



# BOARD *of* GOVERNORS

## State University System of Florida

### Return on Investment in University Research

Dr. Jan Ignash  
Vice Chancellor for Academic and Student Affairs  
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# The Carnegie Classification

## 2015 Basic Carnegie Classifications

Research Universities (Highest Research Activity)	FIU, FSU, UCF, UF, USF
Research Universities (Higher Research Activity)	FAMU, FAU
Doctoral Universities (Moderate Research Activity)	UWF
Master's Colleges and Universities (Larger Programs)	FGCU, UNF
Arts and Sciences Focus	NCF



# A National Perspective

15,953 new U.S. patent applications were filed, a gain of nearly 15%, and 6,680 U.S. patents were issued in 2015, up 5%.

The 1,012 startups were formed, a jump of 11%, making a direct impact on local economies, with more than 72% of the new businesses remaining in the institution's home state.

In 2015, 879 new products made it from U.S. universities to the marketplace.

These products have a downstream impact of revenue for the institutions, and create new businesses, new jobs, and greater revenue.

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Source: Association of University Technology Managers. *FY2015 Licensing Survey*. Retrieved 2/28/17 from the Association of University Technology Managers Web site: <http://www.autm.net/fy2015-survey/>



# The SUS: An Economic Engine

As of Fall 2015, the SUS employed 66,259 people, including 19,256 faculty and instructors, the majority of whom are engaged in research.

The present value of increased earnings by SUS graduates over a 30 year work life was estimated at \$29.57 billion in 2014 dollars.

The employment impacts of the SUS represented 768,856 (or 7.1%) of jobs out of a total state workforce of 10,791,031 jobs in 2014.

The total value-added contributions represented \$49.2 billion (or 5.9%) of the total State's Gross Domestic Product of \$833.3 billion in 2014.

These impacts would not be possible without a healthy SUS research agenda.

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Sources: SUS 2015-16 Accountability Report; UF-IFAS, Food & Resource Economics Department & FSU Center for Economic Forecasting and Analysis. (2016, April). *Economic Contributions of the State University System of Florida in 2014-15, Table ES1*. Available at: <http://cefa.fsu.edu/projects/current-projects>.



# Downstream Earning (and Spending) Power

Average annual per-capita earnings for Florida SUS graduates in the fall of 2014 were \$37,798 for Bachelor's degrees, \$55,641 for Master's degrees, \$81,816 for Doctoral degrees, and \$61,899 for Professional degrees.

These earnings were significantly higher than for students graduating with a high school diploma (\$23,728).

The percentage of 2013-14 SUS graduates who were found employed in Florida in the fall of 2014 was nearly 62.7%, and of those nearly 79.4% were employed full-time.

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Source: UF-IFAS, Food & Resource Economics Department & FSU Center for Economic Forecasting and Analysis. (2016, April). *Economic Contributions of the State University System of Florida in 2014-15*. Retrieved 2/28/17 from <http://www.cefa.fsu.edu/sites/g/files/imported/storage/original/application/5d4b762de630408b3d85be3b878e43e4.pdf>



# Total Research Expenditures

In FY2015-16, the State University System had total research expenditures of \$2.12 billion dollars.

In 2015-16, total research and development expenditures averaged \$272,900 per full-time tenured or tenure-earning faculty.

Graduate and professional programs bring with them a faculty devoted to research and, ultimately, technology transfer and commercialization.

Sources: Higher Education R&D Expenditures, Ranked by all R&D Expenditures, by Source of Funds. (FY 2015). National Science Foundation.

Board of Governors. *2015-16 System Accountability Report*. (March 2017).



# SUS Sponsored Research, 2015

	<u>2015-16</u>	<u>Since 2010-11</u>
➤ Invention Disclosures:	777	3,782
➤ Licensing Income Received:	\$38 M	\$176 M
➤ Start-up Companies:	54	180
➤ Utility Patents Issued:	293	1,452



Source: State University System. Board of Governors. *2015-16 System Accountability Report*. March 15, 2017.



# SUS Centers of Excellence ROI

	<b>Cumulative (since inception to June 2016)</b>	<b>Fiscal Year 2015-16</b>
Number of Competitive Grants Applied For	3,494	289
Value of Competitive Grants Applied For (\$)	\$2,334.5 B	\$170.5 M
Number of Competitive Grants Received	2,305	201
Value of Competitive Grants Received (\$)	\$590.7 M	\$67.9 M
Total Research Expenditures (\$)	\$374.5 M	\$25.5 M
Number of Publications in Refereed Journals From Center Research	3,471	270
Number of Invention Disclosures	606	29
Number of Licenses/Options Executed	111	7
Licensing Income Received (\$)	\$1.1 M	161,481

Source: SUS 2015-16 Accountability Report





# FSU: A Case in Point

FSU has generated over a billion dollars in grants and contracts over the last 5 years.

FSU research grants generate an \$11 average return for every dollar invested.

The anti-cancer drug Taxol and the resulting \$352 million in royalties to FSU remains the single best example of university technology transfer in Florida, if not the entire nation.

FSU research commercialization has resulted in the formation of 40+ new start-up companies.

Source: Florida State University. Office of Research. (Original Data.) March 23, 2017.



# UF: A Case in Point—2014-15

In 2014-15, the University of Florida had output impacts of \$2.3 billion from technology spin-off businesses located in Florida.

UF had output impacts of \$2.89 billion for healthcare services provided by Shands hospitals and Faculty Practice Plans.

UF had total employment impacts of 135,574 full-time and part-time jobs in Florida, including regional multiplier effects of spending from outside revenues.

Source: *Economic Impacts of the University of Florida in 2014-15*. University of Florida. Food and Resource Economics Department.



# Downstream with the Florida High Tech Corridor Council

The Corridor Council has partnered with 350 companies on more than 1,350 research projects.

\$62 million in funds that have been invested by the Council have been matched by \$175 million in corporate funding and in-kind investments resulting in a broader economic impact projected to exceed \$1.3 billion.

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Source: Florida High Tech Corridor Council. Retrieved 2/28/17 from <http://www.floridahightech.com/>



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