

# notre dame report

---

## contents

### the university

- 543 Coopers & Lybrand  
Grant to Accounting
- 543 U.S. Corporations  
in S. Africa Reviewed

### faculty notes

- 544 Appointments
- 544 Honors
- 544 Activities

### documentation

- 548 Minutes of the 210th Graduate  
Council Meeting April 25, 1984

### advanced studies

- 552 Information Circulars
- 552 --Humanities
- 555 --Fine and Performing Arts
- 556 --Social Sciences
- 559 --Science
- 564 --Engineering
- 566 --Business Administration
- 567 --Law
- 567 --Library
- 567 --General
- 574 Current Publications and Other  
Scholarly Works
- 576 Awards Received
- 577 Proposals Submitted
- 579 Summary of Awards Received  
and Proposals Submitted
- 579 Closing Dates for Selected  
Sponsored Programs

83-84

August 3, 1984

number 20

---

# the university

## coopers & lybrand grant to accounting

A grant of \$20,000 has been awarded the University by the accounting firm of Coopers & Lybrand to help finance a program of integrating computer technology into the accounting department curricula this summer.

Part of an \$8-million commitment to accounting and business education, the grant allows Notre Dame to participate in the firm's five-year program in addressing the changing needs of accounting graduates. The program also provides faculty with "in-the-field" experience through internship programs, supports the development of new faculty through Ph.D. grants and contributes to business-related research.

Notre Dame accounting professors Ken Milani and H. James Williams are using the grant and software awarded by the firm to develop case studies for classrooms, as well as research and homework assignments in various tax and accounting courses. They will attend seminars with representatives of nine other schools participating in the program and exchange experiences.

William H. Dausey, managing partner of the Coopers & Lybrand offices in South Bend, Elkhart and Niles, said the funding program is a response to the changes computer technology is bringing to the profession and the need for changes in academic preparation.

## u.s. corporations in s. africa reviewed

Fifteen leading colleges and universities have formed a group to facilitate their review of American companies operating in the Republic of South Africa. Members of the group include Columbia, Cornell, Harvard, Notre Dame, Rutgers, Wesleyan and Yale universities and Amherst, Bryn Mawr, Dartmouth, Haverford, Oberlin, Smith, Swarthmore and Williams colleges.

By improving the existing information base, the group will help its members determine for themselves how effectively American companies in South Africa are contributing to the economic health and social welfare of the non-white majority in that country. The arrangement was not established to produce a common policy by educational institutions for South-Africa related investments nor to lay the groundwork for common actions. The participating colleges and universities have adopted differing policies regarding the holding of investments in companies which conduct business in South Africa.

The universities and colleges have arranged for the Investor Responsibility Research Center (IRRC) of Washington, D.C., to perform most of the research. The IRRC is a non-profit corporation founded in 1972 to provide impartial reports and analysis on social and economic issues to corporations and institutional investors. It makes no recommendations about the subjects it covers.

---

Vol. 13, No. 20

August 3, 1984

**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

© 1984 by the University of Notre Dame, Notre Dame, Ind. 46556. All rights reserved.

---

# faculty notes

## appointments

Anthony Michel, professor of electrical engineering at Iowa State University, will join the University of Notre Dame faculty Aug. 1 as chairman of the Department of Electrical Engineering. Michel succeeds Dr. James Melsa, who resigned his 11-year chairmanship to devote full time to teaching and research.

## honors

Charles W. Allen, professor of metallurgical engineering and materials science, has accepted appointment to the Surface and Interface Committee of the American Society for Metals and to the Alloy Phases Committee of the Metallurgical Society.

Donald Downs, assistant professor of government and international studies, has received the American Political Science Association's 1984 Edward S. Corwin Award for the best doctoral dissertation in public law. Entitled "Freedom, Community and the First Amendment: The Skokie Case and the Limits of Free Speech," the dissertation discusses the constitutional and political questions surrounding the 1977 Nazi march in Skokie, Ill. Downs' dissertation was accepted by the University of California at Berkeley in 1983 for his doctoral degree in political science. A revised form is scheduled for publication in January 1985 by the University of Notre Dame Press.

Philip Gleason, professor of history, has been elected a member of the Bibliography Committee of the American Studies Association and has been invited to publish an article in the 1984 Bibliographic Issue of the Association's journal, American Quarterly.

Julia Knight, associate professor of mathematics, has been awarded one of the 1984 National Science Foundation Visiting Professorships for Women. She will spend the 1984-85 academic year at the University of Illinois at Urbana-Champaign.

Mark McDaniel, assistant professor of psychology, was elected a member of the Psychonomic Society, May 1984.

Guillermo O'Donnell, academic director of the Helen Kellogg Institute for International Studies, was invited to serve as the Simon Bolivar Distinguished Chair on Latin American Studies by Cambridge University for the winter term, 1985-86. He was also appointed for a two-year term (1985-87) as member of the Board of the International Social Science Council, in representation of the International Political Science Association.

Kenneth F. Ripple, professor of law, was appointed to a new term as a member of the Committee on the Federal Constitution of the New York State Bar Association.

M. Katherine Tillman, associate professor in the program of liberal studies, has been named a member of the Board of Advisors of Holy Cross Junior College, South Bend, Ind.

## activities

Daniel M. Chipman, associate professional specialist in the Radiation Laboratory, presented a paper entitled "Theoretical Study of Cyclopropenyl Radical" at the Fifth American Conference on Theoretical Chemistry, Jackson, Wyo., June 15-20.

Xavier Creary, associate professor of chemistry, gave an invited lecture entitled "Carbonyl and Phosphoryl Substituted Carboranes" at the 67th Annual Conference of the Chemical Institute of Canada in Montreal, Quebec, on June 4.

Anne Carson Daly, assistant professor of English, was the invited guest for a television program in San Francisco called "Reach Out" on June 18. Daly was interviewed by the program's host and asked questions by the studio audience concerning feminism and family issues from a Christian perspective.

James P. Dougherty, professor of English, presented a paper, "W.H. Auden's *Horae Canonicae*: Time in the Earthly City," to the Western meeting of the Conference on Christianity and Literature, at Northern Arizona University, Flagstaff, on June 9.

T. Ebbesen, assistant professional specialist in the Radiation Laboratory, gave a talk entitled "Charge Transfer Photochemistry in Bipyridinium Salts and Reactivity of the Products" at the Eighth DOE Solar Photochemistry Research Conference, Lake Geneva, Wis., June 11-14.

Guillermo Ferraudi, associate professional specialist in the Radiation Laboratory, presented a "Sequential Biphotonic Photochemistry of Transition Metal Phthalocyanines," at the Eighth DOE Solar Photochemistry Research Conference, Lake Geneva, Wis., June 11-14.

Malcolm J. Fraser, Jr., assistant professor of biology, gave an invited seminar entitled "Baculovirus Expression Vectors" at Abbott Laboratories, North Chicago, Ill., on May 31.

Philip Gleason, professor of history, served as a commentator for a session on "The Churches and Education" at a conference on "Religion and Society in the American West" at Saint Mary's College, Moraga, Calif., June 15-16.

Patricia Hanley-Dunn, research assistant in the Center for Gerontological Education, Research and Services, delivered a presentation entitled "Problems and Stress in Later Life: Identifiable Intervention and Management" at the Five-State Conference of the Association of Homes and Housing for the Aging, South Bend, Ind., on June 11.

Mark A. Herro, assistant professor of electrical engineering, gave an invited lecture, "Coding Considerations for Fiber Optics Data Communications," at the 92nd Annual Conference of the American Society for Engineering Education, Salt Lake City, Ut., June 24-28.

Patrick Horsbrugh, professor emeritus of architecture, delivered a paper on "Environethics: Global Strategy for Environmental Quality" at the Miami International Symposium on the Biosphere, sponsored by the Clean Energy Research Institute, College of Engineering, University of Miami, Miami, Fla., April 23. He delivered a paper entitled "Historic Fabric: An Unsuspected Form of Energy" to the New Harmony Communities Joint Meeting on Community Development, New Harmony, Atheneum, New Harmony, Ind., May 11. He also served on a panel convened by the Department of Public Instruction, State of Indiana, to discuss "Understanding Our Partners in Trade, The European Economic Community, including Energy, Transportation, Technological Innovations and the Arts," Indianapolis, Ind., June 7.

Richard W. Hubbard, assistant director of the GERAS Center, presented a lecture on "Psychosocial Aspects of Alzheimer's Disease" at Otis Bowen Mental Health Center, Warsaw, Ind., on March 30. He gave the keynote address, "Aging: A Family

Affair," at Stockton State College's Annual Conference on Aging, Stockton, N.J., May 5. Hubbard also conducted a three-day training program on "Long-term Care and the Elderly" for Southwest Community Health Services of Albuquerque, N.M., on May 24-26.

Winifred M. Huo, associate professional specialist in the Radiation Laboratory, delivered a paper entitled "A Variation Method for the Calculation of Dynamic Polarizabilities and Two-Photon Transition Moments: The Dressed Molecule Approach" at the 39th Molecular Spectroscopy Symposium, Columbus, Ohio, June 11-15.

Prashant V. Kamat, assistant professional specialist in the Radiation Laboratory, spoke on "Photoelectrochemical Reduction of Thiazine Dyes with Semiconductor Colloids" at the Eighth DOE Solar Photochemistry Research Conference, Lake Geneva, Wis., June 11-14.

Jeffrey C. Kantor, assistant professor of chemical engineering, presented an invited paper, "Sensitivity Analysis for Model Based Control Configurations," (coauthored with P.J. Antsaklis) at the Third American Automatic Control Conference, San Diego, Calif., June 8. At this meeting, Kantor was co-chair of a technical session entitled "Robustness Issues in Process Control."

Lawrence H.N. Lee, professor of aerospace and mechanical engineering, presented a talk on "Differential Pneumatic Boots for Aircraft Deicing," at NASA Lewis Laboratory, Cleveland, Ohio, June 19.

Rev. Richard P. McBrien, chairman and Crowley-O'Brien-Walter professor of theology, presented a lecture series on "Ecclesiology" at Biscayne College, Miami, Fla., June 10-13. He spoke on "Models of Church" at the conference on "The Future of Parish Leadership" at the Notre Dame Institute for Clergy Education, June 22. "Catholic Education in a New World and a New Church" was the title of a keynote lecture McBrien delivered at the Symposium on Catholic Education, Ursuline College, Cleveland, Ohio, June 25. He lectured on "The Roman Catholic Church as a Political Institution and Religious Community" at a national workshop on the Church and the Media held at Weston School of Theology, Cambridge, Mass., June 26. He also televised a three-part series on "Ministry" for Argus in Allen, Tex., June 29-30.

Mark McDaniel, assistant professor of psychology, gave an invited colloquium lecture, "Encoding Effort and Text Memory: Toward a Unifying Theory," at Purdue University, W. Lafayette, Ind., April 13.

Ralph McInerny, Michael P. Grace professor of medieval studies and director of the Medieval Institute, presented a series of four lectures entitled "Philosophies Previously Forgotten" at the Twelfth Annual Workshop for Priests, Gannon University, Erie, Pa., June 4-7. He also spoke on

"Mystery Literature" at the Public Library of Columbus, Ohio, June 14.

Rev. Ernan McMullin, professor of philosophy, spoke on "Openness and Secrecy in Science: The Historical Background" at a conference entitled "The Universe in Recent Physics and Catholic Thought" at the University of Notre Dame, March 30. He delivered the Presidential Address to the American Philosophical Association (Western Division) at its annual convention in Cincinnati, Ohio, April 27. He gave a lecture entitled "Does the Anthropic Principle in Cosmology Point to God?" in a symposium on Science and Religion at the annual convention of the American Association for the Advancement of Science, New York City, May 26.

Aleksis Rubulis, associate professor of modern and classical languages, had his article "Christ as a Historical Person" broadcast on "Radio Vaticana" into the Soviet Union on June 14.

Thomas J. Mueller, professor of aerospace and mechanical engineering, presented three hours of lectures on "Flow Visualization by Direct Injection" at the Short Course on Fluid Mechanics Measurements held at the University of Minnesota, Minneapolis, Minn., June 18-20. He also presented a paper entitled "The Influence of Laminar Separation and Transition on Low Reynolds Number Airfoil Hysteresis" at the AIAA 17th Fluid Dynamics Plasmadynamics and Lasers Conference, Snowmass, Colo., June 25-27.

Robert C. Nelson, associate professor of aerospace and mechanical engineering, made a presentation entitled "Leading Edge Vortex Breakdown on Delta Wings," at a special meeting on "Supermaneuverability" sponsored by the Air Force Flight Dynamics Laboratory, Dayton, Ohio, June 5-6.

Carl W. O'Neill, associate professor of anthropology, read a paper entitled "Anthropological Approaches to Understanding Culturally Institutionalized Uses of Dreams" at the First International Conference of the Association for the Study of Dreams, San Francisco, Calif., June 16 and 17.

Teresa Godwin Phelps, assistant professor of law, conducted a day-long seminar for judges from Northern Indiana, at the University of Notre Dame, on June 16. During the seminar, entitled "Doing Justice: Literary Texts, Humanistic Values, and the Work of Community Court," the judges discussed Billy Budd, The Caucasian Chalk Circle, and The Cheyenne Way, relating ideas of justice and the law to their work in the community courts. She presented an invited lecture on "The Criminal as Hero in American Fiction" at the National Convention of the Correctional Education Association in Philadelphia, Pa., on July 3. Phelps was recently appointed research associate in the University's Thomas J. White Center for Law and Government.

Richard E. Ricker, assistant professor of metallurgical engineering and materials science, presented a seminar entitled "Corrosion and

Methods for Studying It" at the Standard Oil Company's Warrensville Research Center, Cleveland, Ohio, June 25.

John F. Santos, professor of psychology and director of the Center for Gerontological Education, Research and Services, delivered the keynote address entitled "Challenge of Training for Work with the Frail Elderly" at the Five-State Conference at the Association of Homes and Housing for the Aging, South Bend, Ind., June 10. He also delivered an invited paper on "Some Thoughts and Facts About Care and Service Delivery to the Elderly" at the Regional Genetics Center In-Service Program at Memorial Hospital, South Bend, Ind., on June 8.

Gordon A. Sargent, chairman and professor of metallurgical engineering and materials science, attended an International Symposium on Slurry Erosion sponsored by the American Society for Testing of Materials (ASTM), Denver, Colo., June 24-29. He was chairman of a session and coauthored a paper entitled "Slurry Erosion and Abrasion of Metal Ceramic Coatings," with A. Sagues, D. Spencer and V.J. Sethi. Dr. Sargent was also chairman of the ASTM subcommittee on Solid Particle Erosion.

David L. Schindler, assistant professor in the program of liberal studies, delivered the introductory paper, "Beyond Mechanism: The Universe in Recent Physics and Catholic Thought," at a *Communio* conference centering on the work of physicist David Bohm, held at the University of Notre Dame, March 30-31.

Thomas J. Schlereth, professor of American studies, gave a research paper, "Chautauqua and other Middle Landscapes of the Middle Class" at a plenary session of the Spring Regional Meeting of the Great Lakes American Studies Association at Dearborn, Mich., May 4. He lectured on "Historical Reality and Contemporary Realia" at Elmhurst College, Elmhurst, Ill., June 13.

Roger A. Schmitz, Matthew H. McCloskey dean of engineering and Keating-Crawford professor of chemical engineering, served on a five-member panel of engineering deans in a session entitled "Improving the Quality of Engineering Education," at an Engineering Education Conference sponsored by General Electric, Louisville, Ken., June 13.

James H. Seckinger, professor of law and director of the National Institute for Trial Advocacy (NITA), participated in the following: faculty member, National Institute for Trial Advocacy and Sonnenschein, Carlin, Nath & Rosenthal In-House Trial Advocacy Program, Chicago, Ill., Feb. 9-11; faculty member, NITA Program on Designing and Developing In-House Programs, St. Paul, Minn., Feb. 29 - March 4; faculty member, NITA/ICLEF Indiana Trial Advocacy Workshop, Indianapolis, Ind., March 14-17; team leader, NITA Advanced Trial Advocacy Program, University of California at Berkeley, Boalt Hall, Berkeley, Calif., March 24-28; faculty member, National Institute for Trial Advocacy and Chadwell & Kayser In-House Trial Advocacy Program, Chicago, Ill., March

29-31; faculty member, National Institute for Trial Advocacy and Kaye, Scholer, Fierman, Hays & Handler In-House Trial Advocacy Program, New York, N.Y., April 4-6; faculty member, NITA 1984 Negotiation and Counseling Program, Northwestern University School of Law, Chicago, Ill., June 21-23; program director, NITA Advanced Trial Advocacy Program, University of Colorado, Boulder, Colo., July 1-5; program director, NITA National Session, University of Colorado, Boulder, Colo., July 8-27.

Janet E. Smith, assistant professor in the program of liberal studies, gave a lecture, "Help Available for Women with Problem Pregnancies," to the German Township Lyons Club, May 5 and to the Mishawaka Kiwanis Club, June 5. She gave a talk entitled "Is Abortion a Morally Acceptable Act?" to the Adult Education class at Redeemer Lutheran Church, Mishawaka, Ind., May 6, and to a social concerns class at Riley High School, May 18. "Abortion and an Ethics of Character" was the title of a lecture she presented to the St. Thomas More Educational Foundation in Milwaukee, Wis., May 26.

Andrew J. Sommese, professor of mathematics, was an invited speaker at the Complex Analysis and Geometry III Conference in Trento, Italy. His talk was on "Density of Ratios of Chern Numbers of Algebraic Surfaces" on June 12. Sommese also gave a set of three lectures on "Singular Hyperplane Sections of Algebraic Threefolds" and "Density of Ratios of Chern Numbers of Algebraic Surfaces" at the Instituto di Matematica of the University of Aquila in L'Aquila, Italy, on June 18 and 19.

J. Kerry Thomas, Julius A. Nieuwland, C.S.C., professor of chemistry, spent February, March and April as a visiting professor at the Hahn-Meitner Institut of Berlin. He presented invited lectures, "Photochemistry of Interfaces," at the Czechoslovakian Academy of Science, Prague, on

March 14; "Electronic Processes of CdS Surfaces," Berlin, on April 30; "Fluorescence Probing of Colloids," and a symposium at Bristol on May 4; and "Polymer Interaction with Surfaces" at the Welsh Institute of Science and Technology on Feb. 27. He acted as a consultant on Radiation Processes at the Institute of Science and Technology, Manchester, May 6; Salford University, May 8 and Leeds University on May 11. He presented an invited talk, "Reaction in Organized Media," at a symposium in Radiation Research at Argonne National Lab, Argonne, Ill., on May 25.

G.N.R. Tripathi, associate professional specialist in the Radiation Laboratory, spoke on "Time-Resolved Resonance Raman Spectroscopy of Dihalide Radical Anions" and "Time-Resolved Resonance Raman Spectroscopy of Excited Triplet States of Diphenylpolyenes" at the 39th Molecular Spectroscopy Symposium, Columbus, Ohio, June 11-15.

J.J. Uhran, Jr., professor of electrical engineering, and Y.F. Huang, assistant professor of electrical engineering, presented a paper entitled "Identification Techniques for Ice Detection" at the Annual Princeton Conference on Information Sciences and Systems, Princeton, N.J., April 14.

Eduardo E. Wolf, associate professor of chemical engineering, presented a paper entitled "FTIR Studies of Heterogeneous Catalysts" at the 1984 DiGilab Annual User's Group Meeting, at DiGilab Laboratories, in Cambridge, Mass., June 21.

Stephen T. Worland, professor of economics, served as a panelist at a conference on "Community Dimensions of Economic Enterprise" sponsored by the Association for Social Economics and the Radner Fund, Marquette University, Milwaukee, Wis., June 10-12.

# documen- tation

---

## minutes of the 210th graduate council meeting april 25, 1984

Board Room 121, Hayes-Healy Center

The meeting was convened at 3:30 p.m. on April 25, 1984. All members were present except the following: Dean Francis J. Castellino, replaced by Dr. John G. Duman; Dean Michael J. Loux, replaced by Dr. Roger Skurski; Mr. Robert C. Miller, replaced by Mrs. Maureen Gleason; Dean Frank K. Reilly, replaced by Dr. Yusaku Furuhashi; Dr. Cornelius F. Delaney, excused and Dr. Nathan O. Hatch, excused. Prof. Frederick S. Beckman, chairman of the Art Department and Prof. Thomas S. Fern, director of Graduate Studies of the same department were also present.

### I. Minutes of the 209th Meeting

The minutes of the 209th meeting was approved with some changes in the second paragraph of section III. The amended sentences run as follows:

The stumbling block is that under this plan the Bioengineering program could admit students and grant degrees. In Dean Schmitz's opinion, all students should be admitted into those departments which provide faculty, space and other resources to the program.

### II. A Proposal to Strengthen the Master of Fine Arts Program at Notre Dame

The chairman welcomed Prof. Frederick S. Beckman and Prof. Thomas S. Fern and asked them to summarize their department's view with regard to strengthening the Master's of Fine Arts program. Professor Fern summarized the department's proposal (see Appendix). The floor was then opened for discussion. The following points were made:

- Some schools instituted the Doctor of Fine Arts program but it is believed that this program is no longer offered anywhere. The MFA continues to be the traditional terminal degree in Art.
- The MFA is a studio art program combined with a research element.
- In the current year, we have 17 MFA, 7 MA and 6 nondegree students for a total of 30 graduate students at Notre Dame.
- Graduate students in the Art Department are usually supported for one or two years, not for their entire program.
- The Department proposes that the number of academic courses in the MFA program be increased from 2 to 4 and the total credit hours from 40 to 60. The proposed increase in credit hours is constant with the recommendations of the external reviews in 1977.
- The College of Arts and Letters is in favor of the Department's proposal.
- The Department's chief concern about the proposed increase in credit hours is its effect on potential applicants.
- There are about 200 schools with the MFA program in the U.S., 35 of which have a three-year, sixty-credit hour requirement. In general, the better schools (e.g., Yale, Indiana, Iowa, Cornell, Columbia, etc.) have the three-year program.

- The M.A. program does not provide sufficiently strong training for our graduates to compete for college and university teaching positions.

- We had 30 applicants to the MFA program this year; three have been accepted.

- There is no consideration for increased University support for graduate students in the Art Department at the present; efforts may be made to seek additional outside support.

- The work load of the present faculty in the department will be redistributed to make the proposed increase in credit hours possible.

As there were no further comments, it was moved that the Graduate Council submit the Art Department's proposal to the Academic Council for approval. The motion was carried.

### III. Admission to Degree Candidacy

The list was approved by the Council.

### IV. Report of the Nominating Committee for the Graduate Council Election

Prof. Roger Skurski presented the report of the Nominating Committee for the Graduate Council election, in the absence of the committee chairman, Prof. Nathan O. Hatch. The nominees were:

#### Humanities:

Prof. Charles Rosenberg	Art
Prof. Thomas Werge	English

#### Social Sciences:

Prof. Scott Maxwell	Psychology
Prof. Michael Welch	Sociology

#### Engineering:

Prof. Eugene Henry	Electrical Engineering
Prof. Gordon Sargent	Metallurgy

The motion to accept the nominations was carried.

### V. Chairman's Remarks

1. Master's Program in Architecture: In December 1980, the Graduate Council had accepted for submission to the Academic Council the proposal to establish the master's program in architecture, contingent on the successful development of new resources for student support. The chairman announced that endowments sufficient to support six graduate fellowships would be in place by September of this year and that, if Academic Council approval is forthcoming this fall, the new program may begin in September 1985.

2. Admissions: As of April 19, there were 1,424 applicants (1,391 last year). Of this number, 452 applicants were accepted, 523 rejected and 449 without action. Of the 452 accepted applicants, 161 or 36% confirmed (152 or 33% last year), 95 or 21% declined (109 or 24% last year), and 191 or 43% (198 or 43% last year) were without response. Judging from the quality of First-Year Schmitt Fellows for 1984-85, we seem to have been able to attract students who are a notch better than those in the past.

3. Frances C. Allen Fellowship: The chairman congratulated Ms. Kimberly Blaeser on her reception of the Frances C. Allen Fellowship from the Newberry Library in Chicago. In the words of the award letter from the Newberry Library, it was the largest (and also the longest in terms of fellowship tenure) Allen fellowship ever awarded.

4. Travel Funds: The Jesse H. Jones Faculty Research Travel Fund received 14 proposals, of which 11 were approved for funding. There were 12 proposals from graduate students to the Zahn Research Travel Fund, of which 10 were approved.

5. Litigation: Several meetings ago, mention was made of cases which could have led to litigation. Recently, there was another such case. The common element in all these cases was the fact that some faculty members did not read the Graduate Bulletin and made promises to students concerning program requirements, which were contradictory to Graduate School regulations.



6. Foreign Language Requirement: The chairman has discussed with Dean Loux regarding the frequency of graduate foreign language reading courses. For the summer session, there will be reading courses in French, German, Spanish and in other languages if there is sufficient interest.

7. Burton Fellowship: A graduate fellowship in Radiation Chemistry has been established to honor Prof. Milton Burton, the first director of the Radiation Laboratory.

#### VI. Other Business

Various members of the Council brought up the following:

1. English Language Examination: Arrangements will be made with the English Department concerning a suitable English language examination for foreign students who wish to select English to meet the Graduate School foreign language requirement.

2. Graduate Fellowship Endowments: If approved for the new University fund-raising campaign and if this part of the campaign is successful, such endowments will not be actually established until the early 1990s.

3. Overhead on Tuition: Some members observed that the policy of charging overhead on tuition support from grants may hurt our faculty recruitment efforts. Prospective faculty may be deterred when they hear how expensive it would be to support graduate students at Notre Dame from their grants.

4. Student Support in the Summer: To rely on faculty grants to support graduate students in the summer will continue to be a precarious solution. On the other hand, it is difficult for the University to increase the dollar value of the stipend, the number of stipend slots and at the same time to provide student support in the summer in addition to the academic year.

As there was no other business, the chairman closed the final meeting of the year by thanking all members for their participation, in particular those members who would retire from the Council this year (Prof. Donald P. Costello, Prof. Nathan O. Hatch, Prof. Thomas L. Theis, Ms. Kimberly Blaeser and Ms. Gay Canough). He wished everyone a good summer. The meeting adjourned at 4:20 p.m.

#### A PROPOSAL TO STRENGTHEN THE MASTER OF FINE ARTS PROGRAM AT NOTRE DAME

The MFA degree, as a studio-oriented program, was first offered by Yale University in 1936. In the '40s, several other universities of note adopted similar programs and Notre Dame awarded its first MFA in 1950. 121 institutions offer the degree today. This degree began and remains the one sought by artists and designers who intend to teach at the college level.

The College Art Association of America (CAA), after a thorough study of graduate education in the visual arts, recommended in 1970 that the MFA be recognized as the terminal degree in studio art. This recognition has been accepted throughout the academic community.

In 1977 the CCA published its first standards for MFA programs. These were guidelines that set absolute minimums and encouraged higher and more ideal levels. The CAA recommends, for example, that two years of graduate study be the minimum with three years preferable and advisable. Further, that the MFA consist of 60 semester credits of graduate level work.

Notre Dame's degree has been a two-year, 40 hours of credit program since its inception. It meets the residency minimum but falls short of the course work requirement. The art faculty has discussed this problem off and on since 1977 and only this winter (1984) approved the move to meet the CAA standards on all fronts.

The discrepancy between Notre Dame's minimum and that of the CAA was made more acute by the External Review Report of the Art Department's graduate program in 1978. While the report was generally favorable and supportive, it urged the department to adopt the more rigorous standard of three years and 60 credits for its MFA degree.

There is a third condition, the final straw one might say, that brought the art faculty to their recent decision and that is the shift from a written paper supporting an MFA candidate's final creative project to a proper thesis and final project. The thesis component was introduced in 1982 by the present Director of Graduate Studies in art.

This new emphasis has been revelatory. It revealed what had long been suspected, that most of our MFA candidates could not write or had great difficulty doing so; that they had little experience in research methodologies; and that the writing and the research consumed enormous amounts of time -- time that should have been spent in studio activity.

With a two-year program such as we have, the new thesis requirement cuts too deeply into the artistic development of the MFA student. The MFA student as an artist must achieve professional competence if he or she is to compete for an academic position. And yet, that same objective of joining a faculty and spending a career in teaching requires the MFA candidate be an educated person as well. After considerable agonizing, the inadequacies of a two-year degree became apparent and the faculty decided to adopt a three-year program.

Under the proposed three-year, 60-credit MFA there will be a 35% increase in studio and art history course work. Most of this will occur in the first two years, leaving the third year somewhat freer for research, thesis writing, and development of the final creative project. In short, the MFA program and its students will be strengthened by this move. Their artistic development will be enriched and similar improvements are expected in their scholarly endeavors. There is no reason why an artist must be a dumbbell. History, in fact, reveals that many of the finest painters, designers, and sculptors were bright, articulate thinkers who formulated theories and artistic principles and taught them to others. Artistic ability and intellectual capacity are not mutually exclusive.

The final objective in strengthening the MFA program is to attract applicants with academic skills and artistic superiority. The director of Graduate Studies favors higher GRE scores as one way of achieving this but is also trying to increase the research and writing component for the MFA in the department's art history courses.

In summary, the proposed change should make the recipient of the Master of Fine Arts degree from Notre Dame a more attractive candidate for a college teaching position. At the same time, the more rigorous nature of the degree, once the word has gotten around, should attract a better quality of applicant than is now the case.

#### PRESENT AND FUTURE DISTRIBUTION OF THE CREDITS IN THE MFA PROGRAM

<u>Present 2 Year</u>		<u>Proposed 3 Year</u>	
Studio	31	Studio	39
Art History	06	Art History	12
Graduate Seminar	03	Graduate Seminar	03
Final Project	00	Final Project	03
Thesis	<u>00</u>	Thesis	<u>03</u>
	40		60

The average graduate student will take 12 credit hours for the first four semesters and six for the remaining two terms. Half of the credit in the last two semesters' load will be in thesis and final project.

Our chief worry as we strengthen the MFA, in light of the low financial status of artists and art students is, what effect will the added cost have on potential applicants?

We also realize and we are concerned that our few Teaching Assistantships and Tuition Scholarships will be locked-up for longer periods in the new program.

Thomas S. Fern  
Director of Graduate Studies  
April 12, 1984

# advanced studies

## information circulars

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

## humanities

### American Council of Learned Societies Fellowships

No. FY84-509

Program:

Stipends of up to \$15,000 to scholars with the doctorate or its equivalent for research in humanistic fields. Fellows must be able to devote a minimum of six continuous months (up to a maximum of 12) to full-time work on their proposals. Applicants must be citizens or permanent residents of the U.S. Awards are intended primarily for the provision of free time, although amounts for travel, for clerical or research assistance, or for reproduction or purchase of materials are allowable. Support of dependents may be included.

Deadline:  
October 1, 1984

For Further Information Contact:

American Council of Learned Societies  
Office of Fellowships and Grants  
228 East 45th Street  
New York, NY 10017  
(212) 697-1505

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

(From 1984 ARIS)

### American Council of Learned Societies Fellowships for Studies in Modern Society and Values

No. FY84-510

Program:

Fellowships of up to \$8,500 for a minimum of six months and maximum of one year's humanistic research intended to illuminate and assess the social and cultural issues and ideas of nineteenth- and twentieth-century society. Applicants' degrees should have been conferred between January 1, 1982 and December 31, 1984. Prospective applicants whose doctorates have not been conferred must have completed all requirements for the degree by the program deadline.

Deadline:  
October 1, 1984

For Further Information Contact:

American Council of Learned Societies  
Office of Fellowships and Grants  
228 East 45th Street  
New York, NY 10017  
(212) 697-1505

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

(From 1984 ARIS)

### American Council of Learned Societies Research Fellowships for Recent Recipients of the Ph.D.

No. FY84-511

Program:

Grants of up to \$8,500 for a minimum of 6 months of full-time research in the humanities. The program is limited to scholars whose Ph.D. degrees were awarded after January 1, 1982. Prospective applicants whose doctorates have not been conferred must have completed all requirements for the degree by the program deadline.

Deadline:  
October 1, 1984

For Further Information Contact:

American Council of Learned Societies  
Office of Fellowships and Grants  
228 East 45th Street  
New York, NY 10017  
(212) 697-1505

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

(From 1984 ARIS)

**American Philosophical Society  
Postdoctoral Research Grants and  
Grants-in-Aid**

No. FY84-488

Program:

Grants averaging \$1,500 for basic research in all fields of knowledge are available to persons holding the doctorate or having equivalent scientific or scholarly experience. Grants are awarded five times yearly.

For Further Information Contact:

American Philosophical Society  
Herman G. Goldstine  
Executive Officer  
104 South Fifth Street  
Philadelphia, PA 19106

(From 1984 ARIS)

**National Endowment for the Humanities  
Planning and Assessment Studies  
Program**

No. FY84-507

Program:

Institutions, associations, and individuals are eligible to apply for grants to support studies and experiments designed to collect and analyze data-including information about financial, material, and human resources-which help assess the condition of important sectors in the humanities. Explorations of significant trends or emerging issues in the humanities are also encouraged, along with the design, testing, and implementation of analytical tools for evaluation and policy analysis.

Deadline:

September 1, 1984 and March 1, 1985

For Further Information Contact:

National Endowment for the Humanities  
Office of Program and Policy Studies  
Planning and Assessment Studies

Arnita Jones  
Room 402  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 786-0420

(From 1984 ARIS)

**National Endowment for the Humanities  
Research Conferences**

No. FY84-505

Program:

Grants ranging from \$2,500 to \$10,000 support a limited number of conferences, symposia, and workshops to enable scholars to discuss and advance the current state of research on a particular topic or to consider means of improving conditions for research or inquiry.

Deadline:

September 15, 1984 and February 15, 1985

For Further Information Contact:

National Endowment for the Humanities  
Division of Research Programs  
Basic Research Program  
Eugene Sterud  
Room 319  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 786-0207

(From 1984 ARIS)

**National Endowment for the Humanities  
Travel to Conferences**

No. FY84-506

Program:

Grants of \$500 are available to American humanities scholars to enable them to travel to use the research collections of libraries, archives, museums, or other repositories to consult research materials of fundamental importance for the progress of their scholarly work. These grants support travel only within North America and Western Europe. Preference will be given to applicants who have no other source of funding for the research trip proposed and whose costs amount to at least \$500.

Deadline:

September 15, 1984 and January 15, 1985

For Further Information Contact:

National Endowment for the Humanities  
Division of Research Programs  
Basic Research Program  
Eric Juengst  
Room 319  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 786-0207

(From 1984 ARIS)

## National Gallery of Art Visiting Senior Fellowships

No. FY84-508

### Program:

Fellowships based on individual need will be awarded for study at the Center for a maximum of 60 days. Applications will be considered from scholars for study in the history, theory, and criticism of the visual arts (painting, sculpture, architecture, landscape architecture, urbanism, graphics, film, photography, decorative arts, industrial design, etc.) of any geographical area and of any period. Applications are also solicited from scholars in other disciplines whose work examines physical objects or has implication for the analysis and criticism of physical form. Applicants may be of any age or nationality and must have held a Ph.D. for five years or more or possess a record of professional accomplishment. Scholars are expected to live in Washington throughout their fellowship period and participate in the activities of the Center. Visiting Senior Fellows receive a stipend that includes travel, research, and local expenses and are provided with a study and subsidized luncheon privileges. The Center will also consider appointment of a number of Associates who have obtained awards from other granting institutions and would like to be affiliated with the Center. Qualifications are the same as for Visiting Senior Fellows. Appointments of Associates for periods of less than one academic term will be considered under these deadlines.

### Deadline:

September 21, 1984\* and March 21, 1985

### For Further Information Contact:

National Gallery of Art  
Center for Advanced Study in the  
Visual Arts  
Washington, DC 20565  
(202) 842-6480

\*The September 21 deadline is for applications for fellowship support during the period of March 1, 1985 to August 31, 1985.

(From 1984 ARIS)

## Radcliffe College Radcliffe Research Support Program

No. FY84-513

### Program:

The Radcliffe Research Support Program makes available small grants of up to \$1,500 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. Support will cover such costs as travel to and lodging in Cambridge. Additional funds of up to \$1,500 may be requested, if necessary, for such costs as research assistance, computer time, transcribing, and other research related expenses. 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:

September 15 and December 15, 1984; February 15 and April 15, 1985

### For Further Information Contact:

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

(From 1984 ARIS)

## Wesleyan University Andrew W. Mellon Postdoctoral Fellowships in the Humanities 1985-86

No. FY84-515

### Program:

Scholars who have received their Ph.D. degrees within the last three years (between May 1, 1981 and November 1, 1984) in any field of humanistic inquiry are invited to apply for Postdoctoral Fellowships in the Humanities, made possible through a grant from the Andrew W. Mellon Foundation to Wesleyan University. The purpose of these Fellowships is to promote interdisciplinary interests among younger humanists, to direct their attention to problems of pedagogy on the undergraduate level, and to associate them with a distinguished teaching and research faculty in their immediate post-graduate years. The stipend is \$18,000 plus \$500 for support of research and instruction.

Two Fellows will be appointed to the Wesleyan University Center for the Humanities, an institute of advanced study and research in the Humanities, established in 1960. One of their official duties will be to participate in the planning and teaching of one course per term in undergraduate general humanities education. Otherwise, Fellows will have the time and resources to develop interdisciplinary and research interests of their own choosing. They will also participate in the work of the Center for the Humanities, which sponsors conferences, lectures, and colloquia

on various topics in the Humanities. Fellows will be asked to give one public lecture each semester. All Fellows are required to reside in Middletown during the academic year.

During 1985-86 the Center for the Humanities will examine areas of study relevant to all fields of the Humanities: art history, literature, history, philosophy, religion, literary theory, and those disciplines of the social sciences that deal with traditional areas of humanistic inquiry. Scholars and teachers whose interests bear upon any of these fields are encouraged to apply. It is essential that in their application proposals candidates demonstrate a strong interdisciplinary interest. Notification of the Selection Committee's decision will be sent by February 15, 1985.

Deadline:

Postmarked by November 15, 1984

For Further Information Contact:

Office of Advanced Studies, Division of  
Research and Sponsored Programs, Ext. 7432.

## fine and performing arts

### Coos Art Museum

#### 19th November Annual Exhibition of Fine Art

No. FY84-512

Program:

This juried exhibition is open to all artists working in fine arts media. Works must be non-functional in concept and acceptable media include painting, printmaking, sculpture, drawing, watercolor, collage, soft sculpture, textile, and pottery. Up to two works per artist, which must have been completed within the past year, may be entered for a handling fee of \$7.50. Slides may be submitted for jurying in the case of heavy sculpture. A three-person show to be held in 1985 will be awarded by the juror to winning artists. Additionally, the juror will recommend works of merit for possible purchase by the museum for its permanent collection. There are no cash awards. Entry blanks, fees, return postage, and work must be received by the September 20th deadline. The exhibit will take place during the month of November, 1984.

Deadline:

September 20, 1984

For Further Information Contact:

Coos Art Museum  
515 Market Avenue  
Coos Bay, OR 97420  
(503) 267-3901

(From 1984 ARIS)

## National Endowment for the Arts Centers for New Music Resources

No. FY84-504

Program:

Matching grants of from \$2,000 to \$20,000 are available to centers for new music resources, including electronic music studios, computer centers, and other innovative facilities. Through support of these facilities, the Endowment hopes to make available to composers new musical resources too extensive for individuals to develop and maintain as well as to encourage collaboration between composers and other creative artists. Centers must have been in operation for at least two years at the time of application and may be independent or affiliated with another organization, such as a municipal, state, or regional agency, museum, or university. Funds are available for equipment purchase, equipment maintenance, workshops and seminars, visiting composer residencies, and administrative costs. Funds will not cover staff salaries when the individual(s) is a staff member of a university, students or research assistants at university centers, commissions, performances, or foreign travel. The period of support under this category generally will not exceed 12 months. The earliest beginning date for projects is September 1, 1985.

Deadline:

September 30, 1984

For Further Information Contact:

National Endowment for the Arts  
Music Program  
Room 702  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5445

(From 1984 ARIS)

## National Endowment for the Arts Music Professional Training

No. FY84-503

Program:

Matching grants of from \$5,000 to \$40,000 (or higher) are available to post-secondary programs which provide advanced training for professional careers in the field of music. Possible projects include the development of scholarships, Pilot Residency Projects, innovative activities designed to bridge the gap between training and career entry, and activities designed to improve training opportunities for minorities. To be eligible, organizations must meet the NEA's legal

requirements, have been in existence at least two years, provide exemplary, post-secondary professional training for careers in music, provide evidence of rigorous screening procedures in the selection of students, utilize professional artists of the highest quality as an integral part of the training, and demonstrate a commitment to American music. Grants will not be awarded to fund staff salaries, performance activities, except Pilot Residencies, purchase or repair of musical instruments or equipment, building or renovation of physical facilities, general academic support of administrative overhead, foreign tours or travel, competitions, or research.

**Deadline:**  
September 30, 1984

**For Further Information Contact:**

National Endowment for the Arts  
Music Program  
Room 702  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5445

(From 1984 ARIS)

**National Gallery of Art  
Visiting Senior Fellowships**

**No. FY84-508**

**Program:**

Fellowships based on individual need will be awarded for study at the Center for a maximum of 60 days. Applications will be considered from scholars for study in the history, theory, and criticism of the visual arts (painting, sculpture, architecture, landscape architecture, urbanism, graphics, film, photography, decorative arts, industrial design, etc.) of any geographical area and of any period. Applications are also solicited from scholars in other disciplines whose work examines physical objects or has implication for the analysis and criticism of physical form. Applicants may be of any age or nationality and must have held a Ph.D. for five years or more or possess a record of professional accomplishment. Scholars are expected to live in Washington throughout their fellowship period and participate in the activities of the Center. Visiting Senior Fellows receive a stipend that includes travel, research, and local expenses and are provided with a study and subsidized luncheon privileges. The Center will also consider appointment of a number of Associates who have obtained awards from other granting institutions and would like to be affiliated with the Center. Qualifications are the same as for Visiting Senior Fellows. Appointments of Associates for periods of less than one academic term will be considered under these deadlines.

**Deadline:**  
September 21, 1984\* and March 21, 1985

**For Further Information Contact:**

National Gallery of Art  
Center for Advanced Study in the  
Visual Arts  
Washington, DC 20565  
(202) 842-6480

\*The September 21 deadline is for applications for fellowship support during the period of March 1, 1985 to August 31, 1985.

(From 1984 ARIS)

## **social sciences**

**Alcoholic Beverage Medical Research  
Foundation  
Research Grants**

**No. FY84-480**

**Program:**

The mission of this foundation is to contribute new knowledge toward the prevention of alcohol misuse and alcoholism; and to monitor the safety of alcoholic beverages. Research will be conducted in five areas: 1) The effects of moderate use of alcohol, and factors influencing the transition from moderate to excessive drinking; basic as well as clinically and epidemiologically oriented studies will be considered; 2) Beverage differences in relation to the spectrum of alcohol effects in man; 3) Factors involved in traffic accidents, with special reference to the role of alcohol; 4) Nutritional considerations in the area of alcoholic beverage effects; and 5) Alcoholic beverages in relation to diseases and conditions commonly regarded as non-alcoholic in origin. Studies specifically directed to the so-called fetal alcohol syndrome will have a low priority. The Foundation will accept research grant applications from U.S. and Canadian universities and research institutions. The applications will be considered by either the Medical Advisory Council or the Behavioral and Social Advisory Council at their spring or fall meetings. Application forms are available from the Foundation.

**Deadline:**  
September 1, 1984 and February 1, 1985

**For Further Information Contact:**

Alcoholic Beverage Medical  
Research Foundation  
Gail L. Marsh  
Johns Hopkins University School  
of Medicine  
Turner 57  
720 Rutland Avenue

Baltimore, MD 21205  
(301) 955-3264

(From 1984 ARIS)

## National Science Foundation Economics

No. FY84-459

### Program:

The Economics Program supports basic and applied research designed to improve understanding of the processes and institutions of the U.S. economy and of the world system of which it is a part. The program emphasizes strengthening the theoretical foundations of economics and the methods for analyzing and modeling economic behavior. Research areas currently supported include the microfoundations of economic aggregates, economic dynamics, market structure, macroeconomic policies in open economies, the economics of resource depletion, public finance, international economics, model validation, economic history, and labor economics.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
Daniel H. Newlon  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9675

(From 1984 ARIS)

## National Science Foundation Geography and Regional Science

No. FY84-460

### Program:

The Geography and Regional Science Program supports social science research designed to increase understanding of the location and spatial variations of physical and social phenomena and of the interactions between man and environment. The program seeks improved understanding of land-use patterns, human migration, regional economics, location decisions, and the fundamental processes underlying geographic distributions.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science

Daniel H. Newlon  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7326

(From 1984 ARIS)

## National Science Foundation Law and Social Sciences

No. FY84-463

### Program:

The Law and Social Sciences Program supports social scientific research on law and law-like systems of rules. Included are studies of the processes that enhance or diminish the impact of law; causes and consequences of variations and changes in legal institutions; personal, social, and cultural factors affecting the use of law; dynamics and effects of dispute processing and alternative means of dispute resolution; determinants of decision-making in legal forums and contexts; and conditions and processes that create transformation between formal legal rules and law in action.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
Felice J. Levine  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9567

(From 1984 ARIS)

## National Science Foundation Political Science

No. FY84-462

### Program:

The Political Science Program supports research on the political forms and processes by which societies coordinate their activities through governments, including studies of governmental institutions and their effects on social life, the effects of structural factors on political participation, conflict and political instability, and how political processes are modified in response to social and economic change.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences



Division of Social and  
Economic Science  
Frank P. Scioli, Jr.  
Acting Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9406

(From 1984 ARIS)

### **National Science Foundation Sociology**

No. FY84-461

**Program:**

The Sociology Program supports research on problems of human social organization, demography, and the processes of institutional change. The program encourages theoretically focused empirical investigations aimed at improving the explanation of fundamental social processes. Included is research on decision-making, organizational change, social movements, urbanization, labor force processes, resource allocation, reward distribution, social networks, and the sociology of science.

**For Further Information Contact:**

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
Joanne Miller  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7802

(From 1984 ARIS)

### **National Science Foundation Unsolicited Research Proposals**

No. FY84-458

**Program:**

The Division of Social and Economic Science supports basic and applied disciplinary and multidisciplinary research. The goal of the Division is to develop fundamental knowledge of how social and economic systems work, to advance understanding of organizations and institutions, how they function and change, and to enhance the scientific capability of research efforts designed to produce explanations of how human interaction and decision-making take place. Programs within the Division also consider proposals for doctoral dissertation support, research conferences, the acquisition of specialized research equipment, group international travel, and data resources development.

**Deadline:**  
September 1, 1984

**For Further Information Contact:**

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
James H. Blackman  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7966

(From 1984 ARIS)

### **Scientific Advisory Council to the Distilled Spirits Council of the U.S., Inc. Grants-in-Aid**

No. FY84-486

**Program:**

Small stimulatory grants-in-aid are available to support research into the causes, nature, extent, treatment, and prevention of problems related to the excessive use of alcoholic beverages. Graduate students are not eligible to apply as principal investigators. Grants range from \$2,000-\$15,000 per year.

**Deadline:**  
August 1 and November 1, 1984; February 1 and May 1, 1985

**For Further Information Contact:**

Scientific Advisory Council to  
the Distilled Spirits Council  
of the U.S., Inc.  
Mr. Robert Kirk  
1250 Eye Street, NW  
Washington, DC 20005

(From 1984 ARIS)

### **Spencer Foundation Education Research Grants\***

No. FY84-498

**Program:**

Stipends of variable amounts are awarded for research in the behavioral sciences aimed at the improvement of education. Some fields of study that have been supported include the biological bases of learning, cognitive studies, affective studies, early childhood development, educative effects of electronic media, and effects of schooling. An informal letter of inquiry or a brief preliminary proposal should be submitted to the Foundation to determine whether a proposed study falls within the Foundation's scope. If the proposed research appears to be of potential

interest, a formal proposal will then be requested.

For Further Information Contact:

Spencer Foundation  
H. Thomas James, President  
John Hancock Center  
875 North Michigan Avenue  
Chicago, IL 60611  
(312) 337-7000

\*Inquiries and proposals are welcome any time, but there are specific deadlines for consideration at the following quarterly meetings of the program committee and board of directors. A full proposal (not the initial inquiry) must be received by the 15th of February, May, August, or November for consideration at the quarterly meetings.

(From 1984 ARIS)

## science

### Department of Energy Health and Environmental Research\*

No. FY84-471

Program:

Any organization or individual may submit an unsolicited proposal to conduct basic and applied life sciences research within the following Divisions:

- Health Effects Research. Contact: Dr. Martin Minthorn, Director, Room F-227, (301) 353-5468.
- Human Health and Assessment. Contact: Mr. James S. Robertson, Director, Room E-224, (301) 353-5355.
- Physical and Technological Research. Contact: Dr. Robert W. Wood, Director, Room E-215, (301) 353-3213.
- Ecological Research. Contact: Dr. Helen McCammon, Director, Room F-232, (301) 353-4208.

For Further Information Contact:

Department of Energy  
Office of Energy Research  
Office of Health and Environmental  
Research  
Dr. C.W. Edington, Associate Director  
Room F-208  
Germantown  
Washington, DC 20545  
(301) 353-3251

\*There are no specific dates for the submission of unsolicited proposals; new proposals should be submitted at least six months in advance of the desired period of support. It is recommended that proposals be sent directly

to the Director in the area of interest.  
(From 1984 ARIS)

### Department of Energy University-DOE Laboratory Cooperative Program

No. FY84-455

Program:

This year-round program includes a variety of activities that bring college and university science and engineering faculty and students to DOE laboratories and Energy Technology Centers to participate in ongoing research programs and intensive instructional sessions on energy-related topics. Program categories include: Faculty Research Participation, Student Research Participation, Laboratory Graduate Research Participation, and Thesis Parts Research Participation. Program information, application procedures, and deadlines can be obtained from the facility of interest. The twenty facilities are listed in the DOE Information Guide, DOE-ER-0043/1 (Rev '80) which can be ordered from the address below.

Deadline:

Inquire\*

For Further Information Contact:

Department of Energy  
Mr. Harold Young  
Office of Energy Research  
Office of Field Operations Management  
Division of University and Industry  
Programs  
Forrestal Building  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 252-6833

\*Each laboratory has its own deadlines. The laboratories should be contacted in November-January of each year.

(From 1984 ARIS)

### Department of Energy Used Energy-Related Laboratory Equipment Grants

No. FY84-472

Program:

Used energy-related laboratory equipment is available from the DOE to any non-profit educational institution of higher learning for energy-oriented educational programs in the life, physical and environmental sciences and engineering. The responsibility for location of specific equipment rests with the requesting institution. Specific inquiries concerning equipment should be directed to the office handling university relations at the DOE Field Offices. Shipping costs are to be borne by the institution requesting the

grant. Further information, including proposal guidelines and the location of equipment lists, can be obtained from the brochure, "Instruction and Information on Used Energy-Related Laboratory Equipment Grants for Educational Institutions of Higher Learning," DOE/ER-0042/1, available from Dr. Barker's office.

For Further Information Contact:

Department of Energy  
Office of Energy Research  
University and Industry Programs Division  
Dr. Larry L. Barker  
Mail Stop 3F-032  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 252-6833

(From 1984 ARIS)

**Foundation for Microbiology  
Grants in Microbiology, Immunology,  
and Virology**

No. FY84-491

Program:

Grants of varying amounts are available to individuals or institutions for support of lectureships, meetings, symposia, prizes, unusual publication costs, courses, and other projects in the areas of microbiology, immunology, and virology. Project duration is generally less than three years. Application is by a simple letter to the President. Applications for research projects, travel awards, or fellowships are not considered.

For Further Information Contact:

Foundation for Microbiology  
Byron H. Waksman, President  
c/o National MS Society  
205 East 42nd Street  
New York, NY 10017  
(212) 986-3240

(From 1984 ARIS)

**National Center for Atmospheric  
Research  
NCAR Research Aviation Facility (RAF)**

No. FY84-484

Program:

The RAF operates four aircraft instrumented for atmospheric research in support of field projects in the area of the atmospheric sciences. Requests for NCAR flight support for programs within the context of NSF grants should include NCAR aircraft requirements in the total NSF proposal. Proposals not part of NSF programs should submit sufficient justification so that meaningful comparison

with NSF supported programs can be made. Requests for flight support from the facility's fleet, during the period March 1985 through September 1985, should be submitted by the above deadline in order to be considered at the RAF's Advisory Panel meeting in October. Requests for the long-range Electra aircraft are considered further in advanced to allow sufficient time to organize joint use of the aircraft among several investigators.

Deadline:

August 13, 1984

For Further Information Contact:

National Center for Atmospheric  
Research  
Atmospheric Technology Division  
P.O. Box 3000  
Boulder, CO 80307  
(303) 497-1000

(From 1984 ARIS)

**National Geographic Society  
Research Grants\***

No. FY84-497

Program:

Grants-in-aid ranging from one or two thousand to 40 or 50 thousand dollars for one year are awarded to Ph.D.'s associated with institutes of higher education or other specific and educational non-profit organizations, such as museums, to conduct research in the sciences related to geography. These sciences include, but are not limited to, projects in geography; anthropology; archeology; astronomy; general biology; botany; ecology; ethnology; geology; glaciology; marine biology; mineralogy; oceanography; paleontology; and zoology (including entomology, ornithology, mammology, and primatology). Support may also be provided in the above fields which involve exploration. Grants are very occasionally awarded to graduate students or scientific workers who do not have research degrees or who are not associated with a university, but who do have full qualifications for significant scientific research. However, for the most part, Ph.D.'s are preferred.

For Further Information Contact:

National Geographic Society  
Edwin W. Snider, Secretary  
Committee for Research and Exploration  
17th and M Streets NW  
Washington, DC 20036  
(202) 857-7439

\*The Society does not have deadlines but a lead time of six months after receipt of application should be allowed.

(From 1984 ARIS)

---

## National Research Council NRC Associateship Program

No. FY84-485

### Program:

The NRC offers awards for basic and applied research, free from administrative duties at various laboratories throughout the United States in the physical and biological sciences and biomedical research. Stipends begin at \$24,500 per year for recent doctoral graduates, with higher stipends for seniors having at least five years of postdoctoral experience. Although most programs have a single deadline of January 15 for receipt of application, certain ones have the three deadlines noted here. These are NASA, Air Force Systems Command, U.S. Army Armament Research and Development Command, EPA, U.S. Army Missile Command, and Naval Air Development Center. For detailed information on the available programs, contact NRC.

### Deadline:

August 15, 1984; January 15 and April 15, 1985

### For Further Information Contact:

National Research Council  
Associateship Office (JH 610-D5)  
2101 Constitution Avenue, NW  
Washington, DC 20418  
(202) 334-2760

(From 1984 ARIS)

## National Science Foundation Alternative Biological Resources Program

No. FY84-474

### Program:

This Program supports research on the use of biological systems and biomass conversion as alternative domestic sources of industrial and pharmaceutical chemicals and energy. Emphasis is on the use of arid land plants (such as quayule and jojoba) as sources of petrochemical substitutes. Other topics supported include biological nitrogen fixation and plant stress (drought, nutrient depletion, and salinization).

### For Further Information Contact:

National Science Foundation  
Directorate for Biological, Behavioral  
and Social Sciences  
Division of Physiology, Cellular  
and Molecular Biology  
H.T. Huang  
Program Director  
Room 325  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9782

(From 1984 ARIS)

## National Science Foundation Arctic Research Program

No. FY84-457

### Program:

This program supports both interdisciplinary projects and individual research in a single science discipline, but has as a particular objective the support of the more complex and outstanding arctic research problems that require an interdisciplinary approach. Proposals for creative or innovative research in other appropriate areas, than those listed below, are also encouraged. Research areas include:

- Geology-Geophysics Program; Biology Program; Oceanography Program; Glaciology Program and Atmospheric Sciences Program.

### Deadline:

Target Dates: September 1, 1984

### For Further Information Contact:

National Science Foundation  
Directorate for Astronomical,  
Atmospheric, Earth and Ocean  
Sciences  
Division of Polar Programs  
Guy Guthridge  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7894

(From 1984 ARIS)

## National Science Foundation Climate Dynamics Program

No. FY84-456

### Program:

Grants to academic institutions, non-academic and non-profit research organizations, and profitmaking and private research organizations for research to support the development of a basis for predicting climate variations and for assessing the impact of these variations on human affairs. Toward this end, the program supports research that will contribute to knowledge of the natural variability of climate and to understanding the physical processes governing climate. The major research categories are:

- Climate Modeling and Simulation; Modern Climate Data Assembly and Analysis; Paleoclimatic Data Assembly and Analysis; Climate Impact Assessment and Supportive Climatic Research.

### Deadline:

Target Dates: August 1 and December 1, 1984;  
May 1, 1985

For Further Information Contact:

National Science Foundation  
Directorate for Astronomical,  
Atmospheric, Earth and Ocean  
Sciences  
Division of Atmospheric Sciences  
Thomas J. Crowley,  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9892

(From 1984 ARIS)

**National Science Foundation  
History and Philosophy of Science**

No. FY84-465

Program:

This program supports research having clear and direct relevance to the understanding of science, scientific change, and technological development. This includes studies of the nature and development of scientific theories and methodology, the interactions between science and technology, and social and intellectual factors that affect scientific development. (The history of medicine is normally supported by NIH).

For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
Dr. Ronald J. Overmann  
Program Director  
Room 312  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9677

(From 1984 ARIS)

**National Science Foundation  
Proposals for Mathematical and  
Physical Sciences Relating to Chemistry**

No. FY84-476

Program:

Proposals may be submitted at any time of the year. It takes at least six months to process a proposal. Proposals to be funded in a particular fiscal year (ending September 30) normally should be received by NSF no later than December of that fiscal year.

- Structural Chemistry and Thermodynamics.  
Contact: C. William Kern, 357-9826.
- Chemical Physics. Contact: William H. Cramer, 357-7951.

- Chemical Dynamics. Contact: John B. Hunt, 357-7956.
- Chemical Analysis. Contact: Peter C. Jurs, 357-7960.
- Synthetic Inorganic and Organometallic Chemistry. Contact: Oren F. Williams, 357-7499.
- Synthetic Organic and Natural Products Chemistry. Contact: John S. Showell, 357-7499.
- Chemical Instrumentation. Contact: Daniel D. Traficante, 357-7960.

For Further Information Contact:

National Science Foundation  
Directorate for Mathematical and  
Physical Sciences  
Division of Chemistry  
1800 G Street, NW  
Washington, DC 20550

(From 1984 ARIS)

**National Science Foundation  
Proposals for Mathematical and  
Physical Sciences Relating to Physics**

No. FY84-477

Program:

Proposals may be submitted for the following programs at any time of the year. It takes approximately six to nine months to process a proposal.

- Elementary Particle Physics. Contact: David Berley, 357-9575.
- Intermediate Energy Nuclear Physics.  
Contact: Hall Crannell, 375-7992.
- Nuclear Physics. Contact: William Rodney, 357-7992.
- Atomic, Molecular, and Plasma Physics.  
Contact: Rolf Sinclair, 357-7997.
- Theoretical Physics. Contact: Boris Kayser, 357-7979.
- Gravitational Physics. Contact: Richard Isaacson, 357-7979.

For Further Information Contact:

National Science Foundation  
Directorate for Mathematical and  
Physical Sciences  
Division of Physics  
1800 G Street, NW  
Washington, DC 20550

(From 1984 ARIS)

## National Science Foundation Unsolicited Research Proposals

No. FY84-473

### Program:

The Division is responsible for the support of research on nervous systems and human and animal behavior. Goals are to advance understanding of the biological, environmental, and cultural factors that underlie the behavior of human beings and animals, with explicit emphasis on nervous system structure and function. Clinical research is not supported although other applied research may be considered. Inquiries about support for applied research may be addressed to individual programs or to the Applied Research Coordinator. Programs include:

- Anthropology Program. Contact: John Yellen, Program Director, (202) 375-7804.
- Developmental Neuroscience Program. Contact: Jean Lauder, Program Director, (202) 357-7428.
- Integrative Neural Systems Program. Contact: Kenneth Surrey, Program Director, (202) 357-7471.
- Linguistics Program. Contact: Paul Chapin, Program Director, (202) 357-7696.
- Memory and Cognitive Processes Program. Contact: Joseph Young, Program Director, (202) 357-9898.
- Molecular and Cellular Neurobiology Program. Contact: Joseph S. Colton, Program Director, (202) 375-7471.
- Psychobiology Program. Contact: Fred Stollnitz, Program Director, (202) 357-7949.
- Sensory Physiology and Perception Program. Contact: James O. Larimer, Program Director, (202) 357-7428.
- Social and Developmental Psychology Program. Contact: Jean B. Intermaggio, Program Director, (202) 357-9485.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological, Behavioral  
and Social Sciences  
Division of Behavioral and Neural  
Sciences  
Richard Louttit  
Division Director  
Room 320  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7564

(From 1984 ARIS)

## National Science Foundation U.S.-India Individual Travel Support

No. FY84-469

### Program:

U.S. scientists may apply for travel support to India to engage in research or to complete a formal cooperative research proposal with an Indian counterpart scientist. The award consists of an open, full or partial fare, round-trip airline ticket at the lowest available rate from the point of origin to the destination. Per diem and local costs are not provided nor is travel of dependents. Individual travel support to India will no longer be considered solely for study tours, lectures, short courses, seminars or international meetings. A preliminary proposal must be submitted along with the travel application, NSF Form 192-A.

### Deadline:

September 1\* and December 1, 1984; March 1 and June 1, 1985

### For Further Information Contact:

National Science Foundation  
Directorate for Scientific Technological  
and International Affairs  
Division of International Programs  
Developing Countries Section  
Jean M. Johnson  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9402

\*The September 1 deadline is for travel between January 1 and March 31.

(From 1984 ARIS)

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

No. FY84-466

### 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: Awards are intended to provide for collaboration between research groups with a portion of the research being performed in each of the scientist's home laboratories. It is expected that travel to the United Kingdom will be relatively short (typically two to four weeks per year) and

primarily for planning, consultation, review, and analysis. Projects of one to three years' duration may be proposed. The average total grant provided by the Program is under \$15,000. Renewals are uncommon.

- Joint Seminars: Meetings of groups of 10-20 U.S. and United Kingdom scientists, held in either country and usually lasting from three to five days. The seminars focus on relatively narrow fields of science, bringing together experts from each country to review the state of knowledge, compare methods and findings, and identify projects suitable for mutually beneficial future research collaboration. The total proposed budget should not exceed \$20,000.

- Long-Term Research Visits: Visits of 4 to 12 months focused on a program of research in collaboration with host country scientists.

Deadline:  
September 1, 1984

For Further Information Contact:

National Science Foundation  
Directorate for Scientific  
Technological and International  
Affairs  
Division of International Programs  
Industrial Countries Section  
Marilyn Rurak  
Program Manager  
Room 1201  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7554

(From 1984 ARIS)

**National Science Foundation  
VLSI (Very Large Scale Integration)  
Fast Turnaround Fabrication Service for  
Universities**

No. FY84-470

Program:

A joint cooperative agreement has been established between NSF and the Defense Advanced Research Projects Agency (DARPA) that will allow qualifying universities to use the DARPA fast turnaround VLSI implementation facility, at no cost, as part of university-based research and education programs. This service is directed and limited to U.S. universities and colleges to enable them to use the facility for educational purposes, including graduate and undergraduate courses in VLSI design. Use of the facility is also available to Principal Investigators of NSF supported university-based research projects and those student projects in which the integrated circuit designs legitimately relate to NSF supported research.

Deadline:  
August 1, 1984 and March 1, 1985

For Further Information Contact:

National Science Foundation  
Directorate for Science and  
Engineering Education  
Division of Precollege Education  
in Science and Mathematics  
Andrew R. Molnar  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7539

(From 1984 ARIS)

## engineering

**Department of Energy  
University-DOE Laboratory Cooperative  
Program**

No. FY84-455

Program:

This year-round program includes a variety of activities that bring college and university science and engineering faculty and students to DOE laboratories and Energy Technology Centers to participate in ongoing research programs and intensive instructional sessions on energy-related topics. Program categories include: Faculty Research Participation, Student Research Participation, Laboratory Graduate Research Participation, and Thesis Parts Research Participation. Program information, application procedures, and deadlines can be obtained from the facility of interest. The twenty facilities are listed in the DOE Information Guide, DOE-ER-0043/1 (Rev '80) which can be ordered from the address below.

Deadline:  
Inquire\*

For Further Information Contact:

Department of Energy  
Mr. Harold Young  
Office of Energy Research  
Office of Field Operations Management  
Division of University and Industry  
Programs  
Forrestal Building  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 252-6833

\*Each laboratory has its own deadlines. The laboratories should be contacted in November-January of each year.

(From 1984 ARIS)

**Department of Energy  
Used Energy-Related Laboratory  
Equipment Grants**

No. FY84-472

**Program:**

Used energy-related laboratory equipment is available from the DOE to any non-profit educational institution of higher learning for energy-oriented educational programs in the life, physical and environmental sciences and engineering. The responsibility for location of specific equipment rests with the requesting institution. Specific inquiries concerning equipment should be directed to the office handling university relations at the DOE Field Offices. Shipping costs are to be borne by the institution requesting the grant. Further information, including proposal guidelines and the location of equipment lists, can be obtained from the brochure, "Instruction and Information on Used Energy-Related Laboratory Equipment Grants for Educational Institutions of Higher Learning," DOE/ER-0042/1, available from Dr. Barker's office.

**For Further Information Contact:**

Department of Energy  
Office of Energy Research  
University and Industry Programs Division  
Dr. Larry L. Barker  
Mail Stop 3F-032  
1000 Independence Avenue, SW  
Washington, DC 20585  
(202) 252-6833

(From 1984 ARIS)

**National Center for Atmospheric  
Research  
NCAR Research Aviation Facility (RAF)**

No. FY84-484

**Program:**

The RAF operates four aircraft instrumented for atmospheric research in support of field projects in the area of the atmospheric sciences. Requests for NCAR flight support for programs within the context of NSF grants should include NCAR aircraft requirements in the total NSF proposal. Proposals not part of NSF programs should submit sufficient justification so that meaningful comparison with NSF supported programs can be made. Requests for flight support from the facility's fleet, during the period March 1985 through September 1985, should be submitted by the above deadline in order to be considered at the RAF's Advisory Panel meeting in October. Requests for the long-range Electra aircraft are considered further in

advanced to allow sufficient time to organize joint use of the aircraft among several investigators.

**Deadline:**

August 13, 1984

**For Further Information Contact:**

National Center for Atmospheric  
Research  
Atmospheric Technology Division  
P.O. Box 3000  
Boulder, CO 80307  
(303) 497-1000

(From 1984 ARIS)

**National Science Foundation  
Industry/University Cooperative  
Research Projects**

No. FY84-478

**Program:**

NSF provides grants for the support of cooperative research projects between universities and industrial firms. To qualify for support, proposals must be prepared jointly by academic and industrial researchers and must be submitted jointly by their respective institutions. Their research should focus on fundamental scientific questions of a basic or applied nature rather than on commercial product development. Eligible applicants include colleges and universities, and established profit-making industrial firms, including small businesses. Cooperating institutions must represent bona fide independent operations, as evidenced by the absence of interlocking relationships. Consideration will be given to proposed research that may be expected to make a long-term contribution toward product and/or process innovation, or to provide knowledge as a foundation for new or improved technologies. All grants made by NSF Industry/University Cooperative Research Program will be sponsored jointly by at least one other NSF program. Accordingly, such proposals should be identified on the cover page as being simultaneously submitted to two NSF programs.

**For Further Information Contact:**

National Science Foundation  
Directorate for Scientific,  
Technological and International  
Affairs  
Division of Industrial Science and  
Technological Innovation  
Frederick Betz  
Alex Schwarzkopf  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7785

(From 1984 ARIS)



## National Science Foundation University/Industry Research Centers Program

No. FY84-479

### Program:

This program stimulates industrial support of university research through the establishment of centers that create long-term collaboration between the university and industry in research areas of high mutual interest. With cofunding from groups of industrial firms, the program initiates university research programs that are compatible with university research objectives and also responsive to industry's research needs. Research programs of the centers generally correspond to the university's scientific and engineering areas of expertise and have participants that are or have been principal investigators of other NSF research grants. The program awards planning grants to study possible alternatives for both structure and content of the research plan to be pursued, and to evaluate industry's interest in a potential center.

### For Further Information Contact:

National Science Foundation  
Directorate for Scientific,  
Technological and International  
Affairs  
Division of Industrial Science and  
Technological Innovation  
Robert Colton, Program Manager  
Alex Schwarzkopf  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7527

(From 1984 ARIS)

## National Science Foundation Unsolicited Research Proposals in Production Research (ENG)

No. FY84-475

### Program:

Grants to colleges and universities, non-profit and private profit organizations, to support research on automation and new process technology. The research is concerned with the technical problems that underlie both the physical transformation of objects and the informational transformation necessary to understand, model, control and carry out manufacturing operations. The objectives of this program are to provide support for research which will lead to significantly increased productivity in manufacturing, and to provide a stream of degreed manufacturing engineers to industry. In scope it includes processing bulk materials into engineering materials (primary processing) and processing engineering materials into discrete products (secondary processing). Increasing produc-

tivity means reducing the lead time between design and manufacture, raising production rates, reducing costs, and improving product quality, while meeting legal requirements for product safety, health and safety in the factory, and protection of the factory environment. The research proposed may be for the purposes of optimizing a unit operation or process, permitting safe operation, reducing noise, improving the product, substantially raising first-time-through yield, reducing lead time, or improving process economy. It may include conceptual design and feasibility studies. These may comprise both analytical and experimental approaches, such as modeling and simulation, preparing software, or selecting materials, as well as design, construction, test and evaluation of engineering models of production equipment. Examples of subtopics of interest include computer-aided manufacturing, automation, machining, new unit operations, forming the joining methods, robots for assembly operations, and effectiveness of humans in the factory (e.g., software programmers, manufacturing engineers, and managers at all levels).

### For Further Information Contact:

National Science Foundation  
Directorate for Engineering  
Division of Mechanical Engineering  
and Applied Mechanics  
Dr. W.M. Spurgeon  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7540

(From 1984 ARIS)

## business administration

## National Science Foundation Decision and Management Science

No. FY84-464

### Program:

The Decision and Management Science Program supports research on improving the performance of private and/or public sector organizations. Research to enhance the internal and external validity of formal prescriptive and descriptive models and take better account of human, organizational, and data issues is encouraged. Subjects include complex organizations and their environments, strategic decisions, management, operations, finance, and markets.

### For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences

Division of Social and  
Economic Science  
Trudi C. Miller  
Acting Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-7569

(From 1984 ARIS)

## law

### National Science Foundation Law and Social Sciences

No. FY84-463

Program:

The Law and Social Sciences Program supports social scientific research on law and law-like systems of rules. Included are studies of the processes that enhance or diminish the impact of law; causes and consequences of variations and changes in legal institutions; personal, social, and cultural factors affecting the use of law; dynamics and effects of dispute processing and alternative means of dispute resolution; determinants of decision-making in legal forums and contexts; and conditions and processes that create transformation between formal legal rules and law in action.

For Further Information Contact:

National Science Foundation  
Directorate for Biological  
Behavioral and Social Sciences  
Division of Social and  
Economic Science  
Felice J. Levine  
Program Director  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9567

(From 1984 ARIS)

## library

### Council on Library Resources General Grants

No. FY84-489

Program:

Support of varying amounts is available to institutions and individuals for programs that show promise of helping to provide solutions for the many problems that affect libraries in general and academic and research

libraries in particular. The Council's major interests include automation, networks, standards, management, preservation, international library cooperation, improvement of library services, and professional development for librarians. Support is not given for the improvement of collections and buildings, for normal operating costs, for the purchase of equipment, or for programs that will be useful only to the institutions where they take place. Preliminary proposals in the form of a letter are required.

For Further Information Contact:

Council on Library Resources  
Warren J. Haas, President  
1785 Massachusetts Avenue, NW  
Washington, DC 20036  
(202) 483-7474

(From 1984 ARIS)

## general

### Allied Corporation Foundation Foundation and Corporate Grants

No. FY84-487

Program:

The Allied Corporation Foundation offers education grants to provide scholarship and fellowship aid to college and university departments in science, engineering, and business, as well as grants for projects designed to improve the quality of life and educational opportunities for minorities and women. A substantial amount of money is also allocated for health and welfare projects and a modest percentage to civic, cultural, law-related programs and a broad spectrum of human concerns.

For Further Information Contact:

Allied Corporation Foundation  
Margaret C. Petri  
Contributions Administrator  
P.O. Box 2245R  
Morristown, NJ 07960  
(201) 455-2671

(From 1984 ARIS)

### The Center for Field Research Field Research Grants

No. FY84-514

Program:

The Center, with its affiliate EARTHWATCH, supports postdoctoral field or team research through the mode of participate funding, a

system in which qualified members of the public both join research expeditions as co-workers and help underwrite expedition costs. Grants range from \$3,000 to \$100,000 with an average of \$12,000. The grants cover all expenses for maintaining the research team in the field, the travel of the principal investigator to and from the field, plus expendable and leased or rented field equipment. There are no restrictions as to geographic location, academic discipline, or time of year. The Center especially favors projects of clear scholarly and public value in the sciences and humanities. Preliminary proposals should be submitted at least nine months before project date. Further information may be obtained from the Center at the address below.

For Further Information Contact:

The Center for Field Research  
Dr. George McCully, Director  
10 Juniper Road, Box 127  
Belmont, MA 02178  
(617) 489-3030

(From 1984 ARIS)

**Council for International Exchange of  
Scholars  
Senior Scholar Fulbright Awards for  
University Teaching and Advanced  
Research Abroad**

No. FY84-481

Program:

Awards are available to scholars in all academic fields for university teaching and advanced research abroad. An award generally consists of a maintenance allowance for the grantee and accompanying family members, roundtrip travel for the grantee, and one or more incidental allowances. Travel is usually provided for one dependent of lecturing grantees appointed for a full academic year. Eligibility requirements include: U.S. citizenship; for lecturing--college or university teaching experience at the level of the award sought; for research--a doctoral degree at the time of application or, in some fields, recognized professional standing as demonstrated by faculty rank, publications, compositions, exhibitions, etc.; for some awards, foreign language fluency. Application forms may be obtained from graduate deans or chief academic officers on most U.S. campuses or from the program officer for the country of greatest interest. A list of the program officers (including telephone numbers) for the various countries as well as a list of current openings for positions abroad may be obtained from CIES.

Deadline:

September 15, 1984\* and June 15, 1985

For Further Information Contact:

Council for International  
Exchange of Scholars  
Eleven Dupont Circle, Suite 300  
Washington, DC 20036  
(202) 833-4950

\*Application deadlines are June 15 for Australia, India, and Latin America and the Caribbean, and September 15 for Africa, Asia (except India), Europe, and the Middle East; deadlines are 12-18 months in advance of the grant period. Late applications are often accepted when vacancies exist. Inquiries are welcome.

(From 1984 ARIS)

**The East-West Center  
Awards**

No. FY84-490

Program:

Awards are made in five categories for participation in the programs of the Center: 1) Fellows, appointed for from one month to three years, are senior scholars and authorities who have engaged in research and development in areas of interest to the Center; 2) Research and Professional Interns, chosen by invitation, nomination or application, come to the Center to acquire supervised professional experience in their fields, through participation in Center programs; 3) Professional Associates, chosen by nomination, invitation, or application, include policy-makers, scholars, and managers from private business, government and education; 4) Joint Doctoral Research Interns work on specific projects relevant to their dissertations in a program designed to strengthen relations with institutions in Asia, the Pacific Island and the United States; 5) Graduate Degree Students participate in projects at the Center while studying for an advanced degree at the University of Hawaii. With the exception of the Graduate Degree Program, applications may be made at any time in the Research and Professional Intern or Professional Associate categories for participation in specific projects. The Center, whose purpose is the promotion of better relations and understanding among the people of Asia, the Pacific, and the United States, focuses on cooperative study and research aimed at providing solutions to specific problems. The Center's programs are organized into four institutes as well as Center-wide seminars and an open grant program designed to maintain a geographic and disciplinary spread or participants. The four institutes are: 1) The Institute of Culture and Communication which studies interchange across cultures and seeks to discover ways in which both the process and the substance of these interactions may be improved; 2) The East-West Environment and Policy Institute which examines the environ-

mental aspects of policies which affect relations among nations when a common environment is shared or when interdependency links countries; 3) The East-West Population Institute which seeks to study rapid demographic change, its causes and effects as well as alternatives; 4) The East-West Resource System Institute which concentrates on the interrelationships of food, energy, and raw materials and their influence on the lives of people and relations among nations. Open Grants provide flexibility in offering awards to individuals whose interests do not fit precisely the work of any of the institutes. The division helps the Center to maintain a wide geographic and disciplinary spread of participants, and provides an opportunity to experiment with new issues and ideas.

For Further Information Contact:

The East-West Center  
Office of Student Affairs and  
Open Grants  
1777 East-West Road  
Honolulu, HI 96848  
(808) 944-7737

(From 1984 ARIS)

### **The Daniel and Florence Guggenheim Foundation Grants**

No. FY84-494

Program:

The Foundation awards grants of varying amounts to organizations for those projects it considers most likely to further the cause of human progress in a reasonable time and with economy of means. In the past the Foundation has funded projects in the fields of medicine, the arts, education, science and technology, and criminal justice. No grants are made directly to individuals.

For Further Information Contact:

The Daniel and Florence Guggenheim  
Foundation  
950 - 3rd Avenue, 30th Floor  
New York, NY 10022  
(212) 755-3199

(From 1984 ARIS)

### **The German Marshall Fund of the United States Grants**

No. FY84-492

Program:

The German Marshall Fund of the United States is an independent, American organization principally engaged in making grants to other

organizations; it also conducts its own fellowship and internship programs. The Fund supports activities that 1) will promote a better understanding of issues that arise between Western Europe and the United States, and 2) will permit individuals on both sides of the Atlantic to develop new perspectives on selected domestic problems common to both Western Europe and the United States. Support is organized into four substantive program areas:

- International: Focusing on projects that are designed to strengthen the relations between Western Europe and the United States, and that examine some of the causes of conflict between them, particularly in economic relations.

- Comparative Domestic: Concentrating on projects that involve domestic problems in employment, urban affairs, environment, and immigration, that might be aided by a transfer of experience from abroad.

- Scholarly Support: Sponsoring advanced research by younger U.S. scholars.

- Media: Encouraging U.S. news coverage of events abroad, particularly in Europe.

The average grant the Fund is able to make to a project is small; most grants are less than \$30,000 and many are under \$3,000. Each Fund project must involve both Western European and U.S. perspectives and address issues important to both areas. Within each substantive area, the Fund assists many different types of projects which include but are not limited to: workshops and conferences (principally bilateral, but occasionally multi-lateral); transatlantic exchanges; and policy-relevant research. The Fund supports travel by individuals and groups to examine specific policy options that fall within their competence and responsibilities. Dissemination of observations and/or implementation of new approaches are important components of travel programs. The Fund can support a very limited amount of analytic work and only when it is closely tied to dissemination and/or implementation of policy or program options. Analytic work can be done by professionals, journalists, or persons from the research community. Current resources limit new analytic work largely to the following Fund programs: U.S.-European economic issues, and U.S. European Relations. Individuals and institutions seeking Fund support are encouraged to send an initial brief letter of inquiry describing the proposal being developed. Applications for grants are processed throughout the year. Fund Trustees review all grant decisions and must approve in advance all requests for more than \$25,000. Decisions on most final applications require about four weeks. Material that must be reviewed by the Trustees should be received at least six weeks before a scheduled meeting of the Board. Trustee's meet-

ings are scheduled for mid-October, mid-February, and late May.

For Further Information Contact:

The German Marshall Fund of  
The United States  
11 Dupont Circle, NW  
Washington, DC 20036  
(202) 745-3950

(From 1984 ARIS)

**The German Marshall Fund of the  
United States  
Short-Term Travel  
Awards Program**

No. FY84-493

Program:

The Fund's Short-Term Travel Awards Program enables American and European academics to participate in non-academic conferences, and practitioners to participate in academic conferences across the Atlantic. These grants of up to \$1,000 for travel expenses are designed to facilitate the exchange of ideas and experiences relevant to the Fund's program interests. Applications are accepted throughout the year.

For Further Information Contact:

The German Marshall Fund of  
The United States  
11 Dupont Circle, NW  
Washington, DC 20036  
(202) 745-3950

(From 1984 ARIS)

**Hearst Foundations Grants**

No. FY84-482

Program:

The William Randolph Hearst Foundation and The Hearst Foundation, Inc. make grants to tax-exempt organizations which are not private foundations in the following priority areas of interest: 1) Programs to aid poverty level and minority groups; 2) Traditional education programs at all levels; 3) Traditional health delivery systems and medical research; 4) Traditional cultural programs with records of public support; and 5) Religion. Private sector organizations are generally favored over those receiving primary support from tax dollars, and organizations serving larger geographic areas are generally favored over those of a neighborhood or community nature. "Seed Money" appeals have low priority. A few major grants are approved each year; however, the majority of grants is in the \$5,000 to \$10,000 range. Suggested procedures for

grant applications are available from the Foundations.

Deadline:

July 15 and October 15, 1984; January 15 and April 15, 1985

For Further Information Contact:

Hearst Foundations  
888 Seventh Avenue, Floor 27  
New York, New York 10106  
(212) 586-5404  
(for programs headquartered east of  
the Mississippi)

690 Market Street  
Suite 502  
San Francisco, CA 94104  
(415) 781-8418  
(for programs headquartered west of  
the Mississippi)

(From 1984 ARIS)

**Japan-United States Friendship  
Commission Programs**

No. FY84-483

Program:

The Japan-United States Friendship Commission grants funds for support in four major project areas: Japanese Studies (for Americans), American Studies (for Japanese), the Arts, and Research and Programs for Public Education.

- Japanese Studies: The Commission's major effort under this category will be to develop American professional education on Japan in the areas of law, business, economics, journalism, architecture, and urban planning. Funds for graduate fellowships, faculty expansion, and research will be committed to these areas rather than to the traditionally humanistic and social science areas in Japanese studies at the university level. The Commission will also fund projects in professional school faculty development, faculty research, library support, language training, and general education which promise large regional or national return in the level of American awareness of Japanese society and culture. All funds under this category will go to institutions for the development of programs; individuals interested in support for scholarly work should apply directly to the appropriate institution or research council. The names and addresses of these organizations are available from the Commission.

- Research and Programs for Public Education: Support under the category will go to projects designed to broaden the understanding of Japanese history, society, and culture among the American public at large. Areas of support include public television programs,

regional public affairs programming on Japan, policy-oriented research, and counterpart exchanges in the fields of journalism, education, economics, and public affairs.

**Deadline:**

August 1, 1984 and March 1, 1985

**For Further Information Contact:**

Japan-United States Friendship  
Commission  
Executive Director  
Suite 910  
1875 Connecticut Avenue, NW  
Washington, DC 20009  
(202) 673-5295

NOTE: Grants to individuals, under all programs, normally will be made through academic, professional, artistic, or other appropriate organizations which will examine, recommend, and in most instances select, the individuals to be supported financially by the Commission. The names of such organizations, application dates, and procedures can be obtained from the Commission.

(From 1984 ARIS)

**The Henry Luce Foundation, Inc.  
Special Project Grants**

No. FY84-495

**Program:**

These grants are made to qualified non-profit organizations in response to specific project requests in areas of the foundation's overall program concerns: public affairs, international affairs (with emphasis on Asia), theology, and - more rarely - higher education and the visual arts. The foundation's emphasis may change from year to year to reflect shifts in the national and international scene. Particular attention has always been paid, however, to those projects that demonstrate the broad impact that can be achieved with a relatively modest infusion of private funds. Grants are not made to individuals. Letter requests may be submitted at any time, though under normal circumstances grants in these areas are awarded only in the late fall. The foundation does not provide funds for endowment, domestic building programs, general operating support, annual fund drives, or scholarship/fellowship funds.

**For Further Information Contact:**

The Henry Luce Foundation, Inc.  
Robert E. Armstrong  
Executive Director  
111 West 50th Street  
New York, NY 10020  
(212) 489-7700

(From 1984 ARIS)

**The Andrew W. Mellon Foundation  
Grants**

No. FY84-496

**Program:**

The Foundation makes grants on a selective basis to institutions in higher education; in cultural affairs and the performing arts; in medical, public health, and population education and research; and in certain areas of conservation, natural resources, the environment, and public affairs. Applications are considered throughout the year, and no special forms are required. Ordinarily a letter containing the need, nature and amount of the request and the justification for it, together with evidence of suitable classification by the IRS and any supplementary information will suffice to assure consideration.

**For Further Information Contact:**

The Andrew W. Mellon Foundation  
140 East 62nd Street  
New York, NY 10021  
(212) 838-8400

(From 1984 ARIS)

**National Endowment for the Arts  
Design Arts Program**

No. FY84-499

**Program:**

The Design Arts Program awards grants to both organizations and individuals in seven disciplines: architecture, landscape architecture, urban design and planning, interior design, graphic design, industrial design, and fashion design.

**For Further Information Contact:**

National Endowment for the Arts  
Design Arts Program  
Room 625  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5437

(From 1984 ARIS)

**National Endowment for the Arts  
Design Exploration/Research Grants**

No. FY84-500

**Program:**

One-to-one matching grants of up to \$40,000 will be awarded to organizations which are incorporated as non-profit and tax exempt. They may include community groups, arts insti-

tutions, colleges and universities, service organizations, and local or state governments. These grants support experimental and innovative design research. Priority will be given to projects intended to advance the state of the art and that help define or resolve new or recurring problems. In general, proposals in this category should help us understand the aesthetic, utilitarian, economic, and social consequences of design decisions. Projects may include the development of prototypical solutions to design problems, and the development and testing of design processes such as behavior-based design, computer-aided design, participatory design, and design programming and evaluation techniques. This category also supports projects which develop techniques for translating research results into a form useful to design practitioners and clients. Priority will be given to applicants who communicate clearly about the process as well as the topic of research. The design of the research project itself, as well as the significance of the inquiry in advancing the state of the art, will be important in determining awards.

**Deadline:**

September 20, 1984 and March 20, 1985

**For Further Information Contact:**

National Endowment for the Arts  
Design Arts Program  
Room 625  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5437

(From 1984 ARIS)

**National Endowment for the Arts  
Grants to Individuals**

No. FY84-501

**Program:**

Individual fellowships are available to outstanding individuals in the seven design disciplines and related fields. Fellowships are intended to support a wide variety of activities and to encourage the exploration of new concepts and projects in the areas of design communication, design practice, and design theory. Priority will be given to projects addressing one or more of the "Design Issues of Special Concern" listed above. Fellowships do not require matching funds. Recipients may teach or study at an academic institution or work at a job while undertaking a project, or they may use the fellowship for time on their own to carry out projects and investigations. Fellowships, however, may not be used for tuition assistance. **Deadline:** September 20, 1984 and March 20, 1985. A description of the three fellowship categories follows:

- **Entering Professional Designer Project Fellowships:** Fellowships of up to \$5,000 to support designers in the early stages of career development for specific design, research, or communication projects. People who have recently entered a design profession may apply, including those returning to design after a prolonged absence or those changing careers within the design disciplines. The fellowships may be used to explore new and imaginative ideas or to research new concepts. Priority will be given to individuals demonstrating outstanding potential for achievement in design, as well as to projects of outstanding merit.

- **Individual Project Fellowships:** Fellowships of up to \$10,000 enable knowledgeable and experienced professional designers, educators, researchers, and other qualified individuals to undertake significant and creative design, research, or public awareness projects in any of the seven design disciplines. The category invites highly diversified responses; projects of many kinds are considered and encouraged. Priority will be given to projects of outstanding merit by highly qualified applicants. Excellence in concept and execution is sought.

- **Distinguished Designer Sabbatical Fellowships:** A limited number of fellowships of up to \$20,000 are available to individuals who have made substantial lifetime contributions to the field of design. Sabbaticals are meant to provide time away from daily professional or academic activities and to allow exploration and synthesis of ideas and new approaches to design. No specific product need result from a sabbatical fellowship, an honor accorded exceptional designers on a one-time-only basis. The program encourages both nominations and direct applications. Final evaluation of both nominated and direct applicants will be made without consideration of how the application originated; fellowships will be awarded competitively, solely on the basis of merit. Priority will be given to individuals with records of outstanding and sustained achievements in their field of design. **Deadline:** Applications - September 20, 1984 and March 20, 1985. **Nominations\*** - June 1, 1984 and January 2, 1985.

**For Further Information Contact:**

National Endowment for the Arts  
Design Arts Program  
Room 625  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5437

\*Individuals who wish to nominate a candidate for a Distinguished Designer Sabbatical Fellowship should send a letter to the Design Arts Program providing background information on the candidate and explaining why the candidate should receive a fellowship. Letters

of nomination must include the address and telephone number of recommended candidates. The Design Arts Program will contact each nominee and provide information about submitting the required formal application package. The letter of nomination will be included as a support letter in the final application.

(From 1984 ARIS)

## **National Endowment for the Arts Small Press Assistance**

No. FY84-502

### Program:

Matching grants are available to small, non-profit tax exempt presses and college and university presses. Eligible applicants must have published at least four volumes (of 48 pages or more each) of fiction, poetry, plays, or other creative prose in the past three years. Books of 40,000 or more words will count as the equivalent of two volumes. Grants are awarded on the condition that the author(s) of an Endowment-supported publication receive a minimum of 10% of the sales income in cash (or the equivalent in copies) as at least partial payment of royalties. Small press editors may receive matching fellowships. Grants ranging from \$2,000 to \$12,000 are available to all presses which meet the eligibility requirements. Grants ranging from \$12,000 to \$25,000 are available only to presses which publish six or more volumes of 48 or more pages each year. Grants may be used to assist the publication, promotion, and distribution of books and anthologies of contemporary creative writing and translation, to implement organizational development plans, to purchase technical assistance, and to secure continuing local and private sources of financial support. Endowment funds may not be used to pay for administrative salaries, rent, equipment, or travel. Nor may they be used to pay costs of self-publication or vanity press projects. In addition, presses may not use Endowment funds to pay costs of publishing books by faculty or staff members of their institutions.

### Deadline:

September 13, 1984

### For Further Information Contact:

National Endowment for the Arts  
Literature Program  
Literary Publishing  
Ruth Thompson  
Program Specialist  
Room 723  
1100 Pennsylvania Avenue, NW  
Washington, DC 20506  
(202) 682-5451

(From 1984 ARIS)

## **National Science Foundation U.S.-India Exchange of Scientists**

No. FY84-468

### Program:

Grants to senior-level scientists, with at least five years research experience or a doctorate of at least five years standing, with fields of specialization in the mathematical, physical, medical, biological, engineering, or social sciences, or the history and philosophy of science, or such interdisciplinary areas as geochemistry, meteorology, or oceanography. Funds are to allow participating scientists to make short visits (two to eight weeks) to India in order to work with Indian colleagues on projects of mutual interest. This program offers opportunities to work in new environments with unique research materials and to make long-range plans for collaboration with Indian research centers.

### Deadline:

September 15, 1984\* and March 15, 1985

### For Further Information Contact:

National Science Foundation  
Directorate for Scientific Technological  
and International Affairs  
Division of International Programs  
Developing Countries Section  
Eugene Pronko  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9550

\*The September 15 deadline is for visits during the following year between May 15 and November 15.

(From 1984 ARIS)

## **National Science Foundation U.S.-Taiwan Cooperative Science Program**

No. FY84-467

### Program:

Grants to U.S. citizens or permanent members of the American scientific community who have the Ph.D. or its equivalent. The purposes of this program are to increase the contacts and cooperation between scientists and engineers, and institutions of scientific research and higher learning in the U.S. and Taiwan; to provide researchers and institutions with opportunities to exchange information, ideas, skills, and techniques; to enhance opportunities to collaborate in solving problems of common interest; and to utilize special facilities available in both countries. Cooperation may be in areas of the natural and social sciences, as well as technology, but may not include the clinical sciences, business administration, or social work.



Currently three types of activities are supported:

- Visiting Scientists: Both short-term (five days to four weeks) and long-term (six months to one year) visits are supported.

- Cooperative Research: Studies related to indigenous features of Taiwan's geography, climate, and socio-economic structure are encouraged; however, cooperative research is open to all fields of science.

- Seminars: These meetings may be on any appropriate scientific subject. They may involve small groups of U.S. and Taiwan scientists meeting in the U.S. or Taiwan for the purpose of exchanging information and ideas.

Deadline:  
March 1, 1985

For Further Information Contact:

National Science Foundation  
Directorate for Scientific  
Technological and International  
Affairs  
Division of International Programs  
Developing Countries Section  
Gordon Hiebert  
Program Manager  
1800 G Street, NW  
Washington, DC 20550  
(202) 357-9537

(From 1984 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

#### American Studies

Schlereth, Thomas J.  
T.J. Schlereth. 1984. Object Knowledge:  
Every Historical Museum Visitor Their  
Own Interpreter. Roundtable Reports  
of The Education Museum Council 9(1):  
5-9.

#### Anthropology

Press, Irwin  
I. Press. 1984. The Predisposition to  
File Claims: The Patient's Perspective.  
Law, Medicine, and Health Care 12:53-62.

#### Core Course

Neiman, Alven M.  
A.M. Neiman. 1984. Augustine's Philosophizing  
Person: The View at Cassiciacum.  
The New Scholasticism. Pages 236-256.  
A.M. Neiman. 1984. Review of M. Apple's,  
Education and Power. The Review of  
Politics. April:313-315.

#### Economics

Hudgins, Linda L.  
L.L. Hudgins and W. Miklius. 1984. Tariff  
Rates as Estimates of Actual Freight  
Charges. The Annals of Regional Science  
18(2):45-51.

#### History

Hatch, Nathan O.  
N.O. Hatch. 1984. Millennialism and  
Popular Religion in the Early Republic.  
Pages 113-130 in, L.I. Sweet, ed., The  
Evangelical Tradition in America.  
Mercer University Press.  
N.O. Hatch, M.A. Noll and G.M. Marsden.  
1983. The Search for Christian America.  
Crossway 1-188.

#### Modern and Classical Languages

Welle, John P.  
J.P. Welle. 1984. Review of A. Zanzotto's,  
Fosfeni. World Literature Today 58(2):  
253-254.

#### Philosophy

Foley, Richard F.  
R.F. Foley. 1984. Epistemic Luck and the  
Purely Epistemic. American Philosophical  
Quarterly 21:113-124.

#### Program of Liberal Studies

Ferguson, Linda C.  
L.C. Ferguson. 1984. Of Idealism, Magic,  
and Success: The Music of Lerner and  
Loewe. South Bend Symphony Orchestra  
Association Program. Pages 15-23.

### COLLEGE OF SCIENCE

#### Biology

Hellenthal, Ronald A.  
R.A. Hellenthal. 1983. Editor. Selected  
Bibliographies on Benthic Biology 1959-  
1981, Volume 1. General Aquatic Ecology,  
Methods, Environmental Requirements and  
Indicators, Toxicology, and Production.  
North American Benthological Society.  
213 pages.  
Tweedell, Kenyon S.  
K.S. Tweedell and J.H. Malin. 1984. Changes in Nucleolar and Ribosomal RNA

of the Frog Kidney after Malignant Transformation by the Lucke Tumor Herpesvirus. Explorations in Cell Biology 52:196-206.

#### Chemistry

Neta, Pedatsur

P. Neta. 1984. One- and Two-Electron Reduction of Aluminum and Tin Pyridylporphyrins. A Kinetic Spectrophotometric Study. Journal of Physical Chemistry 88:1595.

P. Neta. 1984. Redox Reactions of Manganese Porphyrins in Aqueous Solutions. Steady-State and Pulse Radiolysis Spectrophotometric Studies. Journal of Physical Chemistry 88:1575.

Scheidt, W. Robert

W.R. Scheidt and H.M. Goff. 1984. Synthesis, Molecular Structure, and Solution Properties of a Phenolate-Bridged (Tetraarylporphinato) Iron (III) Dimer. Inorganic Chemistry 23:315.

Schuler, Robert H.

\*G.N.R. Tripathi and R.H. Schuler. 1984. Resonance Raman Studies of Pulse Radiolytically Produced p-Aminophenoxy Radical. Journal of Physical Chemistry 88:1706.

-----  
\*Under the Radiation Laboratory  
-----

#### Mathematics

Humphreys, John F.

J.F. Humphreys. 1983. Projective Character Tables for the Finite Simple Groups of Order Less Than One Million. Communications in Algebra 11(7):725-751.

Sommese, Andrew J.

A.J. Sommese. 1984. On the Density of Ratios of Chern Numbers of Algebraic Surfaces. Mathematische Annalen 268:207-221.

#### Physics

Blackstead, Howard A.

S.R. Lee, A.E. Miller and H.A. Blackstead. 1984. Crystallization and Ferromagnetic Resonance Behavior of Evaporated Gd-Fe Alloy Films. Journal of Applied Physics 55(6):1745.

#### COLLEGE OF ENGINEERING

##### Aerospace and Mechanical Engineering

Huang, Nai-Chien

N.C. Huang and P.D. Pattillo. 1984. The Effect of Length: Diameter Ratio on Collapse of Casing. Journal of Pressure Vessel Technology 106(2):160-165.

N.C. Huang. 1984. Fracture of Ice Under Compression with Constant Speed. Pages

1067-1084 in, G.C. Silu, E. Sommer and W. Dahl, eds., Application of Fracture Mechanics to Materials and Structures, Martinus Nyhoff Publisher.

Lloyd, John R.

K. Satoh, J.R. Lloyd and K.T. Yang. 1984. Flow and Temperature Oscillations of Fire in a Cubic Enclosure with Ceiling and Floor Vents. Part 3: Nondimensional Relationship Between Oscillatory Frequency and Heat Source Strength. Report of Fire Research Institute of Japan 57:79-92.

Yang, Kwang-tzu

K. Satoh, J.R. Lloyd and K.T. Yang. 1984. Flow and Temperature Oscillations of Fire in a Cubic Enclosure with Ceiling and Floor Vents. Part 3: Nondimensional Relationship Between Oscillatory Frequency and Heat Source Strength. Report of Fire Research Institute of Japan 57:79-92.

#### Chemical Engineering

Kantor, Jeffrey C.

J.C. Kantor. 1984. A Dynamical Instability of Spark-Ignited Engines. Science 224: 1233-1235.

P.J. Antsaklis and J.C. Kantor. 1984. Sensitivity Analysis for Model Based Control Configurations. Proceedings of the Third American Control Conference, San Diego, California. Pages 1296-1302.

J.M. Fox, W.J. Schmidt and J.C. Kantor. 1984. Comparison Sensitivity and Feedback Control for Optimized Chemical Reactors. Proceedings of the Third American Control Conference, San Diego, California. Pages 1621-1627.

Schmitz, Roger A.

Y. Manor and R.A. Schmitz. 1984. Gradient-less Reactor for Gas-Liquid Reactions. I & EC Fundamentals 23:243-252.

#### Civil Engineering

Bang, Sangchul

S. Bang. 1984. Analysis of Spiling Reinforcement System in Tunneling. Proceedings of the Fourth Australia - New Zealand Conference on Geomechanics. Pages 0000-0000.

S. Bang, Y.S. Kim and C.K. Shen. 1984. Improvement of Oil Storage Tank Foundation by Fabric - Mesh Reinforcement. International Conference on In Situ Soil and Rock Reinforcement. Pages 0000-0000.

Jennings, Aaron A.

A.A. Jennings. 1984. The Impact of Phase Exchange Transfers and Unsteady Hydraulic Conditions on Saltwater Intrusion Fronts. Pages 143-152 in, J.P. Laible, et al., eds., Finite Elements in Water Resources, Proceedings of the 5th International Conference, University of Vermont.

D.J. Kirkner, H.W. Reeves and A.A. Jennings. 1984. Finite Element Analysis of Multi-component Transport Including Precipitation-Dissolution Reactions. Pages 308-318 in, J.P. Laible, et al., eds., Finite Elements in Water Resources, Proceedings

of the 5th International Conference,  
University of Vermont.

Kirkner, David J.

D.J. Kirkner, H.W. Reeves and A.A. Jennings.  
1984. Finite Element Analysis of Multi-  
component Transport Including Precipitation-Dissolution Reactions. Pages 309-318  
in, J.P. Laible, et al., eds., Finite  
Elements in Water Resources, Proceedings  
of the 5th International Conference,  
University of Vermont.

#### Electrical Engineering

Antsaklis, Panagiotis J.

P.J. Antsaklis and J.C. Kantor. 1984.  
Sensitivity Analysis for Model Based  
Control Configurations. Proceedings of  
the Third American Control Conference,  
San Diego, California. Pages 1296-1302.

Liu, Ruey-wen

R.W. Liu. 1984. A Non-Local Sensitivity  
Study of a Piecewise Linear Circuits.  
Proceedings of IEEE International  
Symposium on Circuits and Systems.  
Pages 842-843.

#### Metallurgical Engineering and Materials Science

Ricker, Richard E.

R.E. Ricker and D.J. Duquette. 1983.  
Potentiodynamic Polarization Studies of  
An Al-Mg-Li Alloy. Pages 0000-0000 in,  
T.H. Vanders, Jr. and E.A. Starke, Jr.,  
eds., Aluminum-Lithium Alloys II, Con-  
ference Proceedings of the Metallurgical  
Society of AIME, Monterey, California.

#### LAW SCHOOL

Bauer, Joseph P.

E.W. Kintner and J.P. Bauer. 1984. Anti-  
trust Exemptions for Private Requests  
for Governmental Action: A Critical  
Analysis of the Noerr-Pennington Doctrine.  
University of California Davis Law  
Review 17:549-589.

J.P. Bauer. 1984. A Federal Law of Unfair  
Competition: What Should be the Reach  
of Section 43(a) of the Lanham Act?  
UCLA Law Review 31(4):671-753.

Dutile, Fernand N.

F.N. Dutile and E.M. Gaffney, Jr. 1984.  
State and Campus: State Regulation of  
Religiously Affiliated Higher Education.  
University of Notre Dame Press, Notre  
Dame, Indiana. viii + 502 pp.

Kmiec, Douglas W.

D.W. Kmiec and E.L. Diamond. 1984. New  
Federalism Is Not Enough: The Privatiza-  
tion of Non-Public Goods. Harvard  
Journal of Law & Public Policy 7:1-65.

Ripple, Kenneth F.

K.F. Ripple and J. Oostema, et al. 1984.  
Brief on Behalf of Petitioners. Grand  
Rapids School District v. Ball. Pages  
83-990.

#### RADIATION LABORATORY

Tripathi, G.N.R.

G.N.R. Tripathi and R.H. Schuler. 1984.  
Resonance Raman Studies of Pulse Radio-  
lytically Produced p-Aminophenoxy  
Radical. Journal of Physical Chemistry  
88:1706.

## awards received

IN THE MONTH OF JUNE, 1984

Department or Office	Principal	Short title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Chemistry	Miller	$\beta$ -Lactams and Other Natural Products	Natl. Inst. Health	36,936 12
Civil Eng.	Theis	Reaction Pathways of Sorbed Species	Environ. Prot. Agency	50,000 12
Aerospace Mech. Eng.	Brach, Kamman	Interactive Structural Design Software	Bethlehem Steel Corp.	10,000 9
Chemistry	Miller	Synthesis of Ferrichrome and Related Iron Chelators	Natl. Inst. Health	83,539 12
Biology	Goetz	Histology Chinook Samples	Wisc. Dept. Natl. Resources	9,185 4
Biology	Rai	Genetic Differentiation in the <u>Aedes albopictus</u> Subgroup	Natl. Inst. Health	77,474 12

<u>Department or Office</u>	<u>Principal</u>	<u>Short title</u>	<u>Sponsor</u>	<u>Dollars Months</u>
Chemistry	Castellino, Greenlee	Fibrinogen Platelet Interaction in Thrombus Formation	Amer. Heart Assocn.-Ind.	14,000 12
Chemistry	Castellino, Beals	Phospholipid Requirements in Assembly of the Tenase Complex	Amer. Heart Assocn.-Ind.	6,500 12
Mathematics	Taylor	Algebraic and Geometric Topology	Natl. Sci. Fdn.	87,900 12
Mathematics	Stoll	Theory of Several Complex Variables	Natl. Sci. Fdn.	41,600 12
Chemistry	Thomas, Hashimoto, Kuczynski	Photochemistry in Microemulsion	Natl. Sci. Fdn.	80,000 12
Cent. Study Man	Kerrigan, Leege	Selected Works of Ortega y Gasset	Natl. Endow. Humanities	5,000 14
Biology	Fraser	The Isolation of Host Range and Temperature Resistance Genes	Dept. Agriculture	70,000 24

#### AWARDS FOR FACILITIES AND EQUIPMENT

College Bus. Admin.	Keating, Dunikowski, Hemmeter	AUC Graduate School of Business Consortium	Apple Comp., Inc.	70,000 --
------------------------	----------------------------------	---	----------------------	--------------

#### AWARDS FOR INSTRUCTIONAL PROGRAMS

College Science	Cushing, McMullin	Physics and Philosophy	Lilly Endow., Inc.	5,000 4
Management	Raymond	Jesse H. Jones Professorship in Management	Houston Endow.	100,000 9

#### AWARDS FOR SERVICE PROGRAMS

Inst. Urban Studies	Broden, Outlaw	Job Training Program	St. Jos. Cnty. Job Training Prog.	13,280 4
------------------------	-------------------	----------------------	--------------------------------------	-------------

#### AWARDS FOR OTHER PROGRAMS

Graduate School	Le	MARC Predoctoral Fellowship	Natl. Inst. Health	9,292 12
Snite Museum of Art	Porter	George Rickey Exhibition	Ind. Arts Comm.	7,000 12
School Architecture	Bellalta, Bellalta	Architectural Alterations and Additions to a Centennial Church	St. Stanislaus Cath. Church	1,472 2
College Eng.	Hogan	Whirlpool Corporation/University of Notre Dame Cooperation	Whirlpool Corp.	60,000 12

## proposals submitted

IN THE MONTH OF JUNE, 1984

<u>Department or Office</u>	<u>Principal</u>	<u>Short title</u>	<u>Sponsor</u>	<u>Dollars Months</u>
PROPOSALS FOR RESEARCH				
Earth Sciences	Rigby, Wasowski	Analysis of Cretaceous Mammal Teeth	Natl. Sci. Fdn.	294,210 36
Microbiology	Asano	Cancer and Nitrite	Natl. Inst. Health	92,014 12

Department or Office	Principal	Short title	Sponsor	Dollars Months
Biology	Saz	Anaerobic Energy Metabolism of Invertebrates	Natl. Sci. Fdn.	630,988 36
Biology	Martin	Development of <u>Craspedacusta</u>	Natl. Sci. Fdn.	110,146 27
Philosophy	Manier	Pattern of Growth in Biological Research	Natl. Endow. Humanities	25,000 12
Metallurgical Eng.	Sargent	Paintability of Zinc Coated Cold Rolled Steels	Amer. Iron Steel Inst.	46,163 12
Physics	Kolata	Collaborative Research in Heavy-Ion Physics	Argonne Univ. Trust Fund	25,415 12
Management	Williams, Houck	Catholic Social Teaching	Ind. Comm. Humanities	6,000 --
Physics	Kolata, Garg	Nuclear Structure and Reaction Mechanism Studies	Natl. Sci. Fdn.	471,207 36
Biology	Hellenthal	Environmental Evaluation and Prediction	Environ. Prot. Agency	24,188 12
Civil Eng.	Jennings	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60
Earth Sciences	Rigby	Microvertebrate faunas, New Mexico	Natl. Sci. Fdn.	122,820 24
Earth Sciences	Fairley	Structural Interpretation Derived from Cocorp Traverse in Blue Ridge Province	Natl. Sci. Fdn.	51,359 12
Biology	Duman, Castellino	Hemolymph Proteins and Insect Cold Tolerance	Natl. Sci. Fdn.	332,574 36
Chemistry	Bretthauer	Lung Glycoprotein Synthesis	Natl. Inst. Health	160,344 12
Radiation Lab.	Ebbesen, Schuler	The Role of Charge Transfer States in Cis-Trans Photoisomerization	Natl. Sci. Fdn.	37,919 12
Aerospace Mech. Eng.	Kamman	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 --
Aerospace Mech. Eng.	Cain	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60
Sociology	Christiano	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60
Chemical Eng.	Wolf	Kinetic and FTIR Studies of the Catalytic Gasification of Coal	Gas. Res. Inst.	357,274 36
Chemistry	Castellino, Chibber	Chloride Ions in Retarding Fibrinolysis	Amer. Heart Assocn.	-- 60
Cent. Study Man	Moore	Heroin Use: Community, Network and Treatment	Natl. Inst. Health	96,205 12
English	Brennan	<u>Epitome Troporum ac Schematum:</u> Text, Translation, Commentary	Natl. Endow. Humanities	78,575 9
Prog. Lib. Studies	Nicgorski	The Statesman and His Education: The Moral and Political Philosophy of Cicero	Natl. Endow. Humanities	-- 11
Chemistry	Pasto	Radical Intermediate Reactions of Cobaloxime Complexes	Natl. Inst. Health	85,069 12
Microbiology	Asano	Surface Properties of Malignant Cells	Natl. Inst. Health	102,332 12
Chemical Eng.	McHugh	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60
Chemical Eng.	Ivory	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60
Chemical Eng.	Kantor	Presidential Young Investigator Award	Natl. Sci. Fdn.	500,000 60

Department or Office	Principal	Short title	Sponsor	Dollars Months
PROPOSALS FOR FACILITIES AND EQUIPMENT				
Physics	Poirier	Research in Elementary Particle Physics	Digital Equip. Corp.	48,232 12
PROPOSALS FOR INSTRUCTIONAL PROGRAMS				
Aerospace Mech. Eng.	Brach, Akai	Introduction to Engineering	Corning Glass Works Fdtn.	71,169 9

## summary of awards received and proposals submitted

IN THE MONTH OF JUNE, 1984

### AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	6	379,975	7	192,159	13	572,134
Facilities and Equipment	0	0	1	70,000	1	70,000
Instructional Programs	1	100,000	1	5,000	2	105,000
Service Programs	0	0	1	13,280	1	13,280
Other Programs	0	0	4	77,764	4	77,764
Total	7	479,975	14	358,203	21	838,178

### PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	2	30,188	27	6,619,614	29	6,649,802
Facilities and Equipment	0	0	1	48,232	1	48,232
Instructional Programs	1	71,169	0	0	1	71,169
Service Programs	0	0	0	0	0	0
Other Programs	0	0	0	0	0	0
Total	3	101,357	28	6,667,846	31	6,769,203

## closing dates for selected sponsored programs

Proposals must be submitted to the Office of Research and Sponsored Programs seven calendar days prior to the deadline dates listed below.

Information Circular Number	Agency	Programs	Application Closing Dates
HUMANITIES			
FY84-509	American Council of Learned Societies	Fellowships	October 1, 1984
FY84-510	American Council of Learned Societies	Fellowships for Studies in Modern Society and Values	October 1, 1984

FY84-511	American C	of Learned	Research Fellowships for Recent	October 1, 1984
FY84-507	Societie		Recipients of the Ph.D.	
	National E	ent for the	Planning and Assessment Studies	September 1, 1984
FY84-505	Humanit		Program	
	National I	ent for the	Research Conferences	September 15, 1984
FY84-506	Humanit			
	National L	ent for the	Travel to Conferences	September 15, 1984
FY84-508	Humanities			
FY84-508	National Gallery of Art		Visiting Senior Fellowships	September 21, 1984
FY84-513	Radcliffe College		Radcliffe Research Support Program	September 15, 1984
FY84-515	Wesleyan University		Andrew W. Mellon Postdoctoral Fellowships in the Humanities 1985-86	November 15, 1984

#### FINE AND PERFORMING ARTS

FY84-512	Coos Art Museum		19th November Annual Exhibition of Fine Art	September 20, 1984
FY84-504	National Endowment for the Humanities		Centers for New Music Resources	September 30, 1984
FY84-503	National Endowment for the Humanities		Music Professional Training	September 30, 1984
FY84-508	National Gallery of Art		Visiting Senior Fellowships	September 21, 1984

#### SOCIAL SCIENCES

FY84-480	Alcoholic Beverage Medical Research Foundation		Research Grants	September 1, 1984
FY84-458	National Science Foundation		Unsolicited Research Proposals	September 1, 1984
FY84-486	Scientific Advisory Council to the Distilled Spirits Council of the U.S., Inc.		Grants-in-Aid	August 1, 1984

#### SCIENCE

FY84-484	National Center for Atmospheric Research		NCAR Research Aviation Facility (RAF)	August 13, 1984
FY84-485	National Research Council		NRC Associateship Program	August 15, 1984
FY84-457	National Science Foundation		Arctic Research Program	September 1, 1984
FY84-456	National Science Foundation		Climate Dynamics Program	August 1, 1984
FY84-469	National Science Foundation		U.S.-India Individual Travel Support	September 1, 1984
FY84-466	National Science Foundation		U.S.-United Kingdom Cooperative Science Program	September 1, 1984
FY84-470	National Science Foundation		VLSI (Very Large Scale Integration) Fast Turnaround Fabrication Service for Universities	August 1, 1984

#### ENGINEERING

FY84-472	National Center for Atmospheric Research		NCAR Research Aviation Facility (RAF)	August 13, 1984
----------	--	--	---------------------------------------	-----------------

#### GENERAL

FY84-481	Council for International Exchange of Scholars		Senior Scholar Fulbright Awards for University Teaching and Advanced Research Abroad	September 15, 1984
FY84-482	Hearst Foundations		Grants	October 15, 1984
Y84-483	Japan-United States Friendship Commission		Programs	August 1, 1984
FY84-500	National Endowment for the Arts		Design Exploration/Research Grants	September 20, 1984
FY84-502	National Endowment for the Arts		Small Press Assistance	September 13, 1984
FY84-468	National Science Foundation		U.S.-India Exchange of Scientists	September 15, 1984
FY84-467	National Science Foundation		U.S.-Taiwan Cooperative Science Program	March 1, 1985

---

## **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  
Diann Nelson, Layout  
Publications and Graphic Services  
415 Administration Building  
Notre Dame, Ind. 46556  
(219) 239-5337

---