral part of the research. Contact: Bruce H. Barnes, Program Director, Room 339, (202) 357-7345.
- Software Systems Program: The conceptual basis for the specification of future software systems, including advanced programming languages and optimizing compilers; the analysis of program structure to support verification and proof of correctness of programs; and the study of algorithms

both to discover new algorithms and to find improved measures of effectiveness of known algorithms. Contact: Thomas A. Keenan, Program Director, Room 339, (202) 357-7375.

- Theoretical Computer Science Program: Theory of computation, numerical analysis, and computational mathematics, theory of formal languages; analysis of algorithms; other topics concerned with the theoretical foundations of computer science. Contact: John Cherniarsky, Program Director, Room 339, (202) 357-7349.
- Special Projects Program: General and specialized projects focusing, for example, on computer science research equipment; societal issues in computer science including privacy and security, legal aspects of computing, and social and economic impact; new directions in computer sciences and applications including computer networks, databases, and database management; computer-based modeling; and topics of special interest in computer science. Contact: W. Richards Adrion, Program Director, Room 339, (202) 357-7375.

Deadline:
November 1, 1983*

For Further Information Contact:

National Science Foundation
Directorate for Mathematical and
Physical Sciences
Division of Mathematical and
Computer Sciences
Computer Sciences Section
W. Richard Adrion, Program Director
Room 339
1800 G Street, NW
Washington, DC 20550
(202) 357-7375

*For projects to begin in Summer, 1984.

(From 1983 ARIS)

general

AARP Andrus Foundation University Research Grants

No. FY84-093

Program:

Institutional grants of up to \$40,000 per year are available to universities for research into gerontology, with the aim of producing practical knowledge usable by AARP, older persons in general, policy planners, service providers and practitioners in the development and improvement of services for the nation's older population.

Deadline:

December 1, 1983 and June 1, 1984

For Further Information Contact:

AARP Andrus Foundation
Dr. Frederick J. Ferris
Administrator
1909 K Street, NW
Washington, DC 20049
(202) 728-4656

(From 1983 ARIS)

American Association of University Women International Fellowships

No. FY84-094

Program:

About 44 fellowships of \$10,000 will be awarded for one year's graduate study or advanced research at an approved institution in the United States to women of outstanding ability who are citizens of countries other than the U.S.

Deadline:

December 1, 1983

For Further Information Contact:

American Association of
University Women
AAUW Educational Foundation Programs
2401 Virginia Avenue, NW
Washington, DC 20037
(202) 785-7736

(From 1983 ARIS)

American Council of Learned Societies Fellowships and Grants

No. FY84-095

Program:

The general categories of fellowships and grants, exclusively within the province of ACLS, includes the following fields of specialization: philosophy (including the philosophy of law and science); aesthetics; philology, languages, literature, and linguistics; archaeology; art history and musicology; history (including the history of science, law, and religions); cultural anthropology; and folklore. Proposals with a predominantly humanistic emphasis in economics, geography, political science, psychology, sociology, and the natural sciences will also be considered.

Grants-in-Aid: Up to \$3,000 is available to scholars in the humanities for the exclusive purpose of advancing a specific work in progress. Deadline: December 15, 1983.

Travel Grants for Humanists to International Meetings Abroad: Travel grants are available to scholars in humanistic disciplines to enable them to participate in international scholarly meetings held outside North America (including the Caribbean Islands). Deadline: November 1, 1983*, March 1 and July 1, 1984.

For Further Information Contact:

American Council of Learned Societies
800 Third Avenue
New York, NY 10022
(212) 888-1759

NOTE: For all ACLS programs, a letter of inquiry is required for receipt of application forms. The letter should state the year of the applicant's Ph.D., his/her subject of research, his/her field of interest, and the period for which he/she is requesting support.

*The November 1 deadline is for meetings March through June; The March 1 deadline is for meetings July through October; and the July 1 deadline is for meetings November through February.

(From 1983 ARIS)

**The American Research Center in Egypt, Inc.
Fellowships in Egypt, 1984-85**

No. FY84-098

Program:

Monthly stipends for study in Egypt in the fields of Egyptology, archaeology, art history, the humanities, the social sciences, Islamic studies and related disciplines are awarded to doctoral candidates in the dissertation stage and also to postdoctoral scholars.

Deadline:

November 30, 1983*

For Further Information Contact:

The American Research Center in
Egypt, Inc.
1117 International Affairs Building
Columbia University
New York, NY 10027
(212) 280-2045

*Deadline for receipt of applications, letters of recommendation, and filing fees.

(From 1983 ARIS)

**American Schools of Oriental Research
Fellowships, 1984-85**

No. FY84-099

Program:

Fellowships are available to students at all levels, from undergraduate to postdoctoral scholars, seminarians, and other qualified individuals, for Near Eastern studies in such humanistic disciplines as anthropology, archaeology, Biblical studies, epigraphy, history, history of art and architecture, literature, philology, prehistory and topography.

- Mesopotamian Fellowship
- William Foxwell Albright Fellowship
- Shell Fellowship
- George A. Barton Fellowship
- Samuel H. Kress Foundation Fellowship
- National Endowment for the Humanities Postdoctoral Fellowships

Deadline:

November 15, 1983

For Further Information Contact:

American Schools of Oriental Research
Mitchell Rothman
Administrative Director
4243 Spruce Street
Philadelphia, PA 19104
(215) 222-4643

(From 1983 ARIS)

**Council for European Studies
Research Planning Group Awards**

No. FY84-107

Program:

Awards of up to \$10,000 are available for international travel, communication, conferences and interim meetings of multinational groups of scholars. The purpose of these awards is to promote long-term collaborative research by West European and American scholars on policy problems of common concern; European participation is essential. Areas supported include problems related to inflation and unemployment, the provision of social services, crime, the environment, urban planning, education, incomes policy, the instrumentalities of decision and the transformation of the state, science, technology, economic growth, monopoly regulation, etc.

Deadline:

December 1, 1983 and April 1, 1984

For Further Information Contact:

Council for European Studies
Columbia University
1403 International Affairs Building
New York, NY 10027
(212) 280-4172

(From 1983 ARIS)

**Council for International Exchange
of Scholars
NATO Research Fellowships**

No. FY84-109

Program:

Two or three short-term research awards of two to four month periods are available in the humanities and social sciences on topics of direct interest to the North Atlantic Alliance.

Deadline:
December 15, 1983

For Further Information Contact:

Council for International Exchange
of Scholars
Attn: Gladys Semeryan
Eleven Dupont Circle NW
Suite 300
Washington, DC 20036
(202) 833-4967

(From 1983 ARIS)

**Council for International Exchange
of Scholars
West Germany Seminar in Foreign Student
Exchange Administration**

No. FY84-108

Program:

Up to 20 awards are available for a 3-week seminar in Bonn and Berlin in April 1984 - May 1984 on the educational, cultural, and political issues involved in foreign student exchange between the U.S. and the Federal Republic of Germany.

Deadline:
December 1, 1983

For Further Information Contact:

Council for International Exchange
of Scholars
Attn: Jean McPeck
Eleven Dupont Circle NW
Suite 300
Washington, DC 20036
(202) 833-4968

(From 1983 ARIS)

**Department of Education
Mina Shaughnessy Scholars Program**

No. FY84-066

Program:

Approximately twenty awards of up to \$20,000 and fifteen months' duration will be made under this program, named for the late Mina P. Shaughnessy, Director of Writing Programs at the City University of New York. Awards provide educators with opportunities to develop and share ideas emerging from their practice that are of national significance in the field of postsecondary education. Typical projects could emphasize basic literacy, educational equity, undergraduate curriculum or the relation of work to education. The synthesis of case studies or the development of textbooks will also be considered eligible projects. Conditions of the grants are intended to allow flexibility in their use, so that recipients can take brief sabbaticals, or shortened work weeks, as well as

hire research or secretarial assistance. Formal application for funding must be made by the researcher's institution instead of directly by the researcher.

Deadline:
November 1, 1983

For Further Information Contact:

Department of Education
Libraries and Learning Technologies
Division of Library Programs
Library Education, Research and
Resources Branch
Diana Hayman, Program Officer
R08-3, Room 3100
400 Maryland Avenue, SW
Washington, DC 20202
(202) 245-8091

(From 1983 ARIS)

**East-West Center
Graduate Degree Student Awards**

No. FY84-110

Program:

About 100 to 120 scholarships to graduate students to participate in the research and professional projects of the Center's problem-oriented Institutes while studying at the University of Hawaii. Awards include housing in a residence hall, monthly stipend of \$360, tuition, book allowance, and the opportunity for EWC Institute-approved fieldwork. Funding may cover all or part of these provisions.

Deadline:
December 1, 1983*

For Further Information Contact:

East-West Center
Award Services Officer
1777 East West Road
Honolulu, HI 96848
(808) 944-7736

*International application deadline. Non-American applicants should contact their in-country program representative for national competition application deadlines.

(From 1983 ARIS)

**German Academic Exchange Service (DAAD)
Information Visits by Groups of Students**

No. FY84-112

Program:

Groups of students (minimum of 10 and maximum of 30 persons) enrolled at an accredited American institution of higher education, and accompanied by their professor, may apply for financial assistance on a per person/per diem

basis (minimum 7 and maximum 21 days) for an academic study tour to increase their knowledge of specific German subjects and/or institutions.

Applications must be filed at least six months prior to departure date.

For Further Information Contact:

German Academic Exchange Service (DAAD)
535 Fifth Avenue, Suite 1107
New York, NY 10017
(212) 599-0464

(From 1983 ARIS)

**German Marshall Fund of the United States
Research Fellowship Program**

No. FY84-113

Program:

Fellowships are available of up to \$28,000, but not exceeding the fellow's current income for one year's full-time research on projects that seek to improve the understanding of significant contemporary economic, political, and social developments involving the United States and Europe. Projects should involve the comparative analysis of a specific issue in more than one country or explore an issue in a single country in ways that have relevance for other countries. Scholars of all levels beyond the Ph.D. are eligible to apply.

Deadline:

November 30, 1983

For Further Information Contact:

German Marshall Fund of the United States
Research Fellowship Program
Eleven Dupont Circle NW
Washington, DC 20036
(202) 745-3950

(From 1983 ARIS)

**Inter-American Foundation
Doctoral Fellowship Program**

No. FY84-070

Program:

About 15 fellowships for doctoral dissertation research in Latin America and the Caribbean are awarded annually to candidates who have fulfilled all degree requirements other than the dissertation. Applicants must write and speak the language of the area in which they intend to study. Preference is given to those whose background and research are multidisciplinary and who have prior experience in development work. Stipends average about \$600 per month for a one-year period and can be extended for an additional year. Other allowances are made for legal dependents, transportation, and health and

accident insurance; a limited amount is also included for research expenses.

Deadline:

December 5, 1983

For Further Information Contact:

Inter-American Foundation
Elizabeth Veatch
Fellowship Officer
1515 Wilson Boulevard
Rosslyn, VA 22209
(703) 841-3864

(From 1983 ARIS)

**Institute of Early American History
and Culture
Postdoctoral Fellowships**

No. FY84-114

Program:

One two-year postdoctoral fellowship (stipend of \$17,000 per year plus a travel allowance) is given each year to a promising young scholar in any area of early American studies. Applicants should ask one of their instructors to write a letter of nomination to the Director of the Institute, at which time the necessary application forms will be sent.

Deadline:

November 15, 1983

For Further Information Contact:

Institute of Early American History
and Culture
Director of the Institute
Box 220
Williamsburg, VA 23187
(804) 229-2771

(From 1983 ARIS)

**Japan Foundation
Dissertation Fellowships**

No. FY84-117

Program:

Monthly stipends of 180,000 yen for periods ranging from 4-14 months are awarded to doctoral candidates who have completed all requirements except the dissertation. Grants are for research related to Japan or to U.S. - Japanese relations.

For Further Information Contact:

Japan Foundation
Suite 570
Watergate Office Building
600 New Hampshire Avenue NW
Washington, DC 20037
(202) 965-4313

(From 1983 ARIS)

Japan Foundation Fellowships Programs

No. FY84-115

Program:

Monthly stipends of 180,000 to 300,000 yen (approximately \$800 to \$1,250) are awarded to U.S. citizens or permanent residents for research in Japan in the humanities and social sciences.

Deadline:

November 15, 1983

For Further Information Contact:

Japan Foundation
Suite 570
Watergate Office Building
600 New Hampshire Avenue NW
Washington, DC 20037
(202) 965-4313

(From 1983 ARIS)

Japan Foundation Institutional Project Support Programs

No. FY84-118

Program:

Grants of varying amounts are awarded to nonprofit educational, cultural, or public affairs organizations or institutions. Proposals providing for some measure of cost-sharing by the applicant are encouraged; the Foundation does not provide overhead costs. The following are the principal types of grants:

- Visiting Professorship Program
- Staff Expansion Program
- Research Program
- Conference/Summer Institute Program
- Education Abroad Program
- Library Support Program

Deadline:

November 15, 1983

For Further Information Contact:

Japan Foundation
Suite 570
Watergate Office Building
600 New Hampshire Avenue NW
Washington, DC 20037
(202) 965-4313

(From 1983 ARIS)

Japan Foundation Professional Fellowships

No. FY84-116

Program:

Monthly stipends of 240,000 to 300,000 yen for 2-12 months are awarded to academic

faculty members and other professionals with substantial experience in some aspect of Japanese studies who desire to carry out research in Japan.

For Further Information Contact:

Japan Foundation
Suite 570
Watergate Office Building
600 New Hampshire Avenue NW
Washington, DC 20037
(202) 965-4313

(From 1983 ARIS)

The Charles A. Lindbergh Fund, Inc. Lindbergh Grants

No. FY84-119

Program:

Grants up to \$10,580 (the total cost of Charles Lindbergh's "Spirit of St. Louis") will be awarded for research projects that contribute toward the achievement of a balance between technological progress and the preservation of the natural environment. For the 1984 funding period interest is directed toward increasing representation in the following areas: aeronautics/astromatics, agriculture, general aviation, biomedical research, conservation, health and population sciences, intercultural communication, oceanography, natural resource preservation, toxic waste disposal management, and wildlife preservation.

Deadline:

November 16, 1983

For Further Information Contact:

The Charles A. Lindbergh Fund, Inc.
Attn: Gloria S. Perkins
Administrator
99 Park Avenue
New York, NY 10016
(212) 557-2865

(From 1983 ARIS)

The National Humanities Center Fellowships

No. FY84-120

Program:

Approximately 40 fellowships are awarded every year to scholars from fields traditionally associated with the humanities, and humanistically inclined scholars in the natural sciences, the social sciences, and the professions so that they may pursue research and writing while in residence at the Center.

Deadline:

December 10, 1983

For Further Information Contact:

The National Humanities Center
7 Alexander Drive
Fellowships
Research Triangle Park, NC 27709
(919) 549-0661

(From 1983 ARIS)

**National Science Foundation
Graduate Fellowships**

No. FY84-071

Program:

Three-year fellowships to applicants who: 1) are citizens or nationals of the U.S.; and 2) have not completed postbaccalaureate study in excess of 30 quarter hours/20 semester hours, or the equivalent in any field of science, engineering, social sciences, or mathematics (this guideline applies regardless of whether credit for these hours is available for study toward an advanced degree; the last year of a joint baccalaureate-master's program is considered to be postbaccalaureate study). Fellowships are awarded for study or work leading to master's or doctoral degrees in the mathematical, physical, biological, engineering, and social sciences, and in the history and philosophy of science. Stipends are \$8,100 for a 12-month tenure, and are pro-rated at \$675/month for lesser periods. NSF will provide a Fellow's institution with a \$4,900 cost of education allowance in lieu of all tuition and assessed fees in each year of support. Requests for applications for these programs should be addressed to the Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington, DC 20418.

Deadline:

November 23, 1983

For Further Information Contact:

National Science Foundation
Office of Scientific and Engineering
Personnel and Education
Fellowships Section
Dr. Douglas S. Chapin, Program Director
Room 414
1800 G Street, NW
Washington, DC 20550
(202) 357-7536

(From 1983 ARIS)

**National Science Foundation
Minority Graduate Fellowships**

No. FY84-072

Program:

Three-year fellowships to applicants who: 1) are citizens or nationals of the U.S. at the

time of application; 2) are members of an ethnic minority group underrepresented in the advanced levels of the U.S. science personnel pool (American Indian, Alaskan Native, Black, Hispanic or Native Pacific); 3) have not completed postbaccalaureate study in excess of 30 quarter hours/20 semester hours, or the equivalent, in any field of science, engineering, social science or mathematics (this guideline applies regardless of whether credit for these hours is available for study toward an advanced degree; the last year of a joint baccalaureate-master's program is considered to be postbaccalaureate study). Fellowships are awarded for study or work leading to master's or doctoral degrees in the mathematical, physical, medical, biological, engineering, and social sciences, and in the history and philosophy of science. Stipends are \$8,100 for a 12-month tenure, and are pro-rated at \$675/month for less periods. NSF will provide the fellow's institution with a \$4,900 cost-of-education allowance in lieu of all tuition costs and assessed fees. Requests for applications for these programs should be addressed to the Fellowship Office, National Research Council, 2101 Constitution Avenue, Washington, DC 20418.

Deadline:

November 23, 1983

For Further Information Contact:

National Science Foundation
Office of Scientific and Engineering
Personnel and Education
Fellowships Section
Dr. Douglas S. Chapin, Program Director
Room 414
1800 G Street, NW
Washington, DC 20550
(202) 357-7536

(From 1983 ARIS)

**National Science Foundation
NATO Postdoctoral Fellowships in Science**

No. FY84-073

Program:

Grants to promote the progress of science and to assist in obtaining a closer collaboration among the scientists of various nations. Fellowships are awarded for full-time study or work in the mathematical, physical, biological, engineering, and social sciences, in the history and philosophy of science, and in interdisciplinary fields comprised of overlapping areas between two or more sciences (e.g., oceanography, operations research, meteorology and biophysics). Recipients of these awards are expected to study in countries that are members of NATO. However, awards are not totally restricted to study in NATO countries; consideration will be given to those planning to study in other neigh-

boring countries that cooperate with NATO. Eligible applicants are citizens or nationals of the U.S. (or who will be by the time of application) who have demonstrated ability and special aptitude for advanced training in the sciences and who have (or will have by the time of application) earned doctoral degrees in any of the qualifying science fields, or have had research training and experience equivalent to that represented by the doctoral degree. The stipend is \$1,500 per month for up to 12 months. Dependency allowances are \$100 per month per dependent spouse and \$100 per month for each of not more than two children. Travel allowance varies and may not exceed \$2,000 for one individual and \$4,800 for all. Application materials may be obtained from the Fellowships Section, Office of Scientific and Engineering Personnel and Education, National Science Foundation, Washington, DC 20550.

Deadline:
November 8, 1983

For Further Information Contact:

National Science Foundation
Office of Scientific and Engineering
Personnel and Education
Fellowships Section
Michael M. Frodyma, Program Director
1800 G Street, NW
Washington, DC 20550
(202) 357-7536

(From 1983 ARIS)

**National Science Foundation
U.S.-Federal Republic of Germany Cooperative
Science Program**

No. FY84-088

Program:

Grants are available to scientists of the American scientific community who are permanently affiliated with an American research institution and to scientists of the Federal Republic of Germany who are supported by the Deutsche Forschungsgemeinschaft (German Research Association, DFG), the Max Planck Society, or the Fraunhofer Society. This program covers all recognized branches of the natural, social, and engineering sciences, including mathematics.

Deadline:
December 1, 1983 and June 1, 1984

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs
Division of International Programs
Dr. Warren E. Thompson, Program Manager
Room 1214
1800 G Street, NW

Washington, DC 20550
(202) 357-9700

(From 1983 ARIS)

**National Science Foundation
U.S.-Israel Binational Science Foundation**

No. FY84-085

Program:

Funding in Israeli currency is awarded for cooperative research projects in health sciences, natural sciences, energy, and social and behavioral sciences. Projects should be conducted principally in Israel and should involve scientists and institutions of both the United States and Israel.

Deadline:
November 15, 1984*

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs
Division of International Programs
Dr. R.R. Ronkin, Staff Associate
Room 1212-M
1800 G Street, NW
Washington, DC 20550
(202) 357-7613

*There is no request for submissions in 1983. The next proposal deadline is November 15, 1984.

(From 1983 ARIS)

**National Science Foundation
U.S.-Latin America and Caribbean Cooperative
Science Program**

No. FY84-089

Program:

Grants for exchanges that foster and support mutually beneficial scientific and technological cooperation between the U.S. and Latin America. The program encourages collaboration and exchange of information between scientists, engineers, scholars, and institutions of research and higher learning in the U.S. and any independent country of South America, Central America and the Caribbean, including Mexico. The program provides support for three different types of activity.

- Cooperative Research
- Bilateral Workshops
- Scientific Visits

Deadline:
November 1, 1983 and May 1, 1984

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs

Division of International Programs
Latin American and Pacific Section
Dr. Eduardo Feller or
Ms. Christine French
Room 1212
1800 G Street, NW
Washington, DC 20550
(202) 357-9563

(From 1983 ARIS)

National Science Foundation U.S.-Switzerland Cooperative Science Program

No. FY84-087

Program:

Grants are available to scientists and personnel belonging to the American scientific community who reside in the U.S. and are permanently affiliated with an American research institution and to scientists who are supported by or affiliated with the Swiss National Science Foundation for international travel and subsistence abroad. This program covers all recognized branches of the natural, social, and engineering sciences, including mathematics.

Deadline:

December 1, 1983 and June 1, 1984

For Further Information Contact:

National Science Foundation
Directorate for Scientific Technological
and International Affairs
Division of International Programs
Dr. Warren E. Thompson, Program Manager
Room 1214
1800 G Street, NW
Washington, DC 20550
(202) 357-9700

(From 1983 ARIS)

President's Commission on White House Fellowships White House Fellowships

No. FY84-092

Program:

White House Fellowships are one-year educational sabbaticals in government given to persons who have demonstrated exceptional ability, marked leadership qualities, unusual promise of future development, high moral character, and tangible expression of concern about the problems facing our society and the quality of life in the U.S., who are early in their careers. The annual stipend is based on previous education, experience, and salary, and on the particular role a Fellow is assigned in his or her agency. Each White House Fellow is assigned (usually as special assistant) to the Vice President, a member of

the Cabinet, the head of an independent Executive Branch agency, or a principal member of the President's staff. A Fellow's work will usually include speech writing, conference attendance, supervision of staff work, reviewing or helping draft proposed legislation, answering Congressional inquiries, chairing meetings, drafting reports, conducting briefings, and spearheading one or more projects.

Deadline:

Requests for Applications: November 15, 1983
Submit Applications: December 1, 1983

For Further Information Contact:

President's Commission on White House
Fellowships
712 Jackson Place, NW
Washington, DC 20503
(202) 395-4522

(From 1983 ARIS)

Radcliffe College Radcliffe Research Scholars Program

No. FY84-123

Program:

Up to four fellowships of \$16,000 for the full academic year and lesser sums for one-term or summer appointments will be awarded for research drawing upon the resources of the Arthur and Elizabeth Schlesinger Library on the History of Women in America and the Henry A. Murray Research Center. Preference will be given to proposals which include the analysis of previously unused or under-used materials and that make substantial contributions to a better understanding of women and social change in American society. Applicants must have received their doctorates, or the equivalent, at least one year prior to the submission of an application.

Deadline:

November 4, 1983

For Further Information Contact:

Radcliffe College
Henry A. Murray Research Center
Radcliffe College
10 Garden Street
Cambridge, MA 02138
(617) 495-8140

(From 1983 ARIS)

Radcliffe College Radcliffe Research Support Program

No. FY84-122

Program:

The Radcliffe Research Support Program makes available small grants of up to \$3,000 to

support postdoctoral research on women at the Arthur and Elizabeth Schlesinger Library on the History of Women in America and the Henry A. Murray Research Center. Applicants must have received the Ph.D. or its equivalent at least one year prior to the time of application and may not be receiving support from any other fellowship program at the time of their research at Radcliffe.

Deadline:
December 15, 1983, February 15, April 15 and September 15, 1984

For Further Information Contact:

Radcliffe College
Henry A. Murray Research Center
Radcliffe College
10 Garden Street
Cambridge, MA 02138
(617) 495-8140

(From 1983 ARIS)

**Social Science Research Council
Postdoctoral Grants for International
Research on Foreign Affairs**

No. FY84-124

Program:

Grants are available for periods of three months to one year to individuals with Ph.D. degrees or equivalent research experience for research in the humanities or social sciences. These programs are designed to support research in one country, comparative research between countries in an area, and comparative research between areas. Grants may be applied for travel, research, and maintenance expenses.

- Africa - South of the Sahara
- Japan
- Korea
- Latin America and the Caribbean
- Latin America and the Caribbean
International Collaborative Research Grants:
Grants are offered jointly to two scholars in the social sciences or humanities who wish to collaborate on a research project dealing with history, Latin American or Caribbean cultures, societies, or institutions.
- South Asia
- Southeast Asia
- The Near and Middle East

Deadline:
December 1, 1983

For Further Information Contact:

Social Science Research Council
Fellowships and Grants
605 Third Avenue

New York, NY 10158
(212) 557-9500

(From 1983 ARIS)

**The Harry S Truman Scholarship Foundation
Scholarship Program**

No. FY84-125

Program:

The Foundation awards scholarships of up to \$5,000 per year for four years to students preparing for a career in public service. Candidates must be U.S. citizens enrolled in an accredited four-year program at an institution of higher education, must have selected a major that will permit admission to a graduate program in public service and must be in their sophomore year. Application must take the form of nomination by the student's college or university. The Foundation neither invites nor accepts direct applications. The December 1 deadline is for the nomination of candidates.

Deadline:
December 1, 1983

For Further Information Contact:

The Harry S Truman Scholarship
Foundation
Malcolm C. McCormack
Executive Secretary
712 Jackson Place, NW
Washington, DC 20006
(202) 395-4831

(From 1983 ARIS)

**Technicon Instruments Corporation
Grants for Research in Biomedical
and Industrial Instrumentation**

No. FY84-063

Program:

To identify and support significant academic research on novel concepts or technologies in biomedical and industrial instrumentation, which can establish the basis for the development of products with significant commercial value.

Awards:

Maximum of \$100,000 for a one-year period. In most cases grantees will be eligible for renewal for a second year; in exceptional circumstances, support for a third year may be considered.

Scope:

Both basic and applied research will be considered. A proposal may involve a new concept or support for development of a process or device. Each submission will be judged for its scientific merit and novelty, as well as for its potential for practical utilization beyond the research laboratory.

Deadline:

Preliminary submissions are welcome at any time.

Guidelines:

For a copy of the guidelines and application, contact the Office of Advanced Studies, Division of Research and Sponsored Programs, Extension 7432.

**The World Bank
Robert S. McNamara Fellowships**

No. FY84-128

Program:

Twelve-month fellowships, tenable for the 1984 academic year, will be awarded to support imaginative or innovative research projects at the postgraduate level in fields related to economic development. Individuals or small groups of up to five individuals working at the same institution may submit an application for a joint award. Applicants must be a national of a Bank member country, normally 35 years of age or under, holder of a master's degree or equivalent, and the work must be carried out in a Bank member country other than the Fellow's own. Each fellowship will include a stipend to cover subsistence and accommodation; travel at less than first class for the Fellow, the Fellow's spouse and dependent children to and from the place of work or research; and an allowance for books and for the cost of supporting services. This program is not intended to support work leading to an advance degree.

Deadline:

December 1, 1983

For Further Information Contact:

The World Bank
Economic Development Institute
J. Price Gittinger, Coordinator
Robert S. McNamara Fellowship Program
1818 H Street, NW, Room G-1067
Washington, DC 20433
(202) 477-1234

(From 1983 ARIS)

current publications and other scholarly works

Current publications should be mailed to the
Division of Research and Sponsored Programs,
Room 314, Administration Building.

COLLEGE OF ARTS AND LETTERS

Economics

Coe, Richard D.

R.D. Coe. 1983. Participation in the Sup-

plemental Security Income by the Eligible Elderly. Volume 10, pages 93-120 in, G.J. Duncan and J.N. Morgan, eds., Five Thousand American Families - Patterns of Economic Progress. Institute for Social Research, Ann Arbor, Michigan.

R.D. Coe. 1983. Participation in the Food Stamp Program. Volume 10, pages 121-177 in, G.J. Duncan and J.N. Morgan, eds., Five Thousand American Families - Patterns of Economic Progress. Institute for Social Research, Ann Arbor, Michigan.

Government and International Studies

Wilde, Alexander W.

A.W. Wilde. 1983. The Delicate Balance of Nicaragua's Church. Notre Dame Magazine July:57-59.

Philosophy

McMullin, Ernan

E. McMullin. 1983. Is the Progress of Science Dialectical? Pages 215-239 in, R.S. Cohen and M.W. Wartofsky, eds., Hegel and the Sciences, Dordrecht: Reidel.

E. McMullin. 1983. Two Ideals of Explanation. Proceedings Seventh International Congress of Logic, Methodology and Philosophy of Science 6:145-148.

E. McMullin. 1983. Review. Prelude to Galileo. Review of Metaphysics 36:738-739.

Sterba, James P.

J.P. Sterba. 1983. Morality in Practice. Wadsworth Publishing Company. xii + 334 pp.

Psychology

Bartlett, Willis E.

P.G. Banikotes and W.E. Bartlett. 1983. Career Choice: Problems and Issues. Pages 833-852 in, C.E. Walker and M.C. Roberts, eds., Handbook of Clinical Child Psychology. John Wiley & Sons, New York, New York.

Howard, George S.

G.S. Howard, F.H. Obledo, D.A. Cole and S.E. Maxwell. 1983. Linked Judgments, a Solution to Problems of Statistical Conclusion Validity. Applied Psychological Measurement 7:57-62.

G.S. Howard. 1983. Toward Methodological Pluralism. Journal of Counseling Psychology 30:19-21.

G.S. Howard, K.M. Wright and K. Snyder. 1983. Validity of Linked Raters' Judgments. Psychological Reports 52:571-577.

G.S. Howard. 1983. Research Productivity in Counseling Psychology: An Update and Generalization Study. Journal of Counseling Psychology 30:600-602.

G.S. Howard. 1983. On Studying Humans. The Counseling Psychologist 11:85-91

Maxwell, Scott E.

G.S. Howard, F.H. Obledo, D.A. Cole and S.E. Maxwell. 1983. Linked Judgments, a Solution to Problems of Statistical Conclusion Validity. Applied Psychological Measurement 7:57-62.

COLLEGE OF SCIENCE

Biology

Rai, Karamjit S.

V. Dev and S. Rai. 1983. White-eyed, a New Mutant in *Aedes scutellaris katherinensis*. The Journal of Heredity 74:307-308.

Chemistry

Castellino, Francis J.

F.J. Castellino, D.K. Strickland, J.P. Morris, J. Smith and B. Chibber. 1983. Enhancement of the Streptokinase-induced Activation of Human Plasminogen by Human Fibrinogen and Human Fibrinogen Fragment D₁. Annals of the New York Academy of Sciences, Molecular Biology of Fibrinogen and Fibrin 408:595-601.

Freeman, Jeremiah P.

J.P. Freeman and J.A. Kassner. 1983. Base-Catalyzed Conversion of 2,5-Dicarbomethoxy-3,4-diazacyclopentadienone 3,4-Dioxide to 3,5-Dicarbomethoxy-4-hydroxyisoxazole. Journal of Organic Chemistry 48:2441.

Kozak, John J.

*M.K. Musho and J.J. Kozak. 1983. Non-nearest Neighbor Random Walks in Reaction-diffusion Processes. Journal of Chemical Physics 79(4):1942-1947.

Miller, Marvin J.

J.T. Capecchi, M.J. Miller and G.M. Loudon. 1983. Critical Examination of a Method for the Analysis of α and ω Linkages in Peptides Containing Aspartic Acid and Glutamic Acid. Journal of Organic Chemistry 48:2014-2021.

Strickland, Dudley K.

F.J. Castellino, D.K. Strickland, J.P. Morris, J. Smith and B. Chibber. 1983. Enhancement of the Streptokinase-induced Activation of Human Plasminogen by Human Fibrinogen and Human Fibrinogen Fragment D₁. Annals of the New York Academy of Sciences, Molecular Biology of Fibrinogen and Fibrin 408:595-601.

Thomas, J. Kerry

K. Chandrasekaran and J.K. Thomas. 1983. Photochemical Reduction of Carbonate to Formaldehyde on TiO₂ Powder. Chemical Physics Letters 99(1):7-10.

S. Atik and J.K. Thomas. 1983. Photo-induced Reactions in Polymerized Micro-emulsions. Journal of the American Chemical Society 105(14):4515-4519.

Mathematics

Wong, Pit-mann

G. Patrizio and P-M. Wong. 1983. Stability of the Monge-Ampere Foliation. Mathematische Annalen 263:13-29.

Physics

Kolata, James J.

R.M. Freeman, C. Beck, F. Haas, G. Heusch and J.J. Kolata. 1983. Resonant Effects in the ¹³C + ¹⁷O Reaction. Physical Review C 28(1):437-439.

P.A. DeYoung, J.J. Kolata, L.J. Satkowiak

and M.A. Xapsos. 1983. Reaction Cross Sections for ¹⁴N + ¹⁰B. Physical Review C 28(2):692-700.

RADIATION LABORATORY

Chattopadhyay, Swapan K.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. Triplet Excitation Transfer to Carotenoids from Biradical Intermediates in Norrish Type II Photoreactions of o-Alkyl-Substituted Aromatic Carbonyl Compounds. Journal of the American Chemical Society 105:5143-5144.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. A Laser Flash Photolysis Study of Pyrene-1-Aldehyde. Intersystem Crossing Efficiency, Photoreactivity and Triplet State Properties in Various Solvents. Photochemistry and Photobiology 38(2):141-152.

Das, Paritosh K.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. Triplet Excitation Transfer to Carotenoids from Biradical Intermediates in Norrish Type II Photoreactions of o-Alkyl-Substituted Aromatic Carbonyl Compounds. Journal of the American Chemical Society 105:5143-5144.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. A Laser Flash Photolysis Study of Pyrene-1-Aldehyde. Intersystem Crossing Efficiency, Photoreactivity and Triplet State Properties in Various Solvents. Photochemistry and Photobiology 38(2):141-152.

Ebbesen, Thomas W.

T.W. Ebbesen and M. Ohgushi. 1983. Methyl Viologen Aggregation. Photochemistry and Photobiology 38(2):251-252.

Kumar, Challa V.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. Triplet Excitation Transfer to Carotenoids from Biradical Intermediates in Norrish Type II Photoreactions of o-Alkyl-Substituted Aromatic Carbonyl Compounds. Journal of the American Chemical Society 105:5143-5144.

C.V. Kumar, S.K. Chattopadhyay and P.K. Das. 1983. A Laser Flash Photolysis Study of Pyrene-1-Aldehyde. Intersystem Crossing Efficiency, Photoreactivity and Triplet State Properties in Various Solvents. Photochemistry and Photobiology 38(2):141-152.

*Under the Radiation Laboratory

notre dame report

An official publication of the University of Notre Dame, Department of Information Services. Individual copies are available in the Notre Dame Hammes Bookstore at 50 cents each. Mail subscriptions are \$10 per year. Back copies are available through the mail at 70 cents each.

Marianne Murphy Zarzana, Editor
Kevin Onorato, Layout
Printing and Publications Office
415 Administration Building
Notre Dame, Ind. 46556
(219) 239-5337
