

Contact: Keith Saunders

GROW IOWA VALUES FUND PROPOSED AWARDS

Action Requested: Consider approval of Regent universities' FY 2012 Grow Iowa Values Fund (GIVF) proposed awards.

Executive Summary: The 2005 Iowa General Assembly appropriated \$5 million annually through FY 2015 to the Board of Regents through the GIVF administered by the Iowa Department of Economic Development. The funds are for "*capacity-building infrastructure in areas related to technology commercialization, entrepreneurship, and business development for the purposes of state economic development.*" For FY 2012, the appropriation was reduced to \$1.5 million. The 2011 General Assembly also approved language that provides for the future repeal of the GIVF fund and eventual replacement with new business development programs.

Each of the universities has submitted a proposal for how it will direct a share of these appropriations in FY 2012 which is the seventh year of funding under the program. The FY 2012 proposals from the universities total \$1.44 million. An amount of \$60,000 is reserved for the Board to allocate to research and commercialization projects submitted by private colleges and universities.

The \$1.44 million in GIVF funding will be matched on a one-to-one basis from a variety of sources including: private companies participating in projects, university matching funds, client and testing fees, and non-state research grants.

The universities' proposals are summarized in this memo. Complete proposals are included on the Board of Regents' website.

Iowa State University: \$576,000

Iowa State University proposes to allocate FY12 GIVF funds consistent with the proposal presented to the Board of Regents in FY06, but with an improved process and emphasis on pulling technologies toward commercialization. In response to the continued budget cuts, ISU has cut \$424,000 from the Infrastructure allocation and \$749,000 from the original project allocation.

System for Innovation

The Iowa State University *System for Innovation* is focused on the transfer of university technologies into commercial applications in startup or existing companies. This System is coordinated by the Vice President for Research and Economic Development and has demonstrated significant success over the years. It recognizes that the fuel for a technology transfer/commercialization system is faculty and staff research. The GIVF funding is used to support two aspects of the System for Innovation.

Commercialization Startup Program: \$500,000

The purpose of this program is to build and sustain a pipeline of projects that will lead to increased commercial activity by new and existing Iowa companies. There is also a need to identify and foster new projects that have potential to contribute significantly to Iowa's economy. Because of funding reduction, ISU has eliminated the portion of the commercialization program that focused on technologies appropriate for existing companies and is instead focusing the resources on technologies that can lead to new Iowa

companies. ISU proposes to use the resources to pilot its new Innovate Iowa Proof of Concept (IPOC) initiative. This initiative is envisioned to take the progress made with the GIVF funds and move it to the next level. Instead of just funding projects, ISU will put resources toward market research, mentoring and other services to accelerate the growth the new companies. These funds will be used to demonstrate the value of proof-of-concept in de-risking early-stage discovery (technology) into a validated, robust package at a meaningful pilot scale that meets performance, cost, and quality criteria for commercialization.

Projects will be selected by an application process. Projects will be funded in \$50,000 increments, with \$100,000 possible. Projects will be monitored for progress toward commercialization and further funding is contingent on meeting the milestones. A successful outcome of a project that is funded through the IPOC will be companies that are ready to attract additional outside funding such as programs offered by the Iowa Economic Development Authority or angel, seed cap, or venture funds.

Infrastructure and Entrepreneurial Culture: \$76,000

This funding will support the people and activity required to grow, improve, and sustain the technology transfer/commercialization efforts at ISU. The progressive improvement is critical if the entrepreneurial culture at ISU and the *System for Innovation* is to achieve its full potential. The people are what truly make a difference in the acceleration of growth.

University of Iowa: \$576,000

The University of Iowa is proposing to allocate its \$576,000 in GIVF funding to sustain its commitment to enhancing technology transfer, commercialization, job creation and economic development. Over the past 6 years, SUI has been able to effectively utilize GIVF funding to augment university support and create a robust infrastructure to transform UI faculty discoveries into new businesses and/or licensing opportunities, expand entrepreneurial education programs, and increase faculty and student focus on entrepreneurship and economic development. During this period SUI has also consolidated several university programs in the Iowa Centers for Enterprise (ICE) which has enabled UI to effectively partner with State of Iowa as well as regional economic development entities in enhancing recruitment and retention of new and existing industry.

FY12 GIVF funds will allow the UI to continue to invest and enhance faculty disclosures, technology transfer, commercialization, and especially new company formation with an integrated model involving the Office of the Vice President for Research, the UI Research Park, the John Pappajohn Entrepreneurial Center (JPEC) and the UI Research Foundation. The ultimate goals of the Iowa Centers for Enterprise are to facilitate university-private sector partnerships in entrepreneurship and continue to create new companies in Iowa based upon UI technology.

Proof of Concept Funding: \$230,000

Exciting discoveries from University research are, by definition, very early stage and require sustainable sources of funding to take nascent intellectual property to the point where private investment is viable. This gap between federal support and private support to move ideas towards commercialization has been termed the "valley of death" and the UI has been very successful utilizing GIVF funding to help sustain this research through the so called proof-of-concept phase. It is only after this phase of research and investment that the university is in a position to establish new start-up companies or position the technology for possible licensure to Iowa companies. GIVF

filled this critical void and has enabled SUI to continue to take advantage of its growing technology pipeline. These funds are critical for:

- University-private sector collaborations for “proof-of-concept” support for the commercialization of UI- or Iowa-related intellectual property.
- Gap funding for early-stage technologies and startup companies based on UI- or Iowa-related intellectual property.
- Engagement of Entrepreneurs-in-Residence to support UI spin-out companies.
- University-private sector formation and development of startup companies in Iowa directly related to existing UI- or Iowa-related intellectual property.
- Competitive funding to stimulate new ideas among the most highly entrepreneurial faculty.

Entrepreneurial Education & Business Support Programs: \$135,000

JPEC will continue its efforts to significantly enhance entrepreneurship on the UI campus and look to accelerate entrepreneurship and economic development across Iowa through unique programming and partnerships. Specific JPEC initiatives for FY 2012 will include:

- Lead the ICE efforts to centralize and expand web-based technology commercialization educational materials and business development links.
- Assist faculty who are considering the creation of a new venture based on their research and innovations. An experienced entrepreneur will lead a menu of services to faculty as they navigate through early stage business planning and development activities. This includes linking faculty to UI resources, external funding opportunities and identifying industry experts and business mentors.
- Expand the Iowa Medical Innovation Group (IMIG) initiative to complete four commercialization projects. IMIG is a highly successful interdisciplinary program involving students from Medicine, Engineering, Business and Law, who are focused on identifying new opportunities for medical devices and technologies.
- Deliver community and regional entrepreneurial training through the FastTrac program and specialized seminars, speaker events, and workshops to meet the needs of aspiring entrepreneurs in partnership with several entrepreneurial development organizations.
- Partner with Iowa industry and the entrepreneurial business community to identify experiential learning opportunities for students and help to facilitate internship opportunities between top UI students in JPEC’s Entrepreneurial Management Institute and Iowa technology-based companies.
- Direct initial concept and new venture funding competitions at the UI. Elevator pitch competitions identify new venture opportunities and provide initial seed awards to assist aspiring entrepreneurs to further develop and enhance their business concepts. Business plan competitions provide early-stage funding to support the launch of new ventures.

Infrastructure investment for growing startup companies: \$211,000

The UI Research Park continues to mature and provide unique facilities to foster and incubate technology based companies as well as facilitate linkage with key university core resources. GIVF funds have been pivotal for enhancing park capacity and infrastructure. The requested funds would continue to invest in technology development infrastructure to strengthen and accelerate commercialization and support critical economic development support functions associated with the UI Research Park, BioVentures Center, Technology Innovation Center and ICE. The university will create an innovative, joint venture partnership between the UI, regional economic development leaders and the private sector to expand and develop a new non-laboratory based Incubation Center at the University of Iowa Research Park on the Oakdale Research Campus.

University of Northern Iowa: \$288,000

The University of Northern Iowa, due to funding reductions in the GIVF allocation, proposes to narrowing its focus to four important economic development projects previously supported, in part, through the GIVF. Each project has leveraged private and federal support and achieved substantial outcomes with modest investment from the state.

Project 1 - Technology Transfer and Business Incubation: \$93,000

UNI continues to advance intellectual property evaluation and protection, commercialization of campus innovations through licensing/strategic partnerships, and new business development statewide. A number of proposed services directly impact these efforts, including the Innovation Incubator and extension of the MyEntre.Net initiative. These efforts will result in stronger, broader based linkages between the University and the greater Iowa business community. Specific priorities for FY 12 are:

Area 1: Business Incubation:

Limited resources are available to support UNI's business incubation program. UNI's goal for FY12 is to focus programming toward the Innovation Incubator on the UNI campus. Services will be expanded to include additional co-work space and innovative programming to accelerate tenant growth. Minor support will also be provided to the student business incubator which continues to graduate successful student businesses into the regional economy.

Area 2: Technology Transfer:

Intellectual property development at UNI continues to be a priority for GIVF support. With very limited institutional funds available for intellectual property development, UNI will focus on areas of core strength for faculty and staff technology transfer. UNI's goals for FY 12 are to develop at least three technologies for commercialization, increase corporate sponsored research, license two existing technologies, and expand collaborations with ISU and SUI. UNI will also provide market research projects for faculty disclosures and targeted small businesses in Iowa.

Project 2 - Rural Entrepreneurship: \$95,000

MyEntre.Net is an entrepreneurship development system serving entrepreneurs and rural communities since 2003. This system brings online services to entrepreneurs and in-community support to rural leadership toward creating entrepreneurial communities. In FY12, the online community will continue to be enhanced by marketing new business research services for MyEntre.Net users, and the ongoing *Dream Big, Grow Here* campaign and contest. UNI will continue to lead a consortium of statewide service providers in the planning of EntreFest!, the statewide conference for small business and entrepreneurs. This project will address the following specific areas of entrepreneurial development in the coming year:

Area 1: Continued growth of MyEntre.Net, as Iowa's Online Community for Small Business Owners and Entrepreneurs:

In FY12, MyEntre.Net membership will continue to be expanded at by marketing recently developed services and resources statewide, including the new Business Concierge research team, as well as Connections, an interactive database of 2,700 sources of capital, research, incubation and technical assistance in Iowa. Online membership at www.myentre.net is expected to reach 12,000.

Area 2 : UNI will lead a consortium of 15-20 service provider and private partners in the delivery of the fifth annual EntreFest!, Iowa's conference for small business:

EntreFest!, Iowa's statewide traveling conference for small business and entrepreneurs will celebrate its fifth year in 2012. UNI will continue to lead a consortium of service providers to host the event in the spring of 2012, anticipating 200 attendees.

Area 3: Enhance the popular MyEntre.Net Webinars

Based upon the demand expressed by MyEntre.Net users, UNI will continue to host bi-monthly educational webinars, recruit other partners to host webinars through MyEntre.Net and market archived webinars through YouTube.

Area 4: Continue the expansion of *Dream Big, Grow Here* online contests

Pending sponsor support for contest winnings, the successful *Dream Big, Grow Here* contests will continue into 2012 with additional regional contests and a statewide "pitch-off" among winners.

Project 3 - Regional Development: \$50,000

Building upon keen expertise and understanding of regional development, the Institute for Decision Making (IDM) will continue implementing economic development assistance programs that help to sustain Iowa's regional economies into the future. Specific priorities for FY 2012 are:

Area 1: Reorganizing Iowa's Regions.

IDM will collaborate with the Professional Developers of Iowa and the Iowa Partnership for Economic Progress to assess the current structure and success of regions in Iowa. An important part of this assessment is to review current asset mapping and determine the next level of regional development in Iowa.

Area 2: BEST of Iowa Partnership

In partnership with the Iowa Partnerships for Economic Progress (IPEP), Regents universities, community colleges, utilities, Professional Developers of Iowa (PDI) and the Iowa Department of Education, IDM will strengthen the Business Expansion & Strategic Trends (BEST) of Iowa program. BEST of Iowa supports local economic development organizations in implementing or increasing the effectiveness of their business retention and expansion efforts. BEST initiatives include enhancing statewide coordination of existing industry programs and implementation of the Synchronist Business Information System® at the regional level. Specifically, IDM will assist with improving data collection and input at state and regional levels as well as developing a coordinated response to technology transfer issues on behalf of the Regents universities.

Area 3: Entrepreneurial Communities Project

In support of entrepreneurial development across Iowa, IDM will partner with the UNI Regional Business Center and their MyEntre.Net program to implement two pilot Entrepreneurial Communities Projects (ECP). The goal of the ECP is to build the capacity of community stakeholders towards fostering entrepreneurial development within their respective communities. The approach centers on four areas: 1) research and assessment, 2) education of community stakeholders, 3) development of a community entrepreneurship strategic plan, and 4) implementation of the plan and follow-up. IDM staff will lend research and strategic planning expertise to this project, as well as providing customized technical assistance to meet each community's needs.

Project 4 - National Ag-Based Lubricants (NABL) Center: \$50,000

The University of Northern Iowa's National Ag-Based Lubricants (NABL) Center's 25,000 square foot facility, part of the growing Cedar Valley TechWorks campus, houses one of the most comprehensive biolubricant testing labs in the United States. The NABL Center offers more than 100 specific product testing methodologies per ASTM, AOCS, and other standardized specifications, to testing clients and research partners. In addition, NABL offers biodiesel testing, analytical fingerprint analysis, and a full spectrum of customized research and development capabilities.

FY12 research at the NABL Center will continue to explore modified vegetable oils and vegetable oil derivatives for products with superior lubricity, cold temperature performance, and increased oxidative stability. The end goal of these efforts is to expand the successful use of biobased lubricants in applications currently restricted to petroleum or synthetic oils.

Area 1 – Fundamental Research of Vegetable Oil Based Products

This research identifies and evaluates technologies which will enhance the inherent characteristics and fundamental properties of vegetable oils. Current prospective processes include esterification, estolides, genetic crop modifications, and the creative use of non-traditional additives with non-edible *industrial* vegetable oils.

Area 2 – Support Iowa's Biobased Products Industry

NABL Scientists will continue active participation with industry organizations such as ASTM (American Society for Testing and Materials), NFPA (National Fluid Power Association), NLGI (National Lubricating Greases Institute); ELGI (European Lubricating Grease Institute), and AOCS (American Oil Chemists Society). Appropriate standardized testing methods and industry compliance prevent sub-par products from entering the marketplace, protecting consumers, end-users and producers.