



## **STEM<sup>1</sup>, Research and Other Areas of Strategic Emphasis 2012-13 Legislative Budget Request \$91 Million**

The New Florida Initiative remains the primary catalyst for ensuring that Florida's knowledge and innovative economy is sustained by high-technology, high-wage jobs in such fields as science, technology, engineering and mathematics. Since its inception, universities across the System have supported the vision of New Florida by targeting professional industry clusters designed to regenerate, retain, and recruit Florida's economic future. This vision clearly aligns with the Governor's message that Florida must devote a significant amount of time and resources towards developing economic development projects and incentives that are conducive to job creation and the establishment of promising business ventures.

Last year, the Legislature appropriated \$12 million to the System as a jumpstart in delivering the economy, talent and innovations that Florida must have to be globally competitive.<sup>2</sup> With the \$12 million appropriated, universities were awarded grants designed to develop business plans for improving research commercialization efforts, recruit and retain world-class faculty in program areas critical to the state and provide new and exciting collaborations among faculty in teaching, research and service.

Past experience has shown that the universities can deliver when provided adequate resources. Florida's investment in creating 11 Centers of Excellence is a prime example and is paying huge dividends. With an initial \$84.5 M state investment, the Centers have returned \$251 M in competitive grants. Also, the Centers have made 223 invention disclosures, executed 43 licenses/options, received nearly a half a million in licensing income, started 30 companies in Florida, created 745 jobs, and provided more than 100 specialized industry training sessions.

As part of the 2011 University Work Plan instructions, universities were asked to align legislative budget request (LBR) issues with institutional goals and metrics. The issues submitted by each university were identified in the universities' Work Plan as primary institutional goals. For the 2012-13 LBR, of the \$150 million

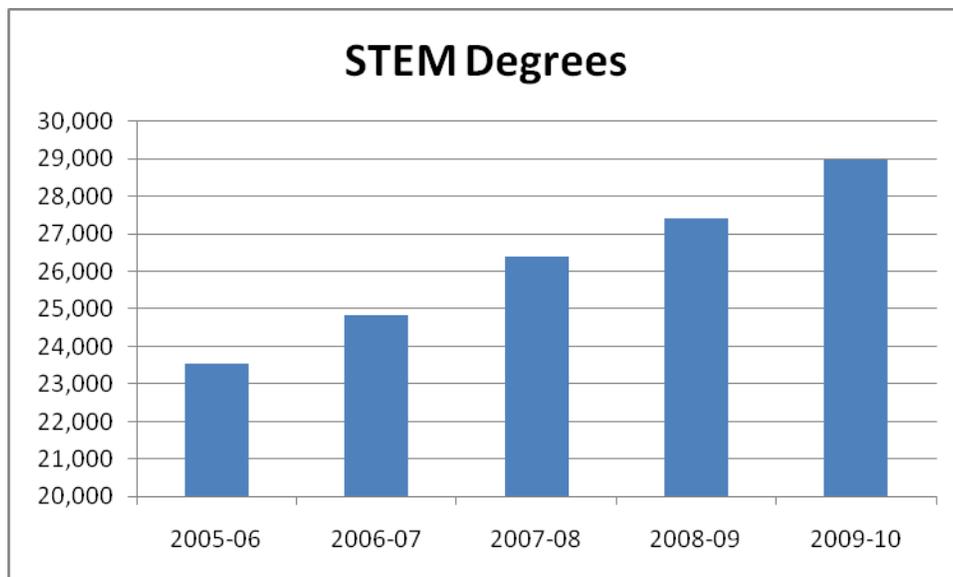
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<sup>1</sup> Science, Technology, Engineering and Mathematics

<sup>2</sup> \$2 M distributed as research commercialization grants and \$10 M to address key state workforce, economic, and policy issues with a tracked return on investment.

earmarked for New Florida, a total of \$77.4 million<sup>3</sup> in LBR proposals were submitted by the universities to create or enhance STEM fields and other strategic goals and objectives at the institutions. One goal is to increase the number of students choosing to study STEM fields by partnering with K-12 institutions to engage more young students in the STEM area. Another goal is to implement initiatives designed to yield more engineering graduates by providing additional academic support in the first two years of school in order to retain these students.

Although there has been a 23% increase in STEM degrees awarded over the last five years, clearly, more degrees are needed as Florida ranks behind other notable systems in the country.<sup>4</sup>



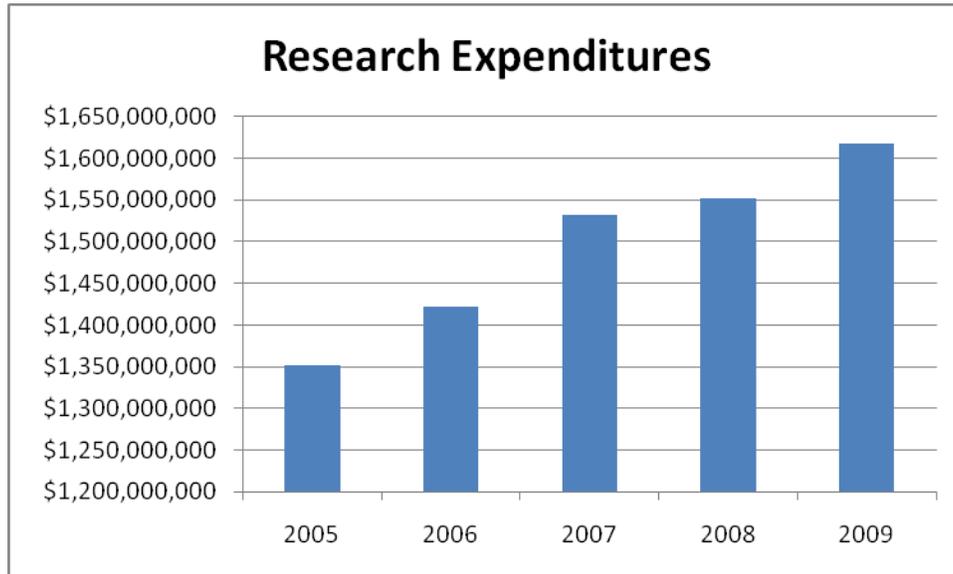
Another STEM initiative includes a system-wide request of \$10 million to recruit and retain additional 21<sup>st</sup> Century World Class Scholars in STEM-related fields. The intent of this request is to invest in recurring base salaries of selected world class scholars throughout the system and fund startup investments in research space and/or equipment and other allowable costs. The return on investment would result in outcomes such as the recruitment of the best and brightest students attending Florida's public universities, the attraction of a share of federal and industry investments in research and development, and the maximization of new business ventures migrating to the state, resulting in additional job opportunities statewide.

The SUS continues to improve yearly in the most meaningful and generally accepted productivity indicators associated with university research and development. In 200-09, the SUS research only activities consisted of \$4.1 billion in awards and \$1.6 billion in expenditures. Continuing the state's investment in

<sup>3</sup> An additional \$13.6 million is related to system issues for a total of \$91 million.

<sup>4</sup> Florida ranks behind the UC, NC, and TX systems.

university research will play a critical role in transforming Florida's economy to one that has a national and global reputation.



Other system issues include the Florida Institute of Oceanography (\$1.2 M), Professional Science Masters Statewide Initiative (\$.3 M), and the Florida Small Business Development Center network (\$2.1 M).

Although the Board has not officially approved individual university LBR issues, the general intent of the Board is to collaborate with each university to develop a comprehensive plan for improving STEM activities, increasing research initiatives and other areas of strategic emphasis throughout the system. This would allow the universities to develop well-defined institutional goals unique to each university's strategic plan along with expected outcome and accountability measures and assumptions. The main objective of this process is to ensure that appropriated funds provided for this purpose are used in the most efficient and effective way intended while examining the return on investment to the state. Any funds appropriated by the Legislature for this purpose would be allocated by the Board based on various established accountability metrics.