Proposed Scholarship Initiative for review, revision and costing

To: Strategic Planning Task Forces Subcommittee on the Scholarship Initiative: Representatives from the SPSC Task forces on: Scholarship (S), Graduate Program (GP), Project Based/Cooperative Learning (PBCL).

Copy: Chairs: Faculty Governance Committees

From: Planning and Implementation Committee (PIC), Prof. Jim Dittami, coordinating committee member for the Scholarship Initiative

RE: Proposed Scholarship Initiative for review, revision and costing

A theme addressed in the recommendations of the Strategic Planning Task Forces is strengthening our stature in faculty and student research activities. The Strategic Plan Steering Committee submitted the following goal statement in its final report, which was endorsed by the WPI faculty: Integrate Education and Research.

We have identified recommendations from the Task Forces in a list below, (with the originating task force acronym in parentheses) that describe possible actions towards this end. Also included is some discussion from the task force reports that, while not presented as recommendations, provides some additional context about this issue.

Following the list we describe our current view of the nature and extent of the initiative that we believe follows from these recommendations, those in other Task Force reports and which is most synergistic with the specific opportunities that are made available within the context of a capital campaign (start-up funds, endowable positions or scholarships, personal involvement and commitments from alumni and trustees). Finally, we outline a specific request to your group to assist us in further defining this initiative and the resources that would be required to address it.

PIC requests that your subcommittee act as the sounding board for campus reaction to the ideas in this initiative and that you assist PIC in modifying and finalizing an appropriate initiative for campus approval and faculty ratification.

SPSC and Task Force Recommendations

The PIC Initiative that follows has components that follow from several of the SPSC goals, with emphasis on the first, including:

- Integrate Education and Research
- Develop Creative Pathways to Graduate Degrees
What follows is a list of the action items drawn from Task Force Reports that fall under a broad category that we call the Scholarship Initiative. We have listed below the action items with the originating task force initials given in parentheses.

**Specific Task force recommendations in this area include:**

1. **Provide seed grants for new research (S)**
   WPI should encourage individual faculty and small groups of faculty to initiate new research by making funds available to conduct preliminary studies in unexplored areas. The funds would be used for graduate student support, equipment, supplies, and no more than one month of summer salary and benefits for each faculty member involved.

2. **Improve Sabbatic leave program (S)**
   WPI should make available sufficient funds to academic departments to replace the effort of faculty members on sabbatic leave. In addition, the compensation to faculty members who take full-year sabbatic leaves should be increased from 50% to 80% of their normal salaries.

3. **Reduce teaching responsibilities (S)**
   WPI should maintain a sufficient number of tenure-track faculty positions to insure that each faculty member is required to teach between 2 to 3 courses per academic year. Project load should be carried equitably within the departments by individual department members. In order to make this a realistic goal, academic departments should consider ways to reduce the number of course offerings without damaging the quality of academic programs.

4. **Introduce research chairs for young faculty (GP)**
   These chairs would provide a reduced teaching load and discretionary funds for untenured faculty. They would foster a rapid engagement of research programs and be attractions for recruitment of outstanding faculty.

5. **Increase professional development funds (S)**
   WPI should provide each faculty member with a modest, reliable source of professional development funds to pay for such items as travel, small equipment and supplies.

6. **Introduce WPI-sponsored travel fellowships (S)**
   To improve opportunities faculty members have to explore new scholarly areas, to utilize resources at other institutions and to establish collaborations with academic/industrial colleagues who are not at WPI, travel fellowships should be made available that would permit faculty to be away from campus for up to two terms.

7. **Increase research incentive payment (S)**
   Incentive payment returned to PI's should be increased from 10% to 20% of indirect costs charged to sponsored research accounts. This would further motivate faculty to seek external funding, allow faculty to reinvest significant sums in their professional development, and send a clear signal that WPI appreciates the efforts of those who attract off-campus sponsors for their work.

8. **Encourage, promote and reward intra- and inter-departmental research collaborations among faculty (PBCL)**

9. **Increase the population of full-time graduate students (PIC)**
10. Establish student summer and full time research fellowships (CGSR report 1/23/1998)

Draft PIC Initiative

While considering the various recommendations, made by the Scholarship Taskforce, by other groups concerning scholarship at WPI, and actions recommended by the CGSR report of this year, PIC has identified a set of actions that we believe will have an immediate impact. PIC has also identified, and suggests, a structure that will provide means for continued interaction between important parties on campus directed towards continual improvement.

The goal of this initiative is to increase WPI's output of nationally recognized scholarly work which results from and is inseparable from our commitment to providing a relevant and exciting educational experience for graduate and undergraduate students alike. The recommendations that follow, seek to accomplish this by establishing a nurturing environment, active encouragement and appropriate incentives and rewards for scholarship activities. These improvements are essential to the continued professional development of the faculty, the improvement of the learning experiences of the students (graduate and undergraduate) and the enhancement of WPI's national reputation.

The CGSR report on Enhancing the Role of Graduate Studies and Research at WPI, suggests an important target for this initiative: "There are, of course, many indices of reputation but the National Research Council's peer review of scholarly quality is, perhaps, the most important. This decennial poll will next be conducted in 2005. Investing in our graduate programs starting now will certainly have a significant positive impact on WPI's ranking in this poll. It is our goal to achieve collective and individual rankings in the top fifty in this poll."

This same report takes the following stance with respect to WPI's view of the close coupling of faculty scholarship and the student's learning experience: "The reputation of the graduate program ultimately depends on the creativity and scholarly achievements of the faculty members and their students." Furthermore it states: "The development of research proposals (in itself a creative activity) and the successful solicitation of funding play an important role in enhancing scholarship. It is the role of each faculty member to establish their goals with respect to these scholarly activities and strive to achieve them. It is the responsibility of each faculty member to recognize the central role played by the student in attaining these goals and to involve them in each step of the creative process. By educating these students, who will be the future generation of scholars, the faculty member will ensure the continuity of learning."

It is in support of this view of the importance of scholarship and the need to integrate it into the experience of every student at WPI that the PIC recommends the following.

Re-Establish the Research Development Council

We recommend the re-establishment of the Research Development Council (RDC) and making that council a formal sub-committee of CGSR. The new RDC would be responsible for such tasks as:
1. Administering an internal renovation and seed grant program (to be described below);
2. Mentoring faculty supported by the internal grant program;
3. Encouraging interdisciplinary interactions within the context of its grant program and mentorship roles.
4. Engaging in on-going dialog with the Provost's Office regarding policies relevant to the execution and promotion of quality scholarship such as appropriate student/faculty ratios, teaching expectations, loading models, growth of the graduate program, rewards and incentives;
5. Engaging in on-going dialog with University Relations to identify areas of potential growth that can be assisted with appropriate gifts for equipment and space renovation;
6. Engaging in on-going dialog with the Provost's Office and Research Director's Office to present faculty viewpoints on important issues arising in the establishment of flourishing funded research activities. Such issues include: intellectual property policy, RA and TA stipends, cost sharing policy, travel and professional development funds, research incentive funds, etc.
7. Direct input into the budget development process at the level of BDAC.

Members of the RDC would be selected based upon their demonstrated excellence in research.

**Endowed Seed Money and Laboratory Renovation Fund**

We recommend the creation through the capital campaign of an endowed seed money and renovation fund. This perpetual fund would be administered by the members of the RDC and would be distributed on the basis of research and renovation proposals according to the perceived long-term impact on WPI. A key element in any such proposal will be the proposed follow-through by the recipient with regards to acquiring new external funding.

After an award, the RDC members would actively participate as mentors in helping the recipient achieve acquisition of external funding.

**Rotating Research Chairs for Young Faculty**

The first few years comprise the most critical point in a faculty member's career. Without proper assistance towards development of scholarly achievement, both the individual and the institution suffer from a lost opportunity. We strongly recommend the establishment of endowed, rotating research chairs that provide some mix of increased release time, summer salary support of discretionary funds for travel, equipment and supplies that can help launch these careers in a fruitful direction. Industrial sponsorship of these chairs is an appropriate target for the capital campaign effort and beneficial in the sense of creating an immediate network of industrial contacts for the new faculty chair and their advisees.

**Endowed Undergraduate Research Experience Fellowships**

The early experience of students is also of paramount importance to their academic development. Many undergraduates leave WPI without ever having contact with the scholarship of the faculty except indirectly through course content introduced by the faculty. In the interest of expanding the interests and acumen of undergraduate students, we recommend a capital campaign effort to obtain endowed funding for
undergraduate research experiences connected to faculty scholarship. These fellowships may either take the
form of summer stipend support, or, financial aid linked to assisting specific faculty in their efforts.

**Increase the Number of Endowed Graduate Student Fellowships**
This form of graduate student financial aid is widely recognized as beneficial to both the graduate student
and the academic program. High quality graduate students can be attracted to a department by the
availability of a fellowship. As a result of their presence, the quality of classroom education, department
environment and faculty research are favorably impacted. Where such opportunities arise in the capital
campaign, PIC urges development of new endowed graduate fellowships.

**Specific Requests**
PIC requests assistance from the previous Task Force members based subcommittee with respect to the
following:

1. Please review the above draft initiative. Your committee will play an important role in modifying
this proposed initiative to address the needs of the WPI campus. This draft is intended to provoke
discussion and reflection regarding the future thrusts for WPI and means to implement these goals
with the help and within the context of the WPI capital campaign.

2. Please canvas the campus for comment and represent the collective wisdom of all interested
parties in constructing your criticism and amendments.

3. Please produce a list of suggestions, by **March 23**, to be addressed by PIC. This need not be a
formal report, but should include background information for each suggested change and an
assessment of the campus wide reaction to the initiative that led to the suggested changes. This
feedback can take the form of a simple email to the member of PIC coordinating this initiative, or,
a new draft of the initiative.

4. Please be prepared to interact with PIC in the preparation of a second version of the initiative in
response to feedback received. Also, please be prepared to participate in an open meeting with PIC
and the campus community to discuss this second revision.

5. Please assist PIC in the evaluation of the costs of undertaking this initiative. As was explained at
the December faculty meeting, the campus will participate in an exercise aimed at capturing the
sense of priorities assigned to the various initiatives to be proposed. To conduct this exercise, we
need to assign a set of costs to each initiative associated with each kind of resource required by
each initiative. Please consider the following questions:

   1. What do you estimate will be the start-up costs of this initiative?
   2. What do you estimate to be the steady state operational costs of this initiative?
   3. What revenue streams, other than the operating budget, can you envision supporting this
      initiative?
   4. In addition to those ways that might have been suggested above, in what other ways do
      you imagine this initiative could benefit from the capital campaign?
   5. What space requirements do you think this initiative will need?

Then, please divide the costs into the following categories:
6. One time (start-up phase) cash expenses.
7. Endowed chairs, fellowships and/or scholarships or other self-replenishing funds.
8. Facilities (construction or equipment costs) that might be addressed through a gift-in-kind or gift that targets this project-specific one-time expense.
9. Continuing costs that impact the operating budget.
10. Potential offsets of continuing costs, due to new revenue streams.

Consider the fact that those initiatives that are selected for implementation after campus priorities have been illuminated will have to share the new resources being developed by the capital campaign. These currently untargeted new resources are, conservatively, estimated at approximately $16 million in unrestricted (effectively cash) and $30 million in restricted funds (scholarships, fellowships, chairs and other gifts dedicated to a particular purpose according to the interests of the donator.)