Feb. 5, 2010
Summaries of Reviews by the Distinguished Professors and Scholars Panel
Average of votes on 1(poor) to 5(excellent) point scale and the number of yes
(proposal should go forward) and no(proposal should not go forward) votes are
reported.

**Overall Recommendations:** Move Complex Systems and Food Systems
proposals forward for outside review. Make Multiscale Dynamics in Biological
Systems a component of Complex Systems. Do not go forward with Culture
and Society, Environmental Change and Adaptation or Public Health proposals.
The group was less sure of the overall merits of the Neuroscience and Policy
Studies proposals.

1. **Multiscale Dynamics in Biological Systems**
   **Strengths:** The impact on undergraduate research was seen as a very positive
   aspect, as was the potential for impact on the state’s economy through spin off
   companies.
   **Weaknesses:** The topic of multiscale dynamics seems forced. As presented, the
   research area seemed best connected to the robust and growing research area of
   complex systems. The need or benefit from a PhD program in multiscale
   dynamics was not made clear especially given that a degree that would include
   complex systems is in progress. Return on investment was not convincing, and
   the case for impact of this spire on faculty competitiveness was not made. It
   seemed that if no spire investment were made, there would be the same funding
   outcomes.

   Votes: 3.7 with 4 yes votes and 2 no votes.
   Unanimous agreement on moving forward with this proposal if it is integrated
   into the Complex Systems Spire

2. **Transdisciplinary Research Initiative in Complex Systems**
   **Strengths:** This proposal is perhaps the most mature because of the ground
   work that has been laid for this spire. It may be possible to achieve national and
   international recognition for this area of research, especially given that UVM will
   have the first PhD program in the US in this area.
   **Weaknesses:** It is not clear how the additional faculty lines mesh with tracks in
   proposed graduate programs. There was a concern about the large number of
   new faculty lines that are proposed and the potential to drive faculty
   recruitments across the campus in all disciplines. There were concerns that the
spire should reach out more explicitly to biological sciences and environmental programs. There could be a very positive amalgamation of disciplines from outreach and integration.

See above for the recommended integration of multiscale biological systems into the Complex Systems potential spire.

Votes: 4.3 with 7 yes and 0 no votes

3. Culture and Society
Strengths: The quality of the faculty is a strength. The support of postdocs is a good aspect.
Weaknesses: The topics are vague. There is too much flexibility and lack of commitment to topics. There seems to be no recruitment potential. There will be no direct impact on graduate education and limited benefit for undergraduates. The potential for future funding is low. There is doubt that there would be seed money for a center from NEH, NSF or private donors and foundations. There is no apparent economic development potential.

Votes: 2.4 with 2 yes votes and 5 no votes

4. Environmental Change and Adaptation
Strengths: The study of the environment is a critical to UVM for many reasons. There are reasons to promote this proposal for that reason alone. The summer institute concept was interesting and should be carried out regardless of whether this proposal is approved for a spire.
Weaknesses: Five areas of the spire are not integrated. There was no effort to build upon the Gund Institute. The spire does not go far enough or do enough. It is too modest and underwhelming. It is especially too small given the talent on campus that could have been drawn upon. It is not likely that we would become the best in the country through this spire. The case for future competitive funding was not convincing.

Votes: 3.2 with 3 yes votes and 4 no votes

5. Food Systems
Strengths: Active contributing programs are extant. The spire would address critical issues of this century cutting across health, agriculture, religious beliefs, environment. The spire would generate new knowledge and has the potential for national recognition. Funding should be available to sustain the spire. The topic is very appropriate for UVM and leverages UVM’s investment in the Center for an Agricultural Economy that has been getting extensive national news coverage (How Food Saved a Town). The potential for impact on the Vermont economy is great.
Weaknesses: The role of the current grad program in Nutrition should be clarified. The proposal is not as well crafted as others. All the participants seem to come from CALS. There would be an effort to reach out to other UVM schools and institutes to include GUND faculty and complex systems. There should be a strong linkage to college of medicine and FAHC.
6. Neuroscience, Behavior and Health

**Strengths:** This proposal builds upon strengths at UVM. There is a foundation in place in the Neuroscience Graduate Program and grass roots organization of neuroscientists from across the entire campus. The use of “behavior” in the title is a noble attempt to find what brings together a group which ranges from neurobiologists to interventionists.

**Weaknesses:** There was concern that there will be no way to build a Neuroscience Research program into one of the best in the country without substantially more resources than even the very large investments described in the proposal. The competition is just too strong. Importantly, the return on investment will be low. There is no reason to think that the faculty involved will do anything differently in terms of funding and collaboration if the spire were established. The impact on graduate education is unclear, in part because of the current neuroscience PhD program. Likewise, the impact on undergraduate education is weak because a major in neuroscience is already under development and will not be dependent on this spire.

Votes: 3.5 with 4 yes votes and 3 no votes

7. Policy Studies

**Strengths:** The concept put forward is transdisciplinary. There is a clear focus on a subset of appropriate topics. The group recognized that leadership was present and a physical center for the proposal now exists in the Jeffords Center. Graduate programs exist for feeding into this spire and more will be created. The creation of a new PhD program was viewed as a strength.

**Weaknesses:** The scope is too small to make this spire into a national force, one of the best in the country. The impact on undergraduate programs is not clear. A connection could be made to the UVM group that is studying the social internet.

Votes: 3.3 with 4 yes votes and 3 no votes

8. Public Health and Health Policy

**Strengths:** The proposal describes a true transdisciplinary concept. The development for an MPH degree at UVM is a good idea in principle.

**Weaknesses:** The proposal is vague. The spire would compete with established schools of public health. Demographics are a problem in Vermont. Public health studies will lack subjects. There is an emphasis on a masters program instead of a PhD program. Evidence for programs that will feed into the spire is absent. Evidence of demand for an undergraduate major is not presented. The proposal has not demonstrated the ability to procure funding

Votes: 2.4 with 1 yes vote and 6 no votes