

**MEMORANDUM**

**To:** Board of Regents  
**From:** Board Office  
**Subject:** FY 2003 Operating Appropriations Requests - Iowa State University  
**Date:** July 6, 2001

**Recommended Action:**

Consider the FY 2003 operating appropriations incremental requests for Iowa State University.

**Executive Summary:**

The Board's strategic plan outlines strategies for quality (KRA 1.0.0.0) and accountability (KRA 4.0.0.0) which include specific action steps related to appropriation requests. The proposed Iowa State University's FY 2003 appropriations requests reflect these strategic planning goals of the Board as well as those of the University, namely learning, discovery and engagement.

**FY 2003 Incremental Requests****Priority**

- |    |   |                  |
|----|---|------------------|
| 1. | Full Funding of Salaries from State Appropriations for Nationally Competitive Faculty and Staff | To Be Determined |
| 2. | A World-Class Plant Sciences Institute  | \$5,000,000      |

Iowa State University's first priority for FY 2003 appropriations requests is to sustain excellence by achieving and maintaining **nationally competitive faculty and staff compensation** from state appropriations. Compensation for faculty and staff must be competitive among the University's peer institutions for ISU to successfully recruit, retain, and develop the quality of faculty and staff. In the past two years, ISU has declined in the overall average of faculty salaries when compared to peer institutions. In some disciplines ISU is significantly below the mean and, as a result, is losing faculty in critical areas.

Iowa State University's second priority is additional state funding of \$5.0 million for **A World-Class Plant Sciences Institute** – an important initiative if Iowa is to become the food capital of the world. The University is positioned to undertake this world-class initiative with predictable success since ISU has considerable expertise in many areas of plant sciences and long-standing reputation and success in agronomy and seed sciences.

**Background/Analysis:**

	<u>FY 2002 Budget</u>	<u>FY 2002 Direct State Appropriations</u>	<u>FY 2003 Incremental Appropriations Request*</u>	<u>% Increase for State Approp.</u>
General University	\$328,949,158	\$199,442,132	\$5,000,000*	2.5
Experiment Station	40,286,814	36,156,441	*	
Cooperative Extension	31,154,455	22,849,455	*	
IPRT	4,309,128	4,309,128	*	
Special Purpose	<u>2,348,901</u>	<u>2,348,901</u>	<u>*</u>	
Total	\$407,048,456	\$265,106,057	\$5,000,000	1.9

\*Does not include an amount for the salary funding request.

**Full Funding of Salaries from State Appropriations for  
Nationally Competitive Faculty and Staff**

**Request  
To Be Determined**

Iowa State University's first priority for sustaining excellence and meeting the goals of its strategic plan is to achieve and maintain nationally competitive faculty and staff compensations including salary and benefits.

ISU's 2000-2005 strategic plan commits the University to attract and retain world-class faculty and staff necessary for "Becoming the Best Land-Grant University." Nationally competitive compensation packages are essential to achieving this objective.

ISU's overall average of FY 2001 faculty salaries was 98% of the average of its peer universities, declining from 100% in FY 1998 and 99% in FY 1999. While the overall average is slightly below its peers, the gradual decline of the past few years concerns the University. Additionally, wide variances exist among the disciplines, and ISU is significantly below the mean of its peer institutions in several critical areas. Consequently, ISU has been losing faculty at an increasing rate.

If ISU is to "Become the Best Land-Grant University", compensation must be higher than the mean of peer institutions so the University can attract and retain faculty and staff of such quality to achieve this aspiration.

For the past two years, salaries and benefits have not been fully funded from state appropriations. The University has also experienced significant health insurance increases. The University has addressed these shortfalls in state appropriations with reallocations and new tuition revenues. In so doing, the University is unable to fulfill commitments made to students in the use of tuition increases to improve educational quality.

ISU is currently below the mean on faculty salaries and professional and scientific staff salaries and has other critical operating needs; accordingly full funding of salary increases from state appropriations must continue to be the top legislative funding priority. ISU's salary objective for FY 2003 is to improve its salary competitiveness among its peer institutions by reaching the mean of salaries at those institutions. If ISU is to aspire to its strategic plan, compensation in future years should be enhanced to raise the University above the mean of its peers.

**Excellence in Fundamental Plant Sciences -  
A World-Class Plant Sciences Institute**

**Request  
\$5,000,000**

Building a Center of Excellence in Fundamental Plant Sciences is an important initiative if Iowa is to become the food capital of the world. As the world enters the 21st century with an ever-growing population, there is an increasing, even urgent, need to develop and expand food sources. Because carbohydrates from plants provide the basic resources for food, continuing research and development in the plant sciences is essential to meet the expanding demand.

In addition to food, plants also produce fiber for clothing, oil and other products that can provide energy in a sustainable manner while protecting the environment. Thus, whether they are interested in food, clothing, or energy resources, the challenge of a carbohydrate-based economy captures the imagination of many of today's brightest young people. To realize the dream of such an economy, much more must be learned about the ways in which plants function.

Iowa State University's considerable expertise in many areas of plant sciences and long-standing reputation and success in agronomy and seed sciences, make it clear that the University is well positioned to undertake this world-class initiative with predictable success.

Much of Iowa's economy is based on plants and animals that consume those plants. Excellent research at Iowa State, focused on fundamental biochemical, physiological and molecular aspects of plant functions, will provide information to maintain and strengthen Iowa's plant-based agriculture into the future. The research will form the basis for development of new uses for crops and for improved genetics, improved pest resistance, improved performance during weather-related stresses, and ultimately improved crop production.

The DNA base sequence of the genome of the model plant, Arabidopsis, is becoming known completely. Sequencing information is accumulating for many of the grasses and legumes. The challenge will be to use this rapidly developing information to understand how the expression of genes is controlled within plants. This information will support such innovative approaches as insertion of artificial chromosomes to aid chromosome mapping so that important genes can be cloned. Moreover, the development of plant artificial chromosomes could lead to new species of crop plants with valuable characteristics.

In September 1999, the Board of Regents approved the establishment of the Plant Sciences Institute – an umbrella organization over a group of centers – each focused on specific areas of the plant sciences. At this time, there are eight centers:

1. Center for Plant Genomics
2. Center for Bioinformatics and Biological Statistics
3. Center for Plant Transformation and Gene Expression
4. Center for Plant Breeding
5. Center for Designer Crops
6. Center for Plant Responses to Environmental Stresses
7. Seed Science Center
8. Center for Crops Utilization Research

A further expansion of investment is now required to make a number of strategic hires of scientists engaged in plant genomic work, plant structure and metabolism studies, agro-ecology, and restoration ecology and bioremediation. The University must increase “seed” funding for scientists working in these areas for their research, laboratory, and equipment for robotics and plant transformation.

The ISU Plant Sciences Institute will be one of the major factors leading to economic development in Iowa. This will include:

- The development of a cluster of plant life science companies in Iowa with high paying jobs that keep Iowans in the State, particularly young people who presently leave the State in large numbers after completing their education.
- The research of the Plant Sciences Institute will promote the vitality of rural communities by enhancing the profitability of agricultural producers/farmers with crops designed to meet specific needs for food, animal feed, and industrial uses. Industrial uses for crops, such as bio-based products and bio-energy, will promote rural economic development with local processing of designer crops, as well as support energy security for the United States.
- Grant and gift-supported faculty and staff positions in the Plant Sciences Institute will directly contribute \$10-20 million annually to Iowa’s economy.

The Plant Sciences Institute is having a significant effect on the state by:

- Enhancing the retention of existing companies by providing strong educational support and by strengthening the science focus and reputation of the State of Iowa and Iowa State University.
- Providing a tangible mechanism to achieve the Governor's vision for the State of Iowa to be the World Food Capital.
- Facilitating, due to the excitement created by the Plant Sciences Institute, the retention of the best minds -- both faculty and students -- in the State of Iowa and Iowa State University. ISU has successfully stymied efforts by other institutions to "raid" some of the best faculty. Also, almost 50 of the National Merit Scholars at ISU are in majors related to the Plant Sciences Institute.
- Synergizing the development of multi-institutional cooperation and partnerships nationally and internationally.
- Cooperating with the Iowa Department of Economic Development to attract new companies to Iowa.

ISU has established a goal to increase the annual operating support from the State of Iowa to the Plant Sciences Institute to \$10.0 million per year. ISU received direct state operating appropriations for the Plant Sciences of \$2.2 million and was later authorized by legislation to spend up to \$4.67 million in state appropriations for the Plant Sciences. The University also received one-time capital funding of \$2.0 million from the sale of ISU land for the Carver Co-Laboratory, a Plant Sciences project.

ISU anticipates that federal and private support of research will be increased by \$100 - \$200 million over a ten-year period, leveraging the State of Iowa's investment. A grant of \$2.5 million has been received from the National Science Foundation Plant Genome program.

The goal for private gifts and endowments is \$100 million, to match the state appropriation over a ten-year period. ISU has made significant progress toward that goal including the anonymous gift of \$80 million to the Agronomy Department, a gift of \$10 million for the Center for Bioinformatics and Biological Statistics, a gift for an endowed chair position in biological statistics, an anonymous gift of \$5 million to the Seed Science Center, and \$3 million from the Roy J. Carver Trust for the Carver Co-Laboratory.

The Plant Sciences Institute meets all of ISU's strategic planning goals of learning, discovery, and engagement.

- *Learning* - All faculty recruited and hired with Plant Sciences Institute funds are full members of academic departments with all of the normal expectations including teaching at both the undergraduate and graduate level.
- *Discovery* - The Plant Science Institute is significantly augmenting the research capability of ISU by bringing together new faculty in new areas and faculty across the University, including engineers, mathematicians, statisticians, computer scientists, to address problems relevant to the state of Iowa.
- *Engagement* - The Plant Science Institute has taken a leadership role in the Genetically Modified Organism (GMO) debate including organizing conferences, providing testimony at the Food and Drug Administration (FDA), and providing presentations in Iowa, nationally, and internationally.

The creation of an internationally renowned center of excellence in the fundamental plant sciences will vigorously advance understanding of the ways in which plants function and will support applied research in horticulture, agronomy, forestry, and plant pathology for the next century. The strategic investments will place the University in a position consistent with a high-profile image that will attract the best researchers to Iowa and will make it the center of choice for the best students who have an interest in developing the carbohydrate based economy.

  
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Deb A. Hendrickson

Approved:   
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Frank J. Stork