

'71'72

# notre dame report

## contents

### the university

- 45 Official announcements
  - WATS lines
  - Erratum
  - Campus tours
- 45 United Way Appeal
- 45 University committees
- 46 Joint alumni board meeting

### faculty notes

- 46 Miscellany
  - Faculty lectures and papers
- 47 University appointments
- 47 Non-university appointments

### events

- 48 ND-SMC Theatre
- 48 Exhibitions: architecture
- 48 Art gallery exhibits
- 48 Saint Mary's concert

### office of advanced studies

#### Notes for Principal Investigators

- 49 Submission of Proposals through the Office of Public Relations and Development
- 49 No-Cost Time Extensions and Major Budget Revisions for Grants and Contracts

### Information Circulars

- 50 The Danforth Foundation: The Kent Fellowship Program for 1972-73 (No. FY72-20)
- 50 N.S.F.: Pre-Service Teacher Education Program (PSTEP) (No. FY72-21)
- 51 General Services Administration (GSA) Federal Supply Service (No. FY72-22)

### Graduate School

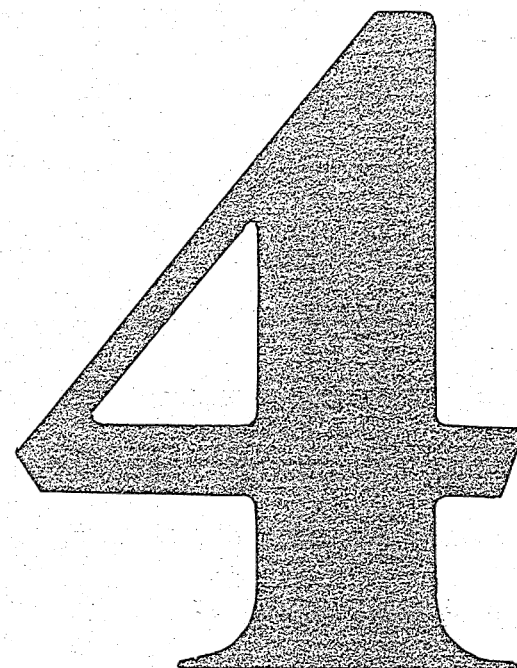
- 52 Resources for the Future, Inc.'s Doctoral Dissertation Fellowships
- 53 Current Publications and Other Scholarly Works

### Monthly Summary

- 54 Awards Received
- 55 Summary of Awards Received and Proposals Submitted
- 56 Closing Dates for Selected Sponsored Programs

### documentation

- 57 Text of Hesburgh speech: "Resurrection for Higher Education"



# the university

## Official announcements

The Development Office began a telethon follow-up on the Summa campaign October 25 and will continue the project through December. The telethon will require the use of all WATS lines after regular business hours during the evenings of November 29 and 30 and December 1, 7 and 8, from 6:30 p.m. on. The WATS service will be available as usual up to 6:30 p.m. during these evenings, but thereafter will be reserved for the exclusive use of the Development Office. It is suggested that you note these dates and times so that you can schedule any WATS calls at a time that will not conflict with the Development's telethon during these specified dates.

ERRATUM: In the third issue of the Notre Dame Report, an error occurred in the Teacher-Course Evaluation memo. In the typing of the copy, the word "not" was inadvertently placed in the second sentence of the second paragraph on page 41. The sentence should read: "Regular consultation with faculty and students will be required, and there are printing and computer deadlines which cannot be met in time for the December administration."

CAMPUS TOURS: Campus tours are arranged through Mrs. Lorraine Faley in the Department of Information Services (7367). The tours are given by members of the campus Knights of Columbus Council, with occasional assistance from Arnold Air Society members. There is no charge. Printed "Walking Tours" of the campus are available at campus gates and from the Information Services Office in the Administration Building.

## United Way Appeal

The University of Notre Dame was chosen this year as the pilot institution in the Educational Division of the 1971 St. Joseph County United Way Appeal. Thirty county social service agencies and thousands of community residents receive direct annual support and assistance through the United Way. The Notre Dame drive formally concludes on campus this week.

Dr. Harvey Bender, professor of biology and campus chairman, last week reported significant progress toward the \$40,700 goal. Dr. Bender asserted that

"the response from our entire Notre Dame community has truly been great and deeply gratifying." He is hoping to note an overall improvement in campus participation in the drive, which last year was less than 50 per cent.

In conjunction with the drive, a group of Notre Dame students initiated the project of selling United Way Fighting Irish shamrocks at the University of Southern California and Navy football games. Proceeds from the sale will go to the 1971 county campaign on behalf of the students.

## University committees

Rev. James T. Burtchaell, C.S.C., provost, has announced the formation of the following committees to serve during the academic year 1971-72.

### CENTER FOR CONTINUING EDUCATION--VISITATION COMMITTEE

Dr. Robert E. Gordon, Chairman, Vice President for Advanced Studies  
Dr. C. Joseph Sequin, Business Administration  
Dr. Kenyon S. Tweedell, Science  
Dr. Stephen D. Kertesz, Arts and Letters  
Dr. Julius T. Banchero, Engineering  
Dr. Charles W. Murdock, Law School

This committee will study in depth the role of the Center for Continuing Education at Notre Dame

### GRADE COMMITTEE

Dr. William M. Burke, Chairman  
Sister M. Jeanne Finske, C.S.C., Saint Mary's Academic Dean  
Mr. Richard J. Sullivan, Registrar  
Dean Leo M. Corbaci, Dean of Administration  
Dean Frederick J. Crosson, Arts and Letters  
Dean Bernard Waldman, Science  
Dean Thomas T. Murphy, Business Administration  
Dean Joseph C. Hogan, Engineering  
Dean Emil T. Hofman, Freshman Year of Studies

This committee will study the new grading system, the Pass-Fail option, the College and University averages and report its findings to the Academic Council.

## COMMENCEMENT PROGRAM COMMITTEE

Dr. William M. Burke, Chairman  
Dean Leo M. Corbaci, Dean of Administration  
Dean Robert J. Waddick, Arts and Letters  
Mr. Richard J. Sullivan, Registrar  
Mr. James E. Murphy, Assistant Vice President,  
Public Relations and Development  
Mr. James V. Gibbons, Director of Special Projects  
Mr. James Gorman, ND class of '68, a third year law student  
Two ND graduates presently in our Graduate School

This committee will review past commencement programs and make its recommendations to the provost. The president of the senior class also is activating a commencement committee.

## Joint alumni board meeting

The alumni board of the University of Notre Dame and alumnae board of Saint Mary's College met in joint session October 22, the first combined meeting in the nearly 100-year history of the two organizations. Coordination of future activities of the groups, in light of the planned unification of the two schools, was one of the principle topics.

The 15-member Notre Dame group, under the direction of national president Robert A. Erkins, Buhl, Idaho, heard reports from University officials on current developments in which the alumni were involved in earlier separate sessions. Similar meetings were conducted on the Saint Mary's campus by Mrs. Timothy P. Galvin Jr., Munster, Ind., national alumnae chairman.

---

# faculty notes

---

NOTE: The principal academic activities of the faculty will continue to appear in the official monthly compilations of the Office for Advanced Studies and these compilations subsequently will be published as part of Notre Dame Report. All material within the purview of these monthly summaries should be sent to the Office for Advanced Studies. "Faculty Notes" deals with items not within the purview of these Office for Advanced Studies reports, and material intended for its consideration should be sent to the editor of Notre Dame Report.

## Miscellany

Dr. Eugene J. Brzenk, associate professor of English, and Dr. John G. Borkowski, associate professor of Psychology, were recently elected for a three-year term to the Faculty Library Committee. The mailing of ballots to voters was unavoidably delayed and, therefore, in order to allow ample time for the return of all ballots, the count was delayed until October 13.

Dr. Fabio Dasilva, associate professor of sociology, attended the IV International Peace and Conflict Research General Conference, Bled, Yugoslavia, in October, where he presented a paper on "Current Situation and Dynamic Processes." Early in April Dr. Dasilva was a guest of the International Conference of the Peace and Conflict Research Institute in Denmark, where he lectured and presented a paper

on "National Integration, Regional Power Blocks and Change."

Dr. Nicholas F. Fiore, chairman of the Department of Metallurgical Engineering and Materials Science, presented a paper entitled "Damping and Ductility in Ni Base Superalloys" at the meeting of the American Society for Metals October 20 in Detroit.

Mr. Edward A. Fischer, professor of communication arts, presented four lectures October 30 on the use of films in schools at a meeting of the New Orleans Media Institute and funded by the American Film Institute of Washington, D.C.

Dr. Astrik L. Gabriel, director of the Mediaeval Institute, was formally honored as a corresponding fellow of the Bavarian Academy of Sciences at a Washington, D.C. luncheon October 28.

Rev. Theodore M. Hesburgh, C.S.C., President, will be the principal speaker at the National Urban League's Equal Opportunity Day Dinner November 18 at the New York Hilton Hotel. Chairman of the dinner is Henry Ford II.

Dr. James L. Massey, professor of electrical engineering who is on leave of absence to the Royal Technical University, Copenhagen, Denmark, for 1971-72, was an invited delegate to the Plenary Session of the Soviet Academy of Sciences, Moscow, Information Theory Congress in Tsahkadsor, Armenia, U.S.S.R., in September.

Dr. John O. Meany, associate professor of education, presented a paper entitled "Saint Simeon, Mystic-- The New Theologian as a 'Psychoanalyst,'" at the annual meeting of the Society for Scientific Study of Religion in Chicago's Bismark Hotel, October 22.

Dr. Basil R. Myers, chairman of the department of Electrical Engineering, has accepted an invitation from the Institute of Electrical and Electronics Engineers, New York, to organize and be guest editor of a special issue of the IEEE Transactions on Education, scheduled for publication November, 1972.

Dr. Myers will also chair a session on "Network Topology" at the Fifth Asilomar Conference on Circuits and Systems, Pacific Grove, Calif., November 8-10.

Dr. Joseph J. Nahas, assistant professor of electrical engineering, (co-author Richard J. Schwartz): "A Three Terminal Voltage-Tunable Gunn Effect Device", International Electron Devices Meeting in Washington, D.C., October 12, and the Fall Electronics Conference, Chicago, Illinois, October 18.

Dr. Cyriac K. Pullapilly, associate professor of history, presented a paper entitled "The Izhavas of Kerala and Their Historic Struggle to Gain Social Acceptance in the Hindu Society" at the American Academy of Religion's annual convention in Atlanta, Ga., October 28-31.

Dr. Charles E. Rice, professor of law, spoke on medical malpractice at a general practice seminar at Edmonton General Hospital October 15 in Alberta. He also addressed the annual meeting of St. Mary's Hospital October 7 in Evansville.

Dean Thomas L. Shaffer of the Law School addressed the Cass County Bar Association October 21 on "What's Happening to Legal Education?"

Msgr. Edward Spiers, research associate in the Office of Educational Research, has been representing the Columbus diocese and The Catholic Times at the world Synod of Bishops in Rome.

Dr. Wilhelm Stoll, professor of mathematics, was awarded a travel grant from the National Science Foundation to attend the Conference on Complex Analysis in Several Variables at Oberwolfach, West Germany, September 5-11, where he gave a one hour lecture on "algebraic and analytic dependence of meromorphic functions."

The following lectures and papers were given by members of the aerospace and mechanical engineering department:

Dr. Raymond M. Brach, associate professor, presented a paper entitled "Optimal Design of Vibrators for Specified Characteristic Functions" at the 82nd Annual Meeting of the Acoustical Society of America in Denver, Colo., October 20.

Dr. Charles W. Ingram, assistant professor, presented a paper entitled "Smoke Flow Visualization" at the Workshop on Flow Visualization and Flow Measurement Techniques at the Naval Ordnance Laboratory, Md., October 20-22.

Dr. John W. Lucey, associate professor, presented an invited lecture entitled "What is Nuclear Energy?" at the winter meeting of the American Nuclear Society, October 18-21 in Miami Beach, Fla.

Dr. Edgar E. Morris, assistant professor, presented two papers at the winter meeting of the American Nuclear Society in Miami Beach, Fla., October 18-21 entitled "Gamma Ray Penetration Correction Factors for Ribbed Slabs" and "Gamma Ray Penetration of Ribbed Slabs."

Philip X. D'Souza, a graduate student in electrical engineering, presented a paper entitled "Development of a Two Dimensional Model of a Solar Cell" at the IEEE Fall Electronics Conference in Chicago, October 18. The co-author was Professor W.B. Berry.

## University appointments

Rev. Theodore M. Hesburgh, C.S.C., President, has announced the appointment of Dr. John J. Fitzgerald, professor of philosophy, as acting director of the Center for the Study of Man in Contemporary Society.

Mr. Richard W. Clemens, director of Current Funds--Restricted, Office of the Comptroller, has announced the appointment of Mr. Thomas E. Houghton as research property officer for the University. Mr. Houghton will set up and maintain a property control system as required by the U.S. Government for all DOD and NASA Government-furnished and Contractor-acquired property.

## Non-university appointments

Rev. David B. Burrell, C.S.C., chairman of the theology department, has been elected to the Central Committee of the Society for Religion in Higher Education.

Dr. Harold Isbell, assistant professor of English, Saint Mary's, has been appointed to the Committee on Student Writing of the College English Association and to the committee in charge of the Poetry Awards Project of the Indiana CEA.

Dr. Charles W. Murdock Jr., associate professor of law, has been appointed to the advisory committee of the Illinois Institute for Continuing Legal Education.

Dr. Charles E. Parnell, professor of modern languages, has been reappointed to the State Advisory Committee on Foreign Languages.

Dr. Nicholas D. Sylvester, assistant professor of chemical engineering, has been appointed organizer and chairman of an AIChE-sponsored session, "Drag Reduction in Polymer Solutions," at the 72nd National Meeting.

---

# events

---

## ND-SMC Theatre

"My Sweet Charlie," a bittersweet comedy-drama about youth and understanding written by David Westheimer, will be presented by the Notre Dame-Saint Mary's Theatre November 5 and 6 at 8:30 p.m. and November 7 at 7:30 p.m. in the Little Theatre of Moreau Hall. The play is the first of two Studio productions for the 1971-72 season and will be directed by Dr. Roger Kenvin, chairman of the speech and drama department.

Noel Coward's "Blithe Spirit" will be presented November 12, 13, 18, 19 and 20 at 8:30 p.m. in Washington Hall. Directed by Charles Ballinger, instructor in the speech and drama department, the Theatre's third production of the season combines wit, style and sophistication in an improbable farce.

Tickets for faculty, staff and students for "My Sweet Charlie" are \$1.00 (No charge for season ticket holders). Tickets for "Blithe Spirit" are \$1.50. Reservations can be made by phoning 283-4141.

## Exhibitions: architecture

A total environment house is currently on exhibition in the Department of Architecture gallery, through November 5. The house is a cantilevered, four-level structure designed to float among the redwood trees which surround it.

The architecture of Bernard Ralph Maybeck will be on display beginning November 28 and continuing through December 20. The exhibition will include a sampling of the many buildings Maybeck designed

and crafted to a unique level of aesthetic refinement.

The Department of Architecture gallery is open daily from 10 a.m. till 10 p.m.

## Art gallery exhibits

Dean A. Porter woodcuts, a comprehensive showing of prints by the Notre Dame curator which exhibits a traditional approach to media and a contemporary commitment in expression, November 7 through December 19.

Alfred Manessier, a retrospective of paintings and prints by this internationally known contemporary French artist, organized in cooperation with the Galerie de France and the Arts Club of Chicago, November 10 through December 27.

## Saint Mary's concert

Saint Mary's music department will present a concert of choral music by Johannes Brahms Sunday, November 7 at 8:15 p.m. in O'Laughlin Auditorium. The program will include both sacred and secular compositions sung by the Saint Mary's Glee Club and the University Chorus. The Glee Club is under the direction of Miss Susan Stevens, instructor of music at Saint Mary's, and the University Chorus is directed by Mr. Arthur Lawrence, assistant professor of music at Saint Mary's.

---

# office of advanced studies

---

## Notes for Principal Investigators

### Submission of Proposals Through the Office of Public Relations and Development

On occasion, faculty members may wish to submit proposals to private individuals, organizations, and foundations through the University's Office of Public Relations and Development. Like other proposals, such proposals are to follow the normal channel to the Office of Advanced Studies, which will review, obtain necessary approvals, and then transmit to the Office of Public Relations and Development. To alert the Office of Advanced Studies, an appropriate remark for this special processing should appear on the proposal routing form. The Office of Public Relations and Development will process such proposals only after the proposal has been reviewed by the Office of Advanced Studies-Division of Research and Sponsored Programs.

### No-Cost Time Extensions and Major Budget Revisions for Grants and Contracts

All Government agencies are placing greater emphasis on the management of grants and contracts. Requests for no-cost extensions and major revisions of the budget will be reviewed critically for justification. Accordingly, such requests should be put in the form of a proposal.

For a no-cost extension, the following items should be included in the proposal:

1. Detailed justification for the no-cost extension.
2. Statement of work to be performed during the extended period.
3. Fiscal report as of date of request.
4. Budget for the extended period and its relation to the total budget.
5. A statement on all charges which exceed contract or grant funds for work done to complete the research.

A request for a major budget revision should include similar items:

1. Detailed justification for the revised budget.
2. Fiscal report as of date of request.
3. Revised budget and its relation to the original approved budget.

A title page with signatures of principal investigator, departmental chairman, dean, and University administrative officials should accompany the request. The request, together with a proposal routing form, should be routed through the same channel as for a proposal.

## Information Circulars

### The Danforth Foundation: The Kent Fellowship Program for 1972-73

NO. FY72-20

The Danforth Foundation is seeking applicants for Kent Graduate Fellowships for 1972-73.

**Eligibility:** Applicants must be engaged in disciplines in the humanities and social sciences, which might be classified as contributing to a liberal education, must have spent at least one year in graduate work leading to the Ph.D., must be preparing for teaching or administration in college and universities, and must be vitally interested in relating their educational plans to their basic values.

**Period of Award and Stipend:** The award is for one year, and is normally renewable until completion of the degree or for a maximum total of three academic years of graduate study. A Fellow may choose his own institution of graduate study. Fellowship stipends are based upon individual need but may not exceed: \$2,025 (academic year) or \$2,700 (calendar year), plus dependency allowances. Tuition and official fees required by the institution in which the Fellow is enrolled for the degree are provided for all Fellows.

**Procedure for Election:** Persons may be nominated by a Kent Fellow, Danforth Fellow, a member of the Society for Religion in Higher Education, or a member of a graduate faculty. Persons may also apply directly. The applicant must then obtain endorsement from a member of the graduate department in which his work is being done or has been done. Only after the endorsement has been received will the candidate be invited to complete his application.

**Applications and Other Deadlines:** Persons who desire to apply should do so by November 15, 1971. The deadline for receiving the endorsement form is December 1, 1971; for receiving the completed application, December 15, 1971. Applicants are required to take the Graduate Record Examination Aptitude Test, Verbal and Quantitative, and the Advanced Test, if offered in their major fields. Applicants are responsible for having the scores reported to the Danforth Foundation by the deadline for completed applications. The Foundation will accept scores on GRE's subsequent to October, 1966.

Additional information may be obtained in the Office of Advanced Studies-Division of Academic Programs (Rev. William A. Botzum, CSC).

### National Science Foundation: Pre-Service Teacher Education Program (PSTEP)

NO. FY72-21

The purpose of the Pre-Service Teacher Education Program (PSTEP) is to assist universities and colleges in improving curricula for the preparation of those who plan to become teachers of pre-college science. The object is to help in the development of institutional models that provide the best possible initial education for prospective science teachers in terms of their mastery of subject matter, their competence in fostering learning by their future pupils, and in their ability to plan and produce or modify teaching materials.

Through PSTEP the Foundation will encourage the testing of ways to produce teachers who will be able to manage the final organization of available materials into instructional units and sequences that will increase their future students' knowledge, desire to learn and skill in learning. The program is particularly responsive to imaginative and practical suggestions that will lead to programs for producing teachers whose strong capacity to

learn will assure the self-renewing of their teaching competence and an adequate mastery of their field of science. The Foundation is concerned with the content and the procedures of all components of a pre-service teacher education program.

The due date for proposals has been left open.

A copy of the guideline for preparation of proposals is available in the Office of Advanced Studies-Division of Research and Sponsored Programs.

## General Services Administration (GSA) Federal Supply Service

NO. FY72-22

The following provides additional information on the General Services Administration Federal Supply Service described in Information Circular NO. FY71-17.

Last year, the University arranged with GSA to allow grantees of the U.S. Department of Health, Education, and Welfare to use GSA sources of supplies and services for grant related activities.

Now, in addition, National Science Foundation and Department of Defence grantees are authorized to make use of GSA Supply Sources as optional procurement channels in addition to their normal supply sources. Grantees are invited to use GSA Supply Sources to acquire materials and supplies at substantial savings over retail prices.

Information on procedures for making use of this GSA service may be obtained from the University's Purchasing Office.



# Graduate School

## Resources for the Future, Inc.'s Doctoral Dissertation Fellowships

Resources for the Future, Inc. announces its annual doctoral dissertation Fellowships in Natural Resources for 1972-73.

### ELIGIBILITY

1. Fellowship candidates must be nominated by the academic department in which the student is a doctoral candidate. Direct applications are not accepted. Nomination forms for submission are supplied only to the chairmen of eligible departments. A department may nominate more than one candidate.
2. Nominees must have completed all requirements for the doctorate except the dissertation before the start of the 1972-73 academic year.
3. The research proposed by the candidate must relate to natural resources, their products, or their services, including land, water, minerals, energy materials, forests, outdoor recreation, fish, wildlife, and air, or any combination of these. It must involve the social sciences or related fields of study, such as economics, economic history, economic geography, business administration, political science, political history, political geography, public administration, planning, sociology, statistics. Interdisciplinary research involving the application of more than one social science or the combination of social science with a physical, biological or engineering science are appropriate.

### DURATION

The fellowship tenure period will be the regular 1972-73 academic year, consisting of two semesters or three quarters. RFF does not grant additional funds to extend awards beyond their specified period.

### AMOUNT

The basic fellowship stipend is \$4,000. A dependency allowance of \$500 is provided for married fellows with children and an additional allowance may be available to cover modest incidental research expenses. Requests for foreign travel will be considered unusual and may be acted upon favorably only where clearly necessary for the collection of primary data, and only for limited periods of time.

### CLOSING DATE

Nominations must be received by February 1, 1972.

Address: Resources for the Future, Inc., Fellowship Program,  
1755 Massachusetts Avenue, N.W., Washington, D.C. 20036

# Current Publications and Other Scholarly Works

## ARTS AND LETTERS HUMANISTIC AND SOCIAL STUDIES

### History

- B.B. Szczesniak. "The Tartar Relation and the Vinland Map: Their Significance and Character." Proc. Vinland Map Conf., Smithsonian Institution, Univ. Chicago Press 1971, 93-103.

### Psychology

- T.L. Whitman, V. Caponigri, and J. Mercurio. "Reducing Hyperactive Behavior in a Severely Retarded Child." Mental Retardation 1971, 9, 17-19.

### Sociology and Anthropology

- A.J. Weigert. "An Emerging Intellectual Group Within a Religious Organization: Implications for Social Change." Social Compass 1971, 18, 101-115.  
A.J. Weigert, with D.L. Thomas. "Family as a Conditional Universal." J. Marriage and the Family 1971, 33, 188-194.

## BUSINESS ADMINISTRATION

### Finance and Business Economics

- E.R. Trubac. "Economic Considerations Regarding the Constitutionality of State Aid to Church-Affiliated Schools." Rev. Soc. Econ. 1971, 29, 258-262.

## EDUCATION

- W.E. Bartlett. "Vocational Maturity: Its Past, Present, and Future Development." J. Vocational Behavior 1971, 1, 217-229.

## ENGINEERING

### Aerospace and Mechanical Engineering

- N.C. Huang. "Snap-Through Buckling of Two Simple Structures." Internatl. J. Non-Linear Mech. 1971, 6, 295-310.  
L.H.N. Lee, with L.M. Murphy. "Inelastic Buckling Process of Axially Compressed Cylindrical Shells Subject to Edge Constraints." Internatl. J. Solids Structures 1971, 7, 1153-1170.

### Electrical Engineering

- M.K. Sain, with S.R. Liberty. "Performance-Measure Densities for a Class of LQG Control Systems." IEEE Trans. on Automatic Control 1971, AC-16, 5, 431-439.

## STUDY OF MAN IN CONTEMPORARY SOCIETY

- G.N. Shuster and R.E. Thorson. Editors of "Evolution in Perspective. Commentaries in Honor of Pierre Lecomte du Noüy." 1970, xi-xviii + 280 pages. Univ. of Notre Dame Press, Notre Dame, Indiana.

## SCIENCE

### Chemistry

- S. Basu, with B. Kaufman and S. Roseman. "Isolation of Glucosylceramide from Yeast (*Hansenula ciferri*)." J. Biol. Chem. 1971, 246, 4266-4271.  
S. Basu, A. Schultz, M. Basu, and S. Roseman. "Enzymatic Synthesis of Galactocerebroside by a Galactosyltransferase from Embryonic Chicken Brain." J. Biol. Chem. 1971, 246, 4272-4279.  
J. Bastellino, with W.J. Brockway. "The Mechanism of the Inhibition of Plasmin Activity by E-Aminocaproic Acid." J. Biol. Chem. 1971, 246, 4641-4647.  
\*W.H. Hamill, with P.B. Merkel. "Energy Loss Spectra of Low-Energy Electrons Scattered from Thin Solid Molecular Films." Chemical Physics 1971, 55, 1409-1413.  
\*R.R. Hentz and H.G. Altmiller. "Radiation-Induced Isomerization of the 1, 2-Diphenylpropenes in Polar Liquids." J. Physical Chem. 1971, 75, 2394.

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

### Microbiology

- \*A.A. Nordin, with J.C. Cerottini and K.T. Brunner. "Specific In Vitro Cytotoxicity of Thymus-derived Lymphocytes Sensitized to Alloantigens." Nature 1970, 228, 1308-1309.

-----  
\*Under the Lobund Laboratory  
-----

### Physics

- S.K. Bose and W.D. McGlinn. "Remarks on the Breaking of Dilation Invariance." Phys. Rev. 1971, D4, 342.

# Monthly Summary

## Awards Received

IN THE MONTH OF SEPTEMBER, 1971

Department or Office	Principal	Short title	Sponsor	Amount-\$ term
AWARDS FOR RESEARCH				
Microbiology- Lobund Lab.	Pollard	Grant-in-aid	Miles Labora- tories, Inc.	5,000 1 yr.
Biology	Craig	Genetic and reproductive biology of aedes mosquitoes	Natl. Inst. Health	108,866 1 yr.
Educational Research	Fahey	Economic problems of non-public school	Office Education	5,000 2 wks.
Civil Eng.	Tenney	Environmental health traineeship grant	Public Health Service	1,890 ---
College Bus. Admin.	Murphy	Grant-in-aid	General Motors Corp.	1,000 ---
Radiation Lab.	Magee	Effects of radiation on matter	Atomic Energy Comm.	1,082,000 1 yr.
Radiation Lab.	Magee	Radiation chemistry data center	Atomic Energy Comm.	45,000 1 yr.
Civil Eng.	Morgan	Tornado detection, tracking, and intercept	Dept. Commerce	1,933 4 mos.
Microbiology- Lobund Lab.	Wagner	Response of gnotobiotics to microbial floras	Natl. Inst. Health	48,487 1 yr.
Microbiology- Lobund Lab.	Wilson	Radiation protection and recovery in germfree animals	Environ. Protection	8,775 3 mos.
Aerospace Mechanical Eng.	Nee, Yang	Laminar-transition-turbulent boundary layers	Natl. Sci. Fdn.	55,300 2 1/2 yr.
Biology	Weinstein	Genetics and cancer	Cancer Soc. St. Jos. Cty.	6,678 1 yr.
Chemistry	Walter	Spectra of amino acids and protein metal complexes	Natl. Inst. Health	21,123 1 yr.
Biology	Saz	Intermediary metabolism of helminths	Natl. Inst. Health	72,856 1 yr.
Biology	Weinstein	Cancer research	Indiana Ladies Aux. VFW	3,000 ---
Sociology Anthropology	Koval	Priestly celibacy	Natl. Fed. Priests' Coun.	1,470 ---
AWARDS FOR FACILITIES AND EQUIPMENT				
Radiation Lab.	Magee	Effects of radiation on matter	Atomic Energy Comm.	95,000 1 yr.
Athletic	---	Locker room	Sam J. Gerardi	25,000 ---
AWARDS FOR EDUCATIONAL PROGRAMS				
Financial Aid Scholarships	McCauslin	Scholarship	Pauline S. Hazen Fund	1,000 ---
Financial Aid Scholarships	McCauslin	Scholarship	Lubrizol Fdn.	4,500 ---
Financial Aid Scholarships	McCauslin	Scholarship	Bristol Brass Fdn., Inc.	1,000 ---

## Summary of Awards Received and Proposals Submitted

IN THE MONTH OF SEPTEMBER, 1971

### AWARDS RECEIVED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	8	\$1,345,510	8	\$122,868	16	\$1,468,378
Facilities and Equipment	1	95,000	1	25,000	2	120,000
Educational Programs	-	---	3	6,500	3	6,500
Service Programs	-	---	-	---	-	---
Total	9	\$1,440,510	12	\$154,368	21	\$1,594,878

### PROPOSALS SUBMITTED

Category	Renewal		New		Total	
	No.	Amount	No.	Amount	No.	Amount
Research	-	---	14	\$726,920	14	\$ 726,920
Facilities and Equipment	-	---	-	---	-	---
Educational Programs	1	\$ 4,079	1	70,624	2	74,703
Service Programs	-	---	-	---	-	---
Total	1	\$ 4,079	15	\$797,544	16	\$ 801,623

## Closing Dates for Selected Sponsored Programs

Agency	Program	Application Closing Dates
Atomic Energy Commission	Faculty Research Participation at AEC Laboratories	December 31, 1971
East-West Center	Study in Areas of International Concern	December 15, 1971
National Institutes of Health	Research Career Development Awards	December 1, 1971
	Special Research Fellowships	January 2, 1972
	Postdoctoral Research Fellowships	January 2, 1972
National Research Council	NASA Postdoctoral Research Associateship	January 8, 1972
National Science Foundation	Engineering Research Initiation Grants	December 1, 1971
Social and Rehabilitation Service, HEW	Development and Expansion of Undergraduate and Graduate Programs in Social Work	December 31, 1971
U.S. Office of Education	Research in Modern Foreign Language Instruction	December 1, 1971

---

# documentation

---

(Following is the text of a talk by Father Hesburgh which keynoted the 54th Annual Meeting of the American Council on Education October 7 in Washington and was subsequently delivered, in slightly different form, at a meeting of the Notre Dame faculty October 20.)

## RESURRECTION FOR HIGHER EDUCATION

During the past few years higher education in this country -- and indeed throughout the world -- has undergone a baptism of fire. Many books have been and will be written to assess why it happened. More thoughtful persons will ask what might be learned from all that happened. Those perennially endowed with hope, as all of us must be, will now inquire: Where do we go from here?

All of this assumes, of course, that internal revolution, violence, vulgarity, and disintegration within the institutions of higher education have peaked out, that the high water mark has been reached and that the waters of contradiction are subsiding. No one can be certain that this assumption is true. One can only surmise that a phenomenon that came upon us unsuspectedly, with the speed of Summer lightning, and all of a sudden engulfed the whole world of higher learning might very well leave us in the same rapid way. Whether it will or not is still surmise and assumption and hope at the moment.

All we can be sure of at this point in time is that there has been a lot of wreckage left behind from the onslaught of these past four or five years. Many, if not most, of our past distinguished presidents are no longer with us. The last two or three years saw most of them leave their posts. What is worse, many of them, after long years of service, presiding over unprecedented growth in their institutions, must now experience some bitter memories of their final days, when everything seemed to become unglued all at once, when a life of reason was suddenly smothered by blind emotion, when a place of calm civility was engulfed by violence, bombings, burnings, vandalism, and vulgarity.

I would hope that in a calmer future moment we might have an honor roll of those who received the brunt of the attack. They have often and irresponsibly been characterized as weak, incompetent, even stupid men and women. I knew most of them personally, cherished almost all of them, and have deeply regretted their departure from our scene. Let at least one word be spoken today in vindication of their valiant, if belated, efforts in an almost impossible situation. They were the inevitable scapegoats for all that happened and they have suffered greatly for all of us and our common enterprise. For that, I salute them in absentia.

I believe that what went wrong, went wrong globally. The universities in Tokyo, London, Paris, Berlin, and Rome were as disturbed and disrupted as Berkeley, Harvard, Columbia, Cornell, and Wisconsin. Some of this was due to a wave of history, still not well understood; part of it was due to serious mistakes on the part of the total enterprise of higher education. It could be called a crisis of credibility, of legitimacy, of authority, or of frustrated expectations. In large measure, it was the kind of abnormal convulsion of heightened tensions and conflicting convictions that characterize every revolution, when the traditional consensus is eroded, and the supportive pillars that depend upon free consensus become suddenly unglued, and total collapse ensues.

It was difficult to be standing there when the dam gave way and not get wet. I recall one brief period when one president was unhorsed because he called in the police, and another fell because he did not. I asked one great president how he had survived a difficult crisis and he answered with great humility: "Each morning when I dragged myself from bed, I asked myself, 'What is the worst thing I could do today?' and I didn't do it."

However one explains the worldwide revolution in higher education, in the case of the revolution in American higher education all the usual problems were exacerbated by the Vietnam war, racial conflict, sudden realization of the plight of the poor in the midst of plenty, wastage and pillage of our national resources, the horrible state of national priorities as reflected in the federal budget, and, in general, by the increasingly dismal quality of our national life. Having made little progress in their assault on racial injustice and the inanity of the Vietnam war, the young -- an unprecedented proportion of whom were now college and university students for a variety of right and wrong reasons -- turned their frustrations on the institution closest to hand, their college or university. The other problems continued to grind away, so that the new revolution fed upon itself as frustration here was heightened by impatience there, and impatience there by frustration here.

There was enough wrong within the colleges and universities, too, so that we soon had an ever more explosive mixture awaiting simple ignition. There were plenty of volunteers to light the match. Every succeeding explosion on one campus ignited others elsewhere. And so it went across the country from West to East, and back again. Few institutions escaped unscarred, some were profoundly changed, and all were affected in one way or another. Some looked in the face of death, and that more than anything else may have accounted for the detente.

What really was wrong within the colleges and universities that fueled the fires of revolution? Strangely enough, we were the victims of our own success. Higher education in its earlier American version grew slowly, from the founding of Harvard in 1636 to a total of 50,000 students in 1900. For the last century, this student body doubled every fifteen years. This was hardly a herculean task when the doubling meant going from 12,500 to 25,000 students, or from 25,000 to 50,000, or even from 50,000 to 100,000.

But by the early 1950's, we had a base of 3,000,000 which in doubling to 6,000,000, and then moving towards 12,000,000, meant doing educationally in fifteen years more than had been done in the last 330 years. We were all so busy growing and expanding, reaching towards the enrollment of half the age group in higher education, that we did not have time to ask whether what was good for 50,000, or 2% of the college age group in 1900, was equally good for 8 1/2 million, or 40% of the college age group, in 1970.

Moreover, change during all these decades has meant simply and mostly expansion and growth, externally, but not necessarily internally, more of the same for ever greater numbers of students, more of the same kind of faculty teaching, the same kinds of courses. This may make sense in the production of more hot dogs, but growth in higher education certainly must mean more than simple reduplication of what is and has been.

Suddenly, the students asked the question we had all been too busy to ask -- does this whole enterprise, as presently constituted, really provide a good education for everyone? I grant that their suggestions for internal change were not always an obvious move towards certain educational improvement, but they did start us looking more seriously at what we were doing, and it is no secret that we were not always greatly pleased by what we saw within our institutions.

Some of our most distinguished and most highly-compensated faculty were teaching less and less and seeing students only when unavoidable, while graduate students carried on the bulk of teaching for slave wages. New faculty, by the tens of thousands, were trained annually for research, engaged to teach, and most rewarded when they could negotiate lucrative contracts from government, industry, or foundations that took them away from both campus teaching and on-campus, course-related research that involved their students as well as themselves and their careers. Four distinguished Midwestern universities once boasted that almost 400 of their faculty were presently overseas, and the standard joke was the Pan-American Faculty Chair that took the distinguished holder somewhere, anywhere but to the university.

Administrators were getting their share of the bounty too: not only balancing their budgets with the ever-enlarging research contract overhead funds, but traveling about to see how the overseas or off-campus enterprises were coming along, and finding additional time to lend their distinguished presence to all manner of industrial, governmental, military, or other activities. Meanwhile, at home, liberal education, the corse of the whole endeavor, became fragmented, fractured, and debilitated, as sub-specialty was heaped on sub-specialty, and students learned more and more about less and less, and next to nothing about the great humanistic questions, such as the meaning of life and death, war and peace, justice and injustice, love and hatred, art and culture, to mention a few.

Few educators even averted to the fact that this enormous growth in their student bodies did not include those who needed higher education most -- minority youngsters and children of the lower socio-economic quartile of the population, for whom a college degree was the essential ingredient to upward mobility and who, whatever their talent or native intelligence, had only one-seventh of the chance to enter higher education as did the youngsters from the upper socio-economic quartile, whatever their intelligence or promise.

The total structure of higher education remained largely the same, although the enterprise doubled every fifteen years and quadrupled every thirty years. Student questioning about governance caught most colleges and universities flat-footed. In their eagerness to reform, many institutions overcompensated so that, from being badly governed, they now emerged as largely ungovernable. Every decision now has to run the gauntlet of many potential vetoes from every conceivable quarter within and outside the university. This, too, compounded the internal problems, since a wise man with some plausible solutions to assist the ailing institution could die of old age before seeing them realized.

My account of internal problems is far from complete, but before leaving this first point of: "Why the revolution of the past few years?", may I add one more potent factor of failure. Most colleges and universities during, and possibly because of their rapid growth, simply ceased to be communities. Almost everyone was culpable. Trustees were often simply unrepresentative of the total endeavor they ultimately sought to govern. One distinguished Western university had a Board of Trustees that was consistently wealthy, male, white, aged, Western, Republican and Protestant. Read backwards this means that there were generally no middle or lower class Trustees, no blacks or Chicanos or Orientals, no women or younger people, no Catholics or Jews, no Middle-Western, Southern, or Eastern members, and, generally, no Democrats. One might ask how such Trustees can provide wisdom for a community that contained reasonably large numbers of all the elements not represented on the Board.

One might wonder why presidents and top administrators in higher education did not see the storm coming and strengthen their communities to meet it effectively. An obvious answer would be that the storm burst suddenly and that the community had been already badly eroded. Rather than strengthened, the community had to be recreated and this is no easy task when part of the crisis was a lack of community, or an external quasi-community that lacked credibility, legitimacy or even the will to govern itself.

If one must fault presidents and chancellors among others, and we must, it would have to be for a lack of moral leadership, not just in time of crisis, but more consistently in earlier and peaceful times. We too often were blind to the moral implications of unbridled educational growth that was certainly spectacular, but questionably educational. We did not use our influence to move for more representative Boards of Trustees, greater rewards for those faculty concerned with students, teaching and true educational reform and growth, more minority students, and stronger words at times for those students who clamored for responsible freedom without being responsible once granted greater freedom. We might also have labored more aggressively in the continuing education of our alumni who have their own new problems understanding each new age and change.

Once we washed our hands of any moral concern for all that was happening in our academic communities, we reaped the harvest of a disintegrating community. I grant you that the great wisdom and courage required for moral leadership are not common qualities among men and women, but then neither are college or university presidencies common tasks. I grant as well that, in its early stages, disintegration of a community is almost imperceptible to all but the very wisest and, as disintegration brings on a crisis of legitimacy and credibility, super-human courage and charisma are needed to recreate what has been largely lost.

In any case, most presidents paid their individual price for a situation created by many, not least of all by the wild men among the student body, most of whom have now successfully graduated, and by some irresponsible faculty members who are still around now that the scapegoat has been driven into the desert. No need to lament further, only to learn from all that happened. There is an interesting Gospel story of the man from whom a devil was driven, only to have him later repossessed by seven worse devils.

What then can we learn from all that has happened? First, I think, that moral leadership is as vitally important to a community as the participation of all its members in its healthy life and growth. Participation has been the word most popularly voiced following the crisis, but there has been all too little said about the moral imperatives of this participation. I have strong belief, nurtured no doubt by my own prejudices, that the

central person in exercising moral leadership for the life and prosperity of any academic institution must be its president. He must, first and foremost, speak for the priorities that really count in academia. Presidential leadership demands that, for his speaking to be effective, he must somehow enlist the support of the various segments of the community. Otherwise, he is only speaking for himself and to himself, which is good posturing, but bad leadership.

There is no magic formula for presidential leadership. Each president must establish his own credibility. He will do this best by the goals which shine through his own life and activities. The day of Olympian detachment for presidents is over. If justice needs a voice, on campus or off, he must have the wisdom and courage to say what must be said, and the president must not be the last one to say it. If faculty or students need defense, he should be the first to defend them. If either or both need criticism, the president cannot avoid saying honestly and clearly what is wrong. If the learning process is lagging because of glacial progress in reforming curricula, structures, teaching, and inflexible out-moded requirements, the president must remind the community of what is needed for educational growth and survival in an unprecedented changing world. He must blow the trumpet loudly and clearly, because the times demand it. There was a time when a president was expected to be a lion abroad and a mouse at home. No longer.

The president, above all other members in the community, must portray respect for the mind and its special values, for true learning and culture, for humanity and humane concerns, for academic freedom, for justice and equality, in all that the university or college touches, especially the lives of its students, faculty and alumni. Of course, the name of the game is good communications on every level, at every opportunity, but I must insist that the president communicates best by what he is and what he does with his own life. If he has credibility, then the goals he proposes will be the extension of that credibility and the means of glueing the community together.

While the community is primarily academic, I submit once more that its basis of unity must be of the heart, as well as of the head. It was not merely intellectual problems that recently unravelled great institutions of learning across the world, but rather the dissipation of moral consensus, community, and concern. When members of a college or university stop caring about each other or their institution, or become unclear about personal or institutional goals, then community ceases to be and chaos results.

The mystique of leadership, be it educational, political, religious, commercial, or whatever, is next to impossible to describe, but wherever it exists, morale flourishes, people pull together towards common goals, spirits soar, order is maintained, not as an end in itself, but as a means to move forward together. Such leadership always has a moral as well as an intellectual dimension; it requires courage as well as wisdom; it does not simply know, it cares. When a faculty and a student body know that their president really cares about them, they will follow him to the heights, even out of the depths.

Moreover, good leadership at the top inspires correlative leadership all down the line. Participatory democracy cannot simply mean endless discussion. Rather, if it is to work at all, it means that every member of the community, especially within his or her own segment of the community, exercises moral responsibility, especially when it hurts and when it demands the courage to say and do what may be unpopular. Student judicial courts will not survive if they never find anyone guilty or never impose adequate sanctions for obvious wrong-doing. Student government will soon enough lose all credibility and acceptance, even from students, if its only concerns are freer sex, more parking, education without effort, and attainment of the heights of Utopia without climbing. Faculty senates will only be debating societies if they never recognize the central faculty abuses and move effectively to correct them. Vice presidents and deans and departmental chairmen do not exist to pass the buck upwards and to avoid the difficult decisions. Leadership may be most important at the presidential level, but it is absolutely essential at every level -- trustees, faculty, administrators, students and alumni -- if the community is going to be equal to the task that lies ahead for each college and university and for the total enterprise of higher education in America.

This brings me to my final point: Where do we go from here? First, I think we should clearly understand the climate that results from the events of the past five years in academia. For the first time in more than a century, the end of quantitative growth in higher education is in sight. Having doubled in size every fifteen years during the last century, we now see higher education leveling off by 1980, possibly slipping downward a bit. This latter movement is already perceptible in graduate education.



However, there is a more serious aspect to the climate in which we in higher education now live. After a century when the society at large could not do enough for universities and college, when these institutions represented the epitome of just about everyone's hopes, a degree being the closest earthly replica of the badge of salvation, suddenly the great American public, our patron and faithful supporter, is rather completely disillusioned about the whole enterprise, let down, as they say, by the weak, vacillating, spineless presidents, their former darlings, disgusted by the ultra-liberal, permissive faculties, who were going to solve all of the world's problems, but could not solve their own, and, needless to say, they find the students revolting in more ways than one, despite the fact that these are their own sons and daughters, the products of the most primordial education of all that does or does not take place in the family.

It is paradoxical that at a time when the universities are being asked to solve more problems than ever before -- urban blight, racial tensions, minority opportunity, generation gap, overseas development, environmental pollution, political participation by the young, forward motion in atomic energy and space, and a whole host of other concerns, at this time we are misunderstood, abused, and abandoned as never before by government and foundations, by benefactors, parents, and alumni, and generally by the public at large.

From what I have said already, it is obvious that we are not blameless at this moment in time. I will not repeat our faults. Most dramatically, in the eyes of the public, our institutions who were supposed to have answers for everyone and everything had few answers for ourselves and our own troubles; the citadels of reason fell to the assaults of mindless emotion; the centers of taste and civility spouted obscenities; the havens of halcyon peace and pranks saw within them violence, destruction, and even death.

We must admit that we were given magnificent coverage in the media when we were at our worst and, although the worst, in terms of delinquent persons and horrible events, represented a very small corner of the total scene, the stereotypes came through clearly and tended to be universalized. The centuries-old love affair of American society with higher education suddenly turned to ashes. And now, at our time of greatest opportunity and direct financial crisis, we are spurned by the very people who created us, confided their children to us, supported us, and looked to us for a solution to everything difficult.

Perhaps one central problem is that we encouraged and allowed the public to place too much hope in us, to expect too much of our endeavor, to be too confident of our apparent omnipotence when, in fact, there are simply many important tasks that we cannot do without perverting what we were established to do. We are not the State or the Church, the Red Cross, or the Peace Corps, not the Overseas Development Council, or the Legal Aid Society. Our members may be active in any or all of these bodies, but we are not these bodies and we cannot institutionally do their work. No wonder that hopes were frustrated when we suggested or allowed hope to transcend the reality of what we are and what we really should be doing.

Not only our supporters in government and the private sector, but our students expected from us something far beyond higher education and, of course, received less.

A Harvard professor has stated it well:

"The dissolution of family and community life and the decline of secondary education have produced a generation of college students, many of whom no longer seek at the university learning and social pleasures, but also and above all affection, attention, moral guidance, and an opportunity to become personally involved in adult affairs. The universities are not equipped to provide these things." (Richard Pipes, New York Times, April 25, 1969, p. 28)

Personally, I believe we have come out of the crisis more disposed to provide for our students affection, attention, moral guidance, and an opportunity to become personally involved in adult affairs. The vote for eighteen-year olds looms more important than military service. We have been listening harder to our students which spells attention. We have learned that it is difficult to educate those we do not really love, and I trust I have already said enough about the moral dimension of higher education.

Perhaps during that period of rapid growth, we grew beyond our potential to be personal and human. High on the list of our agenda now must be how to correct this. As mentioned above, the faculty, the heart of the whole endeavor, were often seduced by the possibility of being rewarded more and more for teaching less and less. Tenure too often became a safe opportunity for somnolence rather than a call to be different, to dare, and to excel. Trustees and presidents were too often too busy with the wrong things. Students were generally on target, but not always on the right one, especially when autocriticism was required. Let us admit it, we were all less than we could and should have been. We were all caught up in unusual historical currents in a very troubled, unjust, and unpeaceful world, yes, but we still must answer for ourselves and our personal responsibility to remake our own world of higher education in a better image.

Anyway, I began with the hope that the worst may be over. Ours is a resilient enterprise -- see how it grew -- and we may well be better for the many tragedies we have experienced during the past five years. Clark Kerr recently said that American higher education has entered its second climacteric in more than a third of a millennium of its existence. That may be fearsome, but it is also exciting. According to Kerr, the last climacteric lasted fifty years, roughly from 1820 to 1870. Those fifty years were difficult; they saw many changes, but they were the prelude to the century of extraordinary growth that we have just experienced. May our second climacteric also be the prelude to better days ahead.

It would be consonant with the rapidity of change in our times, as compared to the last century, that our climacteric might be compressed from fifty into five years. Apart from hope, at least we must believe that we are, in large measure, the masters of our own destiny. If we have unwittingly disestablished our credibility, we can also consciously re-establish it. If we have tarnished our integrity of purpose, we can learn from our frustrated and impossible hopes and refurbish our central purpose. If we grew slack in moral leadership, spoiled by affluence and prosperity, we will surely have some lean years ahead in which to rededicate ourselves to what is right and just. We cannot undo the past five years, but we can learn from them.

There is little profit in just licking our wounds or feeling sorry for ourselves. We still represent the best hope for America's future, provided that we learn from our own mistakes and re-establish in the days ahead that which so often testified to the nobility of our endeavors in times past. All is not lost. We are simply beginning again, as man always must, in a world filled with ambiguities, the greatest of which is man himself.

## NOTRE DAME - SAINT MARY'S UNIFICATION

Following recent unification discussion, the following news release was authorized by both the University of Notre Dame and Saint Mary's College:

On Thursday evening (October 21) a representative group of trustees and officers of the University of Notre Dame and Saint Mary's College met to continue negotiations for the eventual unification of the two schools. Following this session separate meetings of the full boards of the two institutions were held over the weekend.

Mother M. Olivette Whelan, C.S.C. and Edmund A. Stephan, chairmen, respectively, of the Saint Mary's and Notre Dame trustees, said in a joint statement that progress has been made in several areas attending the unification and that meetings would follow soon to further consider financial arrangements after reports from auditors have been completed. The overall goal for complete unification, they noted, remains the academic year 1974-75, although there is still hope it can be accomplished sooner.

## editorial committee

Leo M. Corbaci  
Dean of Administration  
Chairman

Jeannine M. Doty  
Editor  
283-7162

Richard J. Sullivan  
Registrar

Richard W. Conklin  
Director, Information Services

Ronald R. Parent  
Associate Director, Information Services

---

## notre dame report

An official publication published fortnightly by the University of Notre Dame

Vol. 1, No. 4

October 30, 1971



\$2.00 subscription rate per academic year.  
Individual issues on sale at University Bookstore  
Third-class postage paid at Notre Dame, Ind. 46556

---