

Call for Strategic Academic Proposals

SAPC II: 2008-2009

Phase I: Initial Concept Papers

Contents

| INTRODUCTION | 3 |
|--|----------|
| PROPOSAL TOPICS AND INVITED THEMES | 4 |
| TYPES OF PROPOSAL GRANTS | 7 |
| EVALUATION PROCESS | 10 |
| EVALUATION CRITERIA | 11 |
| I. Required Criteria II. Preferred Attributes | 11 12 |
| PHASE 1 PROPOSAL REQUIREMENTS | 12 |
| I. Substantive Sections Required II. Technical Specifications for Submissions | 12 |
| QUESTIONS AND CLARIFICATION | 14 |

INTRODUCTION

Father Edward Sorin, Notre Dame's founder, called on the University to serve as "a powerful force for good in the world." Notre Dame aspires to achieve this vision as a preeminent research university with a distinctive Catholic character and an unsurpassed commitment to undergraduate and post-baccalaureate education. In the 21st century, our ability to fulfill Sorin's vision will depend increasingly on the impact of our research and scholarship. Today's great universities are being asked to help understand and solve the most difficult questions and challenges facing our world. The stature of universities will be based on the depth of their engagement with these grand challenges and the quality of their contributions to solutions. As a Catholic university, Notre Dame has the opportunity to offer a distinctive perspective on these important issues.

The past sixty years have seen an evolution in the approach to major research challenges at universities. The 1950's represented a dependent model, in which the agenda was defined by extramural funding agencies that to a large extent dictated the research areas to be funded and then supported them primarily through grants to individual university faculty. Through the last quarter of the 20th century, research agendas migrated to a model dominated by individual investigator-initiated research. The beginning of the 21st century is witnessing another shift, in which researchers are being recognized for their capability to quickly and effectively assemble multidisciplinary teams of scholars capable of resolving complex questions with significant interdependencies. These teams increasingly span multiple institutions and diverse disciplines of the academy and seriously engage the expertise of scholars in an integrated fashion.

Notre Dame is well positioned to take advantage of this interdependent future of scholarship in terms of both our distinctive mission and our size. We are large enough to have

critical mass and significant breadth in research, but small enough to be able to connect the necessary components together to address these important world questions with minimal complication and maximum effectiveness.

The Strategic Academic Planning Committee (SAPC) was first formed in 2007 to help Notre Dame increase our ability to contribute meaningfully to this new age of research, scholarship, and creative expression. An initial set of grants was awarded in April 2008. The purpose of this communication is to launch a second process of funding (SAPC II). SAPC II will again be designed to assist the University in advancing the excellence and visibility of its research programs, with a focus on contributing meaningfully to crucial world challenges. Like the initial process, the investments funded through SAPC II will not constitute the total of Notre Dame's contributions to these challenges and issues. These investments will be distinct from, and in addition to, those efforts already in place, including those outlined by individual colleges and departments as part of the University's current strategic plan, *Fulfilling the Promise*, and those funded in the first round of the SAPC. The ultimate aim of the SAPC II program is to advance strategically our research enterprise by facilitating research programs of the highest scholarly quality that will enhance Notre Dame's ability to address questions of importance to the academy, the nation, and the world.

The remainder of this document provides guidance about the types of proposals that are sought in the SAPC II process and information about how these submissions will be evaluated.

PROPOSAL TOPICS AND INVITED THEMES

The first round of the SAPC process relied entirely on topics developed by individual teams and investigators. The current SAPC committee has endorsed the creativity and freedom

associated with that approach. Proposals from all topic areas of research, scholarship, and creative expression will continue to be welcomed in the 2008-2009 SAPC II process.

In addition, this year the committee is encouraging proposals that engage the interdependency model of research, which brings several disciplines or even multiple institutions to bear on particular research themes relevant to the world's current and future challenges. There are some research areas where the University already has significant strength that could reach preeminence with additional investment. In some other areas, the University has individually strong research components that could be connected to form an even greater whole. Following consultation with a variety of sources, including faculty members, deans, department chairs, and distinguished outside visitors to the university, the SAPC has identified four broad themes that encompass several of our existing strengths and will be deemed particularly attractive in this proposal process.

Note that the themes are deliberately broad – individual proposals are expected to address a more focused area of research within or even across these four themes.

Invited Themes for Proposals

1. **Environmental Sustainability**. The relationship between environmental protection, energy production, and sustainable cities and communities is of great interest to the University, as evinced by the discussion at the recent Notre Dame Forum. It is also a topic critical to the future of our nation and the world, as we confront global warming and an ever scarcer supply of natural resources. Proposals that address the many aspects of environmental sustainability of cities and communities—including public policy, law,

- public adoption of technologies, the interplay of technology and economics, and the environmental consequences of energy development -- are encouraged.
- 2. Poverty and Human Development. Numerous countries and regions around the world still experience an unacceptably slow or arrested level of development along multiple dimensions of human welfare. Despite tremendous advances in human knowledge, technology, and culture, industrialized nations also struggle with sectors of significantly disadvantaged populations. Proposals are welcomed that address issues such as the political systems, public health and education policies, immigration, and infrastructure development that cause, exacerbate, and/or alleviate poverty.
- 3. Religion and culture; religion and science. Notre Dame's distinctive mission presents an opportunity to explore issues of religion in ways that peer institutions cannot. Religion continues to be a relevant factor in conflict among people and countries, the development of society and culture, and the application of technology. Examples of the numerous proposal topics that might be pursued within this bipartite theme include religion and secularization, religious dialogue, modernity and religion, the "clash of civilizations", theological topics such as faith and reason, neuroscience and religion/religious experience/religious discourse, theories of the origin of the cosmos, or bioethics.
- 4. Water. With a rapidly growing world population, ongoing climate change, and continued technological advancements, water is becoming an increasingly critical resource for the world that must be wisely managed. Proposals might explore approaches to the safety and reliability of water supplies including environmental management; water treatment efficiency; water system designs; watershed-wide mechanisms for

governance; policy analysis and coordination among governments and local institutions; and ecohydrology and collaboration with intergovernmental water programs, such as those sponsored by the United Nations.

TYPES OF PROPOSAL GRANTS

In this year's process, the SAPC will consider two types of proposals for funding: full grants and seed grants. Both types of proposals should seek to achieve the same aim of building bold, innovative world-class research programs, but the maturity of the programs differs. By launching the seed grant program, the SAPC is hoping to encourage programs that may result in an outstanding level of impact, but either need more time to develop before they are likely to produce a world-class research program or are currently less certain of success and would therefore benefit from further proof of concept. The number of each type of proposal that will be funded is not predetermined. Indeed, depending on the number and quality of proposals received, it is possible that the SAPC might fund several proposals of both types or only one kind of grant or the other.

Both types of proposals must include a description of the specific research program that they are seeking to create. The grant for a research program may include associated elements of infrastructure, programmatic requests, or investment in people necessary to conduct the program. Proposals seeking only to invest in particular elements of infrastructure, however, should instead be directed to the Office of Vice President for Research for the Equipment Restoration & Renewal Program (ERR)¹ and/or the new Research Cores program².

¹ Guidelines are available at http://www.nd.edu/~research/funding/nd.htm.

² For further information, please contact the Office of the Vice President for Research at 574-631-3902.

Full and seed grant proposals must seek a minimum of \$250,000 over a period of three years. SAPC grants are designed to support the work of multiple faculty members, preferably crossing disciplinary and college lines and even spanning multiple institutions. The scale of the grants is therefore likely to be significant. Proposals that are smaller in size, even if they involve multiple faculty members, should instead be directed to the Office of Research's Faculty Research Program (FRP)³ or to research programs that are supported by individual colleges (e.g., ISLA⁴). The minimum amount of funding requested for both types of grants is set at the same level to acknowledge that some research questions may be more costly to invest in than others based on the disciplines engaged in the proposal. It is therefore feasible that a full grant could be comparable in cost to a seed grant. The upper limit of the two types of investment does differ; full grants are capped at \$15 million over three years and seed grants may not exceed a \$1 million investment over the same time period.

The following table attempts to summarize the similarities and differences between the two types of proposals.

| Element | Full Grants | Seed Grants |
|---------------------|--|---|
| Objective of Effort | Accelerate and/or augment efforts of an existing excellent research program Create productive new internal and/or external partnerships from disparate existing efforts that will result in an excellent research program within a timeframe of approximately 3-6 years | Pursue a predominantly new research program that could have high impact, but is also less certain of success or needs more than 3-6 years to develop into a world-class program |
| | Launch a new research | |

³ Guidelines are available at http://www.nd.edu/~research/funding/nd.htm.

8

⁴ For further information, go to http://isla.nd.edu/.

| Element | Full Grants | Seed Grants |
|---|--|---|
| | program that is relatively certain of success within the timeframe of 3-6 years | |
| Size of Grant Total over an initial period of 3 years, including one-time & recurring funds. Grants may be eligible for renewal for a second 3 year term. | At least \$250 K in total investment Up to \$15 MM in total investment | At least \$250 K in total investment No more than \$1 MM in total investment |
| Topics for Research Program | Identified thematic areas encouraged Any investigator-initiated idea that is consistent with Notre Dame's unique mission and aspirations | Identified thematic areas encouraged Any investigator-initiated idea that is consistent with Notre Dame's unique mission and aspirations |
| Involvement | Multiple faculty members Interdisciplinary teams preferred, within Notre Dame and/or across multiple institutions | Multiple faculty members Interdisciplinary teams preferred, within Notre Dame and/or across multiple institutions |
| Types of Items Funded | Programmatic needs (e.g., data sets, travel time, research staff) Infrastructure investments (e.g., equipment, facilities, collections) that are part of a research proposal Permanent faculty lines and associated start-up funds that would complement a research proposal | Programmatic needs (e.g., data sets, travel time, research staff) Infrastructure investments (e.g., equipment, collections) that are part of a research proposal |
| Expected Outcome | 3 - 6 year grant will substantially establish program's excellence | 3 - 6 year grant will provide guidance as to whether further and more permanent investment is warranted |

EVALUATION PROCESS

The SAPC will review and evaluate all Phase 1 proposals, with consultation and assistance from appropriate deans. Faculty members are encouraged to work collaboratively with their dean(s), departmental chairs, and pertinent supporting units (such as OIT, the Hesburgh Libraries, research core directors, directors of existing collaborative centers and institutes, etc.) as they develop their proposals.

Following the Phase 1 assessment, a select number of teams will be invited to submit full Phase 2 proposals. The full proposals will be evaluated by the SAPC, appropriate deans, and external reviewers. Phase 2 proposal teams will have an opportunity to submit suggested external reviewers for their proposals. The SAPC will ultimately make a recommendation for investment to Notre Dame's Executive Team (President Jenkins, Provost Burish, and Executive Vice President Affleck-Graves).

Current SAPC II Process Timeline

| Date | Activity |
|-------------------------------|--|
| Tuesday, November 4, 2008 | Phase 1 Call for Proposals issued |
| Monday, March 2, 2009 | Phase 1 Concept Papers due |
| Friday, April 3, 2009 | Notification to Phase 1 participants Invitations to Phase 2 participants |
| Wednesday, September 30, 2009 | Phase 2 Proposals due |
| Tuesday, January 12, 2010 | SAPC II grant recipients announced |

EVALUATION CRITERIA

Proposals will be evaluated at all stages along the following dimensions. Phase 1 proposals will primarily be judged on their potential to achieve Criterion I.A. (below).

I. Required Criteria

- A. **Excellence**. Creates or expands a program of research, scholarship, or creative expression that is of top quality in an important area that will have an impact on the academy, nation, or world. Results in a program that will be a leader in its field and contribute to the overall preeminence of the University.
- B. **Leadership and Program Integration**. Is led by investigators who can contribute outstanding scholarship to the effort and also possess the attributes to serve as effective leaders of a team. The proposed program is effectively organized and integrated to achieve its objectives.
- C. Involvement. Creates productive internal or external collaborations. This could be done by bringing together existing institutional strengths in a new and distinctive way, by proposing a creative new program, or by forming external partnerships. External partners could include other academic institutions, the Church, nonprofits, industry, and so forth.
- D. **Mission Fit**. Is consistent with or strengthens the University's Catholic character.
- E. **Educational Impact**. Enhances the learning environment or research opportunities for undergraduate, graduate and professional education.
- F. **Financial Viability**. Shows promise for sustaining itself after the initial period of support through new University endowments, college or departmental resources, or sponsored research funds. The effort must demonstrate the ability to adapt as the

nature of our collective understanding of intellectual problems evolves. Applications for seed grants will not be required to demonstrate ongoing funding at the end of their initial grant, though those programs would eventually need to achieve sustainability at their fruition.

II. Preferred Attributes

- A. **Thematic Emphasis**. The SAPC is committed to funding only excellent proposals.

 While proposals related to one of the identified thematic areas are encouraged, the final selection will be based on the quality of the proposal.
- B. **Interdisciplinary**. Proposals of a genuinely interdisciplinary nature will be preferred over discipline-specific proposals and proposals where disciplinary scholarship happens in parallel, even if the latter submissions are equally excellent in quality.
- C. **Broader Impact**. Proposals that support the service mission of the University and/or contribute to the economic development of the region and the nation are encouraged.

PHASE 1 PROPOSAL REQUIREMENTS

I. Substantive Sections Required

Include an explicit response to each section listed below in the proposal. Additional sections may be included if necessary, especially those related to the evaluation criteria.

- **A. Research Program Objective**. Briefly describe the purpose of the proposed research program and the objective it is designed to achieve.
- **B.** Approach. List the participants and outline the specific activities that are envisioned as

part of the effort and the methodology that will be used. Indicate how the initiative will be organized and coordinated.

- **C. Excellence**. Explain how the proposed program will demonstrate outstanding quality and contribute to the preeminence of the University. This section should be written particularly for readers outside the field of the proposal team.
- **D. Environmental Scan**. Briefly list efforts related to the proposal topic that are currently or anticipated to be undertaken at other institutions. Indicate how Notre Dame's effort would both complement, and be distinguished from, those efforts.

II. Technical Specifications for Submissions

- A. Date Due. Proposals are due electronically to Erin Hoffmann Harding at eharding@nd.edu by close of business (5:00 pm Eastern) on Monday, March 2, 2009.
 All participants and appropriate deans and department chairs should be copied on the submission.
- B. **Length and Font.** Proposals may not exceed 3 pages in length, using single spacing and 1 inch margins. The cover page, signature page, and abbreviated CVs are the only items that will not be counted toward the 3 page limit. All proposals should utilize Times New Roman, 12 point font. In an effort to be fair to all participants, proposals that fail to meet these requirements will not be evaluated.
- C. **Cover Page.** Complete and include a copy of the attached cover page as the first page of the proposal submission. Indicate in the cover page whether the proposal fits within one of the invited themes. Also select the approximate size of grant requested; further budget details would be provided in the second phase of the proposal process. An electronic

- copy of the cover page is available by contacting Erin Hoffmann Harding (eharding@nd.edu).
- D. **Signatures.** Complete and include a copy of the attached signature page with the name and signature of all participants named in the proposal using the template provided. An electronic copy of the cover page is available by contacting Erin Hoffmann Harding (eharding@nd.edu).
- E. **Curriculum Vitae.** An abbreviated CV must be included for each investigator. The CV of each individual cannot exceed two pages in length. The CV of the principal investigator should be listed first, followed by the CVs of all other investigators in alphabetical order.
- F. **Format and Assembly.** Proposals should be submitted electronically in PDF format as one combined document in the following order:
 - 1. Cover page
 - 2. Signature page
 - 3. Proposal
 - 4. CV of principal investigator
 - 5. CVs of additional investigators (in alphabetical order)

QUESTIONS AND CLARIFICATION

Faculty members are encouraged to contact Bob Bernhard (rbernhar@nd.edu) for questions or consultation during the proposal development process. The objective of the SAPC effort is to help make each proposal as strong as possible, and through the SAPC process, to make significant progress toward the vision of the University as a preeminent research university. The

University is committed to providing the assistance necessary to achieve that result to both the teams selected for awards and those that are not selected in this round of funding.

University of Notre Dame Strategic Academic Planning Committee November 2008

Proposal Cover Sheet

CONFIDENTIAL

<Please complete>

Proposal Title:

| Principal Investiga | tor: <please< th=""><th colspan="3"><please complete=""></please></th></please<> | <please complete=""></please> | | |
|--|---|---|---|-----------------|
| Participants: | <please< th=""><th colspan="3"><please as="" complete="" many="" needed="" rows="" with=""></please></th></please<> | <please as="" complete="" many="" needed="" rows="" with=""></please> | | |
| Last Nam | e | First Name | Depa | artment |
| | | | | |
| | | | | |
| | | | | |
| Deans and Departr needed> | nent Chairs Cop | ied on Proposal: | <please a<="" complete="" th="" with=""><th>as many rows as</th></please> | as many rows as |
| Last Nam | e | First Name | College, School | or Department |
| | | | | |
| Proposal Topic or Theme: Please check the appropriate type. More than one theme may be selected if applicable. | | | | |
| Investigator- Initiated | Environmental Sustainability | Poverty and Human Development | Religion & Culture; Religion & Science | Water |

Type and Scale of SAPC Grant Sought:Please highlight the appropriate type and the approximate budget

| Type of Grant | Large | Medium | Small |
|---------------|--------------------|----------------|--------------------|
| Full | \$10.0 – 15.0 MM | \$5.0 – 9.9 MM | \$250 K - \$4.9 MM |
| Seed | \$750 K - \$1.0 MM | \$500 – 749 K | \$250 – 499 K |

University of Notre Dame Strategic Academic Planning Committee November 2008

Proposal Signatures

I have participated in the development of this proposal. By my signature, I both endorse the proposal's contents and the role that I will play in the effort if it is funded.

Principal Investigator: Name Signature

Participants: <Please complete with as many rows as needed>

| Name | Signature |
|------|-----------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |