THE UNIVERSITY OF NOTRE DAME THE ACADEMIC COUNCIL MEETING OF AUGUST 30, 2005

Members Present: Rev. John I. Jenkins, C.S.C., John Affleck-Graves, Jean Ann Linney, Christine Maziar, Jeffrey Kantor, Rev. Mark Poorman, C.S.C., Seth Brown, Steven Buechler, Gilberto Cardenas, Austin Collins, Philippe Collon, Olivia Remie Constable, Tom Cosimano, Katie Crossin, Mary Rose D'Angelo, Kenneth DeBoer, Neil Delaney, Stephen Fredman, Nasir Ghiaseddin, James Grace, Hope Hollocher, Frank Incropera, Michael Lykoudis, Joseph Marino, Collin Meissner, McRae Miller, Christian Moevs, Robert Nelson, Carolyn Nordstrom, Patricia O'Hara, Hugh Page, Teresa Phelps, Ram Ramanan, Vijay Ramanan, John Robinson, Mark Roche, Valerie Sayers, Richard Taylor, Scott Van Jacob, Jennifer Warlick, Bill Westfall, Carolyn Woo, Jennifer Younger.

Members Absent: Ava Preacher

Members Excused: Thomas G. Burish, Dennis Jacobs, Panos Antsaklis

Observers Present: Mary Hendriksen, LTC Kelly Jordan, Harold Pace, Daniel Saracino, Matt

Storin, Joy Vann-Hamilton

Observers Absent:

Observers Excused: Kevin Barry

Guests Present: Don Crafton, Hilary Crnkovich, Mike Edwards, Liz Spencer, Scott Appleby

The Reverend John Jenkins, C.S.C. opened the Academic Council's first meeting of the year at 3:35 p.m.

Prof. Woo offered a prayer.

- 1. Election of the Executive Committee: In accordance with Article IV(3)(a) of the *Academic Articles*, members elected five of their number to the Executive Committee: Prof. Panos Antsaklis, Prof. Olivia Remie Constable, Prof. Neil Delaney, Prof. Carolyn Nordstrom, and Prof. John Robinson. After the final results were announced, Fr. Jenkins appointed three additional members: Prof. Hugh Page, Prof. Carolyn Woo, and Mr. Vijay Ramanan, academic delegate, Student Government. The ex officio members of the Executive Committee are: Prof. Thomas Burish, provost; Prof. Jean Ann Linney, vice president and associate provost; and Prof. Seth Brown, chair, Faculty Senate.
- **2. Preview of Inauguration Events**: Ms. Crnkovich, Notre Dame's vice president of public affairs and communication gave an overview of events scheduled for Fr. Jenkins' inauguration

on September 22-23, 2005. [See http://inauguration.nd.edu/]. Prof. Appleby, John M. Regan Jr. Director of Joan B. Kroc Institute for International Peace Studies, joined her in outlining the forum "Why God? Understanding Religion and Enacting Faith in a Plural World."

3. Overview of Sponsored Research at Notre Dame: Fr. Jenkins then asked Prof. Kantor, vice president for graduate studies and research, to comment on sponsored research in the Graduate School this past fiscal year and to outline certain changes the Office of Research has made to better serve faculty.

Prof. Kantor began by saying that the past year has been a remarkable, record-setting year at Notre Dame for sponsored research activity, with the University receiving \$80.8 million in new research awards. Moreover, for the sixth consecutive year, the University has experienced growth of 13 percent per year in this area —a statistic that is unprecedented in Notre Dame's history and puts us among the fastest growing research universities in the country.

Prof. Kantor explained that the new awards are distributed across the University: nearly \$40 million in the College of Science, close to \$20 million in Engineering, a little over \$14 million in Arts and Letters, and approximately \$7 million in the Radiation Lab. While the \$80 million does not signify a record number of awards—there were 401 awards made out of approximately 800 proposals submitted—the amount is noteworthy in that much of it represents grants *additional* to the work of individual investigators. This is, Prof. Kantor said, most definitely the trend of the last several years: collaborative groups of faculty are submitting large-scale proposals and meeting with great success.

Prof. Kantor then highlighted two awards that he said resonate particularly well with Notre Dame's mission. First, in psychology, Prof. John Borkowski and his colleagues received two new awards last year—together, totaling nearly \$3 million. One grant supports their work in a multi-site intervention project designed to study the factors that lead to child abuse and neglect in at-risk mothers. Through gathering data in four cities and assessing a wide range of variables, the research team is investigating the impact of neglect on child development, the role of community agencies in preventing neglect, and the potential for developing more sensitive and responsive parenting in at-risk mothers. A second project promotes early intervention in the lives of at-risk mothers and their babies and helps to build responsive and enriching parenting skills in the participants. Prof. Kantor added that much of the work on these two grants takes place at the University's Center for Children and Families, just off campus on Ironwood.

Prof. Kantor explained that the second award he will highlight today is just one of many successful grants within the biological sciences in recent years. This year, three Notre Dame faculty members, Profs. Malcolm Fraser, Jean Romero-Severson, and Mary Ann McDowell, collectively brought in just over \$6 million to support their work in tropical diseases. One award, made to Prof. Fraser by the Bill and Melinda Gates Foundation's Grand Challenges in Global Health Initiative, is particularly noteworthy. Prof. Fraser's award was one of just 43

awards—10 of them in the United States—made out of 600 submissions. It will advance his research in ways to mitigate the transmission of dengue virus in developing countries by modifying the insect vectors for the disease. Prof. Kantor noted that the award is a great acknowledgment of Prof. Fraser's work and the quality of his laboratory and field work.

Prof. Kantor went on to explain that one of the advantages of robust research activity at Notre Dame is its potential to "spin off" a whole range of resources that help to build the University's research infrastructure as a whole, thus benefiting many more than those awarded grants. Because research is such an expensive enterprise, those engaged in sponsored research receive Facilities and Administrative Costs funds (F & A) to cover some of their indirect costs. The University can then use these funds to underwrite various research-related expenses. Some of the monies are used to reinvest back in research—that number was \$10 million this past year, of which slightly over \$5 million went to support new faculty members' start-up costs: laboratories, stipends for graduate students, and the like. With other F&A, the Graduate School distributed just over \$2 million directly to Notre Dame's colleges, centers, and institutes. A portion of those funds are shared with the principal investigators. In addition, the Graduate School set aside \$1 million to increase stipends in this, the first year of a two-year plan, to bring graduate student stipends as a whole up to a more competitive level. With the remainder of the F&A monies, the University is making major investments in basic research infrastructure, such as laboratories, specialized library collections, and the renewal and restoration of equipment.

Prof. Kantor next outlined for Academic Council members a few initiatives underway in the Office of Research this year. He first introduced Michael Edwards, formerly director of technology transfer at Notre Dame and now the director of the Office of Research. Mr. Edwards, he said, has been doing outstanding work in terms of building strategies to reach out and better serve faculty. Thus, in the last few weeks, all faculty received a folder titled "Partners in Research" with materials informing them of the various mechanisms in place at Notre Dame to support their proposal submissions. One featured activity was a workshop in October for new faculty on proposal preparation.

Prof. Kantor also introduced Elizabeth Spencer, Notre Dame's new director of technology transfer. Prof. Kantor said that Ms. Spencer is an experienced professional in technology transfer—with that experience gained in mature companies and start-up companies in the private sector, in university laboratories, and most recently, in the technology transfer office at Carnegie Mellon University.

Prof. Kantor continued that he is in the process of adding some new positions in the Office of Research to better serve faculty in their grant-writing endeavors. Thus, one member of the Office of Research will be assigned to the College of Science and another to the College of Engineering to help faculty with proposal writing. (Prof. Kantor noted that dedicating personnel to assistance with grant writing has proved highly successful in the College of Arts and Letters' Institute for Scholarship in the Liberal Arts.) These experienced professionals will have a special focus in facilitating work on grant writing for the large, collaborative proposals he discussed

earlier. These projects have their own set of challenges, Prof. Kantor observed. Faculty members often have many good ideas and are committed to working on a project for the common good; yet, frequently, the difficulty can be determining who or what particular nucleus of faculty will actually take the lead and be the catalyst for the project. In addition, Prof. Kantor said, the Graduate School will be hiring new support staff in the pre-award area and in technology transfer to better support those activities.

To close his presentation, Prof. Kantor said that the best way of obtaining a sense of where Notre Dame has been and where it is headed is by looking at some key numbers: There are now 800 active sponsored research awards at the University, representing \$160 million in funding. In 2005, Notre Dame received \$80 million in new awards; the year before, the amount was \$62 million. As a point of comparison, the Indiana University at Bloomington received \$55 million three years ago, the most recent year for which other institutions' data is available. Thus, Notre Dame is certainly on a fast-paced trajectory.

A member asked whether the growth of sponsored research affects undergraduate research. That is, is there some trickle-down effect in terms of undergraduate opportunities?

Prof. Kantor said that there is a clear correlation between the two. The Office of Research did a tally and determined that, last year, there were nearly 600 opportunities for undergraduates on proposals that went out the door. While he does not have an accurate count of the number of undergraduates actually engaged in research projects across the University, that number is definitely in the several hundreds. Prof. Jacobs, an associate provost, is making a special effort this year to better organize undergraduate research through the development of a Web site that gives students a clear understanding of the opportunities available on campus and allows them to search more systematically for opportunities with professors.

Prof. Roche stated that in the College of Arts and Letters, there are 446 undergraduates involved in research. He suspects that Science and Engineering probably have bit higher percentage numbers.

Prof. Kantor said that undergraduate research is clearly a very important part of the educational experience for many Notre Dame students. In 2003, Andrew Sarazin, the University's most recent Rhodes Scholar, worked for Prof. Nora Besansky in Biological Sciences. He believes that Andrew would credit much of his success to the experience he had as an undergraduate in a research laboratory.

Fr. Jenkins thanked Prof. Kantor for his presentation, noting that it told a great story of the progress of sponsored research at Notre Dame.

There being no further business, Fr. Jenkins adjourned the meeting at 4:40 p.m.

Respectfully submitted,