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### contents

October 13, 1978

#### the university

- Special Notice
- Special Notice United Way Appeal University Speakers Memorial Library Hours Midsemester Vacation
- Art Exhibits
- ROND Luncheon Scheduled

#### faculty notes

- 50 Appointments
- Honors
- Activities

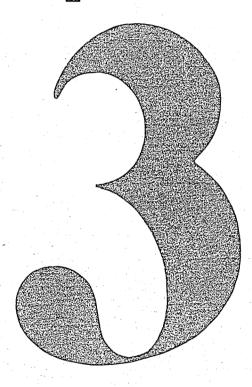
#### office of advanced studies

- 52 Special Notice Notes for Principal Investigators National Science Foundation Fifteen-Page Proposal Limit
- Information Circulars 53 Department of Transporta-tion FY 1979 Program of University Research (No. FY79-39) Office of Education
- Metric Education Program (No. FY79-40)
- National Science Foundation Public Understanding of
- Science (No. FY79-41) Council of Southern University, Inc. The Southern Fellowships Fund Fellowships for Graduate Study--1979-80 (No. FY79-42)

- 55 The Council of Southern Universities, Inc. The Southern Fellowships Fund The Diuguid Fellowships A

- The Diuguid Fellowships A
  Developmental Program for
  Mature Women (No. FY79-43)
  The Newspaper Fund, Inc.
  1979 Minority Internship
  Program (No. FY79-44)
  Danforth Foundation
  Danforth Graduate Fellowships
  (No. FY79-45)
  National Endowment for the
  Humanities NEH Fellowships
  for 1979-80 and 1980-81
  (No. FY79-46) (No. FY79-46)
- Argonne Universities Association AUA Program to Provide Support for Speakers (No. FY79-47)
- Graphic Arts Technical Center Annual Graphic Communications Fellowship Competition
- (No. FY79-48) Law Enforcement Assistance Administration U.S. Depart-ment of Justice National Institute of Law Enforcement and Criminal
  Justice Visiting Fellowship
  Program (No. FY79-49)
  Council for International
  Exchange of Scholars Fulbright
  Opportunities Abroad
- (No. FY79-50)
  Foundations' Fund for Research in Psychiatry Fellowships for Sabbatical Research in Psychiatry and Its Basic Sciences (No. FY79-51)

(continued on back cover)



# the university

## **Special Notice**

The next issue of Notre Dame Report will include the annual update of University committees and the official faculty roster. Deadline for Notre Dame Report #5 is Nov. 6.

# **United Way Appeal**

You will receive or have received your 1978 United Way Pledge Card as of this issue of the Notre Dame Report. To help you in making a decision of how much to give, the average faculty member gift in 1977 was just over \$100 when cash, gifts, pledges and the loose ends were tied into the data. The average for the entire campus, including the staff, students and clergy, was just over \$45.

We hope to increase the participation rate over last year's by ten per cent. Last year less than one out of each two faculty members participated, about the same rate for the staff. The students had a participation rate approaching 80 per cent, and they are trying to better this through their part of this campaign. Please join the responsible members of this community and sign the pledge card or send your check through your college representative or to the Personnel Office. The United Way works only through the efforts of those who participate.

The college representatives are:

College of Arts & Letters Fred Beckman College of Engineering Art Quigley College of Business College of Science Library Freshman Year Law School

Art Quigley Bill Sexton Harvey Bender Ann Kearney Angie Chamblee William McLean

## **University Speakers**

A total of 283 speakers gave talks at Notre Dame during the last academic year, an average of two for each of the 142 scheduled class days for students. One hundred fifty-nine speakers represented other educational institutions: the University of Chicago, 11; Indiana, 10; University of California, 9; University of Illinois, 8, and Purdue, 7. Forty speakers traveled to the campus from foreign countries, and there were 32 representatives of private business and 25 government employees, including senators, congressmen and directors of state and federal bureaus.

## **Memorial Library Hours** Midsemester Vacation

Friday, Oct. 21 and Saturday, Oct. 21 1st and 2nd floors--8.a.m.-5 p.m. 4-13th floors--8 a.m.-10 p.m.

Sunday, Oct. 22 1st and 2nd floors--closed 4-13th floors--1 - 10 p.m.

Monday, Oct. 23 through Saturday, Oct. 28 1st and 2nd floors--8 a.m.-5 p.m. 4-13th floors--8 a.m.- 10 p.m.

Sunday, Oct. 29 Return to regular schedule

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## Art Exhibits

An exhibition of marinescapes by Robert Leader, professor of art, will be shown at the Snite Art Gallery, Oct. 15-Nov. 19. Also, "Contemporary Prints" from the Permanent Collection will be exhibited at the Art Gallery, Oct. 21-Nov. 26.

## **ROND Luncheon Scheduled**

Rep. John Brademas (D-Ind.) will address a luncheon for ROND-Retirees of Notre Dame, at the University Club on Oct. 19 at  $12:15~\rm p.m.$ 

# faculty notes

## **Appointments**

<u>Joseph W. Wall</u>, chief of police at Richton Park, Ill., for the past three years, will assume duties as director of security at Notre Dame Oct. 1, succeeding Arthur N. Pears.

## Honors

Joseph P. Bauer, associate professor of law, was elected to the Board of Directors of the St. Joseph Valley Chapter of the Indiana Civil Liberties Union.

Sr. Elaine DesRosiers, O.P., director of Educational Media, has been elected to the Board of Trustees of St. Catharine College, Springfield, Ken.

<u>Vera B. Profit</u>, assistant professor of modern and classical languages, will have her biography published in the 11th edition of <u>Who's Who of</u> American Women.

Karamjit S. Rai, professor of biology, received a travel award from the Genetics Society of America for attendance at the XIV International Congress of Genetics in Moscow, U.S.S.R., Aug. 21-30.

Kenneth F. Ripple, associate professor of law, was appointed by the Chief Justice of the United States to a four year term as reporter to the Advisory Committee on the Appellate Rules of the Judicial Conference of the United States; was designated "Distinguished Professor" by the Law Class of 1978, and was appointed Chairman of the Federal Bar Association Committee on Amendments to the Uniform Code of Military Justice.

Norlin G. Rueschhoff, associate professor of accountancy, was elected International Accounting Section Treasurer for the American Accounting Association at its annual meeting in Denver in August.

Julian Samora, professor of sociology and anthropology, has been named winner of a 1978 Sydney Spivack Fellowship of the American Sociological Association, recognizing his contribution "to interracial, interethnic and interreligious concerns and, in turn, encourages further work in this area."

Anthony M. Trozzolo, Huisking professor of chemistry, was elected a member of the Selection and Scheduling Committee of the Gordon Research Conferences (GRC).

Penny Van Esterik, assistant professor of sociology and anthropology, has been appointed to the Executive Committee on the Thailand/Laos Cambodia section of the Association for Asian Studies.

Rev. Oliver F. Williams, C.S.C., assistant professor of theology, was elected president of the Association for Professional Education for Ministry at the biennial meeting in Toronto in June.



## **Activities**

<u>Joan Aldous</u>, Kenan professor of sociology, delivered a lecture entitled "Family Careers Over Time" at the formal inaugural ceremonies honoring the holder of the William R. Kenan, Jr. Chair in sociology in the Center for Continuing Education, Sept. 22

<u>Joseph P. Bauer</u>, associate professor of law, worked as a consultant to the Bureau of Competition of the Federal Trade Commission this summer to devise a model for the study of the Commission's merger enforcement activities.

<u>Salvatore J. Bella</u>, Jones professor of management, joined <u>Sr. Elaine</u> <u>DesRosiers</u>, <u>O.P.</u>, director of <u>Educational Media</u>, in making a presentation on the effective use of and preparation of audio visuals for instructional use for the Printing Industries Institute Seminar at the Center for Continuing Education on Sept. 16.

Samir K. Bose, associate professor of physics, gave an invited talk entitled "On the Structure of Multiquark Meson States" to the International Conference on the Application of Group Theory Methods at the University of Texas, Austin, on Sept. 16.

John T. Cacioppo, assistant professor of psychology, along with Charles W. Snyder, assistant professional specialist in psychology, R.E. Petty and L. Quintanar, presented "Changes in Cardiac and Facial EMG Activity During the Forewarning, Anticipation, and Presentation of Proattitudinal, Counterattitudinal, and Neutral Communications," at the meeting of the Society for Psychophysiological Research, Sept. 17 in Madison, Wis. Cacioppo, Snyder, Petty, K. Smith and J. Holbrook also presented "Electroencephalographic Changes During the Forewarning Anticipation, and Presentation of Affect and Nonaffect Laden Communication" at the same meeting.

Robert A. Drevs, instructor in marketing, presented a paper "How to Market Your Company and its Products and Services More Effectively," at the Material Handling Equipment Distributor Association's Young Executive Forum held at the Center for Continuing Education on Sept. 6.

T.P. Fehlner, professor of chemistry, gave an invited talk entitled "Preparation, Characterization and Synthetic Utilization of Ferraboranes" at the XIX International Conference on Coordination Chemistry at Prague, Czechoslovakia on Sept. 5; presented an invited talk entitled "Valence Level Photoelectron Spectroscopy and Chemistry of Ferraboranes Containing One and Two Iron Atoms" at the fall meeting of the Chemical Society at Warwick, England on Sept. 20; and presented research lectures at the University of Basel, Switzerland on Aug. 31, the University of Munich, Germany on Sept. 12, the University of Frankfurt, Germany on Sept. 13, and the University of Durham, England on Sept. 21. A grant was awarded by the National Science Foundation for the partial support of this travel.

<u>Linda C. Ferguson</u>, assistant professor in the General Program of Liberal Studies, directed a seminar, "Contemporary Music: New Noise or Liberal Art?" for the Alumni College offered through Notre Dame's Center for Continuing Education, July 24-27.

Richard J. Hunter, Jr., adjunct instructor in management, received a grant from the Koscuisrko Foundation, Tagellonian University, Knakow, Poland to study Polish-American cultural systems.

Barry Keating, assistant professor of finance, presented a paper "Efficiency and Effectiveness in Social Service Agencies" at the annual meeting of the Association for Social Economics and the American Economic Association held in Chicago on Aug. 29.

Lloyd H. Ketchum, Jr., assistant professor, Robert L. Irvine, associate professor and Thomas L. Theis, assistant professor of civil engineering, each presented a paper collectively entitled, "Rural Wastewater Treatment" at the annual meeting of the Indiana Section of American Society of Civil Engineering on Sept. 8 at Turkey Run State Park, Ind.

Jay A. Labinger, assistant professor of chemistry, gave an invited talk entitled "Hydride Complexes of the Early Transition Metals in CO Reduction" as part of a symposium on "Chemistry of the Early Transition Metals" at the American Chemical Society meeting in Miami Beach, Fla., on Sept. 12.

Richard A. Lamanna, associate professor of sociology and anthropology, chaired a roundtable discussion on "Neighborhood Socioeconomic and Racial Characteristics and Interracial Contact," at the annual meeting of the American Sociological Association in San Francisco, Calif., on Sept. 6.

Albert H. LeMay, assistant professor of modern and classical languages, was invited to teach in the Graduate School of Colgate University for the summer of 1978.

John R. Malone, professor of marketing, conducted two seminars for the Management Development Program of the American Institute of Kitchen Dealers July 16-21, in the Center for Continuing Education entitled "Financial Analysis for AIKD Firms" and "Planning: Key to Successful Small Business Management." Professor Malone also presented a paper entitled "Assessing Area Advertising Potential" at a marketing symposium sponsored by the Notre Dame Outdoor Advertising Foundation held at the Center for Continuing Education, Sept. 17-19.

Thomas J. Mueller, professor of aerospace and mechanical engineering, presented a paper entitled: "Smoke Visualization of Subsonic and Supersonic Flow" at the 25th anniversary meeting of the Supersonic Tunnel Association at the University of Illinois, Urbana, Ill., Sept. 21-22.

Daniel J. Pasto, professor of chemistry, presented a talk entitled "Alternatives to the Concerted  $\pi 2s + \pi 2z$  Cycloaddition and Cyclodimerization of Allenes" before the Organic Division of the American Chemical Society, Miami Beach, Fla., on Sept. 11.



Karamjit S. Rai, professor of biology, presented two papers at the XIV International Congress of Genetics in Moscow, U.S.S.R., Aug. 21-30: "A Novel Control of Chromosomal Expression and Adult Development in Aedes Mosquitoes" and "Differential Staining of Sister Chromatids and Chromosome Mapping in the Mosquito, Aedes aegypti." He delivered a seminar entitled "Chromosomal Differentation and Control of Adult Development in Aedine mosquitoes", at Guru Nanak Dev University, Amritsar, India on Aug. 5, and delivered a seminar entitled "Mosquito Cytogenetics: Past Accomplishments and Future Directions" at Panjab University, Chandigarh, India on Aug. 10.

Bruce I. Rose, assistant professor of mathematics, and John T. Baldwin organized the first meeting of the Midwest Model Theory Seminar at Notre Dame, Sept. 16.

Norlin G. Rueschhoff, associate professor of accountancy, presented a paper entitled "Accountability for Bank Foreign Exchange Dealings" at the annual meeting at the Academy of International Business on Aug. 28.

James R. Stock, assistant professor of marketing, delivered the keynote address, "Why Carriers are Selected by Shippers!! How Shippers Evaluate Carriers!!", to the National Council of Physical Distribution Management, Michigan Roundtable, held in Detroit on Sept. 29, and was an invited participant to the American Academy of Arts and Sciences/Argonne National Laboratory Symposium on "National Energy Issues--How Do We Decide," held Sept. 29-30 in Argonne, Ill.

J.K. Thomas, professor of chemistry, presented an invited talk entitled "Influence of Micellar Systems on Photochemical Reactions" at the American Chemical Society meeting in Miami, Fla., on Sept. 13. He also presented an invited talk entitled "Action of High Energy Radiation on Well Defined Physical Systems" at the joint Italy-U.S.A. Symposium Radiosensitivity in Rome, Italy on Sept. 18

John A. Weber, associate professor of marketing, presented a paper entitled, "Worldwide Evolution of Consumer Spending Patterns," at the annual meeting of the Academy of International Business in Chicago, Aug. 28-30.

Rev. Oliver F. Williams, C.S.C., assistant professor of theology, addressed the biennial meeting of the Association for Professional Education for Ministry on "Creative Programs in Theological Education" in June. He also was a faculty member at the Yale University Institute on Ethical Issues in the Management of Public and Private Institutes in July-August. With John Hauck, professor of management, he gave a series of talks on "Christian Values and the Business World" at the international convention of Serra Clubs in Toronto in June.

# office of advanced studies

## **Special Notice**

The primary purpose of Zahm Research Travel Fund is to enhance scholarly activity at the University of Notre Dame. Specifically, awards from the Fund are to partially subsidize expenses incurred by faculty and students for purposes directly related to their research. Since available funds will be limited, other means of support should also be sought whenever possible. Awardees will be limited to one award per year.

Priority will be given to those worthwhile activities for which there is no other means of support. First priority will be given to research related travel by regular University faculty. Second priority will be given to requests for travel by graduate and undergraduate students. In the present context, graduate students are defined as those admitted to candidacy and undergraduate students are defined as only those with significant involvement in research projects in collaboration with members of the faculty.

#### What Activities May Be Funded

Support may be requested for travel directly related to research and scholarly effort. Such activity would normally include the acquisition of data, analysis of



data, and consulting of resource materials at off campus sites or other institutions. Invited participation in significant symposia that may further the research effort of the participant will also be considered for support. However, participation in annual discipline oriented meetings is to be funded from departmental and/or other travel funds.

#### What to Submit

A short formal proposal (text not in excess of 1,000 words) should be submitted and should contain the following:

- A title page, including an appropriate space for approval and signature by a department chairman
- An introduction explaining the background and overall purpose of the project
- 3. A specific statement on why the travel is desirable
- 4. A simple statement on whether or not travel funds are or may be available from other sources, both external and internal
- Evidence in the form of copies of letters of declination on attempts to seek travel funds from other sources
- 6. A budget for funds requested
- 7. A justification for each item in the budget

#### When to Submit

Proposals will be accepted at any time, but a lead time of two months prior to the date of departure would be desirable.

#### How to Submit

Proposals should be submitted to department chairmen who will forward them via the office of an appropriate dean to the Office of Advanced Studies. Proposals will be judged on an individual basis and funds disbursed until they are exhausted for a given year. The Office of Advanced Studies will publicize awards in the Notre Dame Report.

## **Notes for Principal Investigators**

# National Science Foundation Fifteen-Page Proposal Limit

In response to evidence of increasing proposal writing burdens on principal investigators as well as added pressures on outside proposal reviewers and NSF staff, the National Science Foundation (NSF) has established 15 single-spaced typewritten pages as a normal limit for the project description portion of research proposals.

The change, from the previously permitted unlimited length, was made in view of an increase in length of research proposals sent to NSF over the years. In part, the greater length is felt to be due to competition for funding and the desire to include everything that reviewers might possibly wish to see discussed. Foundation officials expect the requirement to lead to greater brevity and conciseness.

The project description is the main body of a proposal containing a detailed statement of the proposed work, its relation to past and ongoing research and the methodology to be used. It does not include segments such as the principal investigator's publications or curriculum vitae of project personnel. Somewhat greater length may be appropriate for proposals with multiple investigators or for proposals of unusual complexity.

The new policy is effective immediately.

## Information Circulars

# Department of Transportation FY 1979 Program of University Research

Additional information on all circulars listed below may be obtained by calling the following extensions:

Extension 7432, for information on federal government programs.

Extension 7433, for information on private foundations, corporations and state agencies.

#### No. FY79-39

The purpose of the Program of University Research is to assure that resources of the higher education community are effectively brought to bear on transportation problems and, in particular, on those problems related to national transportation policy. The objectives of the Program are:

- \* To conduct high-quality, innovative university research on a few high priority problems of long term interest to the Department.
- \* To complement and support the Department's ongoing research.
- \* To conduct university research which will provide a meaningful contribution to the development of national transportation policy.
- \* To stimulate transportation research in the Nation's minority schools.
- \* To disseminate research findings and results to the appropriate users in the transportation community.
- \* To attract the nation's best young talent into careers in transportation.

In order to accomplish these objectives the thrust of the Program of University Research is to bring the unique capabilities of the university community in both the soft and hard sciences to bear on the specific transportation problems under the mission of the Department of Transportation. While the Program in its present form is devoted entirely to contract research on specific problems, the Department recognizes the pivotal role which the universities potentially can play in education in the transportation field. Thus, although not specifically funded as such, it is expected that education of broad-based professionals as well as skilled specialists will be an important by-product of the Program.

Specific research priorities have been identified for the FY 1979 Annual Solicitation which fall into six problem areas:

1. Control in Transportation Systems

 Maintenance and Rehabilitation of Existing Transportation Infrastructure

3. Technology for Advanced Transportation Systems

4. Transportation and Community Development

Transportation Safety Technology

6. Transportation Planning Methodologies

The deadline for receipt of proposals is December 1, 1978.

#### Office of Education Metric Education Program

No. FY79-40

Applications are invited for new projects under the Education for the Use of the Metric System of Measurement (Metric Education Program)-Special Projects Act.

The purpose of the awards is to encourage educational agencies and institutions to prepare students to use the revised metric system of measurement (as opposed to the customary system used in the United States) with ease and facility as a part of the regular educational program through the development, continuation and expansion of metric education projects.

The objectives of the Metric Education program are as follows:

(1) To increase the number of elementary and secondary school teachers and students (as well as parents and other adults) who are able to use the revised metric system.

(2) To provide for the development or further testing of promising metric education program models which possess potential for responding to the metric

education needs of students.

(3) To increase the number of educational personnel who are qualified to teach the metric system of measurement through preservice and inservice education programs.

(4) To establish or increase interstate and/or interagency cooperation for the purposes of developing

and expanding metric education programs.

(5) To develop and provide technical assistance to enhance and insure the quality of teacher-learner experiences in metric education.

(6) To develop Statewide and multi-State metric educational planning efforts designed to enhance or expand the metric education experience available to teachers, students, parents and other adults.

(7) To support other public and private nonprofit educational agencies, organizations and institutions in their efforts to develop and enhance the quality of metric education for students of all levels.

It is anticipated that approximately \$2,090,000 will be available for fiscal year 1979 which will award 66 to 76 new projects.

The closing date for the transmittal of applications is January 12, 1979.

# National Science Foundation Public Understanding of Science

No. FY79-41

The complexity of modern science and the rapid pace of technological change have significantly altered traditional relationships between the scientific and technological communities and the larger society. Science now pervades many aspects of our lives, and we are called upon more and more often to make judgments on personal and social issues that have important scientific and technological components. These judgments require an understanding of the content, processes and consequences of scientific work. But a widening gap has appeared between the understanding of these matters that is available to specialists and what is known about them by the general public. This gap must be reduced if citizens are to participate effectively in the decisions they are called upon to make.

Accordingly, the Public Understanding of Science (PUOS) program is directed toward two principal goals:

 An increased public understanding of the scientific and technological components of major issues of public policy and personal judgment, and
 An increased public understanding of the methods

 An increased public understanding of the methods and activities of scientists and engineers and their effects upon our lives.

In support of these principal goals the program has several secondary objectives:

- \* To improve the scope, quality and quantity of communication between scientists and nonscientists, and
- \* To facilitate and improve the processes of public communication about science.

In seeking to achieve these objectives, PUOS particularly encourages proposals with the following characteristics:

\* High cost effectiveness

\* Effective communication to a substantial and significant audience

Importance that goes beyond specialized or parochial

interest, either in the scope of the proposal itself or in its potential transferrability and extension to larger purposes

\* Target audiences that are not effectively reached

by existing informal education programs

\* Use of innovative modes of communication

The PUOS Program is addressed to the general public. Its limited funds must be devoted primarily to initiating rather than sustaining activities. Support generally will not be given to projects that involve long-term institutional support, or are addressed to the needs of decisionmakers rather than the general public, or that emphasize communication among scientists themselves. Similarly, the Program does not support projects intended mainly for the construction of facilites or the purchase of equipment.

The public understanding of science requires the balanced consideration of opposing viewpoints on issues of public policy, as well as scientific authority and skill in interpreting them to lay audiences. The program will not support activites intended to support the already-determined policy positions of individuals or organizations, or to promulgate specific dogmas or promote particular technologies.

Since the Program is directed toward informal education, it does not support course and curriculum development or other activities that are part of the formal educational system unless they are incidental to the achievement of other Program goals.

The next closing date for proposals is December 1, 1978.

#### Council of Southern Universities, Inc. The Southern Fellowships Fund Fellowships for Graduate Study—1979-80

#### No. FY 79-42

Purpose:

To promote the development of faculty and administrative staffs for colleges and universities in the United States. Awards will be for (a) pre-doctoral fellowships and (b) for post-doctoral study and research. Primary emphasis is placed on providing black talent.

Eliqibility:

Faculty and graduating seniors who contemplate full-time study and professional careers in predominantly black institutions.

Stipend:

- \* Range from \$2,800 to \$7,500 for twelve months.
- \* Tuition and other instructional fees.

\* Grants for dependents.

Deadline: December 15, 1978

For further information and applications write:
Dr. Samuel M. Nabrit
Executive Director
Southern Fellowships Fund
795 Peachtree Street, NE, Suite 484
Atlanta, Georgia 30308

### The Council of Southern Universities, Inc. The Southern Fellowships Fund The Diuguid Fellowships A Developmental Program for Mature Women



Purpose:

The Diuguid Fellowships are designed for women whose career and professional goals have been deferred because of marriage or other reasons. The fellowships make funds available for one year of intensive retraining or concentrated study on a full-time or parttime basis.

# Eligibility: Women who:

\* Reside in the Southern region of the United States.

\* Are over 21 years old.

\* Have been forced to defer their career goals.

\* Need the financial assistance.

Stipend:

Range from \$3,600 to \$6,000 for twelve months.

Deadline:

December 1, 1978.

For further information and applications write:

Dr. Samuel M. Nabrit Executive Director 795 Peachtree Street, NE, Suite 484 Atlanta, Georgia 30308

### The Newspaper Fund, Inc. 1979 Minority Internship Program

#### No. FY79-44

The Newspaper Fund, Inc., a foundation that encourages young people to consider careers in newspaper work, is offering an internship program intended to attract minority graduate students to newspapers for a summer of work as reporters and editors. The Program will consume the entire summer of 1979, from the end of school in the spring to the start of classes in the fall. Interns are paid regular internship wages by the newspapers hiring them. In addition, a \$1,000 scholarship intended to apply toward the intern's school-related expenses the following year is offered.

Eligibility:

The program is limited to minority graduate students in any discipline--journalism, law, business, etc., and college seniors who plan to enroll in graduate studies the fall following the internship. Minority includes Black, Hispanic, Asian or Pacific Islander and American Indian or Alaskan Native.

Deadline:

December 1, 1978.

For further information and application forms contact the Office of Advanced Studies, Office of Research and Sponsored Programs.

Or write to: The Newspaper Fund P.O. Box 300 Princeton, New Jersey 08540

# Danforth Foundation Danforth Graduate Fellowships

No. FY79-45

Purpose:

Danforth Graduate Fellowships are intended to offer financial support and personal encouragement to selected undergraduate and graduate students of exceptional promise who are committed to careers in college teaching in subject-matter specializations common to the undergraduate liberal arts curriculum.

Requirements:

Persons involved in the processes of selection include Liaison Officers and campus committees in approximately 1200 colleges and universities in the United States, plus faculty and administrators who participate in the selection as Readers, Interviewers and as members of the Advisory Council.

No formula for assigning weights to various areas of concern is used, nor are any "cutoff" limits set for examination scores or grade averages. Final selections are made on the basis of three general criteria, mentioned below, and the way in which these abilities and concerns relate to one another in the person.

- (A) EVIDENCE OF ACADEMIC ACCOMPLISHMENT AND INTELLECTUAL ABILITY. In addition to transcripts showing the range of courses or other academic activity, as well as grades, GRE scores and various quantitative measures of academic accomplishments, the Fellowship committees are interested in manifestation of intellectual ability and potential as may be shown in the applicant's Personal Statement or any other supporting documentation. All of this information is assessed in the context of the applicant's commitment to a career in teaching.
- (B) EVIDENCE OF PERSONAL CHARACTERISTICS WHICH ARE LIKELY TO CONTRIBUTE TO EFFECTIVE TEACHING AND TO CONSTRUCTIVE RELATIONSHIPS WITH STUDENTS AND FUTURE PROFESSIONAL COLLEAGUES. Difficult as it is to define the characteristics which are most likely to make for success as a teacher, the Fellowship committees believe that among those characteristics are curiosity about how people learn, a love of learning, a desire to contribute to others as they learn, a respect for ideas and the community of learning and scholarship, an interest in acquiring the skills that facilitate teaching and learning, and a commitment to improving the settings where teaching and learning take place--whether individual or institutional.

(C) EVIDENCE OF CONCERN FOR THE RELATIONSHIP OF ETH
ICAL AND MORAL VALUES TO SUBJECT-MATTER DISCIPLINES,

THE EDUCATIONAL PROCESSES AND TO THE INSTITUTIONS

OF SOCIETY. The Fellowship committees are interested in appointing as Fellows those persons who are willing to proceed in their study, behavior and the definition of their professional lives from present realities and existing practices to ideals and goals; to the end that the connections between theory and application are made known and the profession of teaching is realized as a life of service.

The Fellowship committees hope to avoid selecting as Fellows those persons who see their future as a teacher and scholar in narrow, rigid, even selfserving terms; who have little or no interest in viewing their lives and the profession of teaching as opportunities for service and as incorporating purposes that go beyond personal gain.

#### For further information contact:

Dr. Thomas Werge Liaison Officer 356 O'Shaughnessy Hall

Before October 27, 1978

### National Endowment for the Humanities NEH Fellowships for 1979-80 and 1980-81

No. FY79-46

NEH Fellowships provide support to scholars, teachers and other interpreters of the humanities to undertake full-time study and research.

NEH Fellowships will be offered in three categories:

NEH Fellowships in Category A are for independent study and research for scholars, teachers and others whose work seems likely to lead to significant contributions to humanistic thought and knowledge. Applications are encouraged from persons with broad interpretive interests as well as from scholars working in specialized fields. June 1, 1979 is the application deadline for the 1980-81 program. Fellowships will not be offered in this category in 1979-80.

NEH Fellowships in Category B are for independent study and research for persons engaged primarily in undergraduate teaching whose work will enhance their abilities as teachers and make important contributions to humanistic thought and knowledge. Faculty members in doctoral degree institutions, if they are predominantly engaged in teaching undergraduate courses, are eligible. The application deadline for the 1979-80 program is October 30, 1978.

NEH Fellowships in Category C provide opportunities to undergraduate college teachers to participate in seminars directed by distinguished scholars at designated universities and to undertake research and study of their own choosing beyond the work of the seminar. Faculty members of departments with doctoral programs are not eligible to apply. November 13, 1978 is the next application deadline, for the 1979-80 program.

### Argonne Universities Association AUA Program to Provide Support for Speakers

#### No. FY79-47

The Argonne Universities Association Board of Trustees has announced a program for 1978-79 which will provide support for visits by the staff of Argonne National Laboratory to universities for the purpose of presenting lectures on energy-related topics. The lectures are primarily intended for undergraduate seminars, beginning graduate student seminars and/or general public lectures. The thrust of the program is to provide information on energy-related matters to nonspecialists; it is not intended to support research seminars and colloquia on specialized topics directed at advanced graduate students and faculty.

#### For further information contact:

Office of Advanced Studies Division of Research and Sponsored Programs

#### Graphic Arts Technical Center Annual Graphic Communications Fellowship Competition

#### No. FY79-48

Purpose:

To promote the progress of science.

Areas of Research and Study:

Mathematics, chemistry, physics, industrial education, engineering and business technology, provided the area of study has potential application in the printing, publishing and packaging industries.

Eligibility:

Students who (1) plan to seek employment at the professional and management or educational level of the graphic communication industries, (2) have demonstrated ability and special aptitude for advanced education in the sciences and education and (3) have been admitted to graduate status.

Awards Will Be Made To:

 College seniors who expect to receive a baccalaureate degree during the 1978-79 academic year and can produce evidence that they are accepted as regular graduate students; or

Študents enrolled in graduate school, provided they have not less than one year of study remaining and are meeting the academic standards of the institution.

Deadline:

February 1, 1979.

#### For guidelines and application forms contact:

Office of Advanced Studies Division of Research and Sponsored Programs Law Enforcement Assistance Administration U.S. Department of Justice National Institute of Law Enforcement and Criminal Justice Visiting Fellowship Program

#### No. FY79-49

The Program:

The Visiting Fellowship Program supports a community of criminal justice scholars at the National Institute offices in Washington, D.C. Fellowship recipients come to the Nation's Capital to work on projects of their own design for periods of 3 to 15 months. In exceptional cases, fellowships are extended to a total period of two years. The emphasis is on independent research on major issues relating to crime prevention and control and the administration of justice.

Eligibility and Selection:

The Visiting Fellowship Program is open to highly qualified persons in the criminal justice professions or the academic community seeking support on projects related to law enforcement and criminal justice.

Each fellow is selected on the basis of past work either in an academic position or a professional career, the significance and conceptualization of the project topic, the quality and feasibility of the research design and the potential impact of the project on the criminal justice system.

Project periods are flexible but should not begin before July 1, 1979.

Applications will be considered in all areas related to crime and criminal justice. However, special consideration will be given to projects which are complementary to the current research priorities of the National Institute, as set forth in the 1979 Program Plan. (Not available as yet).

These priorities include: correlates and determinants of criminal behavior; deterrence; community crime prevention; performance standards and measures; violent crime; career criminal; utilization and deployment of police resources; pre-trial process delay, reduction and consistency; sentencing and rehabilitation. The final list of topics will appear in the 1979 Program Plan

Benefits and Services:

- \* Location: Fellows located at LEAA offices in Washington, D.C. will be provided with offices, furnishings and supplies by the Law Enforcement Assistance Administration. Round trip transportation expenses to Washington are paid by LEAA. Alternatively, Fellows electing to be based outside Washington, D.C. should negotiate an arrangement regarding office space, etc. with the host institution.
- \* Stipend: Annual stipends for Visiting Fellows are determined on an individual basis at the time of award, depending on previous training and experience and such factors as current salary and related consulting income. Annual stipends for Visiting Fellows cannot exceed \$39,600.

- \* Fringe Benefits: LEAA will assume the cost of the employer's contribution to any pension fund and/or medical insurance plan in which the Fellow is enrolled at the time of award and plans to continue during the Fellowship period.
- \* Travel: Travel expenses will be provided for the Fellow and dependents for their relocation to Washington, D.C. The program will also provide for requisite travel in conducting the Fellowship project. However, Fellows may generally not spend more than 20% of their project away from Washington, D.C. on project-related travel.
- \* Supplementary Expenses: Funds will be provided for secretarial and research assistance necessary to complete the Fellow's project. In exceptional cases, funds also will be provided for equipment necessary to conduct the Fellow's project. Supplementary project expenses are limited to a maximum of \$10,000.
- \* Computer Facilities: Fellows will have access to LEAA computer facilities including a limited amount of computer time, the services of computer programmers and a large array of packaged computer programs. Fellows requiring a substantial amount of computer time to conduct their projects should request funds for that purpose in their project budgets.
- \* Research in Local Criminal Justice Agencies: LEAA will make every effort to provide fellows with access to criminal justice agencies in the metropolitan Washington area for research purposes. The numerous facilities in this area have great potential as "laboratories" for Fellowship research.
- \* Deadline: The deadline for the submission of concept papers to the 1979-1980 Visiting Fellowship Program is November 15, 1978 Selections will be made by May 1, 1979.

Application Procedures:
Applicants should send a resume and a 10 to 15 page description of the project to:

Visiting Fellowship Program
National Institute of Law Enforcement and
Criminal Justice
Law Enforcement Assistance Administration
U.S. Department of Justice
Washington, D.C. 20531

The concept paper should include such details as a description of the research topic including the state-of-the-art in the project area, the project's scope, methodology, estimated cost and time necessary to complete the research. The anticipated impact of the proposed research on the criminal justice system and related research efforts in the area should also be described.

# Council for International Exchange of Scholars Fulbright Opportunities Abroad

No. FY79-50

Applications for Fulbright-Hays awards for university teaching and advanced research abroad generally must be submitted by June 1 (Australia, New Zealand and American Republics) or July 1 (Africa, Asia and Europe), 12-18 months in advance of the grant period. Changes in country programs create new openings from time to time and other positions are available for various reasons. The Council for International Exchange of Scholars will accept applications from eligible U.S. scholars for the following awards until an adequate panel of nominees is secured. Unless otherwise stated, openings are for university teaching. Applications should be submitted as soon as possible. Only one application may be submitted, but alternate country interests may be noted.

Basic Eligibility Requirements:

\* U.S. citizenship

\* For lecturing--usually postdoctoral college or university teaching experience - except for awards designated "junior" or for teaching English as a foreign language.

\* For research—a doctoral degree at the time of application or recognized professional standing as demonstrated by faculty rank, publications, compositions, exhibitions, etc.

\* For some awards, foreign language fluency.

For name of program officer to contact and opportunities available -- discipline and country -- contact:

Dr. Paul M. Mellema Extension 7212

Foundations' Fund for Research in Psychiatry Fellowships for Sabbatical Research in Psychiatry and Its Basic Sciences

No. FY79-51

Purpose:

To enable recognized and creative scholars in psychiatry and its basic sciences to take sabbatical leaves in order to further their research and contribute to knowledge in mental disorder with an emphasis on etiology, diagnosis, treatment and prevention. Full time faculty members of universities or equivalent institutes of research with demonstrated research contributions are eligible.

Tenure:

Minimum of nine months and a maximum of one year. This year must be spent away from the home institution anywhere in the world at an internationally recognized institution which provides an optimal environment for the applicant's research.

Stipend:

Amount of award will be determined by the scope of the proposal and resources available to the applicant, particularly from his own institution. In no case will the award exceed half of the applicant's base salary.

Deadline:

Completed applications must be received by May 1 of the year preceding the proposed sabbatical period.

For further information and application forms contact:

The Office of Advanced Studies Division of Research and Sponsored Programs

# **Current Publications** And Other Scholarly Works

ARTS AND LETTERS HUMANISTIC AND SOCIAL STUDIES

#### Economics

Croteau, John T.

J.T. Croteau. 1978. The Farmers' Bank of Rustico: An episode in Acadian history. The Island Magazine of the Heritage Foundation 4:3-9.

#### English

Gernes, Sonia G.

S.G. Gernes. 1978. Plainsong for an ordinary night. Seattle Review 1:42-43.

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#### Modern and <u>Classical Languages</u>

LeMay, Albert H.

A.H. LeMay and T.W. Renaldi. 1977. The friendship between Ramon del Valle-Inclan and Jose Juan Tablada, 1893-1921. The American Hispanist 3:21. Marullo, Thomas G.

T.G. Marullo. 1977. Ivan Bunin's Derevnja: The demythologization of the Russian peasant. The

Russian Language Journal 21(109):79-100.

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#### Psychology

Ryan, Ellen B.

- E.B. Ryan and P.J. Ryan. 1978. Computer simulation of human intelligence and analysis of natural language. Pages 394-402 in, D. Bailey, ed. Computer Science in Social and Behavioral Science Education. Educational Technology Publications, Englewood Cliffs, New Jersey.
- E.B. Ryan, S.R. McNamara and M. Kenney. 1977. Linguistic awareness and reading ability among beginning readers. Journal of Reading Behavior 9(4): 399-400.

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#### Biology

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#### Chemistry

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\*K.C. Wu and A.M. Trozzolo. 1978. Resonance energy transfer between diphenylmethylene and fluorescein at 77 K. Journal of Physical Chemistry 82(16): 1827-1830.

Wu, Kam Chu

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#### \* Under the Radiation Laboratory

#### Mathematics

Huckleberry, Alan T.

B. Gilligan and A.T. Huckleberry. Pseudoconcave homogeneous surfaces. <u>Commentarii Mathematici</u> Helvetici 53:429-438.

Knight, Julia F.

J.F. Knight. 1978. Prime and atomic models. Journal of Symbolic Logic 43(3):385-393.

#### Physics

Bishop, James M.

J.W. Lamsa, W.D. Shephard, J.M. Bishop, N.N. Biswas, N.M. Cason and V.P. Kenney. 1978. Multiparticle rapidity clustering in 200 GeV/c  $\pi^-$ p interactions. Nuclear Physics B135:258-264.

R. Harris, N.N. Biswas, J.M. Bishop, N.M. Cason, V.P. Kenney and W.D. Shephard. 1978. Two-particle correlations involving neutral strange particles.

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R.L. West, E.G. Funk and J.W. Mihelich. 1978. Levels in  $^{154}$ Gd populated by the  $(\alpha, 2n\gamma)$  reaction and the decay of the isomers of  $^{154}$ Tb. <u>Physical</u> Review C18:679-692.

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Ruchti, Randal

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S.B. Martin and A.M. Kanury. 1977. Fire technology. Pages 297-298 in, D.N. Lapedes, ed. McGraw-Hill Encyclopedia of Science and Technology, 4th Edi-

#### BUSINESS ADMINISTRATION

#### Accountancy

Rueschhoff, Norlin G.

N.G. Rueschhoff, A. Enthoven, et. al. 1978. Accounting Education and the Third World. American Accounting Association.  $109\ \mathrm{pp}$ .

#### Finance and Business Economics

Johnson, James M.

J.M. Johnson. 1978. Selecting the optimal mortgage loan using true interest rates. <u>Journal of Consumer Affairs</u> 12(1):140-144.

#### Marketing Management

Weber, John A. J.A. Weber. 1978. Market structure profile analysis and strategic growth opportunities, (Dutch Translation). <u>In</u>, V. Kluwer, ed. Handbook Management Methoden and Technieken. Deventer, Holland.

J.A. Weber. 1978. Market structure profile analysis and strategic growth opportunities, (Spanish Translation). Administracion de Empresas. Arindo, Buenos Aires, Argentina.

#### LAW

Postlewaite, Philip F. P.F. Postlewaite. 1978. Deductibility of expenses for convention and educational seminars, a need for further reform. The Review of Taxation of Individuals 2(3):203-240.

#### MEMORIAL LIBRARY

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# Closing Dates for Selected Sponsored Programs

Proposals must be submitted to the Office of Research and Sponsored Programs seven (7) calendar days prior to the deadline dates listed below.

Agency	Programs	Application Closing Dates
American Association of University	Fellowships for Women	December 15, 1978
Women American Council of Learned Societies American Council of Learned Societies American Lung Association American Political Science Association American Society of Church History Department of Justice	Grants for Research on Chinese Civilization Mellon Fellowships for Chinese Studies Research Congressional Fellowship Program Brewer Prize Competition Visiting Fellowships - National Institute of	December 1, 1978 December 1, 1978 December 1, 1978 December 1, 1978 December 15, 1978 November 15, 1978
Department of Labor Department of Labor Department of Transportation Dumbarton Oaks Center for Byzantine Studies	Law Enforcement CETA Doctoral Dissertation Grants CETA Small-Grant Research Faculty Fellowship Program Visiting Fellowships	December 1, 1978 December 1, 1978 December 15, 1978 December 15, 1978
East-West Center Fogarty International Center Food and Drug Administration German Marshall Fund Health Services Administration	Individual Applications Senior International Fellowships Research Support Fellowship Program Research in Maternal and Child Health and Crippled Children's Services	December 15, 1978 December 1, 1978 November 1, 1978 November 30, 1978 December 1, 1978
Inter-American Foundation International Research and Exchanges Board	Latin American and Caribbean Learning Fellowships Summer Exchange of Language Teachers with the Ministry of Higher and Specialized Secondary Education	December 5, 1978 December 1, 1978
Japan Foundation Muscular Dystrophy Association Muscular Dystrophy Association National Endowment for the Arts National Endowment for the Arts National Endowment for the Humanities National Institute for Occupational	Professional Fellowship Program Grants-In-Aid Postdoctoral Fellowships Media Arts (AFI/NEA Film Archival Program) Media Arts (General Programs) Public Programs Occupational Safety and Health Training	December 1, 1978 November 30, 1978 November 30, 1978 November 15, 1978 December 15, 1978 November 13, 1978 November 1, 1978
Safety and Health National Institute of Mental Health National Institute on Alcohol Abuse	Mental Health Epidemiology Metropolitan Problems Minority Group Mental Health Programs Prevention and Control of Rape Project Grants Research Grants Studies of Crime and Delinquency Research Grants	November 1, 1978 November 1, 1978
and Alcoholism National Institute on Alcohol Abuse and Alcoholism	Training in Prevention and Treatment	November 1, 1978
National Institute on Drug Abuse National Institute on Drug Abuse National Institute on Drug Abuse National Institutes of Health National Research Council National Research Council National Science Foundation National Science Foundation National Science Foundation	Career - Teacher Training Centers Drug Abuse Prevention Education Projects Research on Narcotic Addiction and Drug Abuse Biomedical Publication Grants Biotechnology Resources Medical Library Resources Medical Library Science Research Projects Projects to Support Animal Resources Research Project Grants Graduate Fellowships in the Sciences National Needs Postdoctoral Fellowships Comprehensive Assistance to Undergraduate Science Education Earth Sciences Project Support Engineering Research Initiation Grants	November 1, 1978 November 30, 1978 November 30, 1978 November 7, 1978 November 1, 1978 November 1, 1978 November 1, 1978 November 1, 1978 November 15, 1978
National Science Foundation	International Cooperative Scientific Activities (Israel Bergmann grants)	November 1, 1978

School of Medicine Admissions

Postdoctoral Awards

Uniformed Services University of the

Woods Hole Oceanographic Institution

Health Sciences

November 15, 1978

December 1, 1978

# documentation

# Letter from the President on the Affirmative Action Program

TO: Faculty and Staff of the University of Notre Dame

Since its inception in 1970, our Affirmative Action Program has been of eminent concern to me. As with many other institutions, progress has been less than that desired but greater than that possible without a formal program.

The accompanying statement details the history of our efforts as well as some redirection of our procedures. Its publication affords a timely opportunity to reiterate my own strong belief in the need for affirmative action and in the desirability of a university diversified as a result of that action. Once again, I personally pledge my energies to the task and call upon any of you in a position to do so to work tirelessly toward the realization of affirmative action at this University.

Devotedly in Notre Dame,

Rev. Theodore M. Hesburgh, C.S.C. President

# Statement on the Affirmative Action Program of the University of Notre Dame

The formal affirmative action efforts of the University began in January of 1970 with our first published Equal Employment Opportunity (EEO) Policy. In July of 1971, we submitted our first Affirmative Action Plan to the Department of Health, Education and Welfare. In referring back to that plan, it appears that in the academic sector we were overly ambitious. We determined that by 1976 the faculty of Notre Dame would be composed of 15 per cent women (approximately 100) and ten per cent minority (approximately 75). We appointed two EEO officers at that time and created a small Affirmative Action Committee. In 1973, we expanded the committee to be more broadly representative and charged its members with a revision of the original goals and timetables which were then recognized as unattainable. Tempered by the experience of the first few years, the committee, in concert with deans and department chairmen, adjusted goals for the five academic years from 1974-75 through 1978-79. The 1977-78 goals called for 88 women faculty and 79 minority faculty members. In actuality, this past year, our fall statistics revealed that a total of 85 women (10.7 per cent) and 47 minority (5.9 per cent) were members of our four faculties. Chart I presents the overall picture.

While we have fallen somewhat shy in our quest for women colleagues among our faculty, we are embarrassingly shy in our quest for colleagues from minority groups. Moreover, the overall figures mask an unevenness in the success among the various departments and colleges of the University. We must ask ourselves why we have not been successful in bringing among us more colleagues who will better diversify the University. The answer is complex and the various components of it are interdependent.

As to the availability of potential faculty, the spectrum ranges from a virtually nonexistent availability in some disciplines to a sufficient availability in a few others. Such limits can dictate a demand for exorbitant salaries. Notre Dame has been unwilling to meet those demands of a seller's market, especially when we continue in the struggle to improve salaries for our present faculty.

Another factor lies in the process of the search. Again, evidence suggests both uneven efforts and uneven effects. Some departments with herculean efforts have been thwarted in their search, while others with lesser efforts have been quite successful. Perhaps we still have much to learn about the process of identifying women and minorities who are potential colleagues and of attracting them into our midst.

Over the past several years, the members of the Affirmative Action Committee have spent long hours seeking data from the various departments and analyzing it. Despite the committee's dedication and that of many others, our record gives little reason for satisfaction. The situation is one which must concern the entire Notre Dame community and for which all share responsibility.

The 1974 plan identified numerical goals and timetables not only for faculty but for non-academic staff and graduate students as well. The plans and goals established for the staff were concerned quite specifically with recruitment and promotion of women and minorities. During the five years of its existence, the Affirmative Action Committee has centered its emphasis on the faculty side and thus has been unable to conduct a detailed analysis of efforts relating to the staff. While data from the Personnel Department suggest efforts in that sector have been more successful than in the academic sector, an in-depth study is mandatory.

An obvious component of a university's affirmative action must be an increased number of women and minority members among its advanced degree recipients. While the intent of this effort is long-range, only its eventual success in a number of institutions will effect a large and diversified applicant pool from which universities can draw new faculty.

Each of the three University divisions enrolling graduate students has examined its own attempts to attract women and minorities among its students. Time has not allowed the Affirmative Action Committee to analyze either those efforts or the results among the Graduate School, the Law School, or the MBA Program of the College of Business Administration. Such analysis must be undertaken. Nonetheless, the data presented in Charts II and III reveal that some obvious changes have occurred.

Over the last five years, the total enrollment in the Graduate School has declined. Both the actual number and the percentage of women have steadily increased. An uninterrupted gain in the number of women law students is also perceptible although the total enrollment in the Law School has been held relatively constant. There has been a very slight increase in the numbers of women in the MBA Program.

Since 1974 there has been a less constant, although real, increase in the numbers of ethnic minority students in post baccalaureate programs at Notre Dame. The largest proportion of minority students study in the Graduate School while the most impressive gain occurred in the Law School.

The President's and Provost's Offices have given serious thought to the specifics of improving our Affirmative Action Program and have sought good advice. Our expectations of the Affirmative Action Committee have been unrealistic. A single group has been expected to monitor and facilitate affirmative action in three areas: faculty, staff and graduate students. Despite their commitment, the committee has been involved in the effort only at the review stage. At no central level has there been immediate monitoring of ongoing affirmative action efforts. We need to assign that responsibility and to divide the labor involved so as to extend our capabilities.

The present Affirmative Action Committee and several of the deans have urged employing an affirmative action officer whose responsibility it would be to monitor faculty recruitment. The concept of vesting one person with that responsibility has merit. It seems imperative that such responsibility be assigned to someone with proper authority for its implementation. Rather than fragmenting authority, the stronger and more germane arrangement is to concentrate official responsibility where full authority already lies.

Thus, the provost will become the Affirmative Action Officer for the academic sphere, while the director of personnel assumes that responsibility for the staff. Each bears the burden for continual monitoring of the affirmative action process leading to individual appointment/hiring and promotion, and each will require documentation concerning efforts in that regard. Each will work with those immediately concerned; the provost with deans and department chairmen; the director of personnel with department heads and supervisors. Both are responsible to the President for progress in their own areas.

There still exists the need for an overall and annual review of our corporate efforts. An affirmative action committee is indeed appropriate to that important task. The present committee is a large one composed of both staff and faculty, yet its efforts have long been concentrated on the faculty. They have, as yet, been unable to conduct an evaluative review of those portions of the Affirmative Action Plan concerning staff or graduate students. The present arrangement also necessitates that the academic and staff sectors make judgments in one another's area of competence. By experience, we have come to realize that the committee members' time and talents can be more effectively employed. They have spent considerable efforts in the gathering of pertinent data. Computer capacity for this task is now pending, and other sources for much of the data have been developed.

In application of what experience has taught us, the present committee will be replaced by two smaller committees: an Academic Affirmative Action Committee and a Staff Affirmative Action Committee. The chairman of the former will report directly to the provost. The staff committee chairman will report directly to the director of personnel.

Within the present plan, the 1978-79 academic year is the last for which goals and timetables have been established. Therefore, the immediate task for the two newly established committees is the setting of new goals and timetables. These should be based upon realistic evaluation of the 1974 plan and should be formulated in consultation with those immediately involved. Before finalization, the Academic Affirmative Action Committee should discuss their plans with the provost, academic deans, department chairmen and vice president of advanced studies. The Staff Affirmative Action Committee should formulate its plan in consultation with the director of personnel and the major supervisors. Both committees should evaluate that segment of the 1974 plan which is University-wide. Cooperatively, a new affirmative action plan will be published.

The ongoing assignment for each new committee shall be to conduct an annual review of the affirmative action within its area of responsibility. The Academic Affirmative Action Committee will submit its recommendations and an annual report to the provost. The Staff Affirmative Action Committee will present its recommendations and annual report to the director of personnel. Cooperatively, the two affirmative action officers will arrange for the publication of a single annual report.

Complaint procedures remain as specified in the 1974 plan. Thomas F. Broden retains his presidential appointment as the Equal Employment Opportunity officer for academic personnel and departments. Bro. Kieran Ryan, C.S.C., continues as the EEO Officer for staff personnel and departments.

It is beyond question that because of the demands of today's society, affirmative action legally binds the University as an employer. But our dedication goes beyond the law. At an educational institution, affirmative action is essential for its own sake so as to enrich and diversify its members and its students. The totality of truth is best taught and learned at a University genuinely representing the majority of truth's facets.

## Chart I

### Comparison of Women and Minority Faculty Members

	WOMEN						MINORITY				
	1974-75	1975-76	1976-77	1977-78	1978-79	-1	1974-75	1975-76	1976-77	1977-78	1978-79
Arts and Letters Goal Actual	 28	31 35	36 40	36 41	41 		 18	22 18	29 17	35 13	40 
Business Administra- tion Goal Actual	 2	3 2	3 2	3 1	4		 5	6 6	7 6	7 6	8
Engineering Goal Actual	 2	2 1	4 2	5 1	5 		 6	6 7	8 7	10 5	11 
Science Goal Actual	- <u>-</u> 4	5 6	5 5	9 5	10 		 9	10 7	12 8	12 7	16
Law Goal Actual	 2	3 4	4 2	5 4	6		 2	5 2	5 3	5 3	5
Library Goal Actual	 19	20 14	21 15	22 18	22 		 2	3 2	3 1	4 3	4
Other Goal Other	7	7 6	7 11	8 15	8		- <u>-</u> 6	6 7	6 9	6 10	6
Total Univ. Goal Actual	 64	71 68	80 77	88 85	96		 48	58 49	70 51	79 47	90 

Chart II

#### ENROLLMENT\* OF WOMEN GRADUATE STUDENTS

the state of the s					
	1974-75	1975-76	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>
GRADUATE SCHOOL					
Women Students	341	326	358	368	397
Total Students	1374	1267	1278	1233	1234
% Women	24.8	25.7	28.0	29.8	32.2
LAW SCHOOL					
Women Students	94	117	129	131	150
Total Students	431	467	485	478	488
% Women	21.8	25.0	26.6	29.8	30.7
MBA PROGRAM					
Women Students	25	24	27	38	33
Total Students	183	169	172	194	166
% Women	13.7	14.2	15.7	19.6	19.9
	2.1				

<sup>\*</sup>Official figures of Fall Semester

Chart III

ENROLLMENT*	OF.	ETHNIC	MINORITY	GRADUATE	STUDENTS

	<u> 1974-75</u>	1975-76	1976-77	<u> 1977-78</u>
GRADUATE SCHOOL				
Minority Students	86	67	88	114
Total Students	1374	-1267	1278	1233
% Minority	6.3	5.3	6.9	9.2
LAW SCHOOL				
Minority Students	17	25	42	39
Total Students	431	467	485	478
% Minority	3.9	5.4	8.7	8.2
MBA PROGRAM				
Minority Students	7	5	7	13
Total Students	183	169	172	194
% Minority	3.8	3.0	4.1	5.7
+055:-:-1 5:5 5	17 6			

<sup>\*</sup>Official figures of Fall Semester

# Provost's Address to the New Faculty Friday, August 25, 1978

Welcome to the faculty of the University of Notre Dame. Welcome to the College of Arts and Letters, to the College of Science, to the College of Engineering, to the College of Business Administration, to the Law School, to the Radiation Lab, to Urban Studies, to ROTC, to Pastoral and Social Ministry. Welcome to all 75 of you!

Notre Dame has always been known for its teaching, and for its emphasis on moral and spiritual values as a Catholic university. There is another dimension to a great Catholic university, to any great university, and that is scholarship and research. Active scholars have always been present on our campus. But during the last 30 years, under the initial leadership of Father Hesburgh, and at the insistence of more and more of our faculty, we have made enormous strides in becoming a respected institution of higher learning. We must go one step further. We must distinguish ourselves. That is to say, we must create a university in which scholarship flourishes, is enjoyed, is, so to speak, taken for granted, and is of the highest calibre. And we must do this while allowing our original values to grow. This will be accomplished to a large extent by the quality of our new appointments, hopefully by many of you present today.

These then are our goals. My responsibility now is to translate these goals into more practical terms. In particular, what is expected of our faculty, especially of our new young faculty, for advancement within the University?

The structural procedures are clear. They are specified in the Faculty Handbook. Each department has a Committee on Appointments and Promotions comprised of members of its own faculty. This committee is the first body to consider any appointment or promotion in its department. This is where the grass roots discussions occur. The recommendations of this committee are then considered by the department chairman who then adds his own recommendation to that of the committee. A similar thing happens at the level of the dean of the college. And then again at the level of the provost. The President finally considers all recommendations and makes the decision. Recommendations at each level are independently made, but with full knowledge of all preceding recommendations and all pertinent material. In general, there is no formal mechanism for appealing a decision.

Salaries are handled in a similar way, except for the fact that they are initiated on the level of the chairman of the department. No departmental committees are involved.

So much for structure. But what is expected for promotion and tenure? Three things—excellent teaching; distinguished research; compatibility with the goals of the institution. Not some of the above. All of the above. We expect excellent teaching on the undergraduate level, within the classroom and without. Contributions to teaching on the graduate level, to the supervision of doctoral theses, to work in seminars, in labs, are equally important where the opportunities exist. It is simply impossible to promote a person who is not an accomplished teacher.

Our faculty is expected to do first class research and to publish it. First class by national standards. As judged by their peers within their own departments and at other institutions. The emphasis is on quality, on real creativity, not on quantity alone. Tenure and promotion are not merely rewards for research rendered, but must contain high expectations for continued growth. Honest evaluations from established faculty at other institutions of the significance of a person's research are essential.

So much for the professional.

Notre Dame has always been concerned with moral and spiritual values in the Judeo-Christian tradition, in the Catholic tradition. Notre Dame is ecumenical. Notre Dame is a community in which values are discussed, are debated, are allowed to evolve, and are always treasured.

Finally, I should mention that the University is concerned and must continue to be concerned about the Catholic nature of the institution, about improving the representation of women and minorities at the University. But advancement in rank will be based on teaching, research, character and support of the basic goals of the institutions, without regard to sex, color or religious affiliation.

May we all have a successful year!

Timothy O'Meara

# Minutes of the 182nd Meeting of the Graduate Council April 24, 1978

The chairman, Robert Gordon, called the meeting to order at 3:30 p.m. All Graduate Council members were present except Dean Bernard Waldman, Robert L. Kerby, Frank Bonello and Kenneth M. Sayre (all excused). Nicholas F. Fiore, chairman of metallurgical engineering and materials science, and Raymond M. Brach, division representative on the University Review Committee, attended the meeting at the invitation of the council to participate in the discussion of the review on the graduate program in metallurgical engineering and materials science.

#### I. MINUTES OF THE 181st MEETING

The minutes of the 181st meeting were approved as distributed.

II. FINAL REVIEW REPORT ON THE GRADUATE PROGRAM IN METALLURGICAL ENGINEERING AND MATERIALS SCIENCE

Prof. John W. Lucey, chairman of the University Review Committee, presented a summary of the committee's Final Report (attached). He stressed the issues of faculty replacement, course offerings outside the department, stipend increase, student recruitment and support staff. He concluded that the department had already moved on the implementation of some of the recommendations made by the external reviewers. The overall evaluation of the department could be summed up in the words of one reviewer—that the department was "a small but very high quality department."

The department chairman, Nicholas F. Fiore, was next invited to comment on the Departmental Response. He reported to the council on several changes that had lately taken place in the department. Particularly encouraging were the prospects of faculty recruitment in areas which would enhance the opportunity of increasing the number of courses to be offered jointly with other departments. Incremental stipend funds recently made available by the dean's office had already had an impact on student recruitment. Supportive staff and facilities remained the one area requiring most effort in the total picture of recent positive changes.

Members were invited to ask questions or to comment. Dean Joseph C. Hogan noted that, when alerted by departments, the Dean's Office usually would request the college shops to give special priority to the departmental request to avoid undue delay. In response to questions, Fiore informed the council that there had been a drop in domestic applications this year; that although we should invest more money and effort in student recruitment we should not expect spectacular results from this investment; that we had to compete for students with good institutions outside the region as well as with those in the region; and finally, that our students did not at present come from private business although in the past the local industry had supplied us with a number of parttime students.

Successive motions to accept the University Review Committee's Final Report (Report D) and the Departmental Response to the external reviewers' reports (Report C) were proposed and carried without dissent.

The chairman thanked Fiore and Brach for attending the meeting. Before they took their leave, Fiore told the council that the review had been beneficial to the department and that another review five years from now would be in order.

III. ADMISSION TO THE GRADUATE FACULTY

The respective departments had nominated the following regular faculty members for admission to the Graduate Faculty:

Earth Sciences: Kenneth R. Brehob, assistant professor
Philosophy: Sheilah O'Flynn Brennan, associate professor
Stephen Ellis Gersh, assistant professor

On the recommendation of the chairman, the council unanimously approved these members for admission.

#### IV. ADMISSION TO GRADUATE DEGREE CANDIDACY

The council considered the list of applications as previously distributed and approved it unanimously.

#### V. FOREIGN LANGUAGE REQUIREMENTS (FLR)

After some initial remarks, the chairman introduced the topic of the FLR for discussion. He suggested that the goal of the discussion this time would be to reduce the number of options to the two or three most viable ones—the decision on which option the council would wish to recommend to the chairman would be left to the next meeting.

Members then joined in the discussion and set forth various arguments for and against the language requirements. A number of recommendations were offered, including the following: individual departments could petition the Graduate Council directly for waiver of the requirements; instead of language examinations, students should be required to include foreign reading materials in their research projects; language requirements should be dropped altogether at the master's level.

One member recalled the chairman's earlier suggestion—that the council reduce the number of options to two or three—and recommended that options which were obviously unacceptable to everyone be eliminated. After further discussion, the following options were retained for future consideration:

- Option 4: Retain the present requirements but permit the choice of the language to be made by the department.
- Option 6: Do away with all foreign language requirements at the Graduate School level, leaving all to departmental option.

The chairman called on David C. Leege and William D. Shephard to draft a motion or motions for discussion at the next council meeting.

#### VI. CHAIRMAN'S REMARKS

The chairman reminded the members of the next two meetings on May 16 and 18. He reported briefly on the meeting of the American Council of Learned Societies that he had recently attended in Washington, D.C. He informed the council that Robert Irvine had made some suggestions in regard to the role of internal members in review committees and had wished to have this question discussed at the present meeting. Noting, however, that there were several other aspects in the review program which would also need to be discussed besides the issue raised by Irvine, the chairman thought it would be more profitable if the council considered them all together at a future meeting.

The council adjourned at 5:20 p.m.

Chau T.M. Le, Secretary

# Report D Review of the Graduate Department of Metallurgical Engineering and Materials Science

The External Review Committee, John J. Hren of the University of Florida, Howard K. Birnham of the University of Illinois and Morris Fine of Northwestern University, visited Notre Dame on Oct. 4-6, 1977. During this period they met with faculty, groups of graduate and undergraduate students, and members of the University administration and visited the department's laboratory facilities.

The reviewers' separate reports were in substantial agreement as to the graduate program's merit and areas of potential concern. The departmental response in general accepts the reviewers' judgements and indicates steps already taken or to be taken in light of the review.

Overall the reviewers' appraisal of the department is contained in Fine's evaluation, "a small but very high quality department." Their other comments were with regard to areas which may adversely effect that high quality in the future.

The reviewers' comments and the department's response can be summarized under the four topics of Faculty, Course Offerings, Graduate Students and Administrative Support.

#### Faculty

The department has five full-time faculty. The reviewers consider this the smallest possible size for a viable program and point out that each member must be of high quality, "must carry his/her 'weight'". The most important and immediate area of concern identified was the imminent retirement of Profs. George Kuczynski and Bernard Cullity. Both are recognized as leaders in their field and great care must be exercised in their replacement.

The reviewers recommend that the replacements be tenure track appointments without the constraint of tenure quotas within the department. A further recommendation is that young faculty be brought in to overlap the appointments so that there will be no lack of continuity in the department's research program.

A further recommendation with regard to faculty is the expanded use of visiting faculty and postdoctoral appointments to broaden the teaching and research in the department.

In response the department will increase its efforts to support postdoctoral and research, visiting and adjunct faculty appointments. The department is also seeking approval to begin recruitment of tenure-track faculty to fill the upcoming openings.

#### Course Offerings

The reviewers judged that the department was offering a reasonable range of relevant graduate courses but recommended that the curriculum be further broadened by requiring appropriate out-of-department courses and by offering more courses offered jointly with other departments such as the fracture mechanics course offered jointly by Profs. Charles Allen and Mitchell Jolles of the Aerospace and Mechanical Engineering Department in the fall 1977 semester.

The department agrees with the recommendations and now requires a course in thermal physics, offered in physics. Another source of curricular breadth will be the continued use of adjunct and visiting faculty.

#### Graduate Students

The reviewers noted the department's difficulty in obtaining adequate numbers of high quality graduate students who are U.S. citizens (4 of 9 full-time students in fall 1977 were citizens). They recommended an increase in the graduate student stipend level and a more vigorous effort to recruit good students.

The department's response has been to decrease the number of offers made to prospective graduate students with reallocation of the available funds to provide increased stipends. The department feels that its current recruiting efforts are as much as they are able to do within the constraints of University policy and budget. The Engineering College as a whole is also faced with this problem; but no consensus as to the best procedure for recruiting prospective students has yet evolved.

#### Support Staff

All reviewers noted the need for technical support in the form of electronics and machine shops, probably as a central college facility. This is particularly important given the department's involvement in electron microscopy and X-ray defraction studies.

The department indicates that this question is still under discussion by the College Executive Committee.

#### General Comments

Other areas noted by the reviewers were the extremely high quality of the department's research efforts, both individual and joint, and a perceived need for more effective counseling of part of part-time students.

The department holds that its counseling efforts are consistent for both full and part time students.

#### Summary

In general the review was highly complimentary to the department and its faculty. Concern was expressed for continuity of the teaching and research efforts in the department given the approaching retirements of two of its five faculty. Other areas of concern were the breadth of course offerings available, the quanity and quality of the graduate student population, and the administrative support from the college in the form of central electronic and machine shops.

John Lucey Chairman

Raymond Brach Engineering Division Representative

# Minutes of the 183rd Meeting of the Graduate Council May 16, 1978

The meeting was called to order at 3:30 p.m. All members were present except Dean Leo V. Ryan, C.S.V., who was represented by Yusaku Furuhashi, and William C. Grant (excused). Morris Pollard and Morris Wagner from the Department of Microbiology, and Francis J. Castellino, science division representative on the University Review Committee, attended the meeting at the invitation of the Graduate Council.

#### I. MINUTES OF THE 182nd MEETING

The minutes of the 182nd meeting were approved as circulated except for Section IV. The entire section was removed and replaced by the following: "The Council considered the list of applications as previously distributed and approved it unanimously."

#### II. FINAL REVIEW REPORT ON THE GRADUATE PROGRAM IN MICROBIOLOGY

Following the introductory remarks from Robert Gordon, the council chairman, William D. Shephard, chairman of the University Review Committee, presented the committee's Final Report (Report D). He began by noting that the review had gone smoothly. He then referred the members to the summary part in his committee's report for the major conclusions of the review. According to Shephard, the external reviewers found the department to be a good microbiology department which had overcommitted itself. They thought that the graduate students were, in general, good, but overworked and underpaid, and that they were not given enough teaching experience. The development of a strong undergraduate program may have overshadowed the graduate program. The curriculum lacks depth and the external reviewers attributed this to the small size of the department. The faculty was considered good but, again, "overcommitted." As some retirements occur, the question will be to determine in which areas to recruit new faculty. Some imbalance between teaching and research was noted and the University was urged to provide greater support to the department and more incentives for research to the faculty. Pollard was commended for his success in handling a wide range of administrative responsibilities while remaining productive in research and teaching. However, the external reviewers believed that the situation of the department and LOBUND being placed under the same direction could lead to conflict and should be avoided. They found that there was a shortage of laboratory space and classrooms and that the quality of laboratory instruction could be further affected by inadequate supply budget. Shephard concluded his presentation with the recommendation that the review process itself should be modified in the future to allow for more active participation from the internal members and more time for discussion between the department chairman and the external reviewers.

Francis J. Castellino, who was next invited to speak, wished to re-emphasize some points made by Shephard: the department chairman needs a "wrap-up session" with the external reviewers; the internal members should have a more active role to play in the review process; there is a potential for conflict between the department and LOBUND, but LOBUND makes the department unique and should not be allowed to die; we must have a strong undergraduate program in microbiology, but expansion of both undergraduate and graduate programs without concomitant increase in resources, is difficult.

The council chairman then called on Pollard to comment on the review. Pollard stressed the contribution of LOBUND to the department and the University, and wished to correct the impression that the germ-free program dominated the department. He called the attention of council members to the efforts made by the department in the past in interdepartmental programming, but said that continuation and success of such efforts would be possible only with more positive co-operation from other departments. He reiterated his department's position on the importance of research and publication. He agreed that student stipends were low, that there was a shortage of classrooms and other teaching facilities, and that the department needed greater and more tangible support from the University. He admitted that graduate assistants had not, so far, been sufficiently exposed to teaching, but assured the council that the situation was being remedied. He concurred with both Shepahrd and Castellino on their recommendations regarding the review procedure.

Bernard Waldman briefly reviewed the history of LOBUND and microbiology at Notre Dame, and stressed the University's contribution to the support of LOBUND. Questions were raised as to the influence of LOBUND in the determination of areas for faculty recruitment and, specifically, why the latest recruitment was in the area of virology when, according to the external reviewers, other areas were in greater need of reinforcement. Pollard confirmed that, in that particular case, the needs of the department had dictated the choice.

Separate motions were proposed, and carried unanimously, to accept the University Review Committee's Final Report (Report D) and the Departmental Response (Report C).

In light of the late hour, the council decided to postpone the discussion of the remaining part of the agenda until the next special meeting on Thursday, May 18.

The meeting was adjourned at 5:10 p.m.

Chau T.M. Le Secretary

# Report D Review of the Graduate Program of Microbiology

#### I. INTRODUCTION

The External Review Committee, consisting of Prof. Amadeo Bondi, Hahnemann Medical College; Prof. Norman Durham, Oklahoma State University, and Prof. Sanford S. Elberg, University of California, Berkeley, visited the Notre Dame campus on Nov. 6-8, 1977. During this time they, together with members of the Internal Review Committee including Prof. William D. Shephard (physics), chairman representing the Graduate Council, Prof. Francis J. Castellino (biochemistry), representing the science division, and Prof. Morris Wagner, microbiology liaison, met with various members of the Microbiology Department, graduate students, undergraduates and members of the Notre Dame administration. The reports of the external reviewers were received by early Dec. 1977, and the Departmental Response was received in early March, 1978.

The reports of the external reviewers, while differing in format and details, are in approximate agreement on many points. The Departmental Response consisted primarily of detailed rebuttals of each of the three external reviews. In order to organize this report the internal reviewers have followed, where practical, the outline contained in the material on departmental external reviews which is provided to the reviewers.

The external reviewers all recognized the Notre Dame Department of Microbiology as representing a special situation, with definite strengths and potentials but also with weaknesses which must not be ignored. It is a relatively new department, having developed from the LOBUND Laboratory, a unique germ-free research facility. The department is small, but ambitious. It presents a full program of graduate courses for the Ph.D. and M.S. degrees and an undergraduate major program which was initiated a few years ago. In addition, faculty members participate in teaching a medical microbiology course for the South Bend Center for Medical Education. The department is heavily research oriented with much research closely connected to the program of the LOBUND Laboratory.

The external reviewers see the department as, in the words of Elberg, "a very good microbiology department, capable of being a truly excellent department," but as having "allowed itself to be overcommitted for its size and strengths." All the reviewers see the connection between the department and LOBUND Laboratory as a situation which is very valuable but also puts great demands on the department which can have serious consequences in the future.

In the following sections we discuss details of various facets of the program including PROGRAM, STUDENTS, CURRICULUM, FACULTY, ADMINISTRATIVE ORGANIZATION, LOBUND and RESOURCES. We also discuss recommendations for improving the review process.

#### II. PROGRAM

It is interesting that all three external reviewers perceived the goals of the department as, in Durham's words, "to prepare students for teaching and/or research positions in microbiology with emphasis on germ-free animal research." In contrast, the material provided the reviewers by the department did not specifically mention germ-free research in the general objectives, and the department response stresses the fact that "the great majority of our students and graduates are not involved on germfree animal research." In any case, this general goal, which the department states as "to educate and to train graduate students in advanced studies for careers in teaching, and as independent investigators in microbiology and allied sciences" must be supplemented by a more detailed set of priorities.

LOBUND Laboratory provides a unique facility for research but places great demands on the department which must provide faculty with appropriate skills to maintain the facility. The role of LOBUND vis-à-vis the department is a subject which the external reviewers view as a major importance, requiring careful review. They agree on the value of the facility and, in general, on the importance of preserving it, although there is some question as to the place of germ-free research in the mainstream of modern microbiology. Several of them wonder, however, if the LOBUND program might not become a more separate program and even suggest that leasing the facility to an outside contractor be considered. If LOBUND is to be maintained in its present status, adequate allowance must be made for its needs in allocating resources to the Microbiology Department. The Departmental Response, in contrast, stresses the self-supporting nature of LOBUND, and its importance in providing a special character to microbiology at Notre Dame. A further division between LOBUND and the department is not considered to be acceptable. Clearly more study of this topic by the department and by the Notre Dame administration is needed in the future.

None of the external researchers question the need for a strong graduate program in microbiology at Notre Dame. Durham refers to the discipline as "at the 'cutting edge' of science." They see the Notre Dame program as generally adequate, although lacks in some essential subfields such as microbial genetics and immunology are perceived.

The basic areas of study in the department lie in the areas of bacteriology, virology, immunology, microbial physiology and microbial genetics. Also these disciplines are applied to germ-free animals in research connected with LOBUND Laboratory. Among areas in which more strength is necessary according to the external reviewers are immunology and bacterial genetics. A major difficulty, with no clear solution, is that of maintaining representation in the number of areas regarded as important with a department of the present size.

All reviewers suggested the need for greater interaction between the Microbiology Department and the biology and biochemistry programs at Notre Dame. This interaction is also viewed as a way to overcome some of the problems inherent in a small department. The department response indicates that they believe they have sought such interaction.

The external reviewers did not really address the question as to whether a strong undergraduate program is necessary for success of the graduate program. However, the impact of the undergraduate major program on the department and on the graduate program is of some concern. The program seems to be growing rapidly and puts a severe strain on the facilities, both human and material, that are available. The faculty seems willing and eager to try to meet the demands, but the result may be overcommitted. The department response agrees that the development of a strong undergraduate program initially tended to overshadow the graduate program, but concludes that the undergraduate program is now secure and that strong attention is being returned to the graduate program. Careful attention to this aspect of the program and to the interaction of graduate and undergraduate programs is necessary in the future.

Views vary on the place in the program of the microbiology instruction provided under contract for the South Bend Center for Medical Education. It is seen as a worthwhile service to the community, but again as a drain on the department. Durham recommends that "the administration may wish to review the contract periodically."

The reviewers see discrepancies between administrative expressions of support for excellent research and teaching and the support and incentives provided, especially for research. This obviously makes things difficult for a research-oriented department. Durham comments that "under the circumstances, the department has done exceptionally well." But Bondi lists as a recommendation, "The administration should adopt a definitive plan for the rewarding of faculty for excellence in teaching and/or research."

#### III. STUDENTS

The review team met with students representative of the various stages of graduate education. The external reviewers were generally impressed by the students they met. They did, however, have a number of comments to make. The number of students was regarded as adequate. Indeed, Elberg commented "it may well be that there are too many graduate students per fully effective faculty member." A need for more TAs was seen, however. The external reviewers comment that the proportion of graduate students working in germfree animal research may be excessive. The departmental response disputes this.

The quality of the Ph.D. students was generally regarded as acceptable. Some reservations exist as to the quality of M.S. students. The department is warned against using the non-thesis M.S. option excessively as a haven for students "lingering on campus while seeking admission to a professional school." Elberg specifically warns against encouraging Notre Dame undergraduates to continue here because of current redundancy in the graduate and undergraduate programs.

There is severe criticism of the handling of teaching assistants who, in Elberg's words, "are underpaid, overworked and misplaced in the sense that they do little that could be called teaching." This is a major source of complaint among the students. In some respects, as noted in the Departmental Response, "this matter is beyond our control." The problem with graduate assistant stipends is obviously University-wide. The problem of possible misuse of TAs stems from a shortage of other technical help. In any case, the status of TAs is a major problem for the department in the future.

Graduate student morale was generally acceptable, except for the above problem, although the students might benefit from a greater feeling of security. There was concern by the graduate students about their being closed out of courses because the rolls are filled by undergraduates. The department responds that procedures exist so graduate students can avoid such problems, but that the students do not always avail themselves of these. The students also feel that the department has weaknesses in some areas and that more choice in research areas is desirable.

The performance of graduate students as evidenced by the positions taken by graduates is regarded as rather impressive.

The undergraduate students were described by Bondi as "exceedingly happy and satisfied with their lot." Warnings are given, however, that problems may develop if the number of undergraduate majors continues to increase rapidly.

#### IV. CURRICULUM

The external reviewers agree that the basic course offerings appear quite adequate and demanding and provide a good introduction to the field. They feel, however, that the curriculum suffers from restriction in terms of depth. This problem stems at least partially from the small size of the department. However, Bondi lists "better curriculum planning and course structuring by faculty" as necessary to improve the program from a good one to an outstanding one.

The reviewers mention various specific suggestions for courses which should be represented into the graduate curriculum. These include suggestions for a "truly advanced" virology course, a research course for genetics, a methodology course, etc. Elberg notes, "with such impetus on the department to represent germ-free animal research, it is all the more desirable to insist on a greater degree of breadth in the masters and doctoral programs than is commonly expected via courses in many other departments."

Several reviewers suggested that the department might take better advantage of the resources of allied departments, particularly biology and chemistry. One specific suggestion by Durham was for a biochemistry methods course specifically oriented toward the biological sciences. General and specific comments advocating more interdepartmental cooperation were also made.

All the external reviewers comment on the concentration of thesis research in the germfree animal area. The Departmental Response contradicts this.

Significant difficulties for adequate laboratory course offerings stem from a shortage of adequate classroom and teaching laboratory space. This problem will be discussed further in Section VIII.

#### V. FACULTY

The external reviewers generally had a good impression of the quality of the present faculty. The chairman's reputation receives special praise. The rapport among faculty members was praised as was their willingness and ability to support a high-quality program of teaching and research. However, the department was seen as overcommitted and understaffed. Elberg comments that "it cannot continue to serve all constituencies as it presently attempts to do and still discharge heavy research obligations." Many specific recommendations were made, few of which lie within the power of the department to implement by itself.

Specific areas in need of strengthening were stressed, specifically the need for a full-time faculty member in bacterial genetics and more strength in immunology. The department agrees. The problems of maintaining adequate support for LOBUND in the future as present faculty members with specific non-microbiological skills retire were emphasized. The reviewers saw severe conflicts between the needs of LOBUND and the needs of a general microbiology department. It will be difficult to satisfy both needs unless the department increases in size.

Some imbalances were seen among the teaching and research loads of the various faculty members. The reviewers recommend careful reappraisal and redistribution of workloads and tasks. This, however, cannot solve the basic problem of overcommitment. Elberg comments "Thus one concludes that the faculty is not large enough for the tasks that have been decided it should perform. This should not continue, with such a fine faculty threatened with intellectual and physical exhaustion." Some reviewers comment on a need for better counseling of faculty on priorities. The Departmental Response does not seem to recognize this as a problem.

Most of the faculty are commended for their efforts and success in acquiring research grants and contracts. Durham says "They are to be commended for this dedication especially in a University environment which stresses 'publish or perish' but provides few funds for organized research. Such would appear to be a contradiction in administrative philosophy."

Other comments by reviewers include the advocacy of University summer support for faculty members, and suggestions that greater use might be made of adjunct and joint appointments. We note that Robert Erickson's adjunct appointment has been essential in providing an excellent basic course in microbial genetics, but that it is difficult to satisfy needs for research programs in this manner.

#### VI. ADMINISTRATIVE ORGANIZATIONS

The importance of administrative organization, on both the department level and the University level, to the success of an academic program is undeniable. However, much as a department may try, it cannot prosper without an adequate commitment at the University level. As Durham says, "Excellence as evidenced by regional/national recognition results from planning, financial commitments and administrative endorsement of a program as a priority area. However, even good programs must also have these commitments but to a lesser degree of intensity. Incentive is important to both faculty and students—and such incentives must be readily identifiable and evident."

Many of the problems of the Microbiology Department can only be solved at a higher level. The department has been charged by the administration with extensive tasks, including the operation of both graduate and undergraduate major programs, research and, in effect, the successful maintenance of the LOBUND Laboratory. These tasks cannot be fulfilled without adequate administrative support and commitment. Bondi, for example, was favorably impressed in his contacts with the University administration, but stresses in his summary that greater commitment by the administration is needed to make the microbiology program an outstanding one.

The department chairman receives praise from the reviewers for his productivity in research and teaching and for his success in simultaneously handling a wide range of duties. But Bondi comments that he is spreading himself very thin and might profitably be relieved of some of his administration duties. There are difficulties and conflicts inherent in a situation where the same man serves as chairman of an academic department and head of a research institute, as pointed out by the external reviewers. Pollard does not see this as a problem.

Pollard attempts to operate the department in an open fashion, providing access to relevant information for the faculty. It is not always clear whether he is successful in this. For example, the Departmental Response appears to be the work of the chairman rather than a document in which the input of other faculty members is recognizable.

The external reviewers also comment on the possible advantages for more structured approaches to the guidance and counseling of faculty members and on the need for better communication in both directions between faculty and administrators on academic planning and budget making.

#### VII. LOBUND

Throughout, the reports of the external reviewers and the department run continual references to LOBUND Laboratory, its unique status and national reputation, and the way in which its past and future are intertwined with those of the Notre Dame Microbiology Department. Comments on the relationship are found throughout this report. It is worth pointing out again, however, that LOBUND is both a major and unique resource for the department and a major drain on the resources of the department. addition LOBUND Laboratory is not only a departmental and University resource but a national resource and, as such, its future must be protected. Situations are sure to arise in which there are conflicts between the best interests of LOBUND as a research institute and the development of a good general program in microbiology; an obvious instance is the choice of new faculty members to fill positions left vacant by retirement in future years. The external reviewers make no final recommendations about the proper disposition of LOBUND and its place at the University. They do, however, clearly indicate their concern about this relationship and insist that it must be a subject of ongoing study by the department and by the University administration. Elberg notes that "Indeed, considering the age patterns of the principal LOBUND scientists in the department, a critical time for LOBUND is also approaching." The Departmental Response, however, seems to regard any consideration of a change in the status of LOBUND as unthinkable, stating that "Without the germfree facility, there would be little of unique character in microbiology at Notre Dame." internal reviewers, recognizing both the validity of the comments by the external reviewers and the persuasive arguments of the Departmental Resonse, want to stress the importance of continuing objective study of the status of LOBUND.

#### VIII. RESOURCES

The conclusions of the external reviewers about the financial resources of the department are well summarized by Bondi: "The departmental budget for salaries, teaching supplies and equipment is far from excessive and could be improved. Too many of the staff are being supported essentially from grants. It would appear that some of the overhead coming to the University from grants should be used in support of faculty salaries." The situation in microbiology is similar to that in many other departments in this respect.

An area of immediate concern which affects the quality of the laboratory instruction is that of funds for supplies. Relatively large amounts of expendable materials are needed to teach first-class microbiology laboratory courses. The department budget for this purpose has not kept pace with increasing student numbers or with inflation and is clearly inadequate. This tends to result in a first-come first-served situation where instructors must compete for money for supplies. There is just not enough in the budget to handle the needs. A better allocation system might also be implemented to insure that the available funds are used to accomplish the department's goals and that the fate of a laboratory course is not dependent on the aggressiveness of the instructor in ordering supplies.

The equipment available for research was found to be quite impressive, both in quality and quantity. In many cases, even though it has been purchased with research grant funds, it can be used effectively for instruction as well. However, it was pointed out that the federal source of capital funds tends to be drying up, and that University funds available for replacement of equipment are inadequate. This situation could lead to a severe shortage of up-to-date equipment at some future time unless a more liberal program for replacement is developed.

A major obstacle to the fulfillment by the department of its instructional responsibilities is the extreme inadequacy of the facilities available for this purpose. Durham states, "Research facilities were excellent and certainly would place the department in the upper range of well-equipped departments. Teaching facilities were deplorable both in size, location and numbers." The department's own requests for classroom and laboratory space are discussed in the departmental review report. Something must be done to satisfy their needs!

Another urgent need of the department is for supporting personnel in the areas of media preparation and technical services. Elberg goes so far as to say: "Far more important than addition of new faculty would be addition of full-time technical assistants to prepare the laboratory supplies and maintain equipment, thereby freeing the graduate assistants for teaching and assiting the instructors." University funds are required to hire the needed supporting staff.

The Life-Science Library suffers both from a lack of study space and from an inadequate budget for acquisitions. These problems are liable to become more severe in the future.

#### IX. THE REVIEW PROCESS

In general, the site visit went quite smoothly, although there were a number of ways in which improvement would be possible. Durham makes several suggestions which the Departmental Response reiterates. The internal reviewers agree with these suggestions including suggestions for more interaction between the department chairman and the review team.

In future reviews we specifically suggest full participation by the internal reviewers in all sessions so they are better able to evaluate the resulting reports. During the microbiology review the internal reviewers rearranged their schedules, with the enthusiastic concurrence of the external reviewers, so that at least one of them was present for all the sessions. Further improvement could result if the internal reviewers could schedule total participation for the two days of the site visit. This would require a relatively small additional commitment in most cases--certainly worthwhile in an activity so important for the future of the University. The place of the internal reviewers in the review process is in need of clarification. We feel that they can contribute most effectively by doing more than summarize the opinions of the external reviewers and the department. They can provide a different viewpoint and should be encouraged and given full opportunity to do so.

As Durham states, "Departmental reviews potentially have many advantages and probably the most productive goal is the accomplishment of an objective in-depth self-evaluation by the faculty, students and colleagues." If this goal of the review process is to be achieved, the department must view the external reviewer's reports not as statements which must be answered by rebuttal but as suggestions providing further opportunity for an ongoing evaluation of goals and of relative priorities. We suggest the Department of Microbiology must still examine carefully their options for the future and that they and the University administration must make some definite plans and choices beyond what has yet been done.

#### X. SUMMARY

The Microbiology Department is a small department simultaneously trying to present a full graduate program, an undergraduate major program and special service courses to engage actively in general research, and to cooperate with the LOBUND Laboratory in germ-free animal research. It is seen by external reviewers as good, but overcommitted. Its goals and priorities need continuing evaluation.

The graduate students are generally good, but something must be done to improve the stipend and modify the work load of the TAs. The undergraduate program should not be allowed to restrict the development of the graduate program.

The basic curriculum is adequate but more depth is recommended. The concentration on germ-free animal research is a subject of dicussion.

The faculty is generally good but overcommitted. Vital decisions on the research fields of new department members are imminent. More incentives for quality research are recommended. Imbalances in teaching and research loads must be avoided.

A greater commitment from the University administration is needed to make the program outstanding. The chairman receives praise for handling a wide range of duties but might be better employed in a more specialized role.

LOBUND is a unique resource of great value to the department but it also puts great demands on the department. Continued re-evaluation of the relationship is recommended.

The research equipment and facilities are excellent. The laboratory supply budget is too small. The teaching and instructional laboratory facilities are quite inadequate and must be improved. Support personnel for media preparation are an urgent need.

Suggestions are made for improving the review process.

William D. Shephard Chairman

Francis J. Castellino Science Division Representative

# Minutes of the 184th Meeting of the Graduate Council May 18, 1978

The chairman, Robert Gordon, called the meeting to order at 9 a.m. All members, except William C. Grant, were present. Timothy O'Meara and Francis M. Kobayashi also attended the meeting at the invitation of the Graduate Council. Before taking up the day's business, the council began with the remaining part of the previous meeting's agenda, i.e. admission of new graduate faculty and foreign language requirements.

#### A. ADMISSION OF NEW GRADUATE FACULTY

On the recommendation of the chairman, the council approved the following members for admission to the Graduate Faculty.

Psychology: John T. Cacioppo, assistant professor

Theology:

Norman J. Girardot, assistant professor Rev. Edward J. Kilmartin, S.J., professor Charles Primus, assistant professor

Rev. Robert F. Taft, S.J., associate professor Rev. Oliver F. Williams, C.S.C., assistant professor

#### B. FOREIGN LANGUAGE REQUIREMENTS

The following motion was presented by David C. Leege:

"That the Graduate School shall retain the requirement of reading proficiency in one foreign language for the doctoral degree. The designation of the appropriate language for each candidate is at the option of each department. The Graduate School shall not retain the requirement of one foreign language for the research master's degree, but shall place this decision at each department's option."

William D. Shephard proposed the following amendment for insertion between sentences 2 and 3 of the above motion:

"A department may petition the Graduate Council for the waiver of this requirement for its doctoral students."

Following the motion and amendment, the meeting was open for discussion. Various members spoke in turns in favor of, or against, foreign language requirements. The arguments in favor of the requirements may be summarized as follows: a general and uniform standard must be observed for the Ph.D. degree since the University awards a "Ph.D. degree", rather than a "Ph.D. degree in physics" or a "Ph.D. degree in history"; language learning will give our students self confidence when they face foreign language materials; thought process cannot be separated from the language employed and one must know the language to appreciate this; a Ph.D. must be equipped for his professional life and not simply for the needs of the market at the present; although the materials he needs may be available in English now, the situation may change in the future; the removal of these requirements would mean an erosion. The arguments against the requirements include the following: few institutions with good graduate programs retain these requirements; foreign language skill is unnecessary in a number of disciplines; time spent on language learning could be better invested in other studies more relevant

to the student's program; these requirements and language examinations as they are now set up do not accomplish any useful purpose. One member suggested a compromise to the Shephard amendment, namely that a waiver be granted a department for a limited period of time subject to review by the Graduate Council. Another member wondered why foreign language competency could not be required at the time of admission, thus allowing our graduate students to concentrate on their programs following admission. Finally members were reminded that a waiver of the requirements could be granted in some special cases.

The proposed amendment was then put to a hand vote and was defeated by 15 to 5. The Leege motion was voted on and carried by 16 to 4. Following the voting, several members recommended that foreign language requirements be made more meaningful in the future. Some suggested the use of foreign language materials in graduate seminars.

The business of the previous meeting being completed, the chairman called for a recess at  $10:15 \, \text{a.m.}$ 

#### C. GRADUATE EDUCATION AND RESEARCH IN THE UNIVERSITY

The meeting was resumed at 10:30 a.m. The chairman introduced the topic of Graduate Education and Research (GE&R) in the University and explained the rating sheet which was being distributed to the members. He recommended that the issues be discussed in the order as listed in the document entitled "Graduate Education and Research in the University/Discussion Topics Compiled from Graduate Council Members' Suggestions."

Following is a summary of the discussion.

#### I. Attitude of the University Toward GE&R

There is no Trustees' Committee on GE&R. The present Trustees' Academic and Faculty Affairs Committee deals predominantly with faculty matters. While there was general agreement on the need to bring academic matters, and graduate education and research in particular, to the attention of the trustees, the council was divided on the question whether there would be a new Trustees' Committee to deal primarily with academic matters. Timothy O'Meara stressed the importance for Notre Dame to have a strong undergraduate program and a strong faculty excelling both in teaching and in research. Other issues related to this first topic were discussed, including the following: GE&R in the COUP Report and the Campaign for Notre Dame; college councils and GE&R.

#### II. The Graduate School in the University Structure

Questions were raised concerning interactions between the Office of Advanced Studies (OAS) and the Office of the Provost and those of the college deans. It was noted that a close working relationship exists between OAS and the several offices. The vice president participates in all regular meetings of the deans called by the provost. Communication with the deans is good. On matters of departmental budgetary allocations, there is no direct interaction between the Office of the Provost and OAS in the actual budgetary process, although general thrusts to be made in the University or in one or more colleges are discussed in depth. In matters of recruitment of faculty, OAS has more interaction with chairmen of departments than with deans. Some deans implement the provision that the vice president is to be consulted in the recruitment of chairmen; other deans do not.

(Lunch break between 12:30 and 1:45 p.m.)

#### III. Policies, Regulations and Practices Governing GE&R

The discussion focused on impediments to excellence in research and graduate study. The biggest single factor is excessive teaching loads. Reference was made to the provost's statement of policy with respect to teaching loads (see NDR, 1971-72, No. 11, pp. 179-180). In principle, allowance must be made in the teaching load (as determined by considering the number of preparations, the number of students and the number of clock hours) for teachers who are also active researchers, and their loads should be reduced. However, it was noted that in some departments the faculty members are already so burdened with teaching that there is no flexibility with which one might implement the goals, however desirable.

Requirements for the doctorate, particularly the 72 credit hour residency requirement, were discussed. It was noted that the 72 credit hours was the specific hour equivalent of the general statement, to which all subscribe, that the doctorate requires at least three years of full-time work beyond the baccalaureate. Further, for some members of the council, it was made clear that this did not mean 72 classroom hours. Many doctoral programs require 48 classroom hours, with the remainder spent in research and seminars. The exact distribution of the total required hours is a matter that each program faculty must consider. There was general agreement for the retention of the requirement, and it was not viewed as a factor influencing the quality of programs.

The restriction on credit hour enrollment for graduate assistants (9 credits per semester) was viewed as too limiting, especially in engineering. The chairman noted that a provision to permit GAs to receive additional credits for supervised teaching experience and/or seminars focused on teaching and higher education had been made. He observed that a similar provision probably ought to be made for research assistants.

#### IV. University Support to GE&R

For later discussion.

#### V. The Graduate Program

The problem of how to provide a "specialized" research-oriented doctorate while at the same time addressing the student's need to be adaptable in a changing market place was explored in some depth. One possible approach, that of providing a "narrow focus" in research and specialized seminars, laid on a broad base of formal course work, received the most attention. With increasing restriction on resources, emphasis was also given to the use of minors and course work in cognate programs offered in other departments, and also through increased use of 400-level courses.

Program reviews to date have not focused sufficiently on the quality of specific curricula. Rather, quality has been inferred by sampling a number of other matters and the general environment for the program. Additional data will be needed in future evaluations, including feedback from alumni and examination of dissertations produced.

Other programmatic aspects were considered: specific demand for undergraduate versus graduate courses; control of course proliferation; department review of courses "on the books but not taught", etc.

#### VI. The Graduate Faculty

The council was divided on the need to develop clear-cut guidelines for tenure and promotion. On the one hand, there seemed to be some confusion among new faculty members as to what it would take to get tenure and/or promotion. On the other hand, there was some concern that written guidelines could be taken too literally.

One member warned against "incestuous" publications, or the temptation to go to campus publications instead of trying to get into more competitive, and also more visible, national publications. Another member, however, aruged that the University of Notre Dame Press, for instance, used a panel of national referees, and one would gain as much recognition through publishing one's work there as elsewhere.

The next issue raised was how to attract and reward the faculty. One member pointed out that in one college leaves had been granted as much as the budget would permit. He cited the case of one department where two out of five faculty members had been granted leaves. The problem, however, was to attract good people to a new program where they would have to start from scratch, while they could join a well established program elsewhere. Departments could rely on the resources offered by the institutes and research laboratories on campus to attract senior faculty members, but in some cases an institute or a research laboratory could dominate the department instead of contributing to it.

#### VII. The Graduate Student

The chairman reminded the members that the University had decided graduate students as well as other advanced students and undergraduate students should come under the supervision of the Office of Student Affairs. However, <u>du Lac</u> is more oriented toward undergraduates.

Members suggested various ways to improve the recruitment of students, e.g. use of students as recruiters, campus visits, etc. But there was agreement that the most important factor in recruitment was the reputation of the department.

An increase in part-time enrollment, it was recognized, would add cash flow at no additional cost to the University. But the pool of available part-time applicants in the local community could be easily depleted, as had been demonstrated in several departments in the past.

The level of foreign student enrollment aroused some concern in a number of departments. In 1977-78, there was two per cent of foreign students in the humanities, ten per cent in the social sciences, 20 per cent in sciences and 38 per cent in engineering. The percentage of foreign students in the Graduate School was 13 per cent. One member noted that the percentage of foreign students in engineering would be higher than 30 per cent if we considered full-time students only.

#### VIII. Other Issues

The question of admission to the graduate faculty was raised. One member asked whether admission should be made more stringent. Another member stressed the importance of performance following admission and suggested that the council consider the possibility of making term appointments instead of the present practice of indefinite appointments. Another alternative would be to create a new category of associate membership for faculty who could serve on students' committees, but could not act as principal advisors.

Incentives to research were the next item for discussion. One member suggested that the return of indirect costs, in full or in part, to the department would be a strong incentive to research. Another incentive recommended was teaching load differential. Members were, again, referred to the University position on this issue in NDR, 1971-72, No. 11, pp. 179-80. Some concern was expressed about the lack of research experience among teaching assistants in some departments, for instance in the social sciences. On the other hand, this did not appear to be a problem in the science departments.

At 5:10 p.m. the council decided to adjourn the meeting. After one full day of meeting, the general feeling was that, although many issues related to graduate education and research had been discussed, there were still many more issues of importance remaining on the agenda that the council would like to examine. The chairman thanked all the members and guests for their contributions to the discussion. He asked them to keep the rating sheets, and to fill them out at leisure and return them to the Office of Advanced Studies at a later date.

Chau T.M. Le Secretary



# ND-SMC Fall 1978 Final Examination Schedule

- I. LAST CLASS DAY--is Wednesday, Dec. 13, 1978. Examinations begin at 8 a.m. Friday, Dec. 15, 1978 and continue through 12:30 p.m. Thursday, Dec. 21, 1978. (Thursday, Dec. 14 is a study day and no examinations may be scheduled.) No examinations are to be scheduled on Sunday, Dec. 17.
- II. REGULATIONS FOR FINAL EXAMINATIONS--Two-hour final examinations must be given on the assigned examination dates for undergraduate courses. Changes in the hour, date or place of an examination as assigned by the Office of the Registrar are not permitted. Unless a course is designated as a departmental, the examination in each section of the class must be given at the hour designated. (See V below.)
- III. JANUARY GRADUATES--If a graduating student has a "B" average or better in the class, that student may be exempt from the final examination at the discretion of the instructor. Names of eligible students will be provided to the faculty on the semester grade lists.
- IV. DEPARTMENTAL EXAMINATIONS AND FRESHMAN EXAMINATIONS—All freshmen courses are examined at a departmental time increment. The authorized departmental examinations are:

DEPARTMENT & COURSE NUMBER	EXAMINATION TIME	DATE OF EXAMINATION
ACCT 221 ANTH 109 ARCH 144	7:30 - 9:30 p.m. 1:45 - 3:45 p.m. 8:00 -10:00 a.m.	Wednesday, Dec. 20 Saturday, Dec. 16 Wednesday, Dec. 20
ART 151 BA 234 BA 340	1:45 - 3:45 p.m. 7:30 - 9:30 p.m. 1:45 - 3:45 p.m.	Saturday, Dec. 16 Friday, Dec. 15 Wednesday, Dec. 20
BIOL 101 BIOL 103	1:45 - 3:45 p.m. 8:00 -10:00 a.m.	Tuesday, Dec. 19 Friday, Dec. 15
CHEG 240 CHEG 353	4:15 - 6:15 p.m. 8:00 -10:00 a.m.	Monday, Dec. 18 Saturday, Dec. 16
	7:30 - 9:30 p.m. 1:45 - 3:45 p.m.	Wednesday, Dec. 20 Tuesday, Dec. 19
CHEM 115L CHEM 223	4:15 - 6:15 p.m. 7:30 - 9:30 p.m.	Saturday, Dec. 16 Wednesday, Dec. 20
CHEM 223L EASC 101, 111, 121	7:30 - 9:30 p.m. 1:45 - 3:45 p.m.	Tuesday, Dec. 19 Tuesday, Dec. 19
EASC 141L	1:45 - 3:45 p.m. 4:15 - 6:15 p.m.	Monday, Dec. 18 Tuesday, Dec. 19
ECON 121 ECON 223	8:00 -10:00 a.m. 7:30 - 9:30 p.m.	Tuesday, Dec. 19 Monday, Dec. 18
EG 121	7:30 - 9:30 p.m. 8:00 -10:00 a.m.	Monday, Dec. 18 Friday, Dec. 15
EG 226	8:00 -10:00 a.m. 1:45 - 3:45 p.m.	Thursday, Dec. 21 Monday, Dec. 18
EG 328 10:30	7:30 - 9:30 p.m. 7:a.m12:30 p.m.	Friday, Dec. 15 Thursday, Dec. 21
ENGL 109	1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 8:00 -10:00 a.m.	Saturday, Dec. 16 Wednesday, Dec. 20
FIN 360	1.45 - 3.45  n m	Wednesday, Dec. 20 Saturday, Dec. 16
FS 180	1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 0 a.m12:30 p.m.	Tuesday, Dec. 19 Wednesday, Dec. 20 Friday, Dec. 15
GP 191 10:30	a.m12:30 p.m. 8:00 -10:00 a.m.	Monday, Dec. 18 Wednesday, Dec. 20
HIST 112	4:15 - 6:15 p.m. 8:00 -10:00 a.m.	Monday, Dec. 18 Saturday, Dec. 16
HIST 115	1.45 - 3.45 n m	Saturday Dec 16
MARK 231 MARK 374	7:30 - 9:30 p.m. 1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 1:45 - 3:45 p.m.	Saturday, Dec. 16 Monday, Dec. 18
MATH 100 Level MATH 225	1:45 - 3:45 p.m. 7:30 - 9:30 p.m.	Friday, Dec. 15 Saturday, Dec. 16

DEPARTMENT & COURSE NUMBER	EXAMINATION TIME	DATE OF EXAMINATION
MGT 461, 463 MLFR 203AF, 241	7:30 - 9:30 p.m. 7:30 - 9:30 p.m. 1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 1:45 - 3:45 p.m.	Tuesday, Dec. 19 Tuesday, Dec. 19 Friday, Dec. 15 Monday, Dec. 18 Monday, Dec. 18
Modern and Classical Languages		
100 Series	1:45 - 3:45 p.m.	Monday, Dec. 18
100 Series PHIL 101	4:15 - 6:15 p.m.	Friday, Dec. 15
PHIS III	1.40 - 3.40 0.111.	Tuesday, pec, 19
PHYS 127	8:00 -10:00 a.m.	Thursday, Dec. 21
PHYS 201	1:45 - 3:45 p.m.	Tuesday, Dec. 19
PHYS 210	1:45 - 3:45 p.m. 1:45 - 3:45 p.m. 4:15 - 6:15 p.m.	Wednesday, Dec. 20
PHYS 210 PHYS 221 PSY 111	1:45 - 3:45 p.m.	Wednesday, Dec. 20
PSY 111	4:15 - 6:15 p.m.	Tuesday, Dec. 19
ROTC 10:	30 a.m12:30 p.m.	Wednesday, Dec. 20
ROTC 10: SOC 100 Level	1:45 - 3:45 p.m.	Saturday, Dec. 16
THEO TOO Selles	8:00 -10:00 d.III.	Monday, Dec. 18
UNSC 101, 111	1:45 - 3:45 p.m.	Tuesday, Dec. 19

V. NON-DEPARTMENTAL CLASS EXAMINATIONS-- Class examinations meet in the same classroom used during the semester at the following time increments. Please note the
exact starting time for each examination since these hours differ from the starting
hours of the classes. Seventy-five or 90 minute classes are to be examined at
the time which corresponds to the starting time of a 50-minute class held at the
same hour, i.e. 9TT11 will be examined at the same time as 9TTF, etc.

CLASSES MEETING AT:	WILL BE EXAMINED AT: DATE	CLASSES MEETING AT:	WILL BE EXAMINED AT:	DATE
8:00 a.m. MON* 9:05 a.m. MON 10:10 a.m. MON 11:15 a.m. MON	8:00 a.m. THURS DEC.21 8:00 a.m. FRI DEC.15 8:00 a.m. SAT DEC.16 8:00 a.m. WED DEC 20	8:00 a.m. TUES** 9:05 a.m. TUES 10:10 a.m. TUES 11:15 a.m. TUES	10:30 a.m.THURS 10:30 a.m.FRI 10:30 a.m.SAT 10:30 a.m.SAT	DEC.21 (SMC) DEC.15 DEC.16 DEC.16
12:00 p.m. MON 1:15 p.m. MON 2:20 p.m. MON 3:25 p.m. MON 4:30 p.m. MON 5:35 p.m. MON	8:00 a.m. TUES DEC.19 4:15 p.m. SAT DEC.16 4:15 p.m. MON DEC.18 4:15 p.m. TUES DEC.19 4:15 p.m. FRI DEC.15 4:15 p.m. WED DEC.20	1:15 p.m. TUES 2:20 p.m. TUES 3:25 p.m. TUES 4:30 p.m. TUES	10:30 a.m.MON 10:30 a.m.TUES 8:00 a.m.MON 10:30 a.m.WED	DEC.18 DEC.19 DEC.18 DEC.20

<sup>\*</sup> Monday--Includes classes which meet for the first or only time each week on either MON, WED. or FRI.



85



<sup>\*\*</sup>Tuesday--Includes classes which meet for the first time each week on either TUES. or THURS.

# ND-SMC Fall 1978 Final Examination Schedule

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	FRIDAY Dec. 15	SATURDAY Dec. 16	MONDAY Dec. 18	TUESDAY Dec. 19	WEDNESDAY Dec. 20	THURSDAY Dec. 21
8:00 a.m. to 10:00 a.m.	9MWF BIOL 103 9MW11 EG 121 9M 9W 9F	10MWF HIST 113 10MW12 CHEG 353 10M 10W 10F	3TU 3TH THEO 100 Level SMC: BuEc 231 Soc 153: 61 & 65 EnLt 457 Soc 203	12MWF 12M 12W 12F ECON 121	11MWF 11M 11W 11F HIST 111 ARCH 144 ENGL 113	8MWF 8M 8W 8F PHYS 127 EG 126
10:30 a.m. to 12:30 p.m.	9TT11 9TU 9TH GOVT 141	10TT12 10TU 10TH 11TU 11TH	1TT3 1TU 1TH GP 191	2TT4 2TU 2TH	4TT6 4TU 4TH ROTC SMC: Govt 151,152 EnLt 407	EG 328 SMC: 8TT10 8TU 8TH
1:45 p.m. to 3:45 p.m.	MATH 100 Level MGT 461, 463 SMC: Hist 101: 61 & 63 Hist 201: 63 & 64 HuSt 323	ANTH 109 ART 151 HIST 115 SOC 100 Level PHYS 141 EG 334 FIN 360 SMC: EnLt 100, 101 EnLt 103: 62,63, 64,65,67,68	MODL 100 Level MLFR 203AF, 241 MLSP 241 EASC 141 EG 226 MARK 374  SMC: MIFr 101 MIFr 111: 64, 65 EnWr 315, 316 MIIt 101	BIOL 101 CHEM 115 EASC 101, 111, 121 PHYS 111, 201 UNSC 101, 111 FIN 372 SMC: Bio 103 HuSt 463	FS 180 ENGL 109 HUM 185 PHYS 221 BA 340 SMC: Math 102, 104, 105, 114, 115	
4:15 p.m. to 6:15 p.m.	4 MWF SMC: 4MW6 HuSt 300 4M Phil 300 4W Phil 110 4F Phil 114 Phil Phil 118 101	1MWF 1MW3 1M 1W 1F CHEM 115L	2MWF 2MW4 2M 2W 2F HIST 112 CHEG 240	3MWF 3M 3W 3F PSY 111 EASC 141L	5MWF 5M 5W 5F PHYS 210 SMC: Art 141	
7:30 p.m. to 9:30 p.m.	EG 236 BA 234 SMC: BUEC 201 Educ 301	MATH 225 MARK 231 SMC: BUEC 251 Wurs 201	EG 120,321 ECON 223 SMC: BuEc 252 Chem 155, 211 RISt 226	MET 225 MGT 231 CHEM 223L SMC: BUEC 312 RISt 251	CHEG 443 ACCT 221 CHEM 223 SMC: BuEc 221	

## contents (continued)

- 59 Current Publications And Other Scholarly Works
- 61 Closing Dates for Selected Sponsored Programs

#### documentation

- 63 Letter from the President on the Affirmative Action Program
- 63 Statement on the Affirmative Action Program of the University of Notre Dame
- 68 Provost's Address to the New Faculty Friday, August 25, 1978 69 Minutes of the 182nd Meeting
- 69 Minutes of the 182nd Meeting of the Graduate Council April 24, 1978
- 71 Report D
  Review of the Graduate
  Department of Metallurgical
  Engineering and Materials
  Science
- 73 Minutes of the 183rd Meeting of the Graduate Council May 16, 1978
- 74 Report D
  Review of the Graduate
  Program of Microbiology
- Program of Microbiology 80 Minutes of the 184th Meeting of the Graduate Council May 18, 1978
- Council May 18, 1978 84 ND-SMC Fall 1978 Final Examination Schedule
- 86 ND-SMC Fall 1978 Final Examination Schedule

## 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 30 cents each. Mail subscriptions are \$6 per year. Back copies are available through the mail at 50 cents each.

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