

# notre dame report

---

## contents

### the university

- 1 Opening Mass
- 1 President's Reception and Address to Faculty
- 1 Gift Income Sets ND Record
- 1 New Center to Study Sciences, Liberal Arts
- 2 Advanced Studies Launches New Publication
- 2 Telephone Directory Notice
- 2 Publications and Graphic Services

### faculty notes

- 3 Honors
- 4 Activities

### documentation

- 7 1985-86 NDR Publication Schedule
- 8 NDR Submission Information
- 9 Summer Session Commencement Address
- 11 Faculty Senate Journal  
May 7, 1985
- 14 --Appendix 1. Report of Faculty Senate  
Benefits Committee
- 15 --Appendix 2. Report on the University's  
Contribution to TIAA-CREF (Discussion Draft)
- 17 --Appendix 3. Report of the Chairman of the  
Faculty Senate 1984-85

### advanced studies

- 19 Special Notices
- 19 --Awards from the Jesse H. Jones Faculty  
Research Travel Fund for 1984-85
- 20 --Awards from the Zahm Research Travel Fund,  
1984-85
- 20 --International Doctoral Research Fellowship
- 21 Current Publications and Other Scholarly Works
- 24 Awards Received
- 25 Proposals Submitted
- 25 Summary of Awards Received and Proposals  
Submitted

85-86

September 6, 1985

number

1

---

# the university

## opening mass

The Mass to celebrate the formal opening of the 1985-86 academic year will be held on Sunday, Sept. 22, at 10:30 a.m. in Sacred Heart Church. The presiding celebrant will be Rev. Theodore M. Hesburgh, C.S.C., University President, and the homilist will be Provost Timothy O'Meara.

## president's reception and address to faculty

The President's Reception for new faculty members will be held at the Center for Continuing Education on Sunday, Sept. 22, from 2-3:30 p.m. The President's annual address to all faculty members will be on Wednesday, Oct. 2, at 4:30 p.m. in Washington Hall.

## gift income sets nd record

Gift income of \$33.8 million in fiscal 1985 has set a record at Notre Dame, according to William P. Sexton, vice president for university relations. The total is an increase of 40 percent over fiscal 1984 and eclipses the previous high of \$31.5 million raised by the University in 1980-81.

Corporate giving reached a new high of \$9.7 million, and parents gave a record \$7.5 million. Other categories of giving were individuals (\$7.6 million), organizations (\$1.6 million), foundations (\$6.1 million) and deferred gifts (\$1.1 million). The percentage of alumni making gifts went up slightly to 48 percent.

## new center to study sciences, liberal arts

The John J. Reilly Center for Science, Technology and Values, an interdisciplinary program intended to bridge the gap between the sciences and the liberal arts, has been established at the University.

John D. Reilly, a University alumnus who heads a Washington, D.C., mortgage firm, has underwritten the center in memory of his father. Its programs are intended to enhance teaching and research that will focus upon science, technology and the liberal arts. In addition to the development of new courses, to be taught by faculty from the Colleges of Engineering, Arts and Letters, and Science, the center will also sponsor lectures and conferences on science topics with an emphasis upon value judgments involved in the use of many new technologies.

A primary role of the center will consist of overseeing the five-year Arts and Letters/Engineering degree program. Students who enroll in the program will receive more specialized counseling through the center, as well as opportunities for new scholarships. New courses will also be added to the program, which offers students the opportunity to receive bachelor's degrees from both Colleges. The possibility of a foreign study program within the five-year curriculum is also being considered.

The center memorializes the native of a Pennsylvania mining town who worked in and later managed coal preparation plants in Pittsburgh, Clairton and LaBelle, Pa. John D. Reilly received Notre Dame bachelor's degrees in 1963 from the College of Arts and Letters and in 1964 from the College of Engineering and serves as president of the Reilly Mortgage Group in Washington, D.C.

Vol. 15, No.1

September 6, 1985

Notre Dame Report (USPS 7070-8000) is an official publication published fortnightly during the school year, monthly in the summer, by the University of Notre Dame, Department of Public Relations and Information. Second-class postage paid at Notre Dame, Ind. Postmaster: Please send address corrections to: Editor, Notre Dame Report, c/o Rm. 212, Administration Building, Notre Dame, IN 46556

© 1985 by the University of Notre Dame, Ind. 46556. All rights reserved.

---

## advanced studies launches new publication

Beginning with this issue, information on sponsored program activity previously published in the Advanced Studies section of Notre Dame Report will appear in a new separate publication titled Research Notes, published by the Office of Advanced Studies, Division of Research and Sponsored Programs.

The contents of the new publication will include special notices, policy statements, notes for principal investigators, information circulars, and closing dates for selected sponsored programs. Summaries on proposals submitted and awards received, current publications and other scholarly works, and other items of historical record will continue to be published in Notre Dame Report. Faculty members should continue to direct information regarding publications to the attention of Dr. King W. Pfeiffer, Sponsored Programs Administrator, 314 Administration Building, using the green cards available from the Office of Advanced Studies.

Dates of issue for Research Notes will parallel those for NDR. Since each publication will have its own distribution list, they are likely to appear in mailboxes a day or two apart from each other.

## telephone directory notice

The Department of Publications and Graphic Services is currently compiling information from staff, faculty and departments for the 1985-86 University of Notre Dame/Saint Mary's College permanent telephone directory, scheduled for distribution sometime in October. Please refer to the preliminary directory for instructions on reporting any additions, deletions or changes that should be made in the listing of staff and faculty members in the ND Staff/Faculty Listing and Departmental Listing sections of the directory. There are four different cards for your use and instructions are included on each. If you have any questions, or if you would like to request

telephone directory listing cards, please contact Jacki Callender in their office at 239-5337.

As always, this refers only to Notre Dame faculty and staff. Saint Mary's staff and faculty should contact Dorothy Peters in the Saint Mary's Purchasing Department at 284-4544. Notre Dame and Saint Mary's students should contact their respective Registrar's Offices.

Please Note: The deadline for receipt of all cards at the Publications and Graphic Services Office for inclusion in the permanent directory is September 11, 1985. A correctly completed card must be on file there in order for necessary changes to be made. Cards received after this date will not be used. All information must be on a card (no other form of written changes or telephone calls will be accepted) and should be typed or printed legibly.

## publications and graphic services

Publications and Graphic Services is responsible for the total printing program of the University and offers publications assistance to all departments, colleges, centers and institutes at Notre Dame. The staff provides editorial, design and production services to its customers with no charge other than the cost of design materials and the finished printed piece. The office coordinates relations with the printer from initial contact through printing and delivery.

The office also supervises the Copy Center, located in the rear of the Administration Building.

Questions about the department and its services may be directed to Carl Magel, Director, 415 Administration Building (239-5337).

# faculty notes

---

## honors

John D. Dow, Freimann professor of physics, has been elected to the board of directors of I/O Experts, Inc., Willoughby, Ohio.

Rev. Theodore M. Hesburgh, C.S.C., president of the University, has been named one of three recipients of the first John W. Gardner Leadership Awards of the Independent Sector. The award honors the founder of Common Cause who is also a director of the Independent Sector, a national forum to encourage giving, volunteering and not-for-profit initiative. Other recipients are Marian Wright Edelman, president of the Children's Defense Fund, and Mitchell Sviridoff, a Ford Foundation executive. All will be recognized Oct. 8 during the New Orleans annual national assembly of the Independent Sector.

Patrick Horsburgh, professor emeritus of architecture, was elected a member of the Airship Association, London, England, June 28, and has been re-elected vice president of the Channel Tunnel Association.

Kenneth P. Jameson, associate professor of economics and faculty fellow in the Kellogg Institute, has been named Mellon Research Fellow at the Institute for Latin American Studies of the University of Texas. He will work with the Benson Latin American Collection on his project on "Educational Expenditure Reductions and Their Effect on Rural Production."

Daniel K. Lapsley, assistant professor of psychology, was recently appointed to the editorial board of the new "Journal of Adolescent Research." He is also serving on the editorial board of "Counseling and Values."

Susan Pinto Madigan, assistant professor of art, art history and design, was re-elected secretary of the alumni association of the International Center for Byzantine Studies, Dumbarton Oaks, Washington, D.C., and reappointed editor of that association's Bulletin. She was also appointed reviewer for the "Bulletin Codicologique" of Scriptorium.

Kathie E. Newman, assistant professor of physics, has been chosen to receive an Eloise Gerry Fellowship for 1985 by the Fellowship Committee of the Sigma Delta Epsilon Graduate Women in Science.

Guillermo O'Donnell, academic director of the Kellogg Institute and Kellogg professor of international studies, was re-elected vice president, 1985-88, of the International Political Science Association at the XIII World Congress of Political Science, Paris, France, in July. He also was re-elected chair of the Committee on Research Committees and Study Groups of the association for 1985-88, and was elected to the board of the Argentine Foreign Relations Association for a two-year term.

Kenneth F. Ripple, professor of law, has been named to the American Bar Association advisory board on the bicentennial of the U.S. Constitution.

Leonard M. Savoie, chairman and professor of accountancy, has been appointed to the Education Executive Committee of the American Institute of Certified Public Accountants.

## activities

Terrence J. Akai, assistant dean of the College of Engineering and assistant professor of aerospace and mechanical engineering, presented a paper titled "A Numerical Study of Spin Effects on Axisymmetric Flow Past a Body of Revolution" at the AIAA 18th Fluid Dynamics, Plasmadynamics and Lasers Conference held in Cincinnati, Ohio, July 16-18.

Stephan Arndt, assistant faculty fellow in the Center for the Study of Contemporary Society and in psychology, presented a paper on "Student's Attitudes Towards Computers" at the Rochester Conference on Computers and Society, Rochester, N.Y., June 21.

Kathleen A. Biddick, assistant professor of history, co-organized a session on "Pastoral Resources and the Medieval English Economy" and delivered a paper titled "Consumption and Production of Pastoral Resources on a Medieval Estate: Peterborough Abbey in the Fourteenth Century" at the 20th International Congress on Medieval Studies, Western Michigan University, Kalamazoo, May 9-12.

Ian C. Carmichael, assistant professional specialist in the Radiation Laboratory, presented a paper, "Ab initio Molecular Orbital Calculations on the Electronic Structure. 'Isolated' Vibrational Frequencies and Spin Density Distributions in  $\text{AME}_3$  Radicals and Radical Ions ( $\text{A} = \text{B}^-, \text{C}, \text{N}^+, \text{Al}^-, \text{Si}, \text{P}^+$ )\*" at the Fifth International Congress on Quantum Chemistry, Montreal, Quebec, Canada, Aug. 19-23.

Jean-Paul Chauvet, research associate in the Radiation Laboratory, gave a seminar titled "Model Systems in Photosynthesis. Photophysical Study of Photosynthetic Pigments in Lipid Monolayers and in Micellar Medium" at the Centre de Recherche en Photobiophysique, Université de Trois Rivières, Quebec, Canada, July 30.

Daniel M. Chipman, associate professional specialist in the Radiation Laboratory, presented a paper titled "Electron Affinity of Hydroxyl Radical" at the International Congress on Quantum Chemistry, Montreal, Quebec, Canada, Aug. 19-23.

Michael J. Crowe, professor in the Program of Liberal Studies, presented a paper titled "Astronomy and the Extraterrestrial Life Debate 1700-1900" at the 17th International Congress of the History of Science in Berkeley, Calif., Aug. 8. Portions of the paper were taped for rebroadcast by the Voice of America.

James T. Cushing, professor of physics, delivered a paper, "The Importance of Heisenberg's S-Matrix Program for the Theoretical High-Energy Physics of the 1950's" at the Congress for the History of Science held in Berkeley, Calif., July 31 - Aug. 8.

Paritosh K. Das, associate professional specialist in the Radiation Laboratory, presented a paper titled "Sensitized Ring Opening in Phenyl Oxiranes" at the Gordon Research Conference on Organic Photochemistry, Andover, N.H., July 15-19.

Angel Delgado-Gomez, assistant professor of modern and classical languages, delivered an invited paper titled "Medical and Erasmian Humanism in Renaissance Spain: Two Visions of Nature and Providence" at a symposium on Erasmus in Spain organized by the Biblioteca Menendez Pelayo in Santander, Spain, June 10-15.

Peter Diffley, assistant professor of biological sciences, presented a lecture, "Immunity and Immunodysfunction in African Trypanosomiasis" as part of a guest speaker series titled "Immunobiology of Parasitism," sponsored by the department of veterinary pathobiology at the University of Illinois, Champaign-Urbana, Sept. 4.

Thomas L. Doligalski, assistant professor of aerospace and mechanical engineering, presented a paper titled "Initial Development of a Low-Speed Jet in a Cross-Flow" at the 18th AIAA Fluid Dynamics, Plasmadynamics and Lasers Conference, Cincinnati, Ohio, July 16-18.

William G. Dwyer, professor of mathematics, presented a lecture titled "Homotopy Commutative Diagrams and their Realizations" as an invited participant in the Special Session on Topology at the Canadian Mathematical Society Summer Meeting in Quebec, June 6-8. He also gave an invited lecture titled "A New Approach to Abstract Homotopy Theory" at the Workshop on Homotopical Algebra and its Applications, University College of North Wales, Bangor, Wales, July 21-26.

William F. Eagan, associate professor of management, chaired a panel discussion on "The Legal Environment Course: What Content and Emphasis?" at a meeting of the Midwest Business Administration Association, Chicago, Ill., March 29, and presented a paper titled "Whistleblowing and Job Security: An Employee Right or Employer Prerogative?" for the Tri-State Business Law Association, Akron, Ohio, April 13.

Malcolm J. Fraser, Jr., assistant professor of biological sciences, presented a series of papers at the 18th annual meeting of the Society for Invertebrate Pathology, Sault Ste. Marie, Ontario, Canada, Aug. 4-8: "Analysis of Genotypic Heterogeneity in an Isolate of *Heliothis zea* Nuclear Polyhedrosis Virus" (with Bart Corsaro); "Characterization of Virus Mutants Isolated Upon Passage of *Choristoneura fumeriferana* MNPV in Larvae of *Trichoplusia ni*" (with Heidi Wang); and "Plaque Assay of Baculovirus: A Survey of the History and Current Applications of the Technique with Special Reference to FP, OB negative, and blue plaque morphology mutants," presented at the Symposium on Application of Celluculture for Production and Evaluation of Pathogens or Toxins at that meeting. He also presented "Characterization of Virus Mutants isolated upon passage of *Choristoneura fumeriferana* MNPV in Larvae of *Trichoplusia ni*" at the annual meeting of the American Society of Virology, Albuquerque, N.M., July 21-25 (with Heidi Wang).

Gregory I. Gellene, assistant professor of chemistry, presented two papers, "Experimental Evidence for the Role of  $H_2$  in the Formation of Rydberg Levels of  $H_3$  in a Hollow Cathode Discharge," and "Metastable Radicals and Hypervalent Clusters by Neutralized Ion Beam Techniques" at the 17th International Symposium on Free Radicals, held in Colorado in August.

Two works by Moira Marti Geoffrion, associate professor of art, art history and design, "Arched Again" (sculpture) and "We Passed" (drawing) are included in the "Christians in the Visual Arts" exhibition at Wheaton (Ill.) College. The exhibit was curated by David Tannous, art critic and former Washington correspondent for *Art in America* magazine. The show opened June 19.

Patrick Horsbrugh, professor emeritus of architecture, addressed the Channel Tunnel Association on alternative forms of Euroroute concepts at a meeting in Dover June 15, and presented a paper on the concept of "The World's First HYDRORAMA" at the Fourth International Symposium on Ocean and Coastal Management, Baltimore, Md., Aug. 2.

Nai-Chien Huang, professor of aerospace and mechanical engineering, took an invited lecture tour in the People's Republic of China, June 21 - July 26. He gave lectures on "Recent Development in Fracture Mechanics" at Beijing Institute of Technology, Metal Research Institute of Academia Sinica, Tienjin University and Tongyi University. He also presented seminars on "Mechanics of Rail De-icing" and "Hydraulic Fracture" in the Institute of Applied Mechanics, Academia Sinica, and on "Fracture Dynamics of Indentation" in Qinghua University.

Winifred M. Huo, associate professional specialist in the Radiation Laboratory, presented a paper on "Multichannel Schwinger Variational Calculations of Low-Energy Electron-Molecule Collisions" at the seventh annual West Coast Theoretical Chemistry Conference, Livermore, Calif., April 10-12, and at the 14th International Conference on the Physics of Electronic and Atomic Collisions, Palo Alto, Calif., July 24-30. She delivered a paper titled "Electron-Nitrogen Molecule Collisions in High-Temperature Non-Equilibrium Air" at the AIAA Thermophysics Conference, Williamsburg, Va., June 18-21.

Edward W. Jerger, professor of aerospace and mechanical engineering, served as the academic director of the "1985 Multiprotection Design Summer Institute" for architectural and engineering faculty sponsored by the Federal Emergency Management Agency, National Science Foundation, and the United States Geological Survey. The Institute was held July 22 - Aug. 2, at the National Emergency Training Center, Emmitsburg, Md.

Kwan S. Kim, associate professor of economics and faculty fellow in the Kellogg Institute, was an invited panel discussant at the International Symposium on Public Enterprises sponsored by Centro de Investigacion y Docencia Economicas, Mexico City, July 19. The topic of his talk was "Trade and Industrial Policies for Mexico - With Special Reference to the Role of Public-Enterprise Sector."

Ingemar P.E. Kinnmark, postdoctoral research associate in civil engineering, gave a presentation titled "A Generalized Wave Equation Formulation of Tidal Circulation" at the Fourth International Conference on Numerical Methods in Laminar and Turbulent Flow, held at University College of Swansea, Wales, July 10.

David J. Kirkner, associate professor of civil engineering, presented a lecture titled "Helmholtz-Type Representation Theorems in Linear, Anisotropic Elastodynamics" at the Institute fur Mechanik, University of Innsbruck, Austria, Aug. 8.

John J. Kozak, professor of chemistry and senior scientist in the Radiation Laboratory, presented a paper titled "Diffusion-Controlled Kinetic Processes in Structured Media" at the Gordon Research Conference on Fractals, Antrim, N.H., July 15-19.

Rev. Edward A. Malloy, C.S.C., associate provost and associate professor of theology, gave a talk on "Moral Issues Facing Tomorrow's Family" at the National Convention of the Christian Family Movement held at Saint Mary's College, Aug. 10.

Asokendu Mozumder, associate faculty fellow in the Radiation Laboratory, presented a paper on "Interactions of Charged Particles with Macromolecular Condensed Media" at the Gordon Research Conference on Radiation Chemistry of Macromolecules, held in Plymouth, N.H., Aug. 12-16.

Thomas J. Mueller, professor of aerospace and mechanical engineering, presented a paper titled "The Spanwise Variation of Laminar Separation Bubbles on Finite Wings at Low Reynolds Numbers" at the 18th AIAA Fluid Dynamics, Plasmadynamics and Lasers Conference in Cincinnati, Ohio, July 16-18.

Terry T. Ng, assistant professor of aerospace and mechanical engineering, presented a paper titled "Experimental Study of a Forced Coaxial Shear Layer" at the 18th AIAA Fluid Dynamics, Plasmadynamics and Lasers Conference, Cincinnati, Ohio, July 16-18.

Daniel J. Pasto, professor of chemistry, gave the following lectures at several Chinese institutions of higher learning during the summer: "The Structures and Reactions of Diradical Intermediates Formed in Allene" May 28 at the Shanghai Institute of Organic Chemistry; June 8 for the Department of Modern Chemistry of the University of Science and Technology of China (USTC), Hefei, and June 20 at the Graduate School of the Academia Sinica, Beijing. He also presented "Factors Affecting and o-Complex Formation in Reactions of Substituted Allenes with Ni(0) Complexes" May 30 at the Shanghai Institute of Organic Chemistry, June 16 for the USTC Department of Modern Chemistry, and June 18 for the department of chemistry at the Institute of Chemical Physics at Dalian. At USTC, he gave a lecture titled "Graduate Studies and Research in the USA" June 9, and presented an eight-hour lecture series titled "Applications of Symmetry and Molecular Orbital Theory in Organic Structure and Reactivity" June 1-17.

Teresa Godwin Phelps, assistant professor of law, chaired a session titled "The Uses of Argument: Aristototele, Iser and Toulmin" at the Penn State University Conference on Rhetoric, held at State College, Pa., July 9.

Karamjit S. Rai, professor of biological sciences, presented a paper titled "Genetic Relationships Among Five Species in *Aedes* (*Stegomyia*) *albopictus* Subgroup" at the annual meeting of the Genetics Society at Boston University Aug. 11-15. He also is co-author (with P.N. Rao) of another paper, "Genome Size Variation in Mosquitoes," which was presented by Dr. Rao at that meeting.

Kenneth F. Ripple, professor of law, spoke on "Institutional Pressures in the Certiorari Process" at the annual meeting of the American Bar Association July 8.

Roger A. Schmitz, McCloskey dean of engineering and professor of chemical engineering, gave an invited presentation titled "Instabilities in Heterogeneous Catalysis -- An Overview" (co-authored with L. F. Razon and J. R. Brown) and chaired a session on Heterogeneous Catalysis at the Gordon Conference on "Oscillations and Dynamic Instabilities in Chemical Systems" at Plymouth State College, Plymouth, N.H., July 22-26.

J. Eric Smithburn, professor of law, served as vice chair and panelist at the London Conference on Comparative Aspects of Judicial Education, held at the Notre Dame London Law Centre July 16 and sponsored by the Judicial Administration Section of the American Bar Association and the National Judicial College.

Andrew J. Sommese, professor of mathematics, was a guest professor at the Max-Planck-Institut für Mathematik in Bonn, West Germany, May 1 - July 9. He gave an invited lecture, "Recent Results on Hyperplane Sections" at a Complex Geometry Conference held in May at Nancy, France, and gave a colloquium, "On the Adjunction Theoretic Structure of Ample Divisors on Q-Gorenstein Varieties" in Munich, West Germany, June 20. He gave a principal lecture, "On the Adjunction Theoretic Structure of Ample Divisors on Algebraic Varieties" at the Arbeitstagung on Complex Analysis and Complex Algebraic Geometry held by the Sonderforschungsbereich "Geometrie und Analysis" in Göttingen, West Germany, June 25 - July 2. Sommese also gave a colloquium, "On the degree of the Gauss Mapping of a Submanifold of an Abelian Variety" at Bayreuth, West Germany, July 3.

J. Kerry Thomas, Nieuwland professor of chemistry, presented an invited talk, "The Nature of Microemulsions" at the Gordon Conference on Micelles & Macromolecular Catalysis at Wolfboro, N.H., July 15-19. He also acted as a discussion leader for the session on "Inorganic Semiconductors" at that meeting.

Roberto Todesco, research associate in the Radiation Laboratory, presented a paper on "Excited State Behavior of Poly[dimethyl-co-methyl]-(1-naphthyl)silylene" at the Gordon Research Conference on Organic Photochemistry, New London, N.H., July 15-19.

G.N.R. Tripathi, associate professional specialist in the Radiation Laboratory, gave invited talks on "Time-Resolved Resonance Raman Spectroscopy: The Technique and Applications" at the University of Garakhpur, India, July 8 and July 16; and "Resonance Raman Spectroscopy of Transient Free Radicals and Excited States" at Kurukshetra (India) University, July 20.

Anthony M. Trozzolo, Huisking professor of chemistry, was a session chairman at the TOR 85 (Theory of Organic Reactions) Meeting, Gargnano, Lake Garda, Italy, June 24-28.

Arvind Varma, chairman and professor of chemical engineering, presented an invited seminar titled "Optimal Catalyst Activity Profiles in Pellets" at the Summer Seminar on Reacting Flows: Combustion and Chemical Reactors, held at Cornell University, Ithaca, N.Y., July 11-12.

Eduardo E. Wolf, professor of chemical engineering, presented an invited lecture at the Gordon Research Conference on Chemistry of Interfaces, Kimball Academy, N.H., July 22-23, and a paper titled "FTIR Studies of Hydrocarbon Synthesis" at the DOE Contractors Meeting, Pittsburgh, Pa., July 24-25.

# documen- tation

---

## 1985-86 notre dame report publication schedule

The following is the publication schedule for Volume 15 of the 1985-86 NOTRE DAME REPORT. Please note that all copy deadlines are on Wednesdays, except for Thursday, Jan. 2, 1986. We suggest that you retain this schedule and the guidelines that follow for future reference.

<u>Number</u>	<u>Copy Deadline</u>	<u>Publication Date</u>
1	Aug. 21, 1985	Sept. 6, 1985
2	Sept. 4, 1985	Sept. 20, 1985
3	Sept. 18, 1985	Oct. 4, 1985
*4	Oct. 2, 1985	Oct. 25, 1985
5	Oct. 23, 1985	Nov. 8, 1985
6	Nov. 6, 1985	Nov. 22, 1985
7	Nov. 20, 1985	Dec. 6, 1985
8	Dec. 4, 1985	Dec. 20, 1985
9	Jan. 2, 1986	Jan. 17, 1986
10	Jan. 15, 1986	Jan. 31, 1986
11	Jan. 29, 1986	Feb. 14, 1986
12	Feb. 12, 1986	Feb. 28, 1986
13	Feb. 26, 1986	March 14, 1986
14	March 19, 1986	April 4, 1986
15	April 2, 1986	April 18, 1986
16	April 16, 1986	May 2, 1986
17	April 30, 1986	May 16, 1986
18	May 21, 1986	June 13, 1986
19	June 11, 1986	July 11, 1986
20	July 9, 1986	Aug. 8, 1986
Index		Aug. 22, 1986

Volume 16, Number 1 of the 1986-87 NOTRE DAME REPORT will have a copy deadline of Aug. 20, 1986 and a publication date of Sept. 5, 1986.

\*No. 4 will be an updated version of the annual listing of University administrators, committees and the official faculty roster.



---

## notre dame report submission information

Items for the NDR Faculty Notes section are accepted from: faculty (all classes), professional specialists, and postdoctoral research candidates who teach at Notre Dame.

Appointments include only those University appointments such as deans, department heads, heads of committees, public relations and development professionals and advisory council members. This does not include appointments to faculty positions.

Honors is comprised of non-University appointments in one's field and outright honors. It does not include fellowships, grants, etc. Any grants not published in the Awards Received section (listed in the Advanced Studies section of NDR) should be noted in the Activities section.

Activities must be of a professional and public nature (such as invited lectures and papers read) and should be related to the person's work at the University. Lectures given on campus are only acceptable if they are of a special nature and/or if they are presented to a broader audience than the Notre Dame community. Merely attending a meeting does not meet this requirement. Information required for each activity submitted includes: name, rank, title of presentation, title of meeting, place and date. Standardized cards (yellow) must be used for submissions and are available by contacting Notre Dame Report (239-5337). No activities are printed ahead of the date, only after the fact. Also, activities will not be printed over six months out of date.

Items for NDR's Administrators' Notes section are accepted from administrative staff and follow the same guidelines as Faculty Notes. Standardized cards (blue) are available by contacting NDR as noted above.

All Appointments, Honors and Activities should be sent to Notre Dame Report, 415 Administration Building.

Current Publications and Other Scholarly Works should be sent to the Office of Advanced Studies, 314 Administration Building, c/o King W. Pfeiffer. Submissions of current publications are due on the Friday prior to the copy deadlines stated on the preceding page. Standardized cards (green) must be used for submissions and are available by contacting Research and Sponsored Programs (239-7432).

The only meeting minutes printed in the Documentation section are from the Academic Council, Faculty Committee on University Libraries, Faculty Senate, Graduate Council, Board of Trustees and Committee on Research and Sponsored Programs.

---

# summer session commencement address

(Address given at the Notre Dame Summer Commencement, Aug. 2, 1985, by Prof. Thomas J. Schlereth.)

I would like to speak this morning of our past, rather than of your future. I would like to reflect on shared activities of our years working together, instead of offering imperatives for your years to come. I would like to have us think on something we have done, rather than charge you with what I hope you will do.

Although somewhat unorthodox for a commencement speaker, such a stance is understandable in my case. I am a historian. As a student of the past, I am a custodian of our collective memory. I, like other historians, am engaged in a continual conversation about the past in the present for the future. It is a task in which I delight. I am paid to do one of the two things that many think may be special to our species: to hope and to remember.

I also get paid for doing what I would talk of today: scholarship as a craft. One of my responsibilities, as it is with all of my faculty colleagues, is the researching, analyzing, synthesizing, and communicating of knowledge and insight about the human experience. You who are graduating also have had this responsibility; you, too, have practiced the craft, whether in writing an undergraduate research essay on Chaucer's *Canterbury Tales*, in preparing a master's thesis on the differential geometry, or a Ph.D. dissertation on biomedical ethics. You, however, have had to pay, rather than be paid, to participate in the scholar's craft.

Some of you may pay again should you pursue more advanced studies in places where the craft has been institutionalized. On the other hand, some of you will now be paid to practice the craft since you will join such institutions as faculty members or research professionals. All of you, however, if you wish, will continue to have opportunities to practice the craft because it, unlike many other tasks people perform in technologically advanced societies such as ours, is an enterprise still largely self-generating, self-defining, self-absorbing, and self-rewarding.

Why do I persist in calling scholarship a craft? Why not an art or a science? A discipline or a profession? Why not just work or a job? Why claim the analog of traditional craftsmanship for modern scholarship?

Or, to put the question another way, how is what we have done (and some will continue to do) in library and laboratory, dormitory room and faculty office, comparable with what others have done (and some still do) at cordwainer's benches and potter's wheels, in glassworks and cabinetmakers' shops? What might we scholars have in common with, say, what many young men throughout the nineteenth century here at Notre Dame enrolled in the University's Manual Labor Training School (housed in Badin Hall until 1919) learned of trades such as tailoring, carpentry, masonry, or printing?

Let me answer by briefly noting a few parallels between the worlds of academic scholars and of traditional craftspeople. I think their mutual causes and challenges offer us insight into the nature of the intellectual life.

In the craft of scholarship, like the school of the crafts, many, if not totally self-employed, enjoy an enormous autonomy in their work and workshop. For example, the pace and rhythm of our scholarly work is largely our own -- simultaneously a blessing and a burden; as such, it is a style of labor uncommon to the modern office or factory. As C. Wright Mills recognized, "one is free to begin his work according to his own plan, and during the activity by which it is shaped, he is free to modify its form in the manner of its creation."

Mills' observation suggests a second affinity of scholarship with craftsmanship. Like the traditional artisan, the scholar often enjoys direct, personal engagement with his product. The scholar, like the artisan, controls, to a degree infrequent in the modern world, many of the components of his or her work. One is, as John Ruskin writing in *The Stones of Venice* suggested every true artist should be, an active participant in the three interrelated processes of design, construction, and use. As, for instance, the craftsman of a Midwestern I-house was usually its architect, builder and inhabitant, so too, the scholar is frequently the originator, verifier and explicator of an idea. For each, plan and performance are one.

Such personal independence in creativity is, in part, rooted in an ancient cultural ideal shared by both artisans and authors. Craftsman/scholar William Morris put it thus: "The hope in good work is hope of product and hope of pleasure in the work itself. No ulterior motive (money, reputation, salvation) other than delight in the product being made and in the process of its creation."

While few traditional artisans crafted their wares oblivious to the marketplace, their shops and stores almost always contained personal exercises of whim or imagination that were not for sale. Likewise, who among us has not wrought much mental labor simply "for the sake of the argument?" Who has not been compelled to read on beyond an assignment or to test an unlikely hypothesis or experiment just for the sheer fun of it?

In other, perhaps more mundane ways, scholarship is akin to craftsmanship. Like the skilled workers of pre-industrial times, scholars often own the few tools they need for their trade. This is less so for those in science and engineering, for there researching and testing knowledge, of course, often takes massive technologies far in excess of any artisan's simple bag of tools. Yet these scholars ultimately communicate what they have learned within the economy of a laboratory abstract or mathematical formula. Humanities' scholars -- some philosophers claim they need nothing but consciousness to practice their craft -- often take particular solace in their independence of milieu as well as mind. "The tools that I need for my trade," William Faulkner once remarked, "are simply pen, paper, food, tobacco, and a little whiskey."

Writing in some form is, for most scholars, what the act of fabrication is for most craftspeople. Some work in all scholarly mediums and materials -- book reviews, research abstracts, journal articles, monographs; others concentrate principally on a single method of communicating their research, but almost all, however, do some writing. As an architectural historian, I have often been struck by the aptness of the craft of carpentry as a metaphor for such writing. Recently I discovered, at the suggestion of one of my graduate students, that William Zinsser sees a similar connection. In writing On Writing Well, he suggests: "It is first necessary to be able to saw wood neatly and to drive nails. Later you can bevel the edges or add elegant finials, if that is to your taste. But you can never forget that you are practicing a craft that is based upon certain principles. If the nails are weak, your house will collapse. If your verbs are weak and your syntax is rickety, your sentences will fall apart."

As authors of scholarship, we sign our pieces be they term papers or philosophical treatises. Our names are our maker's marks. They are impressed on book spines and typed on research reports just as our craft counterparts once stamped their trademarks on their creations of wood, ceramic or metal. We also have the luxury of dedicating our work to others, as craftspeople often did to their clients. Few modern occupations permit workers such opportunities to so personalize their products. Moreover, our creativity is also championed by copyright and patent, modern practices with an ancient history in the privileges and prerogatives of the medieval guilds.

Mention of Middle Ages craftsmanship prompts recall of how many of our scholarly traditions are guild-like. We emulate their ranks of skill -- apprenticeship, journeyman, master craftsman -- in both our ranks of academic study (baccalaureate, master's, doctorate) and in our hierarchy of faculty achievement (assistant, associate, and full professor). On community holidays, the craft guilds paraded much as we have processed here. In such rituals, the craftsmen carried banners, their coats of arms, and often the tools of their respective trades. They wore uniforms of their class (for example the Notre Dame Manual Labor students of the 1870s wore "a satinet of gray color for the coat and brilliant black for their pantaloons") as we wear today these ceremonial caps and gowns of our collegiality and our common craft.

I do not wish, however, to romanticize craft, traditional or scholarly. Neither is an idyllic life. Neither is without its acidity or aridity. Neither is without its petty jealousies or its prima donnas.

Scholars, like artisans, know that their vocations (which continually converge into their avocations) require patience and persistence. Thorstein Veblen, describing the "instinct of workmanship" (parallel, in my judgment, to the craft of scholarship) warned our work demands nothing less than "a continual proclivity for taking infinite pains." But what better summary for a true master's piece -- be it a porcelain or a poem, a simple settee or an elegant equation?

We are also subject to what one eighteenth-century Philadelphia housewright recognized when he referred to the "calling of craft as also one of broken days, slack spells, and dull seasons." While we may no longer need to cope (as did he) with the erratic delivery of materials, vacillating consumer demands, or simply the limited hours of winter's

daylight, we have all known experiments that have failed, the depression of writer's block, and the days, nay the weeks, with no ideas, no hypotheses, no imaginings.

Finally, we must also endure the periodic loneliness of craft life. Never fully knowing the immediate or ultimate destiny of the artifacts we create, scholars, like artisans, must occasionally live on anxiety's edge. We worry: will what we create be accepted by colleagues and mentors as they fret over the opinion of clients and customers? Will what we say or make prove true? Will it have meaning for this generation or, possibly, even future ones? Will our respective artifacts, crafted out of research and reflection, be trash or treasure, hokum or heirloom?

In these dilemmas, however, we have the comfort of craft to assuage us. Scholarship, like craftsmanship, is social as well as solitary. It is a community as well as a calling. It is a world of training and customary performance, of shop talk and canons of excellence, and clashes of interpretations and techniques. It is a collective as well as an individual enterprise.

Because the craft of scholarship is communal, we have this gathering. I would have had us assemble in one of the spacious guild halls that architect Ralph Adams Cram designed for us in our South Dining Hall. But no matter, the important thing is that we are communed in a rite of craft, a rite with an ancestry of several millennia.

Such things are important to historians. Today, you, the graduates of this commencement, are rightly recognized in your various ranks and in an official way as practitioners of the scholar's craft. You are so recognized within a scholarly institution that, as we reflected this morning at the Baccalaureate Mass, takes as its spiritual and intellectual model a person who was both a carpenter and a teacher. You are also so recognized within a scholarly institution whose history, beginning in 1842, extends back into a century when the traditional crafts were still in abundance in their adherents. Here at the University of Notre Dame, many generations of students and faculty have practiced the honorable craft of the scholar during our 140-year history. Now so have you. We are honored that your history is now a part of our history.

## faculty senate journal may 7, 1985

Fr. David Burrell called the meeting to order at 7:32 p.m. in Room 202 of the Center for Continuing Education. After leading the opening prayer, he thanked everyone for contributing to a productive year for the senate. He proceeded to introduce the newly elected senate members and then the senators whose terms had expired.

The next order of business was the approval of the minutes from the April meeting. There were several corrections to the list of absentees, and Prof. Thomas Kosel had several amendments to make to his exchange with Mr. Robert Miller. After noting these changes, Burrell suggested the minutes be approved as amended.

Burrell introduced Mr. Roger Mullins, the new Personnel Director, who told the senate of his background in personnel work in private industry and hospitals. Prof. Teresa Ghilarducci asked if the hospital with which Mullins had worked had unionized. He replied that there had been several unsuccessful unionization attempts. He said: "Any employer can function without a union, and do it in a positive manner." Prof. Katharina Blackstead asked if he had any plans to upgrade both intrinsic and extrinsic rewards for the university staff. Mullins felt that money itself was not the answer to any problems. He would work on a three-year plan, and he expected to be public about his plan and ideas for changes and improvements. Prof. Mario Borelli spoke of how difficult it had been to get any information from the Office of Personnel. Mullins said he would try to keep open channels with the faculty. It is unfortunate that personnel management tends to hide behind laws, but he would do what he could to facilitate relationships among the administration, faculty, and staff. Mullins then said that it was his style to be direct and brief in his dealings with people. This was the manner in which he had dealt with doctors, and he felt it would be successful with faculty as well. Burrell thanked Mullins for taking the time to speak with the senate. Borelli asked for a public vote of thanks to Burrell for asking Mullins to come to the meeting.

Next Prof. Robert Vacca presented the report on The Junior Faculty at Notre Dame. He asked whether the four recommendations were substantial enough to achieve satisfactory results: 1) Committee on Teaching - would this be just cosmetic, or would subjects like teaching loads be investigated? Also would interpretation of the single faculty policy and questions raised in the report by both the senate and the students be addressed in such a committee? Vacca felt this committee would have quite a substantial agenda. 2) The letter idea suggested itself as this had come up at earlier meetings, and faculty have asked for such a clarification. 3 & 4) While this would mean more meetings, it would increase communications between faculty and administration. A candid set of meetings off the record would be helpful. College Council meetings on research expectations and support would be beneficial to junior faculty.

Capt. John Rohrbough asked if the College of Law was included in the third recommendation. Vacca replied that as a School it would not be. Prof. Joseph Blenkinsopp felt it was unlikely that the Provost would issue a letter outlining administration policy on religious and moral considerations as they affect tenure and reappointment. He pointed out a discrepancy in the report and asked that the issue be more clearly stated. Burrell responded that if there was any difficulty in clarity it was a problem of perception. Prof. Pamela Falkenberg wondered if the issue needed to be mentioned at all. Prof. Francis Connolly felt it would be good to get such a statement, but did not think we would. Prof. Barrett said the meeting on research would be an extraordinary type of meeting with junior and not senior faculty invited. Borelli proposed that it be made open to all faculty. Vacca agreed. Burrell expressed the opinion that this dovetailed with the senate's work on faculty development. Borelli asked for further clarification on this meeting. Burrell said this would be an opening of the College Council.

Falkenberg said that she liked the report, and asked that the questions mentioned on pg. 9 be included in the recommendations. Burrell asked what the response had been to it. Vacca replied that there had been some two dozen responses from junior faculty, the Provost's Advisory Committee, and Deans, and these had been reflected in the changes to the report.

Ghilarducci commented that the three year renewal decision appeared to be the most important at Notre Dame no matter what the administration said about it. She suggested that the criteria for this renewal be reviewed. Prof. Michael Francis agreed, saying, however, that the view on renewal changed each year. He felt that standards should be clearly stated. Burrell said that the criteria for tenure were stated in the Faculty Manual, but none were for renewal. He suggested including a recommendation that criteria for renewal be clarified and included in the Academic Manual. Borelli agreed as this is an important matter with the junior faculty. Prof. Andre Goddu felt it was clearly spelled out, however there must be a consensus among junior faculty. Several other senators expressed the opinion that college and departmental differences would make these criteria difficult to express.

Rohrbough asked those who were departmental chairs and ex-chairs to comment. It was Vacca's opinion that the chairs were flexible, and that this would aid the junior faculty. Francis said that the Deans changed their instructions from year to year as to how the criteria would be applied. According to Prof. Philip Gleason the three-year renewal was made more important due to pressure from above. There is no college committee of review which could allay the high degree of mistrust. He asked if an actual peer review committee had ever been proposed. Burrell said that the Provost's Advisory Committee was not analogous to this. He then suggested that the Provost appoint a selected group of faculty to consider the problem of mistrust.

Prof. Paul Conway felt there must be miscommunication between the Deans and departmental chairs. He said that this year's signal was to look ahead for tenure at the three-year renewal. He was in favor of a meeting between the Provost, Deans, and department chairs. Ghilarducci suggested that the three-year renewal was becoming more of a termination decision, and if so, then it should be more formalized. Prof. Alex Hahn suggested that such a document of criteria could be beneficial, but would probably be very stiff and difficult to apply. Vacca pointed out the fact that the third recommendation did speak to that.

Borelli commented on the administration's attitude toward teaching which he characterized as somehow with good people good teaching will evolve if you have good research. He did not agree with this attitude, nor with the attitude of some junior faculty that one did not have to bother with teaching. Vacca felt that these sentiments were included in the report, and he asked for a summation as to where the senate now stood with regard to the report.

Burrell suggested that the criteria on renewal be withheld, and said he was pleased with the way the discussions had gone throughout the year enabling the committee to improve the report. Borelli suggested that each recommendation be voted on separately. The first recommendation called for the Provost to appoint a University Committee on Teaching, and Borelli commented that the Provost would have to agree to this in the first place. Prof. Jean Pec Rosenberg proposed that the committee could be an elected committee from the faculty. Conway refined this to half elected and half appointed. Burrell suggested that the Academic Council select the committee. Blackstead wanted to include the pg. 9 questions for the committee to address. Vacca felt that they would read the report. Barrett expressed the opinion that the Faculty Senate, and not the Academic Council, should appoint the committee. Burrell said he felt that involving the Academic Council was the way to insure that the report would be taken up by the council. The vote taken was unanimously in favor of having the Academic Council appoint the committee.

Taking up the third recommendation next, Prof. Bill McDonald wanted to make the junior faculty responsible for calling a meeting with the Deans. Prof. John Yoder suggested alternative wording: The senate recommends annual meetings between deans and junior faculty for candid and informal discussion. Borelli countered with: The senate recommends that annual meetings be established between junior faculty and deans. Vacca defended his wording. The three versions were voted upon with Borelli's wording passing.

The fourth recommendation called for annual meetings to discuss research within the colleges. Various periodicities were discussed with McDonald suggesting the use of the less specific word periodic. All present approved the wording of the original report.

Vacca commented that the second recommendation calling for the Provost to clarify the administration's policy on religion and morals wrote itself. Blenkinsopp felt it was improbable that the Provost would write such a document. Rohrbough commented that while the PACE Report spoke about religion, it did not speak to moral issues. Goddu agreed that the Provost was under no obligation to respond to our request, and furthermore we could get more than we bargained for if he did respond. A lengthy discussion ensued with both sides of the moral and religious issues being defended. Blenkinsopp recommended that the words "...and moral" be dropped. There was only one opposing vote to this recommendation's rewording.

Conway asked what would now happen to the report. Burrell requested that the senate vote on the entire report. The results were twenty-five in favor, and four against. Burrell said the report would be forwarded to the Provost and appended to the senate's minutes in the Notre Dame Report. (To be published in NDR #2.) Burrell then thanked Vacca and the committee for their hard work.

Rohrbough then gave the treasurer's report. As of April 1, the senate was within its \$4,500 budget for the year.

As time was short, Barrett asked everyone to read the two handouts from the Benefits Committee. (See Appendixes 1 & 2.) He hoped the senate would hold them for discussion at the first meeting in the fall. Burrell commented that the Benefits Committee was one of the year's most significant achievements.

Next Burrell presented his report. He felt that the senate had met its first two goals in the final reports on the junior faculty and on faculty development. The third goal of exploring the relationships between students and faculty could be taken up by next year's senate. It was his opinion that everyone should sign up for a committee, and that reports should be discussed by the senate as a whole.

He then commented that he and Prof. John Uhran had discussed the Faculty Development Report (to be published in NDR #2) with the Provost, who suggested that the College Councils discuss the recommendations first. The Board of Trustees' Committee on Faculty Affairs was interested in our recommendations as well. While student affairs questions were still in need of attention, Burrell suggested that the Notre Dame Credit Union and the University's investments and accountability to the community were possible topics for investigation in the fall. He then thanked the Executive Committee and the senate for all their hard work during the year.

Rohrbough presented the following resolution which Prof. Harvey Bender seconded:  
Resolved: The Faculty Senate membership commends and thanks Fr. David Burrell for his leadership and inspiration as its chairman during the 1984-85 academic year. This was unanimously approved.

Next Burrell presented the slate of officers which the Executive Committee had drawn up for the 1985-86 academic year: John Yoder, chair; Jean Pec Rosenberg, vice-chair; Sandra Harmatiuk, student affairs; Thomas Kosel, administrative affairs; Francis Connolly, faculty affairs; John Rohrbough, treasurer; and Joseph Blenkinsopp and Bill McDonald, secretary. Conway moved that the slate be adopted, and Borelli seconded. All were unanimously elected.

Rosenberg moved that the meeting be adjourned. Prof. David Dodge seconded, and as the motion was unanimously passed the meeting was adjourned at 9:28 p.m.

Absent but not excused: Peri Arnold, government and international studies; Tomoaki Asano, microbiology; Subhash Basu, chemistry; Salvatore Bella, management; James Bellis, anthropology; James Danehy, emeritus; Leo Despres, anthropology; Jay Dolan, history; James Flanigan, C.S.C., art, art history and design; Phillip Helman, radiation lab; Michael Katona, civil engineering; David Kirkner, civil engineering; James Powell, director, graduate admissions; Irwin Press, anthropology; William Slowey, accountancy.

Absent and excused: Eugene Henry, electrical engineering; Linda-Margaret Hunt, biology; Robert Lordi, English; Matthew Miceli, C.S.C., theology; Teresa Phelps, law; John Uhran, electrical engineering.

Respectfully submitted,

Jean Pec Rosenberg

## Appendix 1. Report of Faculty Senate Benefits Committee

1. The survey of Notre Dame retired faculty shows progress. We now have about 50% of the returns and are getting more by telephone. Some trial runs of the data have shown promising results, e.g., regarding health, incomes, activities, etc.

2. The Benefits Committee is prepared to propose to the Senate that the University offer each faculty member, 60 years of age and over, one tuition scholarship for the pre-retirement course at the Forever Learning Institute (a series of eight (8) evening sessions, with experts, on health, investments, money management, activities, etc.) Much research shows that better preparation makes one more successful in retirement.

3. Unfortunately some ND faculty do not seem to understand the implications of the annual decision (on the form from Personnel Department) about tax-deferred salary reductions. Many still decide to be taxed on income now, at a higher tax rate, than later. The Senate Committee urges all faculty to consider salary reductions. We have also asked Personnel to clarify this (presently unclear).

The Benefits Committee urges faculty to give serious consideration to Supplemental Retirement Annuities (SRA's) as a better way to invest for retirement than putting more than the minimum 5% required into TIAA/CREF retirement. SRA's are tax deferred (up to a maximum), provide for lifetime annuity options, permit withdrawals, can be cashed in without penalty, and do not affect one's right to participate in an IRA account. The TIAA interest rate on SRA's is currently 11.75% guaranteed through February, 1986.

4. The Benefits Committee urges all faculty 60 years and older to make an appointment with Fred Freeman of Personnel to obtain help in making important decisions about retirement income, Social Security, etc. Some faculty have made bad mistakes in the past.

5. The university's contribution to the Children's Education Benefit involves many hundreds (000s) of dollars per faculty member. The Senate Benefits Committee is now planning to examine the operation of this benefit. We can ascertain how many faculty children currently attend Notre Dame, how many are attending other schools, and how many may be expected to ask for this benefit in the next few years. The Committee asks for any help you may be able to give.

6. The Committee is not unaware of the controversy about the near-and-distant future of Social Security trust funds and benefits. The University and each faculty member contribute substantial monies into Social Security. At present, we feel, there seem to be no viable alternatives or solutions. At present, no action is required.

7. The Benefits Committee notes with satisfaction that benefits for Notre Dame staff have been improved significantly in the last several months.

8. Every faculty member should have received recently the April, 1985 issue of TIAA's The Participant. The Senate Benefits Committee urges faculty to give it careful reading, especially since it contains some prospective changes in investment systems.

9. Harvard University has a fully self-supported (financially, administratively, etc.) program in which "Retired Faculty Teach Retired Students." Our Committee is looking into this option for possible implementation at Notre Dame.

10. No significant changes in the health benefits programs at Notre Dame are evident at this time. In November, there will be "open enrollment." Other changes may come in the fall and winter, e.g., possibly Cost Gard, another HMO, etc.

11. When any questions arise about benefits, faculty members are asked to telephone Mr. Paul Rentschler (5339), or Fred Freeman (5190). Example: we have learned the law has been changed so that at age 65 full-time employees do not have to sign up with Medicare; this remains so, if full-time, until age 70 now. The Senate Benefits Committee asks for faculty input regarding any general questions about any benefits, e.g., parking, athletic tickets, offices, etc.

The Faculty Senate Benefits Committee:

Donald Barrett  
Mario Borelli  
Francis Connolly  
Robert Williamson

## Appendix 2. Report on the University's Contribution to TIAA-CREF (Discussion Draft)

### CURRENT PLAN: History:

Until a few years ago, the University's contribution to an individual faculty member's TIAA-CREF retirement account was set at 5% of the member's salary up to the maximum taxed for Social Security purposes and 10% of the salary above that maximum. Shortly after the Social Security maximum began to be increased on an annual basis, however, the University fixed the cut-off point at the then current maximum of \$18,900. The University's contribution now is computed as 5% of the salary up to \$18,900 and 10% of the salary above \$18,900.

### CURRENT PLAN: Cost Effects:

The Social Security maximum for 1985 is \$39,600. If the University had not fixed the cut-off point, the University's contribution to TIAA-CREF would be substantially lower than will now be the case. For the individual faculty member making the "average" 1983-84 salary of \$35,800, the increased contribution in 1985 will be \$845. This amounts to 2.36% of salary and 10.7% of the dollar value of fringes. For a total faculty of almost 1,000, the increased contribution could amount to over \$800,000 in 1985.

### CURRENT PLAN: Benefit Effects:

The increased benefits of the revised plan can be estimated for the "average" faculty member using the TIAA illustrative tables. Assuming the faculty member is 45 years old and will retire at age 65, an increased contribution of \$845 per year would result in an increased annual retirement of \$4,176.



#### CURRENT PLAN: Regressive Effects:

There is no question that the fixing of the cut-off point has been both costly to the University and beneficial to faculty. Unfortunately, any plan which includes a cut-off point, at whatever level, will result in regressive benefits -- i.e., benefits which are more valuable to higher-paid faculty than to lower-paid faculty. For example, Table 1 shows the total University contribution and its percent of salary for the average 1983-84 salaries by rank:

TABLE 1  
UNIVERSITY CONTRIBUTION TO TIAA-CREF

Rank	Average 1983-84 Salary	University Contribution	Percent of Salary
Professor	\$44,200	\$3,475	7.9%
Associate Professor	34,000	2,455	7.2
Assistant Professor	27,700	1,825	6.6

As can be seen, the lower the faculty member's salary, the lower the percent of salary that is contributed to TIAA-CREF by the University. This differential is partially offset by differences in percentage contributions made to Social Security by the University, which are shown in Table 2, which also shows the total percent contribution when TIAA-CREF and Social Security are combined.

TABLE 2  
UNIVERSITY CONTRIBUTION TO SOCIAL SECURITY

Rank	Social Security Contribution	Percent of Salary	Total Percent*
Professor	\$2,792	6.3%	14.2%
Associate Professor	2,397	7.1	14.3
Assistant Professor	1,953	7.1	13.7

\*Total represents the sum of TIAA-CREF and Social Security.

The problem with including Social Security in this comparison is that, although it represents an increased cost to the University, it does not necessarily represent an increased benefit to the faculty member. Social Security benefits are based on the highest salaries earned over an entire career. Most faculty currently at relatively low salary levels will earn higher levels later in their careers, and thus it is appropriate for individuals to consider any future Social Security benefits as being independent of current social security contributions.

In any case, the current plan does result in lower percentage benefits to lower-paid faculty. These are the very faculty members who will find it harder to fund retirement income, such as Supplemental Retirement Annuities from TIAA-CREF or Individual Retirement Accounts. EQUITY WOULD THUS CALL FOR A REVISED PLAN WHICH ELIMINATES THE REGRESSIVE EFFECTS OF THE CURRENT PLAN.

#### PROPOSED PLAN: Summary:

The proposed plan would call for the University's contribution to be set at 10% of the individual faculty member's salary. To reduce the effects this will have on the University's budget, it is proposed that the plan be phased in over a five-year period. This could be accomplished by lowering the cut-off point from \$18,900 to \$16,000 in the first year and by an additional \$4,000 per year for four years thereafter.

#### PROPOSED PLAN: Cost Effects:

The increased contribution per faculty member would be \$145 in the first year and would increase by \$200 per year for each of the next four years, reaching a maximum additional amount of \$945 per faculty member. This represents 2.64% of the "average" 1983-84 salary and 12.0% of the dollar value of fringes. With almost 1,000 faculty members, this would require an additional annual contribution of about \$900,000 on the University's part when fully implemented.

PROPOSED PLAN: Benefit Effects:

The increased benefits from this plan can also be estimated for most faculty by using the TIAA illustrative tables. Assuming the faculty member is 45 years old and will retire at age 65, an increased contribution of \$945 per year would result in an increased annual retirement benefit of \$4,670.

PROPOSED PLAN: Regressive Effects:

The revised plan would eliminate the regressive effects of the current plan. All faculty members would be receiving a contribution of 10% of salary. If Social Security contributions are taken into account, then lower-paid faculty will be receiving a slightly higher percentage contribution than higher-paid faculty.

CONCLUDING NOTE:

TIAA-CREF Trustees have recently voted to make important changes in these plans. Two new funds will be offered, a money-market annuity and a marked-to-market bond fund. Participants will also have more flexibility in switching balances from one fund to another and back again. These changes make increased contributions to TIAA-CREF even more valuable, especially to lower-paid faculty.

### Appendix 3. Report of the Chairman of the Faculty Senate 1984-85

The goals we set for ourselves this year were (1) an investigation of the situation of junior faculty at the University, (2) a development of the sabbatical policy (1983-84) into a more flexible set of proposals on faculty development, and (3) exploration of student-faculty interaction in the wake of the reorganization of the Student Affairs Area. The first two topics were pursued in a thorough inquiry, issuing in reports which were themselves improved by Senate discussion. Items relating to student-faculty interaction remain perennial concerns, and it is fair to say that this coming year might be a better one in which to pursue the topic with Student Affairs.

We utilized the Senate committee system in a modified manner this year, and I would recommend sticking to it for years following. Inevitably some members will be more active than others, but assignment to committee at the outset allows one to tap individuals as their expertise becomes apparent. Reports will of course be the product of one or two individuals, yet their content and shape can be monitored by some or all of the committee members beforehand, as well as discussed by the entire Senate after the first draft.

I am convinced of the need to elaborate an agenda at the outset of the year, lest the Senate become a purely reactive group. I found that a preliminary meeting with the Executive Committee, consultation with selected colleagues, including Ed Malloy, C.S.C., now serving as Associate Provost, helped me a great deal in deciding on issues to be developed. Administrative action on health benefits shows the value of continued Senate attention to that topic, and the establishment of a Benefits Committee has proven to be the best response to this continuing concern. I would recommend to my successor to continue that Committee and be sure of its representation on the Executive Committee, perhaps by making the Assistant Chairman an ex-officio member of the Benefits Committee.

So far as this coming year (1985-86) is concerned, it appears that some initiative will be required to see that the report on Faculty Development receives the attention of the Academic Council. It has been suggested (by the Provost) that it be submitted first to the College Councils, so that the parts of it may receive refinement and support before it becomes an Academic Council item. But the strategy would be to submit it to the Academic Council, and let the Executive Committee of the Council decide the process. The report on Junior Faculty contains recommendations to the Provost and to Deans, each of which will need follow-up. Finally, the student concerns appended to the report of the University Curriculum Committee still require attention -- a profitable item for the Senate's committee on Student Affairs.

Other questions which have been noted to me and others by our colleagues this year, but too late for our attention, are: (1) the Notre Dame Credit Union -- a review of its policies and its current ethos, (2) University investments -- a forum pursuing the pros and cons of divestment, as well as formulation of a procedure for accountability to the community.

My own convictions, after pursuing our inquiries this year to their interim term of a report, turn on the relations between teaching and research -- the first recommendation of the Junior Faculty Report. The Report on Faculty Development looks primarily to individual enrichment, and barely broaches the question of integrating research with teaching, in suggesting workshops for teaching in conjunction with summer grants. If we are to create a culture in which both will receive the kind of attention that we say they should, then communal discourse about teaching will need to be encouraged. Since proposals like these are not unrelated to the student concerns appended to the Curriculum Committee's report, they might be pursued jointly.

In conclusion, let me say how enjoyable a year it has been to be working with critical and concerned colleagues. The advice of the Executive Committee has proved invaluable, and the discussions in the Senate itself have invariably improved our inquiries into current situations at the University. I am personally grateful to the outgoing Executive Committee members, notably Mario Borelli (past Chairman), for their counsel, and happy that persons so distinguished as those we have recommended will be able to replace them. Mario has agreed to serve in my place on the Committee for the first semester of next year, when I shall be on leave, and our new Chairman and officers will profit from his presence.

David Burrell, C.S.C.  
6 May 1985

# advanced studies

---

## special notices

### Awards from The Jesse H. Jones Faculty Research Travel Fund for 1984-85

The Office of Advanced Studies announces the following awards from the Jesse H. Jones Faculty Research Travel Fund for the period July 1, 1984, through June 30, 1985.

Barbara Allen, Department of American Studies.  
Failure on the Frontier: Homesteading  
on the Oregon Desert. Oregon. \$400.

Jose Anadon, Department of Modern and Classical Languages. Mogrovejo de la Cerda: History and Fiction in the XVII Century. Cuzco, Peru. \$1,500.

C. Andre Barbera, Department of Music.  
Studies on Sectio canonis. Italy.  
\$1,300.

Calvin M. Bower, Department of Music.  
Commentaries on the De Musica in the  
Ninth and Tenth Centuries. Paris,  
France. \$825.

John G. Duman, Department of Biology. Cold  
Hardiness Adaptations in a High Arctic  
Insect, Gynaephora groenlandica.  
Resolute Bay, Alaska. \$2,000.

Moirra M. Geoffrion, Department of Art, Art  
History and Design. Research in Sculptural  
Techniques. Oakland, California.  
\$600.

Teresa Ghilarducci, Department of Economics.  
The Labor Process and Safety in U.S. and  
English Coal Mines. England. \$800.

Mitchell Lifton, Department of Communication  
and Theatre. Development of Television  
Production of Bert's People. Berlin,  
Munich, Zurich, London, Paris and  
Stockholm. \$1,625.

Gilburt D. Loescher, Department of Government  
and International Studies. Refugee  
Decision-Making in Five Major Asylum  
Countries and the Role of the International  
Refugee Regime. Geneva,  
Switzerland. \$700.

Vicki J. Martin, Department of Biology. The  
Origin of Stem Cells in Hydrozoan  
Planulae. North Carolina. \$1,000.

John E. Matthias, Department of English.  
David Jones: Man and Poet. England  
and Wales. \$1,000.

Anthony M. Messina, Department of Government and International Studies. *The Politics of Anti-Nuclear Protest in Britain.* London, England. \$745.

Lewis E. Nicholson, Department of English. *Chaucer's Attitude Toward the Jew: The Problem of Anti-Semitism in His Writings.* London, England. \$1,010.

Maria R. Olivera-Williams, Department of Modern and Classical Languages. *Uruguayan Literature in Exile: Literary Production and Historical Context.* Uruguay and Argentina. \$1,100.

Carl W. O'Neill, Department of Anthropology. *The Examination of Documentary Sources Revealing Types of Interpersonal Violence in the Republic of Ireland.* Ireland. \$850.

Irwin Press, Department of Anthropology. *Patient Perceptions and Malpractice Suits.* St. Paul, Minnesota and San Diego, California. \$550.

L. John Roos, Department of Government and International Studies. *The Electoral Conception: Beyond Congressional Disestablishment.* Washington, D.C. \$740.

David F. Ruccio, Department of Economics. *The State and Planning in Peripheral Socialist Economics, Part I: Planning Institutions in Nicaragua.* Nicaragua. \$1,000.

Kathleen J. Turner, Department of Communication and Theatre. *Images of Women in Comic Strips: A Rhetorical History.* San Francisco, California. \$650.

John P. Welle, Department of Modern and Classical Languages. *The Cinema in Modern Italian Poetry.* Italy. \$1,000.

### Awards from the Zahm Research Travel Fund 1984-85

The Office of Advanced Studies announces the following awards from the Zahm Research Travel Fund for the period of July 1, 1984, through June 30, 1985.

Brother Michael Dini, FSC, Department of Biology. *Diel Vertical Migration of Freshwater Zooplankton.* Land O'Lakes, Wisconsin. \$950.

James P. Earley and R.S. Narashima, Department of Civil Engineering. *Site-Visit to the Wastewater Technology Center, Technology Development Branch, Environmental Protection Service.* Burlington, Canada. \$350.

Jonathan A. Glenn, Department of English. *A New Edition of Sir Gilbert Haye's Buke of the Ordre of Knychthede.* Toulouse, France, and Edinburgh, Scotland. \$1,200.

Brian Holaway, Department of Microbiology. *Research Techniques in Workshops Associated with the International Conference on Yeast Genetics and Molecular Biology.* Edinburgh, Scotland. \$425.

Romana Huk, Department of English. Kathleen Raine--Poet, Critic, Essayist and Autobiographer. London, England. \$1,000.

G. Louise Joyner, Department of Art, Art History and Design. *William Buckland: The Apprenticeship of a Colonial Architect and Joiner.* London, Warwickshire and Norfolk, England, and Virginia and Maryland. \$1,000.

Kathleen Kolberg, Department of Biology. *A Fine-Structural Study of Developmental Toxicity of Nicotine in Pennaria tiarella.* Morehead City, North Carolina. \$700.

Olga Kukal, Department of Biology. *Control of Cold Hardiness in Arctic Insects.* Resolute Bay, Alaska. \$2,000.

Kerry J. MacArthur, Department of English. *A Critical Edition of The Meditations of the Supper of the Lord.* London, Oxford and Cambridge, England. \$850.

Stanley Michael Muschett, Department of Government and International Studies. *Father Juan Luis Segundo, SJ, and "Theology of Liberation."* Toronto, Canada. \$350.

Jerry L. Nixon, Department of History. *Role of Women in U.S. Frontier Life and Warfare.* Montana, Colorado, Oklahoma and Kansas. \$1,846.

Brenda Pennell, Department of Music. *Jerome Kern's Show Boat.* Philadelphia and Washington, DC. \$310.

Sarah Toombs, Department of English. *James Thurber: A Research Guide.* Columbus, Ohio. \$525.

### International Doctoral Research Fellowship

The Social Science Research Council has announced the award of a 1985 Fellowship to Augusto P. DeLaToree, a Ph.D. candidate in Economics, for research in Ecuador on the effects of the petroleum boom on different sectors of the Equadorian economy.

# current publications and other scholarly works

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

## COLLEGE OF ARTS AND LETTERS

### English

- Hasley, Louis L.  
L.L. Hasley. 1985. Oh, Lord, Tennyson;  
The Junky Junk; Love in the Rough.  
Pages 75, 121, 129 in, Light Year '86.  
Bits Press, Cleveland, Ohio.
- O'Rourke, William A.  
W.A. O'Rourke. 1985. Review of B.  
Mac Laverty's, Cal. South Bend Tribune  
January 13:13.
- Modern and Classical Languages
- Doering, Bernard E.  
B.E. Doering. 1985. The Economics of  
Jacques Maritain. The Review of Social  
Economy 43(1):64-72.
- B.E. Doering. 1985. English Translation  
of Jacques Maritain's "Une Société Sans  
Argent. The Review of Social Economy 43  
(1):73-83.

### Psychology

- Santos, John F.  
See under GERAS CENTER; Hubbard, Richard  
W. 1985. Death Studies 9:267-281.

### Sociology

- Dasilva, Fabio B.  
F.B. Dasilva and J.L. Crane. 1985.  
Critical Factors in Adorno's Post-  
Modernist Aesthetic Theory. Free Inquiry  
in Creative Sociology 13(2):74-85.

### Theology

- Ford, Josephine M.  
J.M. Ford. 1984. Shalom in the Johannine  
Corpus. Horizons in Biblical Theology  
6(2):67-89.

## COLLEGE OF SCIENCE

### Biological Sciences

- Carpenter, Stephen R.  
S.R. Carpenter and M.L. Jaynes. 1985.  
Effects of Submersed Macrophytes on  
Phosphorus Cycling in Surface Sediment.  
Proceedings of the North American Lake  
Management Society 4:370-374.
- Diffley, Peter  
P. Diffley. 1985. Mice Varying in Resis-  
tance to African trypanosomiasis Respond  
Differently to Treatments with Variant  
Surface Glycoprotein. European Journal  
of Immunology 15:321-324.

Pollard, Morris

- M. Pollard and P.H. Luckert. 1985. Pros-  
tate Cancer in a Sprague-Dawley Rat.  
The Prostate 6:389-393.
- M. Pollard and P.H. Luckert. 1985. Tumori-  
genic Effects of Direct- and Indirect-  
Acting Chemical Carcinogens in Rats on a  
Restricted Diet. Journal of the National  
Cancer Institute 74(6):1347-1349.

### Chemistry

- Castellino, Francis J.  
S.A. Steiner and F.J. Castellino. 1985.  
Effect of Monovalent Cations on the Pre-  
Steady-State Kinetic Parameters of the  
Plasma Protease Bovine Activated Protein  
C. Biochemistry 24(5):1136-1141.
- Creary, Xavier  
X. Creary, P.A. Inocencio, T.L. Underiner  
and R. Kostromin. 1985. Diels-Alder Ap-  
proach to Bicyclic  $\alpha$ -Hydroxy Ketones.  
Facile Ketol Rearrangements of Strained  
 $\alpha$ -Hydroxy Ketones. Journal of Organic  
Chemistry 50(11):1932-1938.
- X. Creary and T.L. Underiner. 1985.  
Stabilization Demands of Diethyl Phospho-  
nate Substituted Carbocations as Revealed  
by Substituent Effects. Journal of  
Organic Chemistry 50(12):2165-2170.
- Eigenbrot, Jr., Charles W.  
See under Pasto, Daniel J. 1985. Journal  
of American Chemical Society 107(11):  
3160-3172.
- Fessenden, Richard W.  
\*V. Nagarajan and R.W. Fessenden. 1985.  
Flash Photolysis of Transient Radicals.  
1.  $X_2^+$  with  $X = Cl, Br, I, \text{ and } SCN$ .  
Journal of Physical Chemistry 89(11):  
2330-2335.
- \*R.W. Fessenden and J.C. Scaiano. 1985.  
The Dipole Moment of Carbonyl Oxides.  
Chemical Physics Letters 117(2):103-107.
- Freeman, Jeremiah P.  
J.P. Freeman and M.K. Fettes-Fields. 1985.  
Acid-Catalyzed Cyclization of 2-Hydroxy-  
3-Pyrrolone Derivatives. 2-Methoxy-3  
(2H)-Furanones as Precursors of Poly-  
cyclic Nitrogen Heterocycles. Hetero-  
cycles 23(5):1073-1076.
- See under Pasto, Daniel J. 1985. Journal  
of the American Chemical Society 107:  
4090-4091.
- Gellene, Gregory I.  
C.E. Burkhardt, D.L. Earsom, T.L. Daulton,  
W.P. Garver, J.J. Leventhal, G.I.  
Gellene and R.F. Porter. 1985. Energy  
Partitioning in  $He^+/K$  Collisions.  
Journal of Chemical Physics  
82(8):3646-3649.
- S-J. Jeon, A.B. Raksit, G.I. Gellene and  
R.F. Porter. 1985. Isotope Effects on  
the Populations of Metastable  $H_3$  and  $D_3$   
Molecules in Neutralized Ion Beams.  
The Journal of Chemical Physics 82(11):  
4916-4919.
- Huang, Nai-zhong  
See under Pasto, Daniel J. 1985. Journal  
of American Chemical Society 107(11):  
3160-3172.

Pasto, Daniel J.

- D.J. Pasto, N-Z. Huang and C.W. Eigenbrot, Jr. 1985. Study of the Reactions of Substituted Allenes with Tris(triphenylphosphine)nickel(0). An Analysis of the Factors Affecting the Regio- and Stereochemistry of  $\pi$ -Complex Formation and Coupling to Form Nickelacyclopentane Complexes. Journal of American Chemical Society 107(11):3160-3172.
- D.J. Pasto and J.P. Freeman. 1985. Electronic and Structural Requirements for Ring Opening of Azacyclopentadiene Carbenes. Journal of the American Chemical Society 107:4090-4091.
- Patterson, Larry K.
- \*R. Subramanian, L.K. Patterson and H. Levanon. 1985. Photophysics in Liquid Crystals. Fluorescence Behavior of Chlorophyll-a in Dodecycyanobiphenyl. Photochemistry and Photobiology 41(5):511-517.
- Thomas, J. Kerry
- B.H. Milosavljevic and J.K. Thomas. 1985. Photochemistry of Compounds Adsorbed into Cellulose. 5. Solid-State Reduction of Methylviologen Photosensitized by Tris (2,2'-bipyridine)ruthenium(II). Journal of Physical Chemistry 89(9):1830-1835.
- J.K. Thomas and J. Wheeler. 1985. Photochemical Reactions Carried Out Within a Silica Gel Matrix. Journal of Photochemistry 28:285-295.
- J. Kuczyński and J.K. Thomas. 1985. Photo-physical Properties of Cadmium Sulfide Deposited in Porous Vycor Glass. The Journal of Physical Chemistry 89(13):2720-2722.
- H. Grunicke, W. Doppler, S.A.E. Finch, R. Greinert, K. Grünwald, J. Hofmann, K. Maly, A. Stier, F. Scheidl and J.K. Thomas. 1985. Effects of Nitrogen Mustard on Potassium Transport Systems and Membrane Structure of Ehrlich Ascites Tumor Cells. Advances in Enzyme Regulation 23:277-290.
- J.K. Thomas and S. Hashimoto. 1985. Laser Photolysis Studies of Electron-Transfer Reactions in Micellar-Metal Ion Systems. Journal of Physical Chemistry 89(13):2771-2777.

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

#### Mathematics

- Stanton, Nancy K.
- R. Beals, P.C. Greiner and N.K. Stanton. 1984. The Heat Equation on a CR Manifold. Journal of Differential Geometry 20:343-387.

#### Physics

- Bishop, James M.
- J.M. Bishop. 1985. VAX/VMS Version 4 Upgrade Notes. Pageswapper 6(12):18-23.

#### COLLEGE OF ENGINEERING

##### Aerospace and Mechanical Engineering

- Akai, Terrence J.
- K.F. Weber, T.J. Akai and T.J. Mueller. 1985. A Numerical Study of Spin Effects on Axisymmetric Flow Past a Body of Revolution. Pages 1-11 in, AIAA-85-1605, AIAA 18th Fluid Dynamics and Plasmadynamics and Lasers Conference. Cincinnati, Ohio.
- Doligalski, Thomas L.
- J.J. Hoffman and T.L. Doligalski. 1985. Initial Development of a Low-Speed Jet in a Cross-Flow. Pages 1-7 in, AIAA-85-1619.
- Huang, Nai-Chien
- N.C. Huang. 1985. Interfacial Crack Propagation Induced by Scraper Action on Ice. Engineering Fracture Mechanics 21(6):1083-1095.
- Mueller, Thomas J.
- W.G. Bastedo, Jr. and T.J. Mueller. 1985. The Spanwise Variation of Laminar Separation Bubbles on Finite Wings at Low Reynolds Numbers. Pages 1-12 in, AIAA 18th Fluid Dynamics and Plasmadynamics and Lasers Conference. Cincinnati, Ohio.
- See under Akai, Terrence J. 1985. Pages 1-11 in, AIAA-85-1605, AIAA 18th Fluid Dynamics and Plasmadynamics and Lasers Conference.

##### Chemical Engineering

- Kantor, Jeffrey C.
- J.C. Kantor. 1985. The Analysis of Robust Stability and Performance in Multivariable Feedback Systems Using M-matrices. Pages 1309-1314 in, Proceedings of the 1985 American Control Conference. Boston Massachusetts.
- Strieder, William C.
- See under Varma, Arvind. 1985. IMA Journal of Applied Mathematics 34:165-171.
- Varma, Arvind
- A. Varma and W.C. Strieder. 1985. Approximate Solutions of Nonlinear Boundary-value Problems. IMA Journal of Applied Mathematics 34:165-171.

##### Civil Engineering

- Gray, William G.
- W.E. Soll and W.G. Gray. 1985. Proportional Isoparametric Transformations for Quadratic Lagrangian Finite Elements. Engineering Analysis 2(2):61-66.
- I. Kinnmark and W.G. Gray. 1985. A Two-Dimensional Analysis of the Wave Equation Model for Finite Element Tidal Computations. International Journal for Numerical Methods in Engineering 20:369-383.

- I. Kinnmark and W.G. Gray. 1985. One Step Integration Methods with Maximum Stability Regions. Mathematics and Computers in Simulation 26:87-92.
- Katona, Michael G.  
M.G. Katona and O.C. Zienkiewicz. 1985. A Unified Set of Single Step Algorithms, the Beta-m Method. International Journal for Numerical Methods in Engineering 21: 1345-1359.
- Kinnmark, Ingemar  
I. Kinnmark and G.F. Pinder. 1985. On the Diffusive and Dispersive Effect of Displaced Integration Points in Finite Element Analysis. International Journal for Numerical Methods in Engineering 21: 361-365.
- See under Gray, William G. 1985. International Journal for Numerical Methods in Engineering 20:369-383.
- See under Gray, William G. 1985. Mathematics and Computers in Simulation 26:87-92.
- I. Kinnmark and M.F.N. Mohsen. 1985. Convergence Character of a Solution to the Transport Equation with Polynomial Initial Conditions. International Journal for Numerical Methods in Fluids 5:293-297.

#### Electrical Engineering

- Antsaklis, Panagiotis J.  
K.M. Passino and P.J. Antsaklis. 1985. Reconstruction Methods to Obtain Inverse Stable Sampled Systems. Pages 964-969 in, Proceedings of the 1985 American Control Conference. Boston, Massachusetts.

#### COLLEGE OF BUSINESS ADMINISTRATION

##### Marketing Management

- Gaski, John F.  
J.F. Gaski. 1985. Dangerous Territory: The Societal Marketing Concept Revisited. Business Horizons 28(4):42-47.

#### LAW SCHOOL

- Ripple, Kenneth F.  
K.F. Ripple. 1985. Statement. Pages 73-76 in, The Military Justice Act of 1983 Advisory Commission Report, Volume I. Washington, D.C. U.S. Government Printing Office.

#### CENTER FOR THE STUDY OF CONTEMPORARY SOCIETY

##### Center for Gerontological Education, Research, and Services

- Hubbard, Richard W.  
J.L. McIntosh, R.W. Hubbard and J.F. Santos. 1985. Suicide Facts and Myths: A Study of Prevalence. Death Studies 9:267-281.

- McIntosh, John L.  
See under Hubbard, Richard W. 1985. Death Studies 9:267-281.

#### RADIATION LABORATORY

- Bentley, John J.  
See under Carmichael, Ian C. 1985. Journal of Physical Chemistry 89:2951.
- Bhattacharyya, Kankan  
See under Das, Paritosh K. 1985. Chemical Physics Letters 116(4):326-332.
- Carmichael, Ian C.  
I.C. Carmichael and J.J. Bentley. 1985. Comparison of the Magnetic Properties and Harmonic Force Fields of NO<sub>2</sub> and CO<sub>2</sub> by ab Initio Calculation. Journal of Physical Chemistry 89:2951.
- Ferraudi, Guillermo J.  
G.J. Ferraudi. 1985. Reactivity of Intermediates in the Photochemistry of Copper (II) Macrocyclic Complexes. Israel Journal of Chemistry 25:122.
- Levanon, Haim  
See under CHEMISTRY; Patterson, Larry K. 1985. Photochemistry and Photobiology 41(5):511-517.
- Siders, Paul D.  
See under CHEMISTRY; Kozak, John J. 1985. Journal of Chemical Physics 82(9): 4257-4263.

#### O'NEILL CHAIR IN EDUCATION FOR JUSTICE

- Goulet, Denis A.  
D.A. Goulet. 1985. Global Community: Its Ethical Basis. Planet Earth Spring: 10-15.

#### LOBUND LABORATORY

- Luckert, Phyllis H.  
See under BIOLOGICAL SCIENCES; Pollard, Morris. 1985. The Prostate 6:389-393.  
See under BIOLOGICAL SCIENCES; Pollard, Morris. 1985. Journal of the National Cancer Institute 74(6):1347-1349.

#### MEDIEVAL INSTITUTE

- McInerny, Ralph M.  
R.M. McInerny. 1985. Review of V.P. Miceli's, Proper Perspective, Women Priests and Other Fantasies. Reflections 4(3):1.
- R.M. McInerny. 1985. Maritain's Intellectual and Spiritual Life: His Major Intuitions. Pages 7-17 in, Jacques Maritain: A Philosopher in the World. University of Ottawa Press, Ottawa, Canada.



# awards received

Department or Office	Principal	Short title	Sponsor	Dollars Months
AWARDS FOR RESEARCH				
Sociology	M. Hallinan	Determinants of Students' Interracial Friendliness	Natl. Inst. Health	81,739 12
Biology	W. Hawley, G. Craig	<u>Aedes triseriatus</u> : Transovarian Transmission	Natl. Inst. Health	756 24
Chemistry	M. Chetcuti	Alkene & Alkyne Complexes	Amer. Chemical Society	15,000 26
Physics	S. Lundeen	Fast Beam Atomic Physics	Natl. Sci. Fdtn.	110,000 12
Inst. Past. Soc. Min.	J. Gremillion	Institute for Pastoral and Social Ministry	Cath. Church Exten. Soc.	9,500 12
Physics	W. Tomasch	Electronic Tunneling from Metals (Quasiparticle Interference)	Natl. Sci. Fdtn.	45,000 6
Biology	J. Duman, F. Castellino	Hemolymph Proteins and Insect Cold Tolerance	Natl. Sci. Fdtn.	115,988 24
Chemistry	M. Miller	New Approaches to $\beta$ -Lactams and Other Natural Products	Natl. Inst. Health	50,112 12
Microbiology	C. Kulpa	Characterization of Microbial Consortium	Amoco Chemicals Res. Center	2,500 3
Biology	R. Hellenthal	Computerized Prediction Systems for Environmental Data	Environ. Prot. Agency	1,628 24
AWARDS FOR FACILITIES AND EQUIPMENT				
Electrical Eng.	D. Kwong	Computer-Controlled Laser Adjusted TCR's	CTS Corp.	5,000 2
AWARDS FOR INSTRUCTIONAL PROGRAMS				
Psychology	J. Santos, S. McCabe, R. Hubbard	A Geriatric Training Model: Gerontological Counseling	Natl. Inst. Health	11,715 12
Graduate School	C. Le	Dorothy D. Compton Minority Fellowships Grants	Compton Fdtn., Inc.	5,000 9
AWARDS FOR SERVICE PROGRAMS				
Inst. Past. Soc. Min.	R. Pelton	Notre Dame Institute for Clergy Education	---	18,453 --
Inst. Past. Soc. Min.	R. Pelton	Notre Dame Institute for Clergy Education-Reunion	---	3,315 --
Inst. Past. Soc. Min.	E. Bernstein	Notre Dame Center for Pastoral Liturgy	---	2,964 --
Inst. Past. Soc. Min.	E. Bernstein	Notre Dame Center for Pastoral Liturgy-Publications	---	3,012 --
AWARDS FOR OTHER PROGRAMS				
Physics	K. Newman, J. Dow, G. Arnold	Request Support of the Midwest Solid State Theory Symposium	Argonne Univ. Trust Fund	5,290 17
Mathematics	A. Pillay	Conference in Mathematical Logic	Argonne Univ. Trust Fund	3,960 9
Inst. Urban Studies	W. Outlaw, T. Broden	Educational Talent Search	Dept. Education	112,355 12
Advanced Studies	R. Gordon	Institutional Allowance for Prize Fellows Program	J.D. and C.T. MacArthur Fdtn.	15,000 12

<u>Department or Office</u>	<u>Principal</u>	<u>Short title</u>	<u>Sponsor</u>	<u>Dollars Months</u>
History	G. Hamburg	Faculty Research Abroad	Dept. Education	12,141 18

## proposals submitted

<u>Department or Office</u>	<u>Principal</u>	<u>Short title</u>	<u>Sponsor</u>	<u>Dollars Months</u>
---------------------------------	------------------	--------------------	----------------	---------------------------

### PROPOSALS FOR RESEARCH

Aerospace Mech. Eng.	T. Mueller	Separated Regions Near the Leading Edge of Airfoils	Natl. Aero. Space Admin.	46,799 12
Chemical Eng.	C. Ivory	Supplement Funding for Undergraduate Researchers	Natl. Sci. Fdn.	10,526 24
Chemical Eng.	C. Ivory	Countercurrent Chromatographic Separations	Dept. Energy	215,909 24
Civil Eng.	W. Gray	Finite Element Model for Surface Flow Simulation	Natl. Sci. Fdn.	38,838 12
Physics	J. Dow	Auger Recombination	Honeywell Corp. Tech. Center	30,836 10
Anthropology	K. Moore	Regularities: Heroin, Poverty and Crime	Harry Frank Guggenheim Fdn.	132,530 24
Biology	H. Esch	Neuronal Control of Phototaxis	Natl. Sci. Fdn.	159,005 36

### PROPOSALS FOR OTHER PROGRAMS

Earth Sciences	E. Winkler	International Congress on Dete- rioration, Conservation of Stone	Ger. Marshall Fund, U.S.	1,134 5days
-------------------	------------	---	-----------------------------	----------------

## summary of awards received and proposals submitted

### AWARDS RECEIVED

<u>Category</u>	<u>Renewal</u>		<u>New</u>		<u>Total</u>	
	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>
Research	10	913,556	6	285,656	16	1,199,212
Facilities and Equipment	0	0	1	35,000	1	35,000
Instructional Programs	2	42,023	1	24,825	3	66,848
Service Programs	0	0	4	17,800	4	17,800
Other Programs	1	37,500	0	0	1	37,500
Total	13	993,079	12	363,281	25	1,356,360

### PROPOSALS SUBMITTED

<u>Category</u>	<u>Renewal</u>		<u>New</u>		<u>Total</u>	
	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>	<u>No.</u>	<u>Amount</u>
Research	2	56,999	11	1,969,912	13	2,026,911
Facilities and Equipment	0	0	0	0	0	0
Instructional Programs	0	0	1	10,000	1	10,000
Service Programs	0	0	0	0	0	0
Other Programs	0	0	3	285,311	3	285,311
Total	2	56,999	15	2,265,223	17	2,322,221

---

## **notre dame report**

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

**Bernadette Zoss, Editor**  
**Jeff Smith, Layout**  
**Publications and Graphic Services**  
**415 Administration Building**  
**Notre Dame, Ind. 46556**  
**(219) 239-5337**

---