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To: IT&E Admin Council
From: Stephen Nash, Associate Dean
Subject: Criteria for Chartering and Renewing Research Centers
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I. Summary

The School of IT & Engineering will look closely at the chartering and renewal of research centers. Four major principles will be used to assess research centers:

- The creation of a new research center must significantly advance the University's research mission.
- The research conducted by the center must have high technical merit.
- The participation in the center must be broad.
- The funding for the center must be significant.

In particular, there must be a significant benefit beyond that provided by faculty members doing research and obtaining grants through departments, and other units. In addition, for the renewal of research centers:

- Renewal of a center will require that the objectives of the center (as stated in the charter for the center) be met at time of renewal.
- For renewal, a center must show that it is deriving most of its operating budget from a source other than state appropriations.

Background, motivation, and details on these criteria can be found below.

II. Expanded Discussion

Research Centers can contribute significantly to the activities of IT&E. By bringing together a diverse group of researchers to study an important problem, they contribute to the intellectual life of the school, and enhance its mission.

The School of IT&E has chartered a number of research centers:

- Computational Statistics
- Image Analysis
- Information Systems Integration and Evolution
- Parallel and Distributed Computation
- Secure Information Systems
- Excellence in Command, Control, Communications, and Intelligence (C³I)
- Hyperlearning

Carl Harris reviewed the charters for these centers in 1998. The charters for most of these centers must be reviewed in 2001 (except for C³I, whose review will occur in 2003). In addition, four additional centers have been proposed this year.

I think it is important to have criteria for judging research centers, to provide guidance in reviewing proposals for new centers, and renewals of existing centers.

There is a section of the GMU Faculty Handbook that discusses centers:

1.3.7 Centers

A center is a unit of the University intended to advance the University's mission of research and/or public service. Normally housed within a department, college/school or institute, a center does not develop or administer academic degree programs, nor does it possess faculty appointed to primary affiliation with it. From time to time, centers with large grants or contracts may require the presence of research faculty whose affiliation with the center is coterminous with the life of the grant or contract. Faculty appointed to a center under externally funded grants or contracts may not receive probationary or tenured appointments through the center. A center is chartered for a specific period of time by the Provost and the President on the recommendation of appropriate faculty and dean(s) or institute director(s). Renewal of a charter, when called for, is subject to favorable review of a center's performance and accomplishments.

A center is administered by a director who is appointed for a fixed term by the local unit administrator of the unit within which the center is housed. Whenever possible, centers are expected to derive most of their operating budgets from a source or sources other than state appropriations.

I have italicized the sentences that provide guidance in establishing criteria for research centers.

In 1998, when the centers were last reviewed, the upper administration of GMU wished to reduce the number of centers. In my discussions in Spring 2000 with Chris Hill (Vice Provost for Research) and Dave Rossell (Associate Provost for Personnel and Budget), I was advised that the creation of new research centers would not be encouraged. The Dean has indicated on several occasions that he would like to set high standards for the creation of research centers.

Another reason to look closely at the chartering of centers is because of their financial implications. For grants awarded through a center, it has been traditional to direct the department-level share of the indirect costs to the center. This represents a financial incentive to the center and a financial loss to the department.

Based on the above information, I believe that there are four major principles that should be used to assess research centers:

- The creation of a new research center must significantly advance the University's research mission.
- The research conducted by the center must have high technical merit.
- The participation in the center must be broad.
- The funding for the center must be significant.

In particular, there must be a significant benefit beyond that provided by faculty members doing research and obtaining grants through departments, and other units. In addition, for the renewal of centers:

- Renewal of a center will require that the objectives of the center (as stated in the charter for the center) be met at time of renewal.
- For renewal, a center must show that it is deriving most of its operating budget from a source other than state appropriations.

More detailed discussion of these items can be found in the individual sections below.

Advancement of University's Research Mission

A research center must be more than a collection of individual researchers. There must be positive effects arising from the grouping of researchers around a unifying intellectual theme. Ideally, the center would solve problems that could not be undertaken by scientists working alone.

A research center should contribute to the visibility of the School. It should attract visitors and graduate students. It should hold public events (meetings, seminar series, etc.). It should distribute the results of its work in the form of publications and more broadly accessible reports. And its research should have influence beyond the University.

Technical Merit of Research

A research center should have a unifying intellectual theme. The research should contribute to the solution of an important problem. And the researchers should be capable of performing the proposed research.

Breadth of Participation

A research center should bring together researchers and graduate students, individuals who might not normally work together, to study a research problem. A research center must have breadth of support from participating faculty.

The breadth of participation could be measured by:

- Publications that cite the center
- Grants channeled through the center
- Activities (meetings, seminars, etc.) organized by the center

Significance of Funding

Research centers are expected to be self-supporting once they become established. They should also contribute to the research funding of the University, beyond what could be expected of individual faculty. This support should be generated broadly by the faculty who participate in the center. The funding should cover such expenses as graduate student support, administrative support, and supplies. Evidence of existing and expected funding is an important part of a center proposal or renewal.

A proposal for charter or renewal of a center must include a year-by-year budget for the charter period of the center (typically 3 years). It should list known and existing funding, as well as plans for additional funding. (These funds should be listed in terms of annual

expenditures.) Budgets are to be updated and reviewed annually by my office once the center is chartered.

Renewal: Meeting of Objectives

Research centers being considered for renewal will be judged against the claims made when they were last chartered or renewed. Renewal will depend on the extent to which the goals of the center are being accomplished. The review of the center will also be based on the other criteria for centers mentioned above.

At time of renewal, there should be evidence that the research center has contributed to the visibility of the school, in the ways outlined above.

Renewal: Self-Sufficiency of Funding

A research center being considered for renewal should be self-sufficient (or close to it); that is, it should derive most of its operating budget from a source or sources other than state appropriations. The review of the center will also be based on the other criteria for funding mentioned above.

Overhead Return

The current arrangement is that the department-level overhead return (10%) is transferred entirely to the center. The Dean and I are proposing the following revised formula for overhead return:

- 20% to the Dean of IT&E
- 15% to the Principal Investigator
- 5% to the Research Center
- 5% to my office, to be used to support Research Centers
- 5% to the Department

Overall, 10% of the overhead return will be allocated to research centers, but an individual research center is not guaranteed to receive 10% of the overhead return.

The discretionary 5% of the overhead return will be allocated primarily for activities that contribute to the external visibility of the research center and the School of IT&E. It will not typically be made available for day-to-day expenditures.

The allocation of the discretionary 5% of the overhead return will be made annually, at time of chartering and at time of annual budget review. It will apply to grant proposals submitted during the next year. The decision will be based on activities that occurred during the previous year and that are proposed for the coming year. These activities might include:

- Meetings organized by the center
- Seminars organized by the center
- Visitors hosted by the center
- Reports and publications of the center

III. Benefits Associated with Research Centers

The primary benefit of a research center is to provide a highly visible presence in a research area. This should enable the research center to attract support from corporations and funding agencies, and to attract research faculty and graduate students. In addition, there is the

financial benefit of the increased overhead return. Research centers will have a higher priority for space than research laboratories. They will also be given greater prominence in publications, publicity, and signage.

IV. Alternatives to Research Centers

Research activities that do not meet the criteria for research centers may be called research “laboratories”. The benefits associated with research centers do not apply to laboratories, but the laboratory designation will offer research groups the ability to advertise, promote, and fund activities that benefit from interaction among researchers.

V. Proposal Format

Proposals for chartering of research centers should have the following format:

- Cover page signed by (proposed) center director(s), and identifying the name of the center.
- Summary section outlining the themes of the center and how the center will address the four major principles identified at the beginning of this document.
- A more detailed proposal which responds to the following questions/issues:
 - What is the mission of the center? What is the unifying intellectual theme?
 - Is the research center approach essential and appropriate to the research activities described?
 - Will a research center approach add significantly to what could be done through other modes of research support?
 - How will the research center build on established strengths of the University?
 - What is the importance and applicability of the research?
 - How will the research center contribute to the visibility of IT&E? What activities will it organize?
 - Who will be the director? What are the management qualifications of the director? How will the center be managed?
 - Who will participate in the center (faculty, researchers, students)?
 - What experience and accomplishments do the researchers contribute?
 - How will they participate (publications, grants, activities)?
- A detailed budget:
 - Include a year-by-year budget for the charter period of the center (typically 3 years). It should list known and existing funding, as well as plans for additional funding. (These funds should be listed in terms of annual expenditures.)
- Curricula vitae of the director(s).

Proposals for renewal of a research center should include the above materials. In addition, the body of the proposal should provide information on:

- How the center has met its objectives (as stated in the charter for the center).
- How the center is funded (there is an expectation of self-sufficiency for centers at time of renewal).

VI. Intermediate Review of Centers

On an annual basis (on the anniversary of the chartering of the center), the center director must submit an updated budget (corresponding to the year-by-year budget included in the proposal for the center).

In general, the continued operation of the center is subject to the authority of the Dean.