

October 11, 2006

To: Professor Claudia Neuhauser, *Chair* and Head, Department of Ecology, Evolution, and Behavior, CBS  
Professor Judith Berman, Department of Genetics and Cell Biology, Medical School and CBS  
Professor E. Daniel Dahlberg, School of Physics and Astronomy, IT  
Professor Timothy Ebner, Head and Former Director of Graduate Studies, Department of Neuroscience, Medical School  
Associate Professor Stephen Ekker, Director, Beckman Center for Transposon Research and Associate Head, Department of Cell Biology, Medical School and CBS  
Professor John Goodge, Department of Geological Sciences, Duluth  
Professor Megan Gunnar, Regents Professor and Distinguished McKnight University Professor Institute of Child Development, CEHD  
Professor Karen Hsiao Ashe, Edmund Wallace and Anne Marie Tulloch Chairs in Neurology and Neuroscience, Departments of Neurology and Neuroscience, Medical School  
Professor Vipin Kumar, William Norris Professor and Head, Department of Computer Science and Engineering, IT  
Professor Ellen Longmire, Department of Aerospace Engineering, IT  
Professor Susan Mantell, Department of Mechanical Engineering, IT  
Professor Matthew McGue, Department of Psychology, CLA  
Professor Mark Paller, Assistant Vice President for Research, Department of Medicine, Medical School  
Professor Ronald Phillips, Regents Professor and McKnight Presidential Chair in Genomics, Department of Agronomy and Plant Genetics, CFANS  
Professor Ronald Siegel, Head, Department of Pharmaceutics, College of Pharmacy  
Professor Fotis Sotiropoulos, Department of Civil Engineering, IT  
Professor Nevin Young, Distinguished McKnight University Professor, Departments of Plant Biology and Plant Pathology, CBS and CFANS

From: E. Thomas Sullivan, Senior Vice President for Academic Affairs and Provost

RE: Institute for the Advancement of Science and Technology

Thank you for agreeing to participate on the Provost's Advisory Committee on the creation of a world-class interdisciplinary Institute for the Advancement of Science and Technology.

I ask that you gather comparative data from other national and international high-profile science and technology institutes in order to understand how and why they are successful.

I also recommend that you consult with colleagues across the University and across the country to develop ideas on what our Institute must do to enhance academic synergies; promote development of large interdisciplinary grants; bring productive teams of interdisciplinary researchers together across the University; substantially increase our communication and collaboration across science, medical, and engineering research; and to “add value” to our research portfolio here at the University.

The Advisory Committee should prepare recommendations for my consideration that outline: 1) mission; 2) goals, expected benefits, and comparative advantages; 3) structure, design, reporting and governance; 4) a plan to enhance interdisciplinary-focused science, medical and engineering research, education, and civic engagement at the University; 5) a financial model, including capital needs and program investment, external funding and possible ideas for private fundraising; and 6) measures to evaluate progress and impact. The potential is enormous for this new interdisciplinary institute to be a centerpiece of interdisciplinary endeavor.

I ask the committee to submit the report with its implementation plan to me by Spring 2007.

This plan should address the following critical issues:

- 1) What should be the distinctive mission and goals of the new Institute?
- 2) What will be the distinctive consequences and expected benefits of the Institute: How, specifically, will it move the University forward in its goal to be one of the top three public research universities in the world?
- 3) What are our current and potential academic strengths, and how will these be optimized by the new Institute? What barriers must the new Institute overcome? What new opportunities are available to the Institute? How will the Institute’s academic themes and priorities be determined?
- 4) What is the optimal structure, design, governance and oversight, and organization? Why?
- 5) What is the right size? How many faculty do you anticipate will be involved and how? Generally speaking, what level of staffing do you estimate? Should there be an outside advisory committee as well as an inside advisory committee? What role should outside industry experts play on advisory committees?
- 6) What partnerships, internal and external to the University, should be sustained or created?
- 7) What are the qualifications for a director or directors of the Institute? Should there be an advisory board and/or faculty council? What are your recommendations for periodic external review? Should there be an international/national search for the director?
- 8) How will this Institute, compared with our aspirational peers, represent a comparative advantage for the University?

- 9) What kind of space will be needed to give the Institute a clear identity and optimal impact? How should it be structured to minimize conflict and enhance relationships with leading colleges? Consider the need for assignment of flexible space as research agendas and priorities change.
- 10) What kind of operating budget would you expect the Institute to require, as phased in over several years? What are expected sources of support?
- 11) How should we measure the impact, performance and success of the new Institute? What metrics and measurements should be used?
- 12) How should the Institute be established? What implementation timeline do you recommend?
- 13) How can and should the Institute coexist and collaborate with the relevant colleges so that there is synergy and harmony within the University's research goals and priorities?
- 14) How can and should the Institute leverage resources? What are promising ideas and themes for private fundraising? Where are the promising sources of government, foundation, and private sector support?
- 15) Should we engage external advisors and partners in the planning and implementation of the Institute? Please inform me of any immediate needs for support.

The Advisory Committee should feel free to add to this list of issues in your report. Once the report is completed, I plan to act on your recommendations. I have asked Katherine Himes, Assistant to the Provost, to assist with staffing this important Advisory Committee. Katherine is new to the Provost's Office, but not new to the University, where she is currently completing her Ph.D. in Neuroscience. Katherine may be reached at (612) 625-0563, [hime0005@umn.edu](mailto:hime0005@umn.edu).

Thank you for your contribution to help create an Institute for the Advancement of Science and Technology that will serve as a national and international leader.

c: Robert H. Bruininks, President  
Kathryn Martin, Chancellor, Duluth  
Timothy Mulcahy, Vice President, Research  
Darlyne Bailey, Dean, College of Education and Human Development  
Steven Crouch, Dean, Institute of Technology  
Robert Elde, Dean, College of Biological Sciences  
Deborah Powell, Dean, Medical School  
Steven Rosenstone, Dean, College of Liberal Arts  
Marilyn Speedie, Dean, College of Pharmacy  
Kate VandenBosch, Interim Dean, College of Food, Agricultural and Natural Resource Sciences  
Katherine Himes, Assistant to the Provost