



January 2010

Report No. 10-05

Biotechnology Clusters Developing Slowly; Startup Assistance May Encourage Growth

at a glance

Although the Innovation Incentive Program has invested over \$449 million to bring seven major biotechnology research institutes to the state, this investment has not yet resulted in the growth of technology clusters in the counties where program grantees have established facilities. However, experts in the biotechnology industry agree that significant cluster growth often takes decades. While many factors related to biotechnology cluster growth are present in the state, such as a collegial and cooperative environment among stakeholders, Florida has limited early stage capital for beginning companies.

The Legislature could consider options to strengthen the program, including shifting its focus from attracting research institutes to providing early stage money for startup biotechnology companies. The Legislature could do so by authorizing grants to startup companies or by providing matching funds to companies that also receive grants from the federal Small Business Innovation Research and Small Business Technology Transfer Programs.

Scope

In accordance with state law, this report evaluates the Innovation Incentive Program's progress toward creating clusters of high wage, high skilled, complementary industries that serve as catalysts for economic growth in regions in which they are located and across the state.¹ The report answers four questions.

1. How have Innovation Incentive Program funds been awarded?
2. Does Florida have the characteristics necessary for biotechnology cluster growth?
3. Are biotechnology clusters developing because of the program?
4. What options could the Legislature consider to strengthen the Innovation Incentive Program?

The report also includes information about Scripps Florida, which received a separate incentive from the state prior to the establishment of the program.

Background

In recent years, Florida has aggressively pursued developing a biotechnology industry to diversify the state's economy and create

¹ Chapter [2009-51](#), *Laws of Florida*, directs OPPAGA to review the Innovation Incentive Program every three years.

high skill, high wage jobs.² To do so, the state has offered substantial financial incentives to biotechnology research institutes to establish locations in Florida. For example, in October 2003, the Legislature appropriated \$310 million to pay for scientific equipment and staff salaries for the Scripps Florida Research Institute (Scripps Florida) during its first 10 years of operation.³

The 2006 Legislature created the Innovation Incentive Program to further this effort and provide resources to attract high-value research, development, and innovation business projects. The program targets funds to businesses that expand or locate in Florida, are likely to serve as catalysts for the growth of existing or emerging technology clusters, or significantly affect the regional economy in which they expand or locate. Businesses receiving funding may include those engaged in research and development as well as alternative and renewable energy.

The Legislature appropriated \$200 million for the program in Fiscal Year 2006-07 and \$250 million in Fiscal Year 2007-08, for a total of \$450 million. The Legislature did not appropriate funding for the program in Fiscal Years 2008-09 and 2009-10.

Questions and Answers—

How have Innovation Incentive Program funds been awarded?

To date, seven research and development institutes have received funds through the Innovation Incentive Program, and these institutes have received \$449 million in

program awards. Local governments have provided matching funds totaling nearly \$526 million, bringing total funding awards to approximately \$975 million.

Companies were awarded Innovation Incentive Program funds based on an application and approval process. To receive Innovation Incentive Program funding, each grantee is required to submit an application to Enterprise Florida, Inc. (EFI) after EFI conducted an initial screening process.⁴ The applications are evaluated based on factors such as job creation, investment in facilities and equipment, collaborative relationships with state universities, and state and local economic impacts. Applicants are required to specify how the requested funds would influence their decision to locate or expand in Florida and demonstrate local support for the proposal, including a local match equal to program funding from public and private sources.⁵

After reviewing each proposal, Enterprise Florida, Inc., makes a recommendation to the director of the Office of Tourism, Trade, and Economic Development (OTTED), who advises the Governor regarding approval or disapproval of the program award.⁶ The Governor consults with the President of the Senate and the Speaker of the House of Representatives before approving program awards.

After the Governor approves a proposal, OTTED and the grantee enter into a contractual agreement. The contract specifies the funds awarded and performance

² Biotechnology refers to the use of cellular and molecular processes in solving problems and developing products. Advances in biotechnology processes and products have many applications, such as better diagnosing and treating human diseases and improving agricultural crops.

³ The Scripps Research Institute is a large, private, non-profit, biomedical research organization headquartered in La Jolla, California that established a facility called Scripps Florida in Palm Beach County in 2004. Although Scripps Florida predates the Innovation Incentive Program, it is an example of the type of entity the program was intended to attract.

⁴ Enterprise Florida, Inc. is a public-private partnership created by the Legislature to serve as the state's principal economic development organization. It is a non-profit corporation that operates under a contract with the Governor's Office of Tourism, Trade, and Economic Development.

⁵ The local match requirement may be waived or reduced in some cases. However, any local match may not include, directly or indirectly, state funds appropriated from the General Revenue Fund or any state trust fund, excluding tax revenues shared with local governments pursuant to law.

⁶ The Florida Energy and Climate Commission also evaluates alternative and renewable energy project proposals.

conditions regarding job creation, average wages, and cumulative investment.⁷ Contracts also include sanctions for failure to meet performance conditions, including any clawback provisions.⁸ For example, the contracts provide that OTTED can reduce or eliminate disbursements of funds to grantees that fail to meet job creation requirements.

The program awarded \$449 million to seven biotechnology institutes that located in Florida. As of October 2009, the program had awarded \$449,090,000 to seven research and

development institutes in six counties—Hillsborough, Miami-Dade, Orange, Palm Beach, Pinellas, and St. Lucie (see Exhibit 1). Program managers report that the remaining \$910,000 was returned to the General Revenue Fund. Public and private partners contributed approximately \$526 million in local matching funds, for a total award of at least \$974.8 million to the seven grantees. According to OTTED managers, all grantees were meeting their contractual requirements as of November 2009.

When program funding of \$449 million is combined with \$310 million appropriated to Scripps Florida, state funding to attract biotechnology research institutes to Florida totals \$759 million.

⁷ As of September 2009, the seven program grantees had created a total of 419 jobs. In addition, Scripps Florida had created a total of 334 jobs.

⁸ Clawbacks stipulate that a publicly subsidized firm not achieving agreed-upon employment performance targets must pay back a portion of the subsidy it received.

Exhibit 1

The State Has Committed Approximately \$759 Million to Attract Biotechnology Research Institutes to Florida

The State Has Committed Approximately \$100 Million to Attract Biotechnology Research Institutes to Florida						
Entity		City/County	Contract Date	Major Activities	State Funding	Local Match
Scripps Florida		Jupiter/ Palm Beach	1/30/04	Studies several areas, including immunology, molecular and cellular biology, and synthetic vaccine development	\$310,000,000	\$269,000,000
Innovation Incentive Grantees	Burnham Institute for Medical Research	Orlando/Orange	10/30/06	Studies the fundamental molecular mechanisms of diseases	\$155,272,000	\$155,500,000
	Max Planck Florida Corporation	Jupiter/ Palm Beach	3/12/08	Uses bio-imaging to study microscopic molecular processes	\$94,090,000	\$93,460,000
	Miami Institute for Human Genomics	Miami/ Miami-Dade	1/9/08	Explores genetic influences on human health	\$80,000,000	At least \$100 million in private funds ²
	Vaccine & Gene Therapy Institute Florida	Port St. Lucie/ St. Lucie	4/17/08	Develops vaccines and therapeutics for diseases afflicting the elderly	\$60,000,000	At least \$60 million ²
	Torrey Pines Institute for Molecular Studies ¹	Port St. Lucie/ St. Lucie	11/16/06	Conducts basic biomedical research related to disease treatment	\$24,728,000	\$71,520,000
	SRI International	St. Petersburg/ Pinellas	11/22/06	Studies surface and subsurface marine environments	\$20,000,000	At least \$30 million ²
	Charles Stark Draper Laboratory, Inc.	St. Petersburg/ Pinellas Tampa/ Hillsborough	6/30/08	Develops miniature medical technologies and military guidance systems	\$15,000,000	\$15,300,000
Program Total					\$449,090,000	\$525,780,000 ²
Grand Total					\$759,090,000	\$794,780,000 ²

¹ The Torrey Pines Institute for Molecular Studies also received \$7,272,000 from the Quick Action Closing Fund.

² These are minimum figures. Part of local match is provided in-kind, such as building infrastructure over a period, and the total cost may not be known until after the grantee has moved into its permanent facility.

Source: Florida Office of Tourism, Trade, and Economic Development.

Does Florida have the characteristics necessary for biotechnology cluster growth?

Although definitions vary, an industry cluster is generally a geographic concentration of “interconnected companies and institutions in a particular field.”⁹ Industry clusters are important for economic development, as businesses and research institutes often prefer to locate in areas that already have similar enterprises in order to collaborate and draw upon existing labor markets.

There are several significant biotechnology clusters in the United States. For example, Boston, San Diego, San Francisco, and the Research Triangle Park in North Carolina have all been cited as major biotechnology hubs. In addition, biotechnology clusters have formed in other countries, including Brazil, Canada, China, and India.

Some factors favorable for biotechnology cluster growth are present in Florida. Biotechnology experts, economic development organization representatives, and grantee managers we contacted reported that Florida has several characteristics that promote the growth of industry clusters. These include

- specific research programs at the state’s public and private universities;
- a skilled workforce;
- a business-friendly economic climate that includes low taxes;
- a visitor-friendly climate with warm winters;
- state incentive programs that attract biotechnology research institutes to the state; and

- a collegial and cooperative environment among various companies, local governments, economic development organizations, state agencies, and public and private universities.

However, these experts also reported that Florida lacks a key factor related to cluster growth—sufficient early stage venture capital for fledgling biotechnology companies. This is consistent with findings of a 2006 OPPAGA report.¹⁰ Early stage capital is important to companies’ initial operations as they conduct proof of concept activities and demonstrate that products are feasible. It also helps companies develop and commercialize their products and begin to create high skill, high wage jobs.

The Legislature has established programs to provide startup assistance to new biotechnology companies. To address the state’s shortage of early stage venture capital, the 2007 Legislature established the Florida Opportunity Fund to invest in seed and early stage venture capital funds. Investments must be focused on Florida companies in designated sectors including the life sciences, information technology, and homeland security and defense. The Legislature appropriated \$29.5 million for this purpose. As of November 2009, the fund had committed to provide \$12 million to three venture capital companies that invest in Florida technology companies.

In addition, the 2008 Legislature authorized the State Board of Administration to invest up to 1.5% of the net assets of the state retirement system trust fund in technology and high-growth investments. These investments can include space technology, aerospace and aviation engineering, computer technology, renewable energy, and medical and life sciences. Such investments could indirectly assist some startup biotechnology companies. As of November 2009, the board had committed to investing \$26.5 million in three companies.

⁹ Michael E. Porter, “Clusters and the New Economics of Competition,” *Harvard Business Review*, November-December 1998, p. 78. Although institutions in a cluster may be physically close, technology can also allow distant institutions to engage in collaboration.

¹⁰ Start-up companies in Florida historically have had difficulty in attracting early stage capital. See OPPAGA report *Florida Has Implemented Promising Biotechnology Initiatives, But Faces Challenges*, [Report No. 06-71](#), November 2006.

The Legislature could consider authorizing the Innovation Incentive program to provide start-up funds. Some biotechnology experts and economic development organization representatives we contacted suggested that the state provide additional types of financial assistance to biotechnology companies. Some stakeholders recommended that the Innovation Incentive Program's focus be shifted to providing grants of \$1 million or less to assist startup biotechnology companies. Other stakeholders suggested that the state provide matching funds to companies that receive Small Business Innovation Research and Small Business Technology Transfer grants from the U. S. Small Business Administration.¹¹

Are biotechnology clusters developing because of the program?

Biotechnology clusters have yet to grow substantially in the six counties where Innovation Incentive Program grantees have established facilities. The grantees have established collaborative relationships with state universities and other biotechnology institutes that could encourage cluster development. Average wages paid by program grantees and biotechnology businesses are substantially higher than average total wages for all industries in the state and the six counties where grantees are located.

Biotechnology businesses already existed in the counties where program grantees established operations. Each of the six counties where Innovation Incentive Program grantees established institutes had existing biotechnology businesses. As shown in Exhibit 2, Palm Beach County had 46 biotechnology businesses the year before Scripps Florida was established (2003). Similarly, Orange County had 53 such businesses the year before the Burnham Research Institute established its facility (2005).

¹¹ These programs help fund companies' startup and development phases and encourage technology commercialization. Qualifying businesses can receive startup funds up to \$100,000 for approximately six months and expansion funds up to \$750,000 for as long as two years.

Exhibit 2

Biotechnology Businesses Existed in All Six Counties Prior to the Establishment of State Funded Research Institutes

County	Biotechnology Businesses Before Program Awards	Biotechnology Businesses as of December 2008
Hillsborough	37 ¹	49
Miami-Dade	83 ¹	96
Orange	53 ²	46
Palm Beach	46 ³	54
Pinellas	64 ²	72
St. Lucie	4 ²	7
Total	287	324

¹ Funds awarded in 2008.

² Funds awarded in 2006.

³ Funds awarded in 2004.

Source: Florida Agency for Workforce Innovation.

The six counties that host the program's grantees also house many biotechnology companies—these counties had 324 companies as of December 2008, the most recent date for which these data are available. The six counties hosted 41% of the 788 biotechnology businesses in Florida as of that date. The biotechnology companies and the seven program grantees in these counties employed 15,722 persons, over half (57%) of the state's 27,699 biotechnology employees (see Exhibit 3).

Exhibit 3

In 2008, Counties with Grantees Accounted for 41% of Florida Biotechnology Companies and 57% of Biotechnology Employees

County	Companies	Employees
Hillsborough	49	1,257
Miami-Dade	96	6,191
Orange	46	1,213
Palm Beach	54	1,573
Pinellas	72	5,388
St. Lucie	7	100
Total	324	15,722
Statewide	788	27,699
State Total Percentage	41%	57%

Source: Florida Agency for Workforce Innovation.

Relatively few biotechnology companies have begun operations in Florida since the grantees were established. As of the last quarter of 2008, state records show that 36 biotechnology companies began operations in the six counties after the grantees were established. However, only 19 reported that they paid wages or had employees as of December 31, 2008.

However, most of the new companies did not begin operations in Florida as a direct result of the grantees' presence. We were able to contact managers of 14 of these businesses to discuss their location decisions, and only two reported that they had based their decisions on the presence of the grantees; these two companies had a total of six employees as of the last quarter of 2008.

It should be noted that most grantees have been in Florida for a relatively brief period, and they may have more impact on cluster development over time. To date, most grantees have been in operation for two years or less, and four signed contracts with the state in 2008 and are operating in temporary facilities until their permanent facilities are constructed. State and local economic development organizations reported receiving several inquiries from biotechnology companies considering a move to Florida. Experts in the biotechnology industry agree that significant cluster growth often takes decades.

To establish a baseline that will assist in determining the future growth of biotechnology clusters, we calculated location quotients for each county. Location quotients compare local employment in a given industry to statewide or national employment in that industry. As shown in Exhibit 4, Miami-Dade and Pinellas counties had location quotients exceeding 1.0 as of December 2008, meaning that their levels of biotechnology employment were higher than the statewide level.

Exhibit 4 Miami-Dade and Pinellas Counties' Biotechnology Employment Is Higher Than the Statewide Level

Area	Total Employment	Biotechnology Employment	Location Quotient
Statewide	7,663,676	27,699	1.00
Hillsborough	612,733	1,257	0.56
Miami-Dade	1,006,528	6,191	1.70
Orange	688,309	1,213	0.48
Palm Beach	530,308	1,573	0.82
Pinellas	420,268	5,388	3.54
St. Lucie	69,906	100	0.39

Source: Florida Agency for Workforce Innovation and OPPAGA analysis.

Grantees have developed collaborative relationships, which could lead to cluster development. Several grantees reported that they had established collaborative relationships with other grantees and Florida universities. For example, Max Planck Florida Corporation managers said that the presence of Scripps Florida was one of the reasons they located a facility in Palm Beach County, as the corporation can use its bio-imaging to translate Scripps Florida's basic research into clinical and patient-oriented applications. Similarly, SRI International, which located in Pinellas County in 2006, studies surface and subsurface marine environments. It has established a collaborative agreement with the Charles Stark Draper Laboratory, which located in the area in 2008, to develop miniature sensors and other technologies that assist SRI in its research. Both companies have also established collaborative agreements with the University of South Florida.

Grantees have established high paying jobs. Biotechnology jobs provide workers with higher-than-average wages, which is a key goal of the Innovation Incentive Program. As shown in Exhibit 5, average biotechnology wages are substantially higher than average state wages as well as the average wages in the six counties with program grantees. These differences ranged from 12% above the average wage in Palm Beach County to 52% above the average wage in Orange County.

Exhibit 5**In 2008, Biotechnology Employees' Average Annual Wages Were Higher Than Those of Other Employees**

Area	Average Total Wages	Average Biotechnology Wages	Percentage Difference
Statewide	\$40,569	\$55,853	37.7%
Hillsborough	\$43,316	\$55,413	27.9%
Miami-Dade	\$45,152	\$55,535	23.0%
Orange	\$41,056	\$62,481	52.2%
Palm Beach	\$44,488	\$49,849	12.1%
Pinellas	\$39,261	\$51,390	30.9%
St. Lucie	\$34,833	\$42,648	22.4%

Source: Florida Agency for Workforce Innovation.

What options could the Legislature consider to strengthen the Innovation Incentive Program?

The Innovation Incentive Program, as well as the earlier recruitment of Scripps Florida, has helped the state develop a biotechnology industry. However, the state continues to face challenges in developing industry clusters, most notably the limited availability of early stage venture capital for new start-up companies.

The Legislature could consider shifting the focus of the Innovation Incentive Program from attracting new research institutes to providing early stage capital for startup biotechnology companies. It could do this by providing direct grants to startup biotechnology companies.

Alternatively, the Legislature could provide matching funds to companies that receive grants from the federal Small Business Innovation Research and Small Business Technology Transfer Programs. These federal programs encourage small businesses to engage in research or research and development projects that have the potential for commercialization. The programs provide grants of up to \$100,000 for the first phase (approximately six months) and up to \$750,000 for the second phase (up to two years of operation).

Either of these alternatives could assist Florida in attracting biotechnology companies to the state and aid in developing industry clusters, thereby amplifying the economic impact of the Innovation Incentive Program research facilities. However, these alternatives would require additional state funding, which may not be possible until the state's economy improves.

Agency Response

In accordance with the provisions of s. 11.51(5), *Florida Statutes*, a draft of our report was submitted to the director of the Office of Tourism, Trade, and Economic Development and the president of Enterprise Florida, Inc. for them to review and respond.

Their written responses have been reprinted herein in Appendix A.

Appendix A



CHARLIE CRIST
GOVERNOR

STATE OF FLORIDA
Office of the Governor

THE CAPITOL
TALLAHASSEE, FLORIDA 32399-0001

www.flgov.com
850-488-7146
850-487-0801 fax

December 30, 2009

Gary R. VanLandingham, Ph.D.
Director
Office of Program Policy Analysis and Government Accountability
111 West Madison Street
Room 312
Tallahassee, FL 32399

Dear Dr. VanLandingham:

In accordance with the provisions of S.11.51 (5) Florida Statutes, the Governor's Office of Tourism, Trade and Economic Development ("OTTED") acknowledges the OPPAGA draft report dated December 2009 prepared by the Office of Program Policy Analysis & Government Accountability ("OPPAGA") which evaluated the Innovation Incentive Program's progress toward creating clusters of high-wage, high-skilled industries throughout the state. OTTED appreciates the professional work of the OPPAGA team and commends them on a comprehensive and quantitative analysis of several industry factors necessary to assemble a successful biotechnology industry.

OTTED is encouraged by the findings in this report which demonstrate that the fundamental building blocks of cluster development have been laid and that in a few short years, progress is already quantifiable. On page 4, OPPAGA reports that

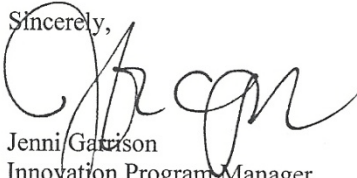
Some factors favorable for biotechnology cluster growth are present in Florida ... including ... a collegial and cooperative environment among various companies, local governments, economic development organizations, state agencies, and public and private universities.

Additionally, the report finds that "biotechnology jobs provide workers with higher-than-average wages, which is a key goal of the Innovation Incentive Program." Considering there was no funding in the Innovation Incentive Program in fiscal years 2008-09 and 2009-10 and that "experts in the biotechnology industry agree that significant cluster growth often takes decades." OTTED is satisfied with these successful stepping stones on the path to cluster development.

The OPPAGA report also finds the need for start-up assistance for early stage companies and recommends providing this capital for start-up companies or matching funds to companies which receive federal grants. OTTED acknowledges these are two viable options to help ease the competition for capital among early stage companies. Additionally, it is our position that venture capital is one factor among many that will continue to strengthen with the growth of biotechnology clusters and the industry overall in the State of Florida.

We are prepared to answer any questions relative to the report and we thank you for the opportunity to respond.

Sincerely,



Jenni Garrison
Innovation Program Manager
Office of Tourism, Trade and Economic Development

Cc (via email):

Ms. Michelle Dennard, Senior Attorney, Office of Tourism, Trade, and Economic Development

Ms. Kim Mills, Director of Auditing, Executive Office of the Governor

Mr. Larry Novey, Chief Legislative Analyst, OPPAGA

Ms. Kara Collins-Gomez, Staff Director, OPPAGA

eflora.com



January 5, 2010

Gary VanLandingham
The Florida Legislature's Office of Program
Policy Analysis and Government Accountability (OPPAGA)
111 West Madison Street, Suite 312
Tallahassee, Florida 32399-1475

Dear Mr. VanLandingham:

Thank you for the opportunity to respond to the preliminary findings and conclusions of OPPAGA's report:
Biotechnology Clusters Developing Slowly; Start-up Assistance May Encourage Growth

We think this is a fair and reasonable report and in general support your recommendations. We have a couple of comments for your consideration.

In looking at the impact of the Innovation Incentive Fund, in section "Are biotechnology clusters developing because of the program?" we suggest that impact must be seen in the long term, a decade or more. Although your report has this deadline, it is too early to call a verdict. However there is more impact than suggested in the paper.

In our review of the data, we find that before Scripps, there were only 36 biotech companies in Florida. There are now more than 170 biotech companies in Florida (developed through attraction, home grown start ups, and spin offs). Importantly for future growth, Florida is now recognized as a top state for biotechnology. It is more appropriate to look at Florida as the geography, not individual counties, since the measures of success include not only the spinoffs from the biotechnology companies in their counties but also supporting development of Orlando's Medical City and the University of Miami Innovation Center. While the investments may be viewed as county specific, the impact is beyond these counties to the entire state.

In the last section "What options could the Legislature consider to strengthen the Innovation Incentive Program?" the report states that there continue to be gaps such as early stage capital and matching funds for SBIR/STTR. We fully agree. However, we don't think that Innovation Fund and these initiatives are alternatives for each other, but complementary parts of developing a robust cluster. Both are necessary for encouraging and nurturing growth in innovation driven businesses.

Further information on the need to commit to funds for Innovation can be found in **Roadmap to Florida's Future 2010-2015 Strategic Plan for Economic Development Priority Recommendations**. *Strategic Priority: Innovation*. The **Roadmap** will be available after January 1, 2010 and will be posted on our website shortly after that.

Let us know if we can provide any further explanation of our comments.

Sincerely,

John A. Adams, Jr. Ph.D

cc: Chris Hart, OTTED

P.S. Please note that per enclosed email request from Darwin Gamble the above is a duplicate letter addressed to Gary VanLandingham. Original letter was mailed on December 18, 2009 to Darwin Gamble – copy enclosed.



Governor Charlie Crist, Chairman • Allan G. Bense, Vice Chairman • John A. Adams, Jr., President & CEO

800 North Magnolia Avenue, Suite 1100 • Orlando, Florida 32803 • T 407.956.5600 • F 407.956.5599

The Florida Legislature

Office of Program Policy Analysis and Government Accountability



OPPAGA provides performance and accountability information about Florida government in several ways.

- Reports deliver program evaluation, policy analysis, and Sunset reviews of state programs to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government better, faster, and cheaper.
- PolicyCasts, short narrated slide presentations, provide bottom-line briefings of findings and recommendations for select reports.
- Government Program Summaries (GPS), an online encyclopedia, www.oppaga.state.fl.us/government, provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- The [Florida Monitor Weekly](#), an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.
- Visit OPPAGA's website at www.oppaga.state.fl.us

OPPAGA supports the Florida Legislature by providing evaluative research and objective analyses to promote government accountability and the efficient and effective use of public resources. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475). Cover photo by Mark Foley.

Florida Monitor: www.oppaga.state.fl.us

Project supervised by Larry Novey, Chief Legislative Analyst (850/487-3768)

Project conducted by Darwin Gamble (850/487-9247), Kent Hutchinson (850/487-9164), and Alex Regalado (850/487-9234)

Kara Collins-Gomez, Staff Director (850/487-4257)

Gary R. VanLandingham, Ph.D., OPPAGA Director