

'76-'77

notre dame report

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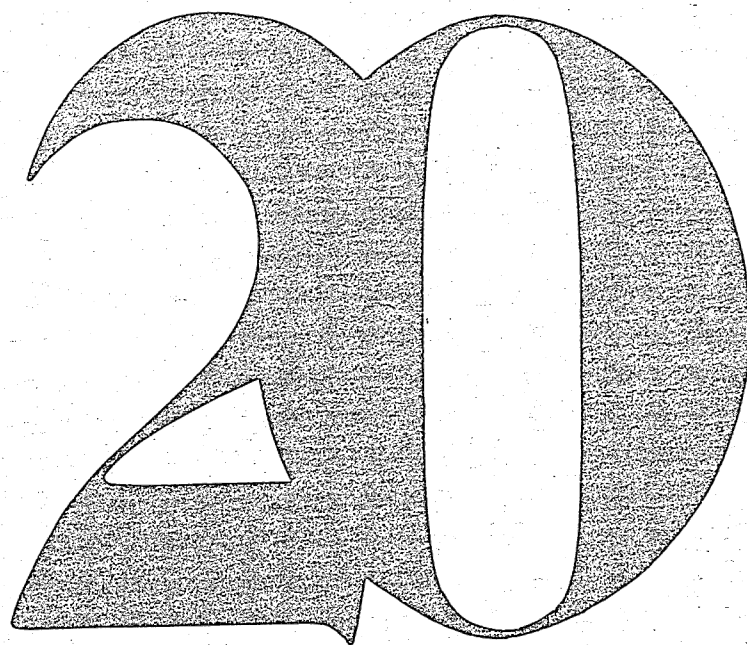
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Special Notice

Please note that the free day for staff employees for the Feast of the Assumption is Monday, August 15. Labor Day, Sept. 5 will not be a free day as classes will be in session. The compensating holiday for Labor Day will be Friday, Dec. 23.

Computer Course

Advanced Job Control Language will be offered by the Computing Center on July 27 and 29. The class will be held in Room 115 of the Computing Center at 3:30 and will last for approximately one hour. Job Control Language for Fortran and PL/1 Users or Job Control Language for SPSS, BMD and ESP Users or equivalent is a prerequisite for the class. The course is non-credit and tuition free. Pre-registration is not required for individuals, but it would be helpful if you would indicate your intention by leaving your name with the secretary in Room 1 of the Computing Center or by calling 7784. Groups must pre-register.

Ambrosiana Collection

The University has received \$55,000 from the National Endowment for the Humanities to complete its Folsom Ambrosiana Collection of materials from Milan's famed library. According to Prof. A.L. Gabriel, director of the collection, the grant will enable the microfilming of some 500 manuscripts acquired in recent years by the Ambrosiana, especially those mediaeval and renaissance treatises with interest for humanistic disciplines, as well as liturgical materials, biblical commentaries, rhetorical discourses and other historical data.

Medical Insurance

Due to increasing hospital and doctor costs it has been necessary to raise the monthly Blue Cross and Blue Shield insurance rates. Effective July 1, 1977, the new rates are \$24.10 a month for a single coverage and \$64.20 a month for family coverage. Also, any employee with a major medical claim or with questions concerning individual coverage should direct those inquiries to Gary J. Marmontello, coordinator of Employee Benefits. The Personnel Office also handles the details for the following insurance programs: Blue Cross & Blue Shield, Life Insurance and Workmen's Compensation. Mr. Charles Reddy will continue to be responsible for other University Insurances.

Summer Session Commencement

Summer Session graduate exercises will be on Friday, August 5, with a 9 a.m. Baccalaureate Mass in Sacred Heart Church and an 11 a.m. commencement in the concourse of the Athletic and Convocation Center. Rev. James T. Burtchaeil, C.S.C., provost of the University, will be the principal celebrant of the Mass and will confer the degrees. Rev. Robert J. Austgen, C.S.C., director of the Summer Session, will be the homilist at the Mass, and Dean Isabel Charles of the College of Arts and Letters will deliver the commencement address.

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Correction

For Notre Dame Report #19, page 471: In the fourth paragraph down, Kobayashi should be changed to Furuhashi.

Page 480: James N. Bishop should be changed from assistant faculty fellow to associate faculty fellow.

faculty notes

Appointments

Berniece Cunningham, personnel officer of the University Libraries, has been appointed Coordinator of Salaried Personnel according to G. Thomas Bull, director of personnel.

Honors

David L. Cohn, associate professor of electrical engineering, has won the 1977 Dow Outstanding Young Faculty Award of the Illinois-Indiana Section of the American Society of Engineering Educators (ASEE).

Rev. Theodore M. Hesburgh, C.S.C., president of the University, has been awarded the Society for the Family of Man medallion as 1977 "Clergyman of the Year."

George C. Kuczynski, professor of metallurgical engineering, has been awarded the Frenkel Prize, the highest prize of the International Institute for the Science of Sintering.

Brother Leo V. Ryan, C.S.V., dean of the College of Business Administration, has been appointed to serve on the Research Committee in Non-Public School Management of the Association of School Business Officials beginning Jan. 1, 1978.

Arthur E. Zannoni, visiting assistant professor of theology, has been appointed as associate editor of the Review for Religious Research beginning in September.

Activities

Joan Aldous, Kenan professor of sociology, was a panelist in the third annual Center for the Family/J.C. Penney Forum "Women Employed: Impact on Family" held in Boston, June 26.

S.D. Blessing, glassblower in the Radiation Laboratory, presented a paper entitled "The Optical Window and What We Can Do with Borosilicate, Quartz and Sapphire" at the American Scientific Glassblowers Society Annual Symposium held at Boston, Mass., June 20-23.

Wendy Carlton, assistant professor of sociology and anthropology, gave a workshop on "Women and Family Health" on June 18 in South Bend as part of the "Search for Health" Indiana humanities project.

Moirra Geoffrion, assistant professor of art, gave two African art lectures, "Introduction to African Art" and "African Decorative Motifs" in the Architecture Building for the African Institute on June 30 and July 1.

Gilbert Hong, scientist in the Radiation Laboratory, presented a paper entitled "Polarized Two Photon Absorption of Naphthalene" at the 32nd Annual Symposium on Molecular Spectroscopy held at Columbus, Oh., June 13-18.

Clayton W. Jacobsen, scientist in the Radiation Laboratory, presented a paper entitled "Quantitative Studies of Excitation Profiles of Totally Symmetric and Non-totally Symmetric Vibrations of Pyrazine with Tunable UV Lasers" at the 32nd Annual Symposium on Molecular Spectroscopy held at Columbus, Oh., June 13-18.

Bernard J. Kilbride, professor of finance, presented a forecast on housing to the Third Annual World Congress on Manufactured Home Financing in San Francisco on June 7.

Sophie Korczyk, assistant professor of finance, presented a paper entitled "The Microeconomics of Student Loans" at a session on Funding of Education at the Western Economic Association annual meetings held in Anaheim, Calif., June 20-23. She was also a panel discussant in a session on Public Finance and Income Distribution.

John J. Kozak, associate professor of chemistry, chaired the session on "Chemical Waves and Turbulence" at the International Workshop on Synergetics, held at Schloss Elman, West Germany, May 2-7. He also gave seminars at the Institut de Chimie Physique, École Polytechnique Fédérale de Lausanne, on "Catastrophe Theory" on May 17 and "Theory of Electrolytes" on May 19.

Kenneth R. Lauer, professor of civil engineering, was an invited participant in a workshop dealing with incinerator residue at an American Society of Civil Engineering conference on Geotechnical Practice for Disposal of Solid Waste Materials at the University of Michigan, June 13 to 15.

G.D. Loescher, assistant dean of the College of Arts and Letters and assistant professor of government and international studies, was invited by the U.S. Department of State to participate in a Scholar-Diplomat Seminar in Washington, D.C. from June 13-17.

John Lyon, chairman and associate professor of the general program of liberal studies, visited the Headquarters, US Army Third ROTC Region, Fort Riley, Kan. on June 23-25, as an Institutional Representative to observe the Cadet Corps Review and equipment display.

John Matthias, associate professor of English, gave a reading of his poetry at Oxford University on May 12, and on a B.B.C. broadcast on May 30.

Rev. Edward O'Connor, C.S.C., associate professor of theology, gave several series of lectures on "Pope Paul and the Charismatic Renewal": June 10-11, at Aguas Buenas, Puerto Rico (3 lectures); June 25, at the Christian Life Center, Oakland, Calif. (2 lectures); and July 2, at Fort Campbell, Ken. (2 lectures). He also spoke on "Prayer and Study" at St. Thomas in the Virgin Islands, June 13.

Bruce I. Rose, assistant professor of mathematics, gave a talk titled "On the Model Theory of Finite-Dimensional Algebras" for the Mathematical Colloquium at Yale University on June 6.

Thomas J. Schlereth, associate professor of American studies and Wendy Clauson Schlereth, assistant University archivist, delivered papers at the Multi-Cultural Education Seminar sponsored by the Institute of Urban Studies, June 22-23. Professor Schlereth spoke on "Ethnicity in Photography and on the Landscape" and Ms. Schlereth lectured on "Oral History and Archives in Ethnic Studies."

Anthony M. Trozzolo, Huisking professor of chemistry, was a participant as editor of Chemical Reviews in the 1977 Conference of Editors of American Chemical Society Research Journals at the Battelle Northwest Research Center in Seattle, Wash., June 12-14. He also presented a lecture entitled "Photochromic Heterocyclic Systems--The Ylides That Dye and Fade Away" at the Department of Chemistry, University of British Columbia, Vancouver, B.C. on June 10.

Deaths

Rev. Cornelius A. Hooyboer, C.S.C., 73, a former professor of English from 1935 to 1946, died June 22 in Elgin, Ill.

Addendum to NDR #4

The following faculty members taught the spring semester, 1977:

MARY PATRICIA CROSSON, Adjunct Assistant Professional Specialist, Counseling Center. B.A., Mt. St. Joseph, at Cincinnati, 1948; M.A., Catholic U. of America, 1950; Ph.D., Univ. of Chicago, 1976. (1977)

BERNARD DOBRANSKI, Visiting Associate Professor of Law. B.B.A., Univ. of Notre Dame, 1961; J.D., U. of Virginia, 1964. (1977)

WILFRIED DUMON, Visiting Professor of Sociology and Anthropology. Ph.D., Univ. of Louvain, 1964. (1977)

ELI FOGEL, Adjunct Instructor in Electrical Engineering. B.Sc., Technion-Israel, 1973; M.S., Colorado State U., 1973. (1977)

ALVIN PLANTINGA, Adjunct Professor in Philosophy. A.B., Calvin College, 1954; M.A., U. of Michigan, 1955; Ph.D., Yale U., 1958. (1977)

PAUL H. SCHERER, Adjunct Associate Professor of History. A.B., Midland Lutheran College, 1955; M.S., U. of Wisconsin, 1956; Ph.D., *ibid.*, 1964. (1977)

CHRISTOPHER J.F. WILLIAMS, Visiting Professor of Philosophy. M.A., Oxford University, 1955; D.Phil., *ibid.*, 1965. (1977)

office of advanced studies

Information Circulars

National Institute of General Medical Sciences Research Career Development Awards

No. FY78-1

After July 1, 1977, the National Institute of General Medical Sciences will accept applications for Research Career Development Awards only on behalf of individuals who wish to develop a career directed to bridging the gap between basic and clinical sciences in one of the following fields:

1. clinical pharmacology
2. trauma and/or burn research
3. anesthesiology
4. biomedical engineering

Candidates for the award should provide documentary evidence that they have a high potential for a productive research career but require additional experience in an active research environment before they can launch careers as independent scientists. Since the rank of associate professor or the successful competition for more than one substantial research grant usually indicates that the candidate has been judged to be an independent investigator, preference in selection of NIGMS awardees will be given to individuals whose achievements at the time of application have not been so recognized.

National Heart, Lung, and Blood Institute National Research Service Awards

No. FY78-2

Fellowships are available to support research training of cardiovascular investigators in a variety of disciplines to promote multidisciplinary research capability. The research training may be in fundamental studies of basic processes and functions, behavioral studies (including dietary modifications), population genetics, or clinical investigations directed toward long-term involvement in research toward increasing our knowledge and understanding in cardiovascular areas related to our programs in Hypertension, Arteriosclerosis, Coronary Heart Disease, Cardiovascular Aspects of Diabetes, Arrhythmias, Heart Failure and Shock, Cerebrovascular Disease, Peripheral Vascular Disease, Congenital and Rheumatic Heart Diseases, Cardiomyopathies and Infections of the Heart, Circulatory Assistance, and Cardiovascular Devices and Technology.

Individual Postdoctoral Fellowships are available to recipients of a doctoral degree who are United States citizens or non-citizens who have been admitted for permanent residence. Research training should be the above or other disciplines directly related to heart and vascular diseases. Applicants must be sponsored by an investigator at a domestic or foreign nonprofit public institution that has the staff and facilities to provide the desired training. Applications for training outside the United States require a detailed justification of the need to study abroad based on unique facilities and/or training opportunities. Stipends range between \$10,000 and \$13,200 for the first year of postdoctoral research training depending on the years of relevant postdoctoral experience.

The next deadline for receipt of applications is October 1, 1977.

Harry S. Truman Scholarship Program The Harry S. Truman Scholarship Foundation

No. FY78-3

Purpose:

The Harry S. Truman Scholarship Foundation, established by Congress as the official Federal memorial to honor the thirty-third President of the United States, is a permanent education scholarship program designed to provide opportunities for outstanding students to prepare for careers in public service.

General Guidelines:

Harry S. Truman Scholarships are awarded on the basis of merit to students who will be college juniors in the forthcoming academic year and who have an outstanding potential for leadership in government. To be considered, a student must be nominated by his or her college or university using the official nomination materials provided.

Each scholarship covers tuition, fees, books, and room and board, to a maximum of \$5,000 per year. One scholarship is awarded each year to a resident nominee in each of the 50 states, the District of Columbia, Puerto Rico, and, considered as a single entity, Guam, the Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

The word "resident" refers to a person who has legal residence in the State from which he or she is a candidate. In many cases, this might be indicated by parents' place of residence. If this criterion of residence is not relevant, the candidate's eligibility for in-state tuition rates (where applicable) and place of registration to vote will determine legal residence.

A Career in Public Service:

Authorized to award scholarships to persons preparing for a career in public service, the Foundation defines public service as participation in government, with emphasis on potential leadership ability. Careers at all levels and functions of government are specifically included in the definition.

Nominees for Truman Scholarships must include in their nomination materials a statement of interest in a career in government that specifies in some detail how their academic program and their overall educational plans will prepare them for their chosen career goal. Courses in history, political science, public administration, economics and finance, and international relations are among the types of studies considered by many educators to be appropriate for such a career. Because no list of areas of study can be comprehensive or exhaustive, nominees should feel free to offer other relevant and appropriate fields of study that they believe will help prepare them for a career in government.

Conditions of Eligibility:

To be considered for nomination as a Truman Scholar, a student must:

1. Be enrolled as a matriculated student pursuing a degree at an accredited institution of higher education during the year in which nominated.
2. Be a junior pursuing a bachelor's degree as a full-time student during the year for which nominated. "Junior" here means a student who has completed more than half the second year of college but not more than half the third year prior to the beginning of the academic year for which nominated.
3. Have a college grade point average of at least "B" (or equivalent) and be in the upper fourth of his or her class.
4. Be a United States citizen, or in case of nominees from American Samoa or the Trust Territory of the Pacific Islands, a United States national.
5. Have selected an undergraduate field of study that will permit admission to a graduate program leading to a career in government.

Nomination Procedures:

All candidates are nominated by their institutions of higher education. Candidates do not make direct application for a Harry S. Truman Scholarship.

Each accredited institution of higher education is authorized to nominate one student for the 1978 competition.

Nominations must be based upon recommendations of the institution's faculty.

The following information, on the official nominating materials, must be included with each scholarship nomination:

1. The Nomination and Supporting Information for the Harry S. Truman Scholarship Program Qualifying Test must include a certification that the student is a candidate for a Truman Scholarship; a statement that the student plans to pursue a career in government; a list of the student's public service activities such as those associated with government agencies, community groups, political campaigns, and charities; a list of leadership positions the student has held during high school and during the first two years of undergraduate study; a statement of interest in a career in government that specifies how the student's educational plans will provide preparation for that career; and a statement that the student is willing to participate in an internship or seminar sponsored by the Foundation.

2. It must also contain an essay of 600 words or less written by the student that discusses some public policy issue chosen by the student; the Harry S. Truman Scholarship Program Qualifying Test, completed by the student; transcripts of the student's high school and college grades; and the three letters of recommendation. One of the letters must be written by a faculty member in the student's field of study, and one by another person who can discuss the student's potential for a career in government.

The Role of the Faculty Representative:

The faculty representative of an institution is the key person in the Truman Scholarship selection process and serves as liaison between his or her institution and the Foundation. The faculty representative is responsible for publicizing the Truman Scholarship on campus, soliciting recommendations on potential candidates from members of the faculty, conducting a competition on campus in order to determine the person best qualified to be the institution's nominee and insuring that the institution's official nomination is forwarded to the Truman Scholarship Review Committee by the stated deadline.

Nomination Deadline:

Institutions must submit nominations for Truman Scholarships by December 8, 1977. Nominations not submitted by this deadline, with all required supporting documents, will not be considered. Nomination information will be available from the institutional faculty representative.

Selection Procedures:

1. Initial evaluation

Students nominated for consideration as Harry S. Truman Scholars will be evaluated on the basis of:

- * the extent to which the student has shown an outstanding potential for leadership in government, and
- * the student's academic performance.

2. Interviews

Semifinalists selected as a result of the initial evaluation of the credentials of all nominees are interviewed by Regional Review Panels, composed primarily of prominent scholars and public officials. Each Regional Review Panel will recommend two persons from each State in rank order for selection as Truman Scholars by the Board of Trustees of the Foundation.

Since only students with superior academic records are selected as semifinalists, the Regional Review Panels will concentrate their evaluation on the nominees' relative potential for leadership in government. Characteristics to be considered include the following:

- * Analytic ability,
- * Communication skills,
- * Independence and initiative,
- * Self-confidence,
- * Sensitivity to others,
- * Ability to explain with clarity a complex situation,
- * Demonstrated interest in government service, and
- * Commitment to future government service.

3. Final selection

From among the candidates recommended by the Regional Review Panels, the Board of Trustees will name the 53 winners of Harry S. Truman Scholarships. The remaining finalists will be named as official alternates and will be eligible to receive that year's scholarship if the winner originally named from the same State is not able to begin studies as a Truman Scholar.

Payment of Scholarship Awards:

To be eligible to receive payments, A Truman Scholar must submit in writing:

- * An acceptance of the scholarship award, and
- * At the beginning of each academic term, a statement of eligible expenses certified by the authorized financial officer of the enrolling institution, including those for tuition, fees, books, and room and board, an additional certification regarding the scholar's academic program, and other certifications as required by law or regulation.

The number of payments to be made during the academic year will correspond to the number of semesters, trimesters, or quarters in the institution's academic year, but will not be less than two.

Additional Scholarship Conditions:

Scholars receiving an award from another foundation or organization shall receive benefits only to the extent that these do not duplicate actual Foundation payments made in behalf of the Scholar, except that educational benefits received from the Veterans Administration are considered the same as personal or family funds and may be received in full without regard to the conditions of this provision.

The intent of the above provision is to avoid duplication of awards while meeting the authorized expenses of a Scholar up to \$5,000.

Duration of Awards:

1. It is the intent of the Foundation to renew scholarship awards for the senior year and for a period not to exceed two academic years of graduate study, in accordance with the regulations established by its Board of Trustees, and subject to an annual review for compliance with these requirements.
2. The Foundation may terminate a scholarship:
 - * When a student has not maintained, for two consecutive academic terms, satisfactory proficiency, or
 - * When the student is no longer enrolled in a program preparing for public service as specified by the Foundation.
3. A Scholar may seek postponement of his or her award because of ill health or other mitigating circumstances, upon application to the Executive Secretary.

Important Dates:

- | | |
|---------------------|---|
| June 1977 | - College presidents are notified of the 1978 Harry S. Truman Scholarship Program and asked for the name of the faculty representative. |
| September 1977 | - Scholarship nomination forms and other materials are mailed to faculty representatives. |
| December 8, 1977 | - Deadline for the nomination of candidates for Truman Scholarships. |
| January 1978 | - Scholarship nominees are evaluated and semifinalists selected. |
| February-March 1978 | - Truman Scholarship semifinalists are interviewed. |
| April 1978 | - The 1978 Truman Scholars and Alternates are selected by the Board of the Harry S. Truman Scholarship Foundation. |

For further information concerning the scholarship nomination and selection process, write to:

Truman Scholarship Review Committee
Box 2838
Princeton, NJ 08540

National Endowment for the Arts Work Experience Internship Program

No. FY78-4

The National Endowment for the Arts announces the Work Experience Internship Programs scheduled for 1978.

The 13-week programs are designed to acquaint participants with the policies, procedures, and operations of the National Endowment and to give them an overview of arts activities in this country. Activities are planned to provide a detailed knowledge of the programs of the Endowment, including policy development, grant-making procedures, and administration. In addition to working as members of the Endowment's staff, interns attend a series of seminars and meetings with members of the National Council on the Arts, Endowment panelists, artists, journalists, federal officials, and other leading arts administrators.

Internships will be awarded on a competitive basis. Applicants must be sponsored by a college or university, state arts agency, or other non-profit, tax-exempt arts organization. Non-matching grants will include a stipend of \$2,320 plus travel. The application deadlines are listed below.

Participants:

Participants are generally selected on the basis of academic background and prior professional experience and have represented a wide variety of backgrounds. Interns have been assigned to nearly all Endowment programs including the Chairman's Office, the Architecture + Environmental Arts, Dance, Education, Expansion Arts, Media Arts, Museum, Music, Special Projects, and Visual Arts Programs, and the Budget, Federal-State Partnership, Program Information, and Research Offices. Former interns are now working with state and municipal arts agencies, professional theatre, opera, and dance companies, universities, cultural centers, and museums. Participants in the Work Experience-Internship Program are not eligible for immediate employment at the National Endowment for the Arts.

Activities:

Each intern is assigned to one program division or office throughout the session. Participants will spend approximately two-thirds of their time working as members of the professional staff to gain a functional view of the Endowment and to assist the program in daily operations. These activities will provide detailed knowledge of the programs of the Endowment, including policy development, grant-making procedures, and internal administration.

The remainder of the time will involve internship activities, including guest speaker seminars, panel meetings, and National Council on the Arts meetings. Representative lists of guest speakers are available upon request.

Application Procedures:

To apply, each candidate must be sponsored by a college or university, state agency, or other non-profit, tax-exempt arts organization. Organizations may sponsor the applications of one or two candidates. Budget proposals should include a fellowship stipend of \$2,320 for 13 weeks and round-trip transportation expenses limited to coach fare. No indirect costs are allowed.

Sponsor Requirements:

- 1) Submit formal Project Grant application form (NEA-3 Revised)
- 2) Include IRS Determination Letter of Tax-Exempt status.
- 3) Receive and administer fellowship stipend if candidate is selected.
- 4) Submit final expense report at the completion of the program.

Candidate Requirements:

- 1) Submit resume.
- 2) Submit academic transcript and/or description of current job responsibilities.
- 3) Submit 3 or more letters of recommendation.
- 4) Submit an essay dealing with career plans and areas of interest within the Endowment.

Note:

No formal application need be submitted by candidates.

Requests for application forms and additional material should be addressed in writing to:

Intern Program Administrator
Mail Stop 557
National Endowment for the Arts
Washington, D.C. 20506

Program Dates--1978

Spring: February 6-May 5, 1978
Deadline: October 7, 1977
Summer: June 5-September 1, 1978
Deadline: February 3, 1978
Fall: September 25-December 22, 1978
Deadline: May 26, 1978

Law Enforcement Assistance Administration Competitive Graduate Research Fellowships

No. FY78-5

The Graduate Research Fellowship Program provides financial support for doctoral candidates writing dissertations in crime-related fields. Fellowships are awarded for one-year period.

The Graduate Research Fellowship program is competitive. Only a limited number of fellowship grants can be awarded each year. Doctoral candidates in crime-related fields of study who have finished their course work and require support while they are writing their dissertations are eligible to compete for grants. Proposals which are especially encouraged would be those that contribute to: (1) improved research and evaluation methodologies for innovative criminal justice programs; and (2) improvement of criminal justice services or criminal justice manpower planning and development.

A candidate must submit to the Office of Criminal Justice Education and Training a brief concept paper describing the project, a proposed budget, and a letter of support from the sponsoring university. An original and nine copies of each of these documents must be submitted.

The concept paper should include such details as the statement of the problem, objectives of the study, description of the methodology, policy implications of the findings, time schedule of the study, and assurances of needed cooperation from outside sources.

Proposals are judged on the basis of the perceived need for the subject matter in the criminal justice body of knowledge, the originality of the research subject, the quality and feasibility of the methodology, the practical applicability of the findings, and the applicants' qualifications to produce an acceptable dissertation.

Concept papers and related documents will be reviewed by a panel of qualified criminal justice academicians and a panel of LEAA specialists. The universities enrolling those candidates whose concept papers are selected following these two levels of review will be invited to submit formal applications. Final selection of fellows will be made following review of the formal applications.

The deadline for submission of concept papers is October 1, 1977. For further information, contact the Office of Research and Sponsored Programs, Extension 7378.

National Institute of Mental Health Clinical or Services Manpower Training/Development

No. FY78-6

For the past thirty years, the National Institute of Mental Health (NIMH) manpower policy has focused primarily on the production of an adequate supply of well prepared mental health specialists to correct major shortages in mental health manpower supply.

Manpower and training support programs have emphasized the building of institutional training capacity to develop a pool of professionals in the core disciplines - psychiatry, psychology, psychiatric nursing, and social work. Although considerable progress has been made in achieving these objectives, critical problems arising from increasingly complex and diverse service delivery systems have demanded a reassessment of the NIMH manpower policy strategies in light of current and anticipated problems such as:

- Maldistribution of manpower by geographic areas, by the types of human problems and needs that must be met, and by types of populations that must be served;
- Lack of coordination between manpower production and manpower utilization of diverse delivery systems;
- Lack of a systematically derived body of knowledge and technology for assessing and improving for effectiveness and efficiency of education and training programs.

As a result of this reassessment of NIMH manpower policy and programs--which included the efforts of the NIMH Services Manpower Task Force, consultation from the field, interaction with and directives from the Congress--fundamental shifts have been made in the underlying principles and strategies for NIMH manpower development programs. These shifts emphasize manpower development as a derivative of service needs and identify targeted service-related priorities as the central focus for manpower development programs. This has demanded a broader conception of manpower development that includes (in addition to education and training) such areas as: recruitment, utilization, distribution, credentialing, and evaluation.

The resultant program initiatives are intended to: (1) maintain and strengthen the capacity of educational institutions developed over the past thirty years to insure a continuing supply of mental health specialists to provide needed mental health services to targeted geographic areas and populations; (2) to insure a framework for developing manpower programs that are adaptive to current and anticipated trends and issues in manpower

education, utilization, distribution, etc., and that promotes a system of mental health care in which every citizen is entitled to, and has adequate access to, quality services. This includes high priority on appropriate manpower programs for minority groups; (3) facilitate productive working relationships among Federal, State, and local mental health systems and enable States to build capacity to plan and develop community manpower development systems; (4) foster effective collaboration between educational institutions and State and local governmental agencies.

The general objectives of the new program initiatives are:

1. To improve present education efforts to prepare professional and paraprofessional manpower for the delivery of mental health services.
2. To maintain and improve the competence and improve the utilization and productivity of available professional and paraprofessional personnel in providing mental health services.
3. To enable all elements of mental health services system, particularly State mental health agencies, to more effectively plan, utilize, and coordinate existing manpower resources for the delivery of mental health services.
4. To stimulate research and development approaches to problems related to training and development of mental health manpower to fulfill mental health service needs.
5. To facilitate the development of effective approaches for enabling health care providers to deal with the emotional problems or mental disorders of the patients under their care.

The deadline for receipt of applications for the Division of Manpower and Training Programs is September 15, 1977 and for the Division of Special Mental Health Programs, the next deadline is October 1, 1977. For further information, contact the Office of Research and Sponsored Programs, Extension 7378.

National Heart, Lung, and Blood Institute National Research Service Awards, Individual Postdoctoral Fellowships

No. FY78-7

Fellowships are available to support multidisciplinary postdoctoral training for basic and clinical research in pulmonary disease. The research training, in fundamental or clinical disciplines, should be directed toward long-term involvement in research that may increase our knowledge and understanding relative to the following program areas:

Structure and Function of the Lung
 Pediatric Pulmonary Diseases
 Emphysema and Chronic Bronchitis
 Fibrotic and Immunologic Lung Diseases
 Respiratory Failure
 Pulmonary Vascular Diseases
 Epidemiology of Respiratory Diseases

Applicants must be citizens or non-citizen nationals of the United States, or have been lawfully admitted to the United States for permanent residence. As of the beginning date of the proposed fellowship, the applicant must have received a doctoral degree. Proposed study must encompass biomedical research training with an opportunity to carry out supervised research in the areas specified above, and offer opportunity to broaden the candidate's scientific background or extend his potential for research in the pulmonary field. Prior to formal submission, an applicant must arrange for appointment to an appropriate institution and acceptance by a sponsor who will supervise his training and research experience. Applications for training outside the United States require a detailed justification of the need to study abroad based on unique facilities and/or training opportunities.

The award provides a stipend ranging between \$10,000 and \$13,200 for the first year, as determined by the number of years of prior relevant postdoctoral experience at the time of the award. Support may be requested for up to three years.

The next deadline for the receipt of applications is October 1, 1977.

National Science Foundation Chautauqua-Type Short Courses

No. FY78-8

Fifty-two courses will be offered in the 1977-78 program of NSF CHAUTAUQUA-TYPE SHORT COURSES with opportunity for 3,400 college teachers throughout the U.S. to participate. Courses will be offered at fifteen Field Centers.

The program provides a forum in which scholars at the frontiers of various disciplines communicate recent advances in their fields directly to college teachers. The primary aim is to enable college-teacher participants to keep their teaching up-to-date and relevant.

The program, which is administered by the American Association for the Advancement of Science, is a cooperative enterprise with the National Science Foundation, the scholars who teach the short courses (course directors), the colleges and universities which house the Field Centers, and the college teachers who participate with the encouragement of home institutions.

In general, the courses are open to college teachers of the natural and social sciences, mathematics, and engineering. In some interdisciplinary courses a limited number of teachers from other disciplines may be admitted.

The National Science Foundation provides overall support, including four nights of room rent on a double occupancy basis for 20 participants in each class of 25. Course Directors have available an allowance of \$14.00 per participant for the purchase or preparation of instructional materials. Participants or their institutions bear the costs of transportation, meals, and incidental expenses.

In each short course the course director meets with the college-teacher participants for a total of four days--two days in the fall and in the spring. Between the fall and spring sessions participants work on projects related to the course. The interim projects provide a structure for participants to incorporate new knowledge, concepts, or techniques in their teaching with minimum delay.

For further information, contact the Office of Research and Sponsored Programs, Extension 7378.

The Rhodes Scholarship—1977 Study at the University of Oxford The Marshall Scholarship—1977 Graduate Study in the United Kingdom

No. FY78-9

The assistance of the faculty is requested in the identification and encouragement of outstanding candidates for the Rhodes and Marshall Scholarship competitions.

The Rhodes Scholarship provides for graduate study at the University of Oxford; the Marshall Scholarship, for graduate study at any university in the United Kingdom. The awards are for two years, renewable for a third. Both Scholarships are open to both men and women applicants. Age limits are 24 for the Rhodes, 25 for the Marshall, as of October 1, 1977.

The qualities sought in candidates by both Rhodes and Marshall selectors are similar, and high academic achievement is a requirement for both Scholarships. In general, however, Marshall selection committees, while seeking candidates who "display a potential to make a significant contribution to their own society," seem to be oriented toward individuals of outstanding academic achievement and professional or scholarly potential, with strong preparation in the major field. Rhodes selectors emphasize, in addition to excellent intellectual ability and achievement, qualities of character, leadership, and public-spiritedness. Notable athletic

achievement, while certainly of interest to the Rhodes selectors, is by no means a requirement for that Scholarship.

The faculty is urged to call these Scholarships to the attention of Seniors and post-graduate students, in all divisions of the University, who would be strong candidates for the awards but who might not otherwise have considered applying for them. Since both Scholarships are highly competitive, it must be stressed that only students of outstanding ability and promise should be encouraged. The importance of the faculty's assistance in this matter cannot be over-emphasized: The University's Marshall Scholarship winner of last year had his attention directed to the competition as a result of this notice.

Interested students should obtain further information and application forms from Professor William Frerking in 103 Brownson Hall immediately after the beginning of the Fall Semester. The deadline for receipt of application materials for both Scholarships is the first week of October.

National Science Foundation Regional Research Conferences in the Mathematical Sciences

No. FY78-10

The National Science Foundation is seeking proposals from prospective host institutions in the U.S. for five-day regional conferences, each to feature 10 lectures by a distinguished guest lecturer on a subject of current research interest in the mathematical sciences. An applying institution should have at least a minimal research competence in the area of its proposal. The conferences are to be held during the summer of 1978 (not earlier than June) or during the succeeding fall or winter. The objective of the project is to stimulate and broaden mathematical research activity, particularly in regions of the country where such activity needs further development. The organization of the conferences, evaluation of proposals, and arrangements for publication of monographs based on the guest speakers' lectures are carried out by the Conference Board of the Mathematical Sciences, Washington, D.C., under contract with the Foundation.

Approximately 10 conferences per year are projected, each to take place at a host institution during a week of the summer of 1978, or possibly during the succeeding academic year. Topics for conferences may be concerned with any of the subdisciplines of the mathematical sciences.

Each conference must plan for a single principal guest lecturer and about 25 other invited participants, the latter to be active research mathematicians from the broad geographic region around the host institution. It is expected that the lecturer will give two lectures per day during the five days of the conference, with the remainder of the time available for study, informal discussion, and exchange of ideas.

All invited participants in a conference receive allowances for travel and subsistence under the host institution's grant from the Foundation for the conference. In addition, the principal lecturer receives from the Conference Board a fee for delivering his lectures and a second fee for organizing these into a substantial monograph. The Conference Board arranges the editing and publication of these papers.

The deadline for receipt of proposals is November 15, 1977.

Current Publications And Other Scholarly Works

ARTS AND LETTERS HUMANISTIC AND SOCIAL STUDIES

American Studies

- Schlereth, Thomas J.
T.J. Schlereth. 1976. America 1871-1919: A view of Chicago. American Studies 17 (2):87-100.

Art

- Lauck, CSC, Anthony J.
A.J. Lauck, CSC. 1977. Four portraits in watercolor, People Painters, YWCA, South Bend, Indiana.
A.J. Lauck, CSC. 1977. Hesitation, stone-ware sculpture, Audubon Artists' 35th Annual, National Academy Galleries, New York, N.Y.
A.J. Lauck, CSC. 1977. One man show of sculpture and watercolors, Kalamazoo Institute of Fine Arts, Kalamazoo, Michigan.
A.J. Lauck, CSC. 1977. Plaster of St. Angela and Student, recent acquisitions, Indiana State Museum, Indianapolis, Indiana.

English

- Collins, Carvel
C. Collins. 1975. A fourth book review by Faulkner. Mississippi Quarterly 23(3): 339-346.
C. Collins. 1975. Faulkner and certain earlier Southern fiction. Pages 259-265 in, M.T. Inge, ed. The Frontier Humorists: Critical Views. Archon Books, Hamden, Connecticut.
C. Collins. 1977. Faulkner's Mayday, with Introduction by Carvel Collins. University of Notre Dame Press. 68pp.

Government and International Studies

- Kommers, Donald P.
D.P. Kommers. 1977. Abortion and Constitution: United States and West Germany. American Journal of Comparative Law 25 (2):255-285.
Niemeyer, Gerhart
G. Niemeyer. 1976. History and civilization. The Anglican Theological Review 7:81-97.

History

- Blantz, CSC, Thomas E.
T.E. Blantz, CSC. 1977. Francis Joseph Haas. Pages 263-264 in, Dictionary of American Biography: Supplement Five.
Fitzsimons, Matthew A.
M.A. Fitzsimons. 1977. The mind of Tacitus. Review of Politics 38(4):473-493.
Kerby, Robert L.
R.L. Kerby. 1977. The militia system and the state militias in the War of 1812. Indiana Magazine of History 73(2):102-124.

Modern and Classical Languages

- Klawiter, Randolph J.
R.J. Klawiter. 1977. The Polemics of Erasmus and Ulrich von Hutten. University of Notre Dame Press. xviii + 331pp.

Psychology

- Sebastian, Richard J.
P.D. Parke, L. Berkowitz, J.P. Leyens, S.G. West, and R.J. Sebastian. 1977. Some effects of violent and nonviolent movies on the behavior of juvenile delinquents. Pages 135-172 in, L. Berkowitz, ed. Advances in Experimental Social Psychology, Vol. 10.
Wehlage, David F.
D.F. Wehlage. 1977. The diagnosis and treatment of delirium. The Journal of the Indiana State Medical Association 70(5):246-248.

Sociology and Anthropology

- Kurtz, Richard A.
R.A. Kurtz. 1977. LaPorte County Health Department Study. Northern Indiana Health Systems Agency, Inc. 101pp.

SCIENCE

Biology

- Bender, Harvey A.
H.A. Bender. 1977. Science and Society-Looking at DNA Research. A.D. Correspondence 14(8):2-7.
McIntosh, Robert P.
R.P. McIntosh. 1977. Forests of the Catskill Mountains. Hope Farm Press. 33pp.
Rai, Karamjit S.
E. Hallinan, N. Lorimer, and K.S. Rai. 1977. Cytogenetic manipulation of Aedes aegypti. II. A cytogenetic study of radiation-induced translocations in Delhi strain. Pages 117-128 in, Proceedings of the XV International Congress of Entomology.

E. Hallinan, N. Lorimer, and K.S. Rai. 1977. Genetic manipulation of Aedes aegypti: II. A cytogenetic study of radiation induced translocations in Delhi strain. Pages 117-128, in Proceedings of the XV International Congress on Entomology. Washington, D.C., August 20-27.

C.F. Curtis, N. Lorimer, K.S. Rai, S.G. Suguna, D.K. Uppal, S.J. Kazmi, E. Holli-
nan, and K. Dietz. 1976. Simulation of
alternative genetic control systems for
Aedes aegypti in outdoor cages and with a
computer. Journal of Genetics 62(3):101-
115.

Saz, Howard J.

P. Bhattacharya, J.R. Moskal, S. Basu, and
H.J. Saz. 1977. Effect of 5 Brdeoxyuri-
dine on neuroblastoma DNA polymerase ac-
tivities. Federation Proceedings 36(3):
848.

Thorson, Ralph E.

T.M. Roberts and R.E. Thorson. 1977.
Chemical attraction between adults of
Nippostrongylus brasiliensis: Descrip-
tion of the phenomenon and effects of
host immunity. Journal of Parasitology
63:357-363.

Chemistry

Basu, Subhash

K.A. Presper, M. Basu, and S. Basu. 1977.
Blood group glycolipid biosynthesis in
tumor and differentiated cultured cells.
Federation Proceedings 36(3):731.

P. Bhattacharya, J.R. Moskal, and S. Basu.
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neuroblastoma cells of NIE-115 and N-18
contain an inhibitor of acid deoxyribo-
nuclease. Proceedings of the National
Academy of Science USA 74(3):842-845.

P. Bhattacharya, J.R. Moskal, S. Basu, and
H.J. Saz. 1977. Effect of 5 Brdeoxyuri-
dine on neuroblastoma DNA polymerase ac-
tivities. Federation Proceedings 36(3):
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Hong, Hwei-Kwan

*H.-K. Hong and C.W. Jacobsen. 1977. Raman
spectroscopy with tunable UV lasers: The
enhancement of B_{3g} vibrations due to the
vibronically perturbed B_{2u} (S_1) and B_{1u}
(S_2) excited states of crystalline naph-
thalene. Chemical Physics Letters 47(3):
457-461.

Jacobsen, Clayton W.

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enhancement of B_{3g} vibrations due to the
vibronically perturbed B_{2u} (S_1) and B_{1u}
(S_2) excited states of crystalline naph-
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Kozak, John J.

*J.W. Kress and J.J. Kozak. 1977. Deter-
mination of the pair polarizability ten-
sor for the Ne diatom. Journal of Chem-
ical Physics 66(10):4516-4519.

Levanon, Haim

*E. Nissani, A. Scherz, and H. Levanon.
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tetraphenyl chlorin, magnesium tetraphenyl
porphyrin and whole cells of Chlamydomonas
reinhardtii: A light modulation - EPR
study. Photochemistry and Photobiology
25:87-89.

Mozumder, Asokendu

*A. Mozumder. 1977. Concerning the cube-
root dependence of the molecular yield on
scavenger concentration in the radiolysis
of water. High Energy Chemistry 11(2):
182-184. (Russian)

*Under the Radiation Laboratory

Mathematics

Cecil, Thomas E.

T.E. Cecil. 1976. Taut immersions of non-
compact surfaces into a Euclidean 3-space.
Journal of Differential Geometry 11(3):
451-459.

Microbiology

Wagner, Morris

*B.A. Peri and M. Wagner. 1977. Immune re-
sponse and dental caries incidence in
Streptococcus faecalis monoassociated
Harvard caries-resistant and caries-sus-
ceptible rats. Infection and Immunity
16(3):805-811.

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lation and characterization of the anaer-
obic bacteria of the cecal wall in CFW
mice. Page 160 in, Annual Meeting of the
American Society for Microbiology. New
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Wostmann, Bernard S.

*D.C. Madsen, M.H. Beaver, and B.S. Wostmann.
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production by rodent intestinal micro-
flora. Federation Proceedings 36(3):393.

*B.S. Wostmann, E. Bruckner-Kardoss, M.H.
Beaver, and D.C. Madsen. 1977. Effect
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on cholesterol metabolism of rats and
gerbils. Federation Proceedings 36(3):
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ENGINEERING

Aerospace and Mechanical Engineering

Betchov, Robert

R. Betchov. 1976. On the non-Gaussian aspects of turbulence. Archives of Mechanics 28(5-6):837-845.

Kanury, A. Murty

A.M. Kanury, S.B. Martin, and S.J. Wiersma. 1977. A Critical Review of Full-Scale Fire Testing. Products Research Committee. Washington, D.C. ix + 110pp.

Lee, Lawrence H.N.

L.H.N. Lee. 1977. Quasi-bifurcation in dynamics of elastic-plastic continua. Journal of Applied Mechanics 77-WA/APM-3: 6pp.

Lloyd, John R.

D.E. Negrelli, J.R. Lloyd, and J.L. Novotny. 1977. A theoretical and experimental study of radiation-convection interaction in a diffusion flame. Journal of Heat Transfer 99(2):212-220.

J.D. Bankston, J.R. Lloyd, and J.L. Novotny. 1977. Radiation-convection interaction in an absorbing-emitting liquid in natural convection boundary layer flow. Journal of Heat Transfer 99:125-127.

F.N. Dutile. 1977. Promises, promises: Reflections on the validity of immunity grants to hostage-holders. Res Gestae 21(6):260-262.

RADIATION LABORATORY

Maruthamuthu, P.

P. Maruthamuthu and P. Neta. 1977. Radiolytic chain decomposition of peroxomono-phosphoric and peroxomonosulfuric acids. Journal of Physical Chemistry 81(10): 937-940.

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P. Maruthamuthu and P. Neta. 1977. Radiolytic chain decomposition of peroxomono-phosphoric and peroxomonosulfuric acids. Journal of Physical Chemistry 81(10): 937-940.

Shimamori, Hiroshi

H. Shimamori and Y. Hatano. 1977. Thermal electron attachment to O₂ in the presence of various compounds as studied by a microwave cavity technique combined with pulse radiolysis. Chemical Physics 21: 187-201.

LAW

Dutile, Fernand N.

F.N. Dutile. 1976. Review of Murray L. Schwartz, ed., Law and the American Future. The Jurist 36:490-493.

Monthly Summary

Awards Received

IN THE MONTH OF JUNE, 1977

Department or Office	Principal	Short title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Biology	Craig	Survey of mosquitoes of St. Joseph County, Indiana	St. Jos. Cty. Dept. Health	25,000 10
Aeros. Mech. Eng.	Mueller, Goddard	Structure of separated flow regions near edge of airfoils	Natl. Aero. Space Admin.	25,000 10
Metallurgical Eng.	Miller, Allen	Behavior of ferrimagnetic, rare-earth-cobalt compounds	U.S. Navy	50,685 12
Sociology Anthropology	Press	Restructuring current paradigms of health and illness	Inst. Human Values Med.	4,000 2
Microbiology Lobund Lab.	Pleasants	Factors in lysinolalanine nephrocytomegalia	Natl. Inst. Health	10,458 4
Aeros. Mech. Eng.	Nee	Differential field theory of turbulent heat transfer	Natl. Sci. Fdn.	62,900 24
Physics	Browne	Summer support for faculty from small college	Natl. Sci. Fdn.	4,700 3
Biology	Morgan	Effect of NIPSCO power station on salmonid migrations	NIPSCO	151,285 12
Aeros. Mech. Eng.	Houghton	Zero insertion force socket design	Wells Elect., Inc.	7,933 2
Aeros. Mech. Eng.	Hogan	Whirlpool Corporation fellowship in engineering	Whirlpool Corp.	7,870 12
Biology	Duman, Patterson	Research grant-in-aid	Sigma Xi	200 ---
Electrical Eng.	Hogan	Whirlpool Corporation fellowship in engineering	Whirlpool Corp.	7,870 12
Chemistry	Kowalski	Stereospecific replacement of hydroxyl group by carbon	Research Corp.	6,200 24
Electrical Eng.	Uhran	Flow charting for remote reading software programs	Am. Elect. Power Serv. Co.	4,200 2.5
Chemical Eng.	Strieder	Transport in heterogeneous and porous media	Natl. Sci. Fdn.	70,700 24
Mathematics	Matsushima, Nagano	Lie groups and differential geometry	Natl. Sci. Fdn.	44,900 12
Aeros. Mech. Eng.	Mueller	Smoke visualization of subsonic and supersonic flows	U.S. Air Force	3,782 12
Physics	Darden	Study of nuclear reactions using beams of polarized particles	Natl. Sci. Fdn.	5,300 24
Civil Eng.	Irvine, Ketchum	Sequencing batch reactors for wastewater treatment	Natl. Sci. Fdn.	76,800 ---
AWARDS FOR FACILITIES AND EQUIPMENT				
Metallurgical Eng.	Fiore	Materials research equipment	Natl. Sci. Fdn.	51,000 12
AWARDS FOR EDUCATIONAL PROGRAMS				
Theology	Hommes	Institute on theological reflection	Boston Theo. Inst.	14,700 2 wks.
Biology	Weinstein	Experimental parasitology and vector biology	Natl. Inst. Health	80,517 12
Psychology	Borkowski, Whitman	Research training in mental retardation	Natl. Inst. Health	53,861 12
Finance Bus. Econ.	Sim	Faculty fellowship award - School of Mortgage Banking	Mortgage Bankers Assocn.	1,200 1 wk.
Economics	Skurski	AID contract for participant training	Agency Internatl. Dev.	2,260 12
Art	Kremer	Ceramic artists-in-residence	Natl. Endow. Arts	810 2 wks.
SERVICE PROGRAMS				
Center Human Dev.	Dwyer	Needs assessment program	-----	710 ---

Proposals Submitted

IN THE MONTH OF JUNE, 1977

Department or Office	Principal	Short title	Sponsor	Dollars Months
PROPOSALS FOR RESEARCH				
Psychology	Borkowski	Development of the metamemory memory relationship	Natl. Inst. Mental Health	7,365 12
Microbiology Lobund Lab	Pollard	Model therapy system of myelogenous leukemia	Bank America	36,825 ----
Finance	Ghoshal, Patrick	Buffer stocks in the world trade of wheat and rice	Ford Fdn.	47,782 11
Urban Studies	Broden, Roos Kromkowski	Evaluation of housing rehabili- tation in South Bend	City South Bend	13,867 7
Civil Eng.	Theis, Marley	Contamination of groundwater by heavy metals	Energy Res. Develop. Admin.	21,053 12
Management	Vecchio	Resolution of predictions by expectancy theory/equity theory	Dept. Labor	14,994 12
Chemistry	Hayes	XPS studies of the structures of biological systems	Natl. Inst. Health	111,291 12
Accountancy, Finance	Campbell, Johnson Wittenbach	Internal management of business liquidity	Fin. Exec. Res. Fdn.	52,340 12
Aero. Mech. Eng.	Atassi	Unsteady aerodynamic forces on cambered airfoils	U.S. Air Force	45,277 12
Electrical Eng.	Gajda	Electromagnetic properties of advanced composite materials	U.S. Air Force	18,120 2
Earth Sciences	Winkler	Weathering rates of rocks and stones	Natl. Sci. Fdn.	82,366 36
Microbiology	Kulpa	Liposome studies with metho- trexate and poly (U)	Natl. Inst. Health	59,002 12
Aero. Mech. Eng.	Ariman	Earthquake response/seismic de- sign of underground piping syst.	Natl. Sci. Fdn.	103,895 24
Microbiology	Burleson, Kulpa	Interferson-hyporeactivity studies using liposomes	Natl. Inst. Health	65,128 12
PROPOSALS FOR FACILITIES AND EQUIPMENT				
American Studies	Davisson	Computerized laboratory equipment	Frank E. Gannett Newspaper Fdn.	235,870 48
Chemical Eng.	Varma	Research equipment in chemical/ catalytic reaction engineering	NALCO Fdn.	7,500 12
PROPOSALS FOR EDUCATIONAL PROGRAMS				
Black Studies	Stewart, Scott	Single-parent families/extended family kin-helping relationships	Natl. Endow. Humanities	13,170 2
Aero. Mech. Eng.	Jolles	Mechanics I and II	Exxon Educ. Fdn.	11,183 12
Art Gallery	Porter	Work experience internship pro- gram	Natl. Endow. Arts	2,345 3
Engineering	Cohn	Introducing minority students to engineering	CIC + MPME	53,068 12
Engineering	Cohn	Using microcomputers to introduce minority students to engineering	Internatl. Paper Fdn.	23,185 12
English	Robinson	Theatre of the spirit	Natl. Endow. Humanities	40,479 5.5
English	Costello	From script to screen: A semi- nar in film analysis	Natl. Endow. Humanities	45,794 7.5

Summary of Awards Received and Proposals Submitted

IN THE MONTH OF JUNE, 1977

AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	7	\$ 366,998	12	\$ 202,785	19	\$ 569,783
Facilities and Equipment	-	- - -	1	51,000	1	51,000
Educational Programs	2	134,378	4	18,970	6	153,348
Service Programs	-	- - -	1	710	1	710
Total	9	\$ 501,376	18	\$ 273,465	27	\$ 774,841

PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	2	\$ 66,330	12	\$ 612,975	14	\$ 679,305
Facilities and Equipment	1	7,500	1	235,870	2	243,370
Educational Programs	1	53,068	6	136,156	7	189,224
Service Programs	-	- - -	-	- - -	-	- - -
Total	4	\$ 126,898	19	\$ 985,001	23	\$ 1,111,899

Closing Dates for Selected Sponsored Programs

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

Agency	Programs	Application Closing Dates
Department of Labor	Manpower-Related Doctoral Dissertation Grants	September 1, 1977
National Endowment for the Humanities	Education Programs (consultants)	September 15, 1977
National Endowment for the Humanities	Research Programs (centers)	September 1, 1977
National Institute of Mental Health	Experimental Mental Health Training Projects	September 1, 1977
National Institute of Mental Health	Utilization and Development Training Projects in Mental Health	September 1, 1977
National Research Council	Postdoctoral Research Associateships (NASA)	September 15, 1977
National Science Foundation	Ethics and Values in Science and Technology Program	September 1, 1977
National Science Foundation	Greenland Ice Sheet Study Proposals	September 1, 1977
National Science Foundation	Institute for Theoretical Physics Proposals	September 1, 1977
National Science Foundation	Long-Term Collaborative Research Visits to Australia	September 1, 1977
Office of Education	Education of Migrant Children	September 30, 1977
Public Broadcasting Service	Corporation for Public Broadcasting (women's training)	September 1, 1977

documentation

Minutes of the 176th Meeting of the Graduate Council May 10, 1977

The 176th meeting of the Graduate Council was called to order at 3:30 p.m., Tuesday, May 10, 1977, in Room 121 Hayes-Healy Center. All council members but Walter Gajda (excused) were present.

I. APPROVAL OF THE MINUTES OF THE PREVIOUS MEETING

The minutes of the 175th meeting were unanimously approved after changing "Roselyn Glass" to "Carol Glass" in paragraph 3, page 1, and "the Wilson Townhouses for graduate women" to "the Wilson Commons for graduate students," in the last paragraph, page 3.

II. ANNOUNCEMENT OF NEWLY ELECTED GRADUATE COUNCIL MEMBERS

In the Humanities and Social Science Divisions, Robert L. Kerby (history) and Frank Bonello (economics) were elected to four-year terms. In the Science Division, William D. Shephard (physics) was elected to a four year term. In the Engineering Division, Charles W. Allen (metallurgy) and John W. Lucey (aerospace-mechanical engineering) were elected to three-year terms.

III. FINAL REPORT ON THE GRADUATE BIOLOGY QUINQUENNIAL REVIEW

Anthony Trozzolo (chemistry), chairman of the Biology Review Committee, recapitulated his and William McGlinn's (physics) final biology review report (Report D), copies of which were previously distributed to the council membership. By way of preface, he reported an external reviewer's suggestions for strengthening the review process itself. An additional day for the site visit, would, it was suggested, allow the external reviewers needed extra time to consult among themselves, as well as with selected on-site personnel, on major issues which may arise. Meeting faculty groups by subject area rather than academic ranking would have been more helpful to these site visitors. Finally, to minimize redundancies and provide a more unified report, a single comprehensive site report rather than three separate ones, as preferred by the council, was suggested.

By way of structuring his recap, Trozzolo commented in turn on the major concurrences of the external review reports and the corresponding responses of the department on:

1. the biology graduate program,
2. faculty,
3. students and
4. facilities.

As to the graduate program: the two reviewers who submitted comprehensive reports applauded the concentration of the programmatic resources into three major areas: parasitology, vector biology and aquatic biology. Of these, the vector biology and parasitology groups were deemed nationally and internationally visible through their researches, publications and resulting attraction for post-doctorals. The aquatic biology group, on the other hand, being staffed by younger and less productive faculty was seen as still groping for an elusive identity. The graduate curriculum, structure and content was found to be unacceptably fragmented, offering too many course options with too little discrimination between graduate and undergraduate attendants. Remedially, a curriculum reorganization was recommended to provide a core of fewer but basic graduate level courses excluding undergraduates and unclassified postbaccalaureates. Thereafter sequences of selected

seminars and special topic offerings were recommended to assist the graduate through such individualized laboratory training as would be most appropriate to his specific degree and career objectives. It was noted career and professional goals are more and more determined by societal and market demands which much accordingly be reckoned with in graduate admissions as well as in curriculum development. Currently too many graduates appear to be admitted with little or no awareness of career requirements and consequent inadequate preparation for professionally relevant graduate studies.

As to the faculty: on its composition and performance, Trozzolo cited the external reviewers' concern for a more judicious matching of staff resources with department needs. With a 70 per cent tenured faculty and no retirements occurring before 1984, departmental reorganization must rely on optimal use of its tenured staff along with periodic candid reassessment of its untenured staff. Using the quality and influence of publications and the magnitude of outside research support as measures of research productivity, the external reviewers noted a wide variation in faculty research performance. On these criteria, seven senior faculty in two of the major specialization areas were found to generate most of the current outside support. In view of this wide disparity in research productivity, a reassessment of individual teaching, service and research loads was recommended. To this end the department chairman is presently conducting personal interviews to determine individual faculty career goals and consequent assignment preferences before redistributing teaching and service loads. Given the limited institutional funding resources, faculty must seek aggressively extramural support for individual research projects. Extra special attention needs to be given to the recruitment of outstanding young faculty in the current buyer's market. A hard scrutiny of all subsequent tenure decisions is crucial. Finally, leaves of absence should be counted on, in some cases, as much if not more to stimulate less productive but promising younger faculty as to reward others.

Beyond improved intradepartmental, interdepartmental communications for strengthened interdisciplinary programs should be encouraged. Additional communication links between the department, the college and advanced studies need to be worked out and reinforced. Within the department, non-tenured staff feel unconsulted on decisions affecting the department as a whole. Administration by committees to promote larger participation in departmental management paradoxically seems to have diminished department-wide esprit-de-corps.

As to students: Reviewers and department alike recognized the dependence of the program on quality graduate students. Student quality, in turn, is related to the competitiveness of support and service schedules. On both counts, the external reviewers faulted the graduate program: the stipends for assistants are not competitive and their work loads are inordinately heavy. To ease the load stemming from increasing undergraduate enrollments, additional graduate assistants are needed; to improve the quality of applicants and admissions, higher stipends are needed. But unless, beyond the manpower needs of the undergraduate program, the academic interests of admitted graduates are served, increased admissions and higher stipends will not yield a quality program attractive to a large and informed applicant pool. The current practice of admitting postgraduate pre-professionals, oriented towards medical school, and upper-level undergraduates into graduate courses tends to dilute the graduate quality of both courses and program.

The diversion of extramural research support to a growing postdoctoral population, while enhancing the research resources of the funded projects, diminishes predoctoral student support and, in consequence, weakens the graduate program. Finally, the reviewers found the practice of charging graduates for summer tuition short-sighted and self-defeating for as much as it denied to those who could not afford the costs the most productive period of the year in which to pursue and thus complete their graduate research.

To the low graduate stipend and summer support problems, the department countered with the proposal that the Office for Advanced Studies increase the number and enlarge the stipend of assistants, provide summer support to at least some students and remit tuition for some, if not all, graduate students with research assistantships.

As to facilities: Trozzolo noted that the external reviewers' findings supported the department's claim that, though the facilities were generally in good shape, additional animal rearing space is needed as well as a permanent full-time electron microscopy technician. Library insufficiencies mentioned in the departmental documents were unmentioned by the external reviewers. Concluding his recap of the D Report, Trozzolo noted that the review process disclosed not only the strengths and weaknesses of the graduate biology program for the benefit of department and administration alike but also something of the indigenous constraints on the graduate program in the Notre Dame environment. A copy of the D Report follows these minutes.

Present for this final council discussion of the Graduate Biology Quinquennial Review, Theodore Crovello was invited by the council chairman to comment on the overall review. He prefaced his comments with the suggestion that council members consult pp. 21-31 of his department's Report C--Departmental Response to the External Reviewers' Report, copies of which they had previously received. Those pages spell out in detail the department's moves to implement or counter the external reviewers' recommendations. He noted that they call for specific actions by the college dean and vice president for advanced studies to assist the department, faculty and students in meeting the department's reformulated goals. More generally and despite the inordinately delayed reports of the external reviewers, the review has proved to be a strong and continuing involvement of the students from the outset but particularly in the preparation and production of the departmental response. For the future, Crovello recommended that departmental review documents include submitted and approved, even though not funded, staff projects in addition to funded projects. In his view, a fairer statement of the department's research productivity would show that 40 per cent of the staff have major extramural support, 20 per cent have funding from minor or shared grants; 20 per cent are, according to Crovello, without research grants, funded or sought. Of these, one is on temporary appointment; another is on a terminal appointment, a third is involved in reshaping a lab program and the last is heavily involved in teaching and administration. This record, in his view, needs no apologies and compares favorably with any in the department's past.

On graduate admissions, he noted that in biology they have become conspicuously better over the last two years; a hopeful circumstance not unrelated to a more generous assistantship allowance from the Office of Advanced Studies and consequent improvement in the competitiveness of stipends. The department is at the same time and consonantly with the external reviewers' recommendations diminishing the service loads of its graduate assistants.

Crovello's comments evoked a wide ranging open discussion in which the following, among other questions were raised: Is not a normal teaching load of three credit hours a week as reported in the biology response document inordinately low especially as compared to normal loads in the Arts and Letters College? The question as put, it was noted, overlooks the associated 3 to 4 labs of 3 hours duration each associated with such classes as well as the several hours of weekend preparation required to set up the labs. Though the teacher is assisted by graduate assistants, he remains responsible for the overall supervision of the associated labs. Furthermore, as pointed out by the dean of science, teaching and research loads in science faculties are additionally determined by professional market conditions which cannot be ignored in departments requiring substantial extramural research support.

The distribution of teaching, research and service loads within departments and colleges appears to depend upon numerous internal and external variables which do not remain the same from time to time and place to place. Accordingly, they have to be recognized and dealt with. Given the current changing enrollment patterns here and elsewhere and their inevitable impact on staff assignments, the Graduate Council may soon, in the view of the arts and letters dean, have to address the recurrent recommendation of several of the outside reviewers to readjust teaching and service loads to the requirements of research productivity and conversely.

In assessing research time, the council chairman pointed out attention must be paid to "thinking time," that is, the time to conceive, formulate, submit and carry through a viable research project.

Marilyn Lawson, the graduate student representative on the council, strongly commended the heavy involvement of the biology graduate students in the review process from start to finish. The council discussion of the biology review closed with a spirited exchange between the biology and council chairmen on the department's progress in matching and structuring its program offerings to its resources and the career goals of its graduates. In the course of this exchange Crovello called attention to the department's shift of emphasis from the non-research to a research master's program with a consequent tighter selection and ordering of 400, 500 and 600 level courses to assure not just a more adequate coverage of basic materials but more especially a sufficient training in research skills.

The council chairman at this point called for successive motions to approve the Departmental Response to The External Reviewers' Reports (Report C) and the Trozzolo-McGlinn University Committee Report on the Graduate Biology Review (Report D). Both reports were unanimously approved.

IV. PROPOSAL FOR VARIABLE INTERVALS BETWEEN GRADUATE PROGRAM REVIEWS

Before opening the discussion of a proposal by Stanley Hauerwas (theology) and Peri Arnold (government) to change from the current fixed five years review cycle to a future variable five to seven year cycle depending upon a department's rating in the current review, the

council chairman sketched the background of the present review program. On Oct. 29, 1970, the Board of Trustees' Student Affairs Committee accepted in principle a graduate student proposal for a thorough evaluation of the current state of graduate education at Notre Dame. In the 155th meeting of the Graduate Council on May 5, 1971, the council approved a motion to begin a five year review cycle of graduate departments in 1972-73. The COUP Report of 1973 mandated these reviews which were finally initiated in the fall of 1974 with the first site visits by external reviewers in the spring of 1975. To the present, of the 14 departments with completed external reviews, all but those three whose site visits occurred this spring have completed their reviews.

The Arnold-Hauerwas proposal for a variable review cycle provided that a department receiving a positive review in the current review would not be reviewed again for seven years whereas a department receiving a negative review would be reviewed again in five years. The discussion of this proposal generated a number of variants. Thus, some members suggested a discretionary rather than a fixed single or alternative cycle--the actual time interval between successive reviews being determined by the Graduate Council on the basis of the quality of the department's last review. A variant on this suggestion would leave the determination of review frequency to the reviewed department's faculty. The dean of engineering proposed that, within three years of an external review, an internal committee assess a program's compliance with the recommendations of its external review and then recommend to the council whether and when the program should be further reviewed. Noting that current reviews use up the first year of the five year cycle leaving a four year span in which to implement the review findings, the arts and letters dean suggested that a more appropriate time for addressing the whether and/or when of a subsequent review would arise naturally at the end of the four-year implementation time. At this point in the discussion it became clear that in fact two review modes were at issue, namely, a "basic" mode, such as we are presently in, and a "monitoring" mode, such as some of the follow-up reviews being proposed for assessing compliance with the basic mode findings. Though not mutually exclusive and probably correlative, each mode attracted articulate partisans. Another council member suggested continuing on some sort of a consultative teams to return at a reasonable interval to assess a department's compliance with the basic review. A favorable assessment by the consultant would release a department from further review; an unfavorable assessment would require the council to decide on the most appropriate action: program termination or further review. In the perception of yet another council member, since in the final analysis, the quality of a department or a program depends rather on its faculty than its structure or content, only poor departments should be reviewed and then only to be discontinued.

With the accumulation of variants to the original suggestion for variant against the present invariant five-year review cycles, the council chairman closed the discussion with the promise of a position paper collecting and analyzing the various suggestions for presentation at the first meeting of the council in the fall.

V. OTHER BUSINESS

The council approved unanimously the chairman's recommendation of acceptance for admission into candidacy of 45 Ph.D. intents and 125 master degree intents.

On the recommendations of their department chairmen, college deans and the vice president for advanced studies, Jay A. Labinger, assistant professor of chemistry and Pratul K. Ajmera, assistant professor of electrical engineering, were unanimously approved for admission to the graduate faculty.

The council chairman expressed the council's appreciation for the unstinting services of Thomas Blantz (history), Sperry Darden (physics), Walter Gajda (electrical engineering), Nicholas Fiore (metallurgy), Albin Szewczyk (aerospace and mechanical engineering), Arnold and Hauerwas who, with this meeting, completed their tenure on the council. For the retiring council secretary, he invited a round of applause.

In closing, Chairman Robert Gordon promised to address in the upcoming year the questions of graduate foreign language requirements and the status of the master's degree which this year's overburdened agenda were unable to accommodate. The meeting was declared adjourned at 5:25 p.m.

J.J. FitzGerald
Secretary

Report D

University Committee Report of the Graduate Biology Review

The review of the Graduate Program in Biology was conducted on Oct. 13 and 14, 1976 by the members of the External Review Team, Prof. William Balamuth, University of California, Berkeley; Prof. Cluff Hopla, University of Oklahoma; and Prof. Keith E. Justice, University of California, Irvine. During the visit the external reviewers visited the biology facilities, graduate student representatives, all faculty members, both tenured and untenured, and members of the administration.

Since each of the reviewers submitted a separate report with his individual opinions and recommendations (one report arrived in December, 1976, and the other two in March, 1977), the departmental response was addressed to each individual report. There is sufficient overlap in the comments that we will address the various aspects of the graduate program and the corresponding departmental response. Finally there will be some general remarks regarding the review. The Graduate Program in Biology can be divided conveniently into four categories: I) Program or Course of Studies; II) Faculty; III) Graduate Students; and IV) Facilities. Although the reviews of two reviewers were comprehensive in responding to the guide provided by the Council of Graduate Schools and the OAS, the third review was largely devoted to the quality of the graduate student body and to the development of areas of research excellence in the department.

I. Program or Course of Studies

The two reviewers who had comprehensive reports agreed that the most distinctive aspect of the graduate program is its concentration in three areas of special emphasis in each of which a cluster of faculty members have complementary roles in their instructional, student-training and research activities. These three areas are, respectively, parasitology, vector biology and aquatic biology. All reviewers seemed to feel that this division was a reasonable one and proper for a department of the size of the Biology Department. In addition to the three special areas there were opportunities for specialization in the basic areas of genetics, developmental biology, animal behavior and selected aspects of organismal biology, and an important role of these basic areas is apparently to support the special programs. There is also a general feeling that biology is a very broad subject so that expansion into other areas probably would not be a good idea at this time. It was generally agreed that while the parasitology and vector biology programs are well established, the aquatic biology program, in the words of one reviewer, is "still groping for special identity and primary focus." A number of reasons were given for this relative weakness of the aquatic biology program, the most important of which are that it is the youngest program and also involves the younger faculty members. The departmental response agreed with this view. There was a suggestion that a senior faculty member slot be filled by a person in this field. One of the reviewers wondered about the uniqueness of the UNDERC and whether its support was warranted. The departmental response suggested that this decision was largely an administrative matter. There seemed to be some feeling among the reviewers that too many graduate courses were offered and too many undergraduates were enrolled in graduate courses. They thought that this had a bad effect on graduate students who now felt they were competing with undergraduates and that the courses became diluted in level. The reviewers further observed that the actual distribution of undergraduates and graduates in the department suggests that the classification of courses is perhaps unrealistic. One reviewer felt that the number of designated graduate courses seems unjustifiably large to meet the actual needs. The departmental response suggested that it is difficult to offer courses for graduate students only, due to the diversity of biology. Therefore, one has great difficulty filling courses which are open only to graduate students; but, the department has now dropped the requirement of any minimum number of graduate students in a course which is a required course. Further, the department felt that the limitation in number of undergraduate courses that a graduate student can take means that courses have to be raised to graduate level in order to give the graduate student a wider range of choices. The department noted that many of the graduate courses are offered only once every two years and therefore the objection may not be valid. One of the reviewers thought that perhaps there were universal courses that should be taken by all biologists. The departmental response seemed to indicate that the broadness of the subject precluded that possibility. One reviewer noted that a substantial number of the graduate students seemed to be non-Ph.D. students and felt that this would blur the identity of the graduate program and inevitably cut into limited departmental resources. The departmental response was that the Biology Department was at times hard-pressed to find sufficient numbers of the highest quality students to fill its teaching needs, but that this situation is now changing. One reviewer suggested that a committee be formed to determine what courses should be offered. The department noted that they have been carrying out this particular step.

II. Faculty

The faculty provides the continuity for a graduate program and, as one reviewer points out, "A graduate program will tend to reflect the capabilities of the faculty and the resources that the faculty have collectively put together." As mentioned earlier, the faculty research specialities show a broad range through the major areas previously described. The age distribution indicates that no retirements are impending until 1984 and that 70 per cent of the faculty is tenured. The reviewers felt that these two facts impose limitations on the plans for any major reorganization of the existing staff barring terminations or resignations. As a measure of research productivity of the faculty the reviewers set up two criteria: 1) the quality and influence of research publications, and 2) the extent of extramural research grant support. Application of these criteria showed wide variations in faculty performance. Most of the faculty who have extramural research grants are senior faculty. One of the reviewers actually reviewed the faculty individually. However, the departmental response was more general and our comments here are also more general. To the reviewers the most disturbing aspect of the review concerned the recruitment of outstanding young faculty. They felt that the department should take this responsibility very seriously and should be encouraged to do so by the administration. There is no question that there are outstanding scientists in the department; however, if the department wishes to maintain and upgrade the quality of its faculty, it must take a hard look at tenure decisions since the future of the department ultimately lies with the younger faculty members. The reviewers felt that, in view of the wide variation in research productivity, it would be appropriate to adjust teaching loads on the basis of this productivity. The departmental response indicates that the chairman is discussing with faculty members their individual career goals and a decision is made about teaching and service loads which will enable the faculty member to "be a full and complete faculty member at Notre Dame." The reviewers noted that only seven faculty members currently have extramural research grants. They suggested that, in view of the limited institutional resources, it must be accepted as essential to seek extramural research programs. The suggestion was made by one reviewer that leaves of absence have not been fully utilized in the department, to which the department responded that three faculty members will be on leave next year. However, the question of whether the leave of absence is a reward or, in fact, a period for stimulating some of the less productive members of the faculty is one which should be considered.

There was a general agreement by the reviewers that more departmental meetings were needed in order to increase communications between the members of the department and the administration. This apparently has been already put into effect in the department. It was also felt by some of the non-tenured members of the faculty that they were not always consulted on decisions affecting the department. Also, the departmental budget is known only to the chairman. A reviewer suggested that both the department and the administration should be "hard-nosed" in their approach to each other; that is, the administration should critically evaluate department proposals and vice versa. One reviewer urged continued support of the American Midland Naturalist although the reviewers recognized that half of the time of the editor was involved in this enterprise.

The general recommendations regarding the faculty were the following: 1) the next increment in faculty should occur in the field of population genetics. This suggestion originated in discussions with faculty and graduate students during the review and the departmental response has been to concur with the suggestion; 2) while the areas of vector biology and parasitology are in relatively good condition and the faculty within these areas complement each other in excellent fashion, aquatic biology is not very well established and careful study of the future development of this area is suggested--one possible addition would be a senior faculty member whose interests are in aquatic biology; 3) a faculty addition in the field of ecological parasitology was recommended; 4) the recruitment and nurture of the junior faculty must be recognized as the key to the future national ranking of the department. Beginning faculty members should have had post-doctoral research experience and established their independence from their pre-doctoral research supervisor.

III. Graduate Students

One important criterion in judging a graduate program is to be measured in the quality of its graduate students. The procedure for accomplishing this is to recruit the best graduate students that one can. The reviewers felt that the department should strive to raise the quality and size of its applicant pool. The reviewers and the department recognized that the need for teaching assistants to staff undergraduate laboratories can have extraordinary influence on the size and quality of the graduate student body. However, the department felt it was hard-pressed to find sufficient number of TAs to handle the undergraduate courses and enrollments have climbed rapidly in recent years, and although the graduate GRE scores have improved in recent years, there is still a serious need for more TAs and better quality ones. One reviewer suggested spending funds on a temporary full-time instructor non-tenure track position rather than to support less-than-fully acceptable graduate students. This alternative was not acceptable to the department since they felt that this would create a second-class status for some faculty members. A very important issue in the recruiting of graduate students is whether the graduate stipends are competitive with those of comparable schools outside the University. The reviewers, in general, felt that they were not competitive and the department agreed. Closely related to this point was the feeling by all of the reviewers that, while the support of post-doctoral scholars in a laboratory certainly adds to the quality of research and graduate instruction in the group, the wholesale diversion of grant funds from graduate student support would have a deleterious effect on the graduate program. In addition, the reviewers were concerned with the requirement that graduate students pay tuition in the summer and suggested that the "actual net income to Notre Dame is relatively minor compared to the effect it has on the morale of graduate students and their progress in their research." In addition, the reviewers agreed that since "for most students the problem of financial support is year-round," the absence of summer support poses some administrative policy decisions for both the administration and the department in possible budgetary reallocations to alleviate the graduate student's financial burden during the summer, which is potentially the most productive period of the year. The departmental response to the low graduate stipend and summer support issues was to suggest that direct support from the Office of Advanced Studies be increased to provide more GAs, increase academic year graduate student stipends, permit the guaranteeing of summer support to some students, and provide tuition remission for (at least some) students whose stipends are paid by research grants. A recommendation that one fellowship or RA be reserved for the "have-nots" or younger faculty was countered by the departmental response in which it was pointed out that this action would remove one pressure to get more extramural funding.

IV. Facilities

Facilities were thought to be in reasonably good shape, but there were a number of recommendations. The reviewers thought that the amount of animal rearing space should be increased, and one of the reviewers suggested a rearrangement of existing facilities in order to accomplish this aim. The reviewers also suggested that there should be more technical support, such as an electronics or mechanical shop and an electron microscopy technician. Apparently, the library facilities were not visited or commented upon; however, the departmental response points out that there ought to be more funds in the biology library budget.

In addition to the response to the reviewers' comments, the faculty recommended several actions which were suggested by the review. These may be summarized as the following: 1) specific steps to upgrade certain undergraduate courses to the graduate level; 2) increased assignment of differential teaching load to assure that everyone is a complete fully active faculty member; 3) maintenance of the three areas of research emphasis; however, no faculty member should feel like a second-class citizen if he is not in one of those three areas; 4) in the area of financial support, there are several requests of the Office of Advanced Studies to increase the level of support of the graduate program, particularly, in connection with the number and level of graduate student stipends; 5) continuous positive action by faculty members to obtain major outside grants, additional professional recognition and to dedicate themselves to graduate research; 6) that the size of the biology faculty be increased in accordance with the suggestions made earlier; addition of a population geneticist seems paramount; 7) suggested changes for the mechanism involving application to the Graduate School.

It is clear to the internal review committee that the review process has served a very useful function in making the department and the administration aware of the strengths and weaknesses of the graduate program as well as to focus on the constraints under which the graduate program is conducted in the environment that constitutes Notre Dame. The goals that the department has set for itself are admirable, but the accomplishment of those goals will involve a continual striving for better students through aggressive recruiting, greater extramural support, and a constant vigilance that the avenues of communication between the department and the administration be kept open and clear. For just as the field of biology clearly recognizes that the vitality of an organism depends on the nourishment and interaction of its independent parts, so too does the flourishing of the graduate program.

William D. McGlinn
Divisional Representative

Anthony M. Trozzolo
Chairman

May 2, 1977

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