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**BATTELLE TECHNOLOGY DEVELOPMENT INFRASTRUCTURE  
AND PLATFORM PROJECTS GRANT PROCESSES**

**Action Requested:** Review preliminary plans for Battelle Infrastructure and Platform Project Grants.

**Executive Summary:** The Iowa Legislature appropriated \$20 million in FY 2007 to the Board of Regents for purposes of implementing the economic development activities in biosciences, advanced manufacturing and information technology recommended in the Iowa Department of Economic Development's 2004-2005 Battelle reports. The legislation designates \$6.8 million of the funding to be spent on "vertical infrastructure-related improvements associated with the implementation of the recommendations" and designates \$8.2 million to be spent "for implementation of the recommendations."

The University of Iowa, Iowa State University and the University of Northern Iowa have prepared preliminary plans for the use of these funds for review and comment by the Board of Regents and for possible further action at the August Board of Regents meeting.

After approval by the Board of Regents, the general platform and grants projects must then be reviewed by the Technology and Commercialization Resources Organization created by the Legislature. The recommendations of the TCRO will then be forwarded to the Board of Regents for the Regents final approval.

The universities propose the funding be allocated in the following proportions:

- SUI: \$2.72 million for infrastructure and \$3.69 million for platform projects;
- ISU: \$2.72 million for infrastructure and \$3.69 million for platform projects;
- UNI: \$1.36 million for infrastructure and \$820,000 for platform projects.

The following summarizes the universities' preliminary plans for the use of the funds and for the process of soliciting proposals from faculty. Further detail can be found in Attachments A, B, and C in Agenda Item 2b.

**University of Iowa**

Infrastructure Proposals

SUI proposes to use \$2.72 million to invest in technology development infrastructure to strengthen and accelerate the scientific and commercialization work in the key platform areas. Presently the SUI Technology Innovation Center (TIC) has leased 100% of all available space. New funding would be used to expand technology incubation and research park space. SUI proposes a multi-stage process to accomplish this expansion, including:

- Contract with an external consultant for analysis and recommendations
- Visit other successful university technology incubators and develop best practice recommendations
- Bring together key stakeholders to begin long-range planning for a successful incubator
- Present to the Board of Regents a plan for development of a new university technology incubator at the Oakdale Research Park

### Platform Proposals

SUI proposes to use \$3.69 million to provide grants to accelerate the research and development initiatives in the key platform areas. The funding is intended to support a wide range of stages in technology development, from initial concept to proof of concept to licensing and commercialization. The university has developed request for proposal criteria that include:

- potential to lead to future funding from non-SUI sources
- potential to strengthen SUI research capacity in key platform areas
- magnitude of economic impact on new or existing Iowa companies measured by sales, investment, and job creation metrics
- probability of technical and commercial success and probability of generating intellectual property
- demonstration of one-to-one matching funds for the proposal

All proposals will be evaluated by Proposal Review Committee convened by SUI's IOWA Centers for Enterprise. The committee will be comprised of individuals responsible for economic development activities at SUI as well as representatives from the SUI Research Foundation, the Pappajohn Entrepreneurial Center, the Colleges of Medicine, Engineering and LAS, as well as individuals from the private sector and members of the Bioscience Alliance of Iowa. Examples of platform proposals in the biosciences area could include:

- diagnostics and therapeutics platform for age-related macular degeneration
- national genetics testing laboratory for inherited eye diseases
- bioinformatics for the study of human diseases

### **Iowa State University**

#### Infrastructure and Platform Proposals

ISU proposes to spend \$2.72 million for infrastructure grants and \$3.69 million for platform project grants to implement the Battelle recommendations. The university proposes to award infrastructure grants in an opportunistic manner to attract star quality faculty members by providing start-up packages, renovating facilities for cutting-edge technology or procuring equipment that can help multiple faculty members in developing technology with high potential for commercialization.

Proposals will be solicited from faculty through a competitive request for proposals process. The office of Vice-Provost for Research will establish a review committee of selected Deans, commercialization administrators and private sector representatives to rank all submitted projects. The Vice-Provost will make final recommendations to the University president who will make the final decision on proposals to be submitted to the Board of Regents.

Core criteria for proposals will include an evaluation of the potential of the proposal in the following areas:

- creation of new Iowa businesses or jobs based on ISU technology
- increased sales or profitability of Iowa companies developed from ISU technology
- new ISU technology licensed to Iowa companies
- increased research funding from non-state sources
- clearly identifiable benchmarks

Based on initial activity of the Bioscience Alliance of Iowa and the university's collaboration in that platform area, it is likely that projects will be developed in several areas, including the Wellness and Nutrition Center, bioeconomy, food safety and animal genomics projects. It is also anticipated that proposals will be developed by the College of Veterinary medicine in both animal and human neurotoxicology. Existing strengths in information sciences have also led to the concept of creating a new Information Sciences Institute which could include centers for human-computer interaction, computational intelligence, learning and discovery and computer security.

### **University of Northern Iowa**

#### Infrastructure Proposals

UNI proposes to use \$1.36 million for bricks and mortar and equipment to advance the university's work in the key Battelle platform areas and has conducted preliminary screening of projects that fit the guidelines of commercializable research. The five identified applications of this funding include:

- greenhouse renovations to provide facilities for research with tissue cultures. This would support the work of one of the proposed new hires in biotechnology and well as infrastructure required for biotechnologists and biochemists.
- equipment to support the commercializable research activity in biotechnology and biochemistry.
- equipment for commercializable research in nanotechnology.
- equipment for commercializable research in industrial technology including renovation of laboratory space to support the research of some new hires in information solutions.
- hardware and software support for Enterprise Resource Planning and to expand NASA-sponsored research on satellite monitoring developing into commercializable programs with bio-terror defense applications.

#### Platform Proposals

UNI proposes to spend \$820,000 for grants to expand the number of research/commercialization projects in the key Battelle platform areas and to accelerate the progress of new innovations through the pipeline. The university will invite research faculty to submit proposals in biosciences, advanced manufacturing and information technology. UNI's Technology Transfer Team will assist researchers in assessing commercial potential, connecting with industry partners, and identifying matching fund sources. A selection committee, comprised of the Office of Sponsored Programs, Business and Community Services and specific academic programs, will evaluate each proposal. The proposals will be evaluated based on:

- probability of developing innovations
- clear plan for commercialization
- direct involvement by an Iowa business

The range of anticipated proposals includes:

- virtual reality painting and coating training instrumentation
- bio-based lubricants and metal-casting binders
- nanotechnology for the foundry industry
- nanoscale high temperature superconductors and thermoelectric compounds