

# 2007 Centers of Excellence

## Criteria and Instructions for Preparing Technical and Cost Proposals

### Section I: Introduction

The 21<sup>st</sup> Century Technology, Research, and Scholarship Enhancement Act, established by the 2006 Florida Legislature, provides for the establishment of Centers of Excellence to give Florida a clear position of leadership in key emerging technology areas with the unique potential for economic and societal impact in the years to come. The Act created the Florida Technology, Research, and Scholarship Board (“FTRSB”) within the Board of Governors (“BOG”) of the State University System to develop and recommend to the BOG criteria for evaluating proposals related to the creation of new or expansion of existing Centers of Excellence, to solicit proposals from eligible Florida entities for creating new or expanding existing Centers of Excellence, and to review and make recommendations regarding Centers of Excellence to the BOG for its consideration for funding.

*Important submission and timeline information relative to this Program is included as Appendix I of this document, entitled “Recommendations to the Florida Technology, Research, and Scholarship Board and to the Florida Board of Governors Regarding the Centers of Excellence Program” as amended and approved by the Florida Technology, Research, and Scholarship Board on August 8, 2007, and approved by the Board of Governors on August 9, 2007.*

The following sets forth (a) general success factors of a Center of Excellence and (b) specific factors identified as relevant to evaluating a proposed Center of Excellence. Taken together, these and other considerations have been determined by the FTRSB to constitute the criteria for evaluating Centers of Excellence.

**(a) General Success Factors:** General success factors should include:

- o An integrated vision to develop commercially promising, advanced, and innovative technologies and a process to facilitate transfer of these technologies to the commercial sector as appropriate;
- o A national and prominent technology-centric research focus;
- o The potential for positive economic impact on Florida;
- o A leadership and management plan to assure success;
- o The ability to acquire and leverage public and private-sector funding to provide the totality of funds, personnel, facilities, equipment, and other resources needed to support the research required to develop commercially promising, advanced, and innovative technologies and to transfer those technologies to commercial sectors;

- o The promotion of collaborative partnerships among university scholars, research center scientists and engineers, and private businesses to foster the research required to develop commercially promising, advanced, and innovative technologies and to transfer those technologies to commercial sectors; and
- o The opportunities to develop a high-skilled, high-wage workforce.

**(b) Specific Success Factors:** The proposal must include and describe whether and how the specific success factors identified in statute as relevant to evaluating a proposed Center of Excellence are addressed. Following the proposal's Executive Summary, the proposal must contain Appendix II's crosswalk. The crosswalk identifies the specific page number(s) on which the following specific success factors (as well as other considerations incorporated under the general criteria) are addressed.

- o Maturity of existing university programs relating to a proposed Center of Excellence.
- o Existing amount of university resources dedicated to activities relating to a proposed Center of Excellence.
- o Comprehensiveness and effectiveness of site plans relating to a proposed Center of Excellence.
- o Regional economic structure and climate.
- o The degree to which an entity proposed to house a Center of Excellence identifies and seizes opportunities to collaborate with other public or private entities for research purposes.
- o The presence of a comprehensive performance and accountability measurement system.
- o The use of an integrated research and development strategy utilizing multiple levels of the educational system.
- o The ability of an entity proposed to house a Center of Excellence to raise research funds and leverage public and private investment dollars to support advanced and emerging technological research and development projects.
- o The degree to which an entity proposed to house a Center of Excellence transfers advanced and emerging technologies from its laboratories to the commercial sector.
- o The degree to which an entity proposed to house a Center of Excellence stimulates and supports new venture creation.
- o The existence of a plan to enhance academic curricula by improving communication between academia and industry.
- o The existence of a plan to increase the number, quality, and retention rate of faculty, graduate students, and eminent scholars in advanced and emerging technology-based disciplines.
- o The existence of a plan to increase the likelihood of faculty, graduate students, and eminent scholars pursuing private-sector careers in the state.
- o The ability to provide capital facilities necessary to support research and development.

## Section II: Evaluation Criteria

Centers of Excellence will be evaluated using the following criteria:

2007 Centers of Excellence Criteria
<p><b><u>Vision, Leadership, and Research Focus</u></b> (clear and integrated vision and plan to assure success for developing innovative technologies and transferring them to the commercial sector; technology-centric research focus)</p> <p><i><u>Additional Considerations</u></i></p> <ul style="list-style-type: none"><li>○ Evidence that the core team has a past track record of success in comparable endeavors.</li><li>○ The scientific strength of the proposal (as supported by external review).</li><li>○ The relevance of the research and the extent to which it is either waxing or waning.</li><li>○ Whether or not the research is wholly new or has been attempted before.</li><li>○ An identification and analysis of the national/world competition and the extent to which it might be displaced by the proposal.</li><li>○ The extent to which the research addresses any Florida specific societal issues beyond the stated goals of the legislation.</li><li>○ The interpretation of “innovative technologies to include technological processes or applications as well as products.</li><li>○ Is the investment level appropriate and sufficient to make a difference in the identified technology area, and to result in a sustainable Center?</li></ul>
<p><b><u>Economic Opportunity</u></b> (potential for positive national and state impact, including a high-skilled, high-wage Florida workforce)</p> <p>The regional economic structure and climate.</p> <p>The degree to which the applicant transfers advanced and emerging sciences and technologies from its laboratories to the commercial sector.</p> <p>The degree to which the applicant stimulates and supports the creation of new ventures.</p> <p>The existence of a plan to increase the likelihood of faculty and graduate students pursuing private-sector careers in the state.</p> <p>The existence of a plan to increase the number, quality, and retention rate of <u>faculty and graduate students</u> in advancing and emerging science and technology-based disciplines.</p> <p><i><u>Additional Considerations</u></i></p> <ul style="list-style-type: none"><li>○ The extent to which Center will foster a high skilled, high wage workforce.</li><li>○ The likelihood of new or expanded economic clusters as a result of Center.</li><li>○ The interpretation of “economic development” to include the creation of jobs or the removal of barriers to further economic development.</li></ul>

### **Management and Infrastructure**

The maturity of the applicant's existing programs relating to a proposed Center of Excellence.

The ability of the applicant to provide capital facilities necessary to support research and development.

The comprehensiveness and effectiveness of site plans relating to a proposed Center of Excellence.

The existing amount of the applicant's resources dedicated to activities relating to a proposed Center of Excellence.

The presence of a comprehensive performance and accountability measurement system.

#### **Additional Considerations**

- *An effective management structure showing clear lines of authority and responsibility.*
- *Evidence that the investment level is appropriate and sufficient to make a difference in the identified technology area.*

**Leveraging Resources and Other Collaboration** (the ability to acquire public and private-sector funding; and the ability to value-add by creating multi-sectored partnerships with scholars, research center scientists and engineers, other educational institutions, and private businesses)

The degree to which the applicant identifies and seizes opportunities to collaborate with other public or private entities for research purposes.

The ability of the applicant to raise research funds and leverage public and private investment dollars to support advanced and emerging scientific and technological research and development projects.

The existence of a plan to enhance academic curricula by improving communication between academia and industry.

#### **Additional Considerations**

- *The extent to which the Center supports the mission of each partner.*
- *Existence or development of a framework to encourage long-term university/industry collaboration.*
- *The demonstration of collaborative commitment by in-kind, matching funds, or other tangible investments.*
- *The level of industry consensus that supports the proposed Center.*

## **Section III: Instructions for Preparing Proposals**

### **A. General Instructions**

1. The Proposal Package will consist of the following: Summary Information; Table of Contents, List of Figures, and List of Tables; Criteria Crosswalk and Executive Summary; Technical Proposal; Resumes; Letters of Support; and Cost Proposal. The total length of Technical Proposals shall not exceed twenty (20) pages, excluding the Summary Information, Table of Contents, List of Figures, List of Tables, Executive Summary, Resumes, Letters of Support, and Cost Proposal. All appendices, charts, tabulations, plots, photographs, figures, references and other illustrative material will be included in the 20 pages. A page is defined as 8 ½ X 11 inch paper, single spaced, single-sided not to exceed sixty-six (66) lines of single column text, with one-inch margins and a minimum font size of 12 point. All tables, figures, captions, footnotes, etc. must have a minimum font size of 10 point. A separate Cost Proposal should be submitted, as set forth below.
2. A hard-copy cover letter from the Chief Executive Officer must accompany each electronic Proposal Package submission (to be submitted as described in #3 below). The cover letter must contain the name of the proposal, the signature of the Chief Executive Officer, and language attesting that the institution's internal process for review and selection (as identified in Appendix I) is in place and has been duly applied. The signature of the Chief Executive Officer on the cover letter will signify institutional compliance with the requirements and expectations included in Appendix I.
3. Hard-copies of the Proposal Package are not to be submitted. The Proposal Package should be prepared as both a .pdf document (created from files, not scanned) readable by Adobe Acrobat 8.0 and as a Word document readable by Microsoft Word 2003. All .pdf documents should be prepared in ADA-accessible format, suitable for web posting. Sixteen (16) copies should be submitted for each proposal, on a separate disc media (CD-ROM or DVD). Each disc should contain both the .pdf and Word versions of the full Proposal Package, with filenames clearly indicating file content. Supporting documentation may be submitted if it is in either Microsoft Office 2003 or .pdf format. If an institution is submitting more than one proposal, only one proposal may be included per disc. Submit all materials comprising the Proposal Package so that they are received no later than 5:00 p.m. EST on December 3, 2007 to:

**Dr. R. E. LeMon, Vice Chancellor, Academic and Student Affairs  
Florida Board of Governors  
Florida Education Center, Suite 1614  
325 West Gaines Street  
Tallahassee, Florida 32399**

4. The Technical Proposal should provide sufficient detail to enable a reviewer to: (a) evaluate the proposal in light of the Evaluation Criteria in Section II above; and (b) assess the probability that the proposal authors will be able to accomplish the stated objectives of the proposal within the requested time and resource parameters.
5. Appendix I contains important submission details and timeline information, including submission deadlines for the Cover Letter and Proposal Package described in this section (due no later than December 3, 2007), as well as the mandatory Letter of Intent to Apply described in Appendix I (due no later than October 1, 2007). Offerors should reference Appendix I to ensure compliance throughout the process.
6. The Proposal Information Package associated with 2002 legislation creating the Emerging Technology Commission and Centers of Excellence was used in the preparation of this Proposal Information Package. That 2002 format, in turn, was indebted to the book Managing Industry/University Cooperative Research Centers: A Guide for Directors and Other Stakeholders by Denis O. Gray and S. George Walters.

## **B. Deliverables**

It is the intent of the State that successfully-bid Centers of Excellence have considerable discretion in providing the documentation that is necessary to satisfy the reporting or other filing requirements under this program. However, successfully-bid Centers of Excellence shall be required to submit the following minimum categories of documentation to the FTRSB: (1) data and information that demonstrate the extent to which the Center of Excellence can meet the evaluation criteria set forth in Section II above; (2) analysis criteria and data that demonstrate the extent to which the Center of Excellence can achieve its specific stated goals and objectives; and (3) evidence that the Center of Excellence can track the progress and expenditures of state funding.

For reporting and related purposes, each successfully-bid Center of Excellence shall designate a Program Manager. The Program Manager shall serve as the point-person for transmitting required and other documentation to the BOG and the FTRSB and for receiving inquiries from the BOG, the FTRSB, or others as the case may be.

Beginning June 30, 2007 and on June 30<sup>th</sup> of each year thereafter, each successfully-bid Center of Excellence shall, through its Program Manager, submit performance reviews on request to the BOG that demonstrate the extent to which the Center of Excellence is meeting the evaluation criteria set forth in Section II and achieving its specific stated goals and objectives, and that track the progress and expenditures of state funding.

## **C. Proposal Format**

Proposals should contain the components set forth in subsections 1-7 below and adhere to the designated page limits. Nonconforming proposals may be rejected without review. Throughout the Technical Proposal (subsection 4) and associated Cost Proposal (subsection 7), specific tasks and milestones should be clearly identified, as feasible.

**1. Summary Information (1 Page).** A cover page shall include the following, which must also appear in both the technical and cost proposals:

- Name and address of the Principal Offeror(s) submitting proposal.
- Title of proposal.
- Concise abstract of the proposed effort (approximately 50 words).
- Names, telephone numbers, and e-mail addresses of:
  - Principal technical personnel responsible for achieving objectives.
  - Principal business personnel responsible for contract negotiation.
- Date of submission.
- Period of performance (base effort and option(s)).
- Total cost (base effort and option(s)).

**2. Table of Contents, List of Figures, and List of Tables (no page limit)**

All entries should be hyperlinked to the corresponding section, figure, or table.

**3. Executive Summary and Criteria Crosswalk (5 pages plus Criteria Crosswalk)**

The Executive Summary contains the following sections:

- Proposed Center of Excellence: In layman's terms, describe (a) the world-class research focus of the proposed Center of Excellence and (b) the clear and integrated vision to develop commercially promising, advanced, and innovative technologies through a national and prominent technology-centric research focus and a process to facilitate transfer of these technologies to the commercial sector as appropriate.
- Industrial Need and Outcome: Describe the current related industry and how the proposed Center of Excellence would, if funded, help create a vibrant industrial base in Florida.
- University Capabilities: Summarize the participating institutions' abilities to identify and pursue opportunities for university scholars, research center scientists and engineers, and private businesses to form collaborative partnerships to foster and promote the research required to develop

commercially promising, advanced, and innovative technologies and to transfer those technologies to commercial sectors.

- o Plan for Self-Sufficiency: Summarize the proposed Center of Excellence’s ability and plan to acquire and leverage public and private-sector funding to provide the totality of funds, personnel, facilities, equipment, and other resources needed to support the research required to develop commercially promising, advanced, and innovative technologies both initially and after the termination of this program.
- o Organizational Plan: Briefly describe the proposed organizational structure (including a listing of key personnel), research program philosophy, implementation schedule and planned budget.
- o Criteria Crosswalk: Utilizing Appendix II as a template, indicate on which page(s) of the submission the criteria are addressed. The Specific Success Factors found on page 2 of this document and identified as “Required Criteria” in the template must be crosswalked. Any other “Additional Considerations” found within the proposal should be crosswalked.

#### **4. Technical Proposal (20 pages)**

The four (4) bolded headings in paragraphs 4.1 to 4.4 constitute the performance criteria by which proposals will be evaluated. It is not an absolute requirement to respond to everything within 4.1 to 4.4. Those items identified in Appendix II as “Required Criteria” must be addressed. The items identified in Appendix II as “Other Considerations” represent an inexhaustive list of elements that should assist in addressing the particular criterion. Successful proposals may not necessarily address all of the bulleted factors. Proposals may also address other factors not listed. While proposals should specifically respond to the four (4) performance criteria, Offerors should organize the discussion under each criterion in the manner that most accurately and clearly describes the proposed Center of Excellence.

**4.1 Vision, Leadership, and Research Focus** (clear and integrated vision and plan to assure success for developing innovative technologies and transferring them to the commercial sector; technology-centric research focus)

- o Evidence that the core team has a past track record of success in comparable endeavors. This should be demonstrated by providing data on the most recent three-year performance of the principals associated with the Center of Excellence, using the sixteen (16) “2007 Accountability Measures” found in Appendix I. (*Note: not all measures may be applicable*).
- o The scientific strength of the proposal (as supported by external review).
- o The relevance of the research and extent to which it is waxing or waning.
- o Whether or not the research is wholly new or has been attempted before.

- An identification and analysis of the national/world competition and the extent to which it might be displaced by the proposal.
- The extent to which the research addresses any Florida specific societal issues beyond the stated goals of the legislation.
- The interpretation of “innovative technologies to include technological processes or applications as well as products.”
- Is the investment level appropriate and sufficient to make a difference in the identified technology area, and to result in a sustainable Center of Excellence?
- The degree to which an entity proposed to house a Center of Excellence transfers advanced and emerging technologies from its laboratories to the commercial sector.
- The degree to which an entity proposed to house a Center of Excellence stimulates and supports new venture creation.
- The presence of a comprehensive performance and accountability measurement system.
- The use of an integrated research and development strategy utilizing multiple levels of the educational system.
- A compelling scientific research and commercialization vision of the Center of Excellence and relevance to the future Florida economy.
- An analysis of the proposed Center of Excellence’s key national research competitors, its own competitive advantages, and the niche market that the proposed Center of Excellence would fill.
- A plan to support technology transfer for the public benefit, while complying with the universities' policies on patents and copyrights.
- Industry participation and collaboration in defining, proposing, and advancing the Center of Excellence’s goals and programs.

**4.2 Economic Opportunity** (potential for positive national and state impact, including a high-skilled, high-wage Florida workforce)

- The regional economic structure and climate.
- The degree to which the applicant transfers advanced and emerging sciences and technologies from its laboratories to the commercial sector.
- The degree to which the applicant stimulates and supports the creation of new ventures.
- The existence of a plan to increase the likelihood of faculty and graduate students pursuing private-sector careers in the state.
- The existence of a plan to increase the number, quality, and retention rate of faculty and graduate students in advancing and emerging science and technology-based disciplines.
- The extent to which proposed Center of Excellence will foster a high-skilled, high-wage workforce.

- The likelihood of new or expanded economic clusters as a result of the proposed Center of Excellence.
- The interpretation of “economic development” to include the creation of jobs or the removal of barriers to further economic development.

#### **4.3 Management and Infrastructure**

- The maturity of the applicant’s existing programs relating to a proposed Center of Excellence.
- The ability of the applicant to provide capital facilities necessary to support research and development.
- The comprehensiveness and effectiveness of site plans relating to a proposed Center of Excellence.
- The existing amount of the applicant’s resources dedicated to activities relating to a proposed Center of Excellence.
- The presence of a comprehensive performance and accountability measurement system.
- An effective management structure showing clear lines of authority and responsibility.
- Evidence that the investment level is appropriate and sufficient to make a difference in the identified technology area.

#### **4.4 Leveraging Resources and Other Collaboration** (the ability to acquire public and private-sector funding; and the ability to value-add by creating multi-sectored partnerships with scholars, research center scientists and engineers, other educational institutions, and private businesses)

- The degree to which the applicant identifies and seizes opportunities to collaborate with other public or private entities for research purposes.
- The ability of the applicant to raise research funds and leverage public and private investment dollars to support advanced and emerging scientific and technological research and development projects.
- The existence of a plan to enhance academic curricula by improving communication between academia and industry.
- The extent to which the proposed Center of Excellence supports the mission of each partner.
- Existence or development of a framework to encourage long-term university/industry collaboration.
- The demonstration of collaborative commitment by in-kind, matching funds, or other tangible investments.
- The level of industry consensus that supports the proposed Center of Excellence.

## **5. Resumes (no page limit)**

Biographies of the key management/leadership personnel of, and the technical contributors to, the proposed Center of Excellence must be submitted. The biographies should provide demonstrable evidence of relevant skill sets and an ability to excel in an environment of technology innovation and transition.

## **6. Letters of Support (up to 15 pages)**

One page letters of support from corporate, industrial, or economic development partners, from Florida companies or other companies whose support would have a positive impact on the proposed Center of Excellence or the state economy, or from companies that would establish a new presence in the State as a result of the work of the proposed Center of Excellence are encouraged.

## **7. Cost Proposal**

Cost information shall be provided in a separate volume. There is no page limitation for the cost proposal. The cost proposal shall contain:

- The proposed cost on a task basis, and sufficient supporting information to justify the proposed costs for each task.
- The proposed cost of the effort on a fiscal year basis for FY2008, FY 2009, and FY2010 assuming June 2008 as the time of the award.
- The breakout by year for faculty labor, staff/support labor, student labor, tuition and fees, all overhead and facility charges, any capital expenditures, travel, endowments.
- The total proposed cost of the effort.
- Justification for the funds to be spent on facility update/construction, if any.
- Justification for the funds to be spent on capital purchases, if any.
- Justification for the funds to be spent on the creation of endowed positions, if any. If there are any endowed position(s) created with this funding, the selection and evaluation criteria must be clearly stated.
- A demonstrated ability to continue the proposed Center of Excellence without additional state funding.
- A \$10M "fallback budget" if the proposal exceeds that amount, in the event that full-funding cannot be awarded.

#### **D. "Best Value" to State**

Each initial offer should contain the Offeror's best terms for award of a contract under this solicitation. The State intends to evaluate proposals and award a contract without discussions. However, the State reserves the right to conduct discussions and request a Best and Final Offer. Offerors will be selected for award on the basis of their proposals providing the "best value," all criteria considered. A one-time award will be made to those Offerors whose proposals are deemed most advantageous to the goals of the program; whose proposals conform to the requirements of the solicitation; and are acceptable in regards to the evaluation criteria specified above. The State may select offers that are not the lower priced technically acceptable offers, if the selection of higher priced offers represents the "Best Value" to the State.

# APPENDIX I

## Recommendations

to

**The Florida Technology, Research, and Scholarship  
Board**

and to

**The Florida Board of Governors**

**Regarding the  
Centers of Excellence Program**

**R. E. LeMon, Ph.D.**

**Vice Chancellor, Academic and Student Affairs**

**State University System of Florida**

**And Lead Staff to**

**The Florida Board of Governors Research and Economic Development Committee and**

**The Florida Technology, Research, and Scholarship Board**

*As amended and approved by the Florida Technology, Research, and Scholarship Board  
on August 8, 2007, and approved by the Board of Governors on August 9, 2007*

## Introduction

The 2002 Legislature provided \$30,000,000 to fund Centers of Excellence (COE). This funding resulted in the creation of three Centers of Excellence, one each at the University of Florida, the University of Central Florida, and Florida Atlantic University, each funded at \$10M.

The 2006 Legislature provided \$30M to fund COEs. This funding resulted in six additional Centers of Excellence: two at the University of Florida, and one each at Florida State University, the University of South Florida, the University of Central Florida, and Florida Atlantic University. Thus, a total of 9 Centers of Excellence currently exist and are funded at these levels:

<u>Center of Excellence</u>	<u>Funding Awarded</u>
<b>2002 COE Awards</b>	
UF COE in Regenerative Health Biotechnology	\$10,000,000
FAU COE in Biomedical and Marine Biotechnology	\$10,000,000
UCF Florida Photonics COE	\$10,000,000
	<b>\$30,000,000</b>
<b>2006 COE Awards</b>	
USF COE in Biomolecular Identification & Targeted Therapeutics	\$8,000,000
FAU COE in Ocean Energy Technology	\$5,000,000
UF Institute for Sustainable Energy/Energy Technology Incubator	\$4,500,000
UCF Florida Photonics COE Laser Technology Initiative	\$4,500,000
UF COE for Nano-Bio Sensors	\$4,000,000
FSU COE in Advanced Materials	\$4,000,000
	<b>\$30,000,000</b>

The 2007 Legislature was generous in providing \$100,000,000 for what will be the third round of COE funding. Given the magnitude of this appropriation, and benefiting from two rounds of COE competition, annual reporting, accountability data gathering, and ad hoc meetings on the subject of COEs with the State University System (SUS) Council of Vice Presidents for Research, the SUS Council of Academic Vice Presidents, and representatives of other potential respondents, this set of recommendations is presented for enhancing the COE competitive process. It is hoped that the Florida Technology, Research, and Scholarship Board (FTRSB), working together with the Florida Board of Governors (BOG), can create a more efficient, focused, and accountable process, resulting in an even greater return on the investment that Florida is making in higher education and economic development through this program.

### **2007 COE Budget Parameters**

It is recommended that, generally, COE proposals reflect a budget of between \$10M and \$20M. This will assist in ensuring that proposals are of the magnitude contemplated by the legislation. All proposals with budgets exceeding \$10M should submit secondary “fallback” budgets indicating how their proposals could be successfully scaled if they were to receive funding at \$10M. Any proposal requesting equipment valued at over \$1 Million must include an analysis to determine whether the equipment can be utilized throughout the State University System and other public and private institutions, as appropriate.

Notwithstanding the recommendation above, proposals at less than \$10M may be entertained if they clearly demonstrate that they are responding to the criteria for success as outlined later in this document.

At the other end of the spectrum, proposals with budgets above \$20M may be entertained. These “Supercenter” proposals must demonstrate the following:

- extraordinary chances for success, indicating that elements of their planning are well in-process and involve major stakeholders in Florida including business and industry, government, and other economic development entities;
- clear, substantial, meaningful, and multifaceted collaboration with shared decision making among multiple (to be defined as more than two) postsecondary institutions, as documented by a Memorandum of Understanding submitted with the proposal; and
- the likelihood of achieving tangible results in a critical area of concern such as energy efficiency, the environment, or a similar area of major concern to Florida’s and the Nation’s citizenry.

### **Initial Institutional Review of COE Proposals**

Submitting institutions must have in place an internal process for review and selection of COE proposals for formal submission to the FTRSB and, if it is requested, must be able to provide the documentation associated with their internal processes. Formal proposal submissions to the FTRSB are to be accompanied by a cover letter signed by the institution’s Chief Executive Officer, whose signature attests that the internal process for review and selection is in place and has been duly applied.

### **Letters of Intent and Proposal Submission**

On a date specified in a timetable approved by the FTRSB and the BOG, each submitting institution shall provide a Letter Of Intent. The Letter Of Intent must be transmitted by the institution’s Chief Executive Officer and accompanied by an abstract of no more than one page for each proposal. Subsequent to the comprehensive internal

review process and the submission of proposals, institutions submitting more than one proposal may be asked to rank-order by priority proposals for which they are the lead institution. Existing COEs are eligible to submit proposals per statutory language.

### **External Review of Submissions**

It is recommended that the FTRSB's review process of COE proposals include an external review for scientific merit by a major national academy or other national scientific entity or entities, the costs for which must be borne by the submitting institutions, absent other means of paying for them. The review should include the proposal's technical merit, the vitas of the technical team, and an assessment of the opportunity, growth, competition, and maturity of the proposed technology. Such a review may serve as a "first cut" process for proposals from a scientific perspective, with possible responses being "Highly Recommended," "Recommended," or "Not Recommended." Ultimately, the exact nature of the service provided by the external reviewing agency will be determined through a dialogue of negotiation between the agency and the FTRSB through the Board of Governors Office. It will be necessary for these external reviews to consider the viability of budgets and "fallback" budgets as discussed under the "2007 COE Budget Parameters" section.

### **Institutional Contact with Boards**

Consistent with the spirit of national competition, it is recommended that university representatives at all levels refrain from contacting FTRSB or BOG members with respect to COE submissions once proposals have been formally submitted. In the event that FTRSB members have specific questions about proposals subsequent to their submission, a mechanism will be created to facilitate information exchange.

### **Board Final Deliberations and/or Voting**

It is recommended that any voting by the FTRSB should be effected by individual member rank-ordering. The nonvoting of recused or absent members will be accommodated in the scoring by utilizing a proposal's rank-order average on the completion of the vote. Diversity of research portfolio may be a factor in determining final recommendations.

### **COE Criteria**

The following recommendations are provided to the FTRSB for its consideration of COE proposals:

1. While the criteria adopted in 2006 by the FTRSB are still valid, it is recommended that the seven criteria be reduced to four key areas. It is believed that this will

improve and facilitate the FTRSB’s review and scoring process, and allow for more appropriate weightings to be applied in key areas which heretofore may have appeared under-valued.

2006 COE Criteria	2006 Weighting
<b>Vision.</b> The proposal must demonstrate a clear and integrated vision to develop commercially promising, advanced, and innovative technologies and to transfer those technologies to the commercial sector.	25%
<b>Research Focus.</b> The proposal must demonstrate national and prominent technology-centric research focus.	25%
<b>Economic Impact Potential.</b> The Proposal must demonstrate the potential for positive economic impact on the State of Florida and the Nation.	20%
<b>Leadership and Management.</b> The proposal must clearly outline its leadership and management plan to assure success if the Center is funded. The plan must show lines of authority and responsibility of the proposed Center’s organization, and clearly identify a Program Manager who is the single point of contact for information regarding program management, execution, and reporting for the proposed Center of Excellence.	10%
<b>Leveraging Resources.</b> The proposal must demonstrate the ability and plans to acquire and leverage public and private-sector resources to support the operations and research of the Center, including funding, personnel, facilities, and equipment.	10%
<b>Center Collaboration with Other Entities.</b> The proposal must demonstrate how the Center of Excellence promotes collaboration among university scholars, research center scientists and engineers, public schools, and private businesses.	5%
<b>Workforce Development.</b> The proposal must clearly describe how the Center of Excellence will foster the development of a highly skilled, high-wage workforce.	5%

It is recommended that the “General Success Factors” stipulated in statute be combined with the “Specific Success Factors,” also stipulated in statute, joined with any “Additional Considerations” to create four criteria areas:

2007  
COE Criteria

**Vision, Leadership, and Research Focus** (clear and integrated vision and plan to assure success for developing innovative technologies and transferring them to the commercial sector; technology-centric research focus)

Additional Considerations

- Evidence that the core team has a past track record of success in comparable endeavors.
- The scientific strength of the proposal (as supported by external review).
- The relevance of the research and the extent to which it is either waxing or waning.
- Whether or not the research is wholly new or has been attempted before.
- An identification and analysis of the national/world competition and the extent to which it might be displaced by the proposal.
- The extent to which the research addresses any Florida specific societal issues beyond the stated goals of the legislation.
- The interpretation of “innovative technologies to include technological processes or applications as well as products.
- Is the investment level appropriate and sufficient to make a difference in the identified technology area, and to result in a sustainable Center?

**Economic Opportunity** (potential for positive national and state impact, including a high-skilled, high-wage Florida workforce)

The regional economic structure and climate.

The degree to which the applicant transfers advanced and emerging sciences and technologies from its laboratories to the commercial sector.

The degree to which the applicant stimulates and supports the creation of new ventures.

The existence of a plan to increase the likelihood of faculty and graduate students pursuing private-sector careers in the state.

The existence of a plan to increase the number, quality, and retention rate of faculty and graduate students in advancing and emerging science and technology-based disciplines.

Additional Considerations

- The extent to which Center will foster a high skilled, high wage workforce.
- The likelihood of new or expanded economic clusters as a result of Center.
- The interpretation of “economic development” to include the creation of jobs or the removal of barriers to further economic development.

## Management and Infrastructure

The maturity of the applicant's existing programs relating to a proposed Center of Excellence.

The ability of the applicant to provide capital facilities necessary to support research and development.

The comprehensiveness and effectiveness of site plans relating to a proposed Center of Excellence.

The existing amount of the applicant's resources dedicated to activities relating to a proposed Center of Excellence.

The presence of a comprehensive performance and accountability measurement system.

### Additional Considerations

- *An effective management structure showing clear lines of authority and responsibility.*
- *Evidence that the investment level is appropriate and sufficient to make a difference in the identified technology area.*

Leveraging Resources and Other Collaboration (the ability to acquire public and private-sector funding; and the ability to value-add by creating multi-sectored partnerships with scholars, research center scientists and engineers, other educational institutions, and private businesses)

The degree to which the applicant identifies and seizes opportunities to collaborate with other public or private entities for research purposes.

The ability of the applicant to raise research funds and leverage public and private investment dollars to support advanced and emerging scientific and technological research and development projects.

The existence of a plan to enhance academic curricula by improving communication between academia and industry.

### Additional Considerations

- *The extent to which the Center supports the mission of each partner.*
- *Existence or development of a framework to encourage long-term university/industry collaboration.*
- *The demonstration of collaborative commitment by in-kind, matching funds, or other tangible investments.*
- *The level of industry consensus that supports the proposed Center.*

It is believed that considering all three sets of language will better reflect statute and the stated expectations of the BOG and the FTRSB, and that it will assist the FTRSB during its deliberative process.

2. It is recommended that the FTRSB encourage the submission of collaborative COE proposals in areas that demonstrate cross-sector and multi-institutional areas of SUS strength. Further, it is recommended that the FTRSB encourage proposals by major research institutions in the SUS that genuinely involve smaller SUS institutions in meaningful collaboration. Proposals submitted that do not reflect inter-institutional collaboration should articulate why such collaboration was not appropriate or possible.

**COE Accountability**

At its March 28-29 meeting, the Board of Governors approved a set of accountability measures to be applied to all COEs. They are:

<b>CENTERS OF EXCELLENCE 2007 Accountability Measures: Part I</b>	
<b><u>Research Effectiveness</u></b>	
1.	Competitive Grants Applied For and Received
2.	Total Research Expenditures
3.	Publications in Refereed Journals From Center Research
4.	Professional Presentations Made on Center Research
5.	Invention Disclosures Filed and Issued
6.	Technologies Licensed and Revenues Received
<b><u>Collaboration Effectiveness</u></b>	
7.	Collaborations with Other Postsecondary Institutions
8.	Collaborations with K-12 Education Systems/Schools
9.	Collaborations with Private Industry
10.	Students Supported with Center Funds
11.	Students Graduated
12.	Job Placements of Graduates Upon Leaving the Center
<b><u>Economic Development Effectiveness</u></b>	
13.	Business Start-Ups in Florida
14.	Jobs Created and Jobs Saved in Florida
15.	Specialized Industry Training and Education
16.	Dollars Acquired from Venture Capitalists and Other Investments

The BOG has created a working committee of Vice Presidents for Research charged with further defining and refining these measures to ensure that they are clearly understood and systematically reported.

In addition, the BOG has determined that each COE should be queried for a yearly set of “indicators of success” unique to each COE which will provide information regarding shorter-term milestones and achievements that will assist in determining the extent to which COEs are on-track to meet their larger goals. These indicators are in the process of being developed and, when finalized, will become a part of the COE Annual Report.

It is recommended that both internal and external review become a part of the normal operating procedures for Centers of Excellence, and the cost of such external reviews should be planned as part of the COE budget.

Finally, it is recommended that the accountability process should always be considered open to positive change as new data and concomitant measures become available, and as the FTRSB, the BOG, and other constituents work to maximize this important investment to the State.

### **COE Timeline**

The following timeline is recommended:

<b>CENTERS OF EXCELLENCE TIMELINE</b>	
<b>July 19, 2007</b>	Finalize staff compilation of recommendations from multiple sources (FRC, CAVP, VPs for Research, BOG, etc.) regarding the criteria and process, and transmit to the BOG Corporate Secretary
<b>July 26, 2007</b>	Mail staff recommendations to members of the FTRSB and the BOG
<b>August 8, 2007</b>	FTRSB meets at the University of South Florida to discuss and approve 2007 criteria, recommendations for program improvement, and timeline; and to transmit recommendations to BOG
<b>August 9, 2007</b>	BOG considers and approves FTRSB recommendations
<b>August 17, 2007</b>	Send out RFP for Centers of Excellence
<b>October 1, 2007</b>	Electronically transmitted Letters of Intent to Apply from institutional CEOs due by 5pm EST in BOG Office
<b>October 2, 2007</b>	Letters of Intent to Apply transmitted to external reviewers
<b>December 3, 2007</b>	Electronically transmitted Center of Excellence proposals due by 5pm EST in BOG Office
<b>December 10, 2007</b>	Staff technical review of proposals completed
<b>December 12, 2007</b>	Proposals sent to external reviewers
<b>March 21, 2008</b>	Results from external reviews due in Board Office
<b>March 25, 2008</b>	Results from external reviewers sent to FTRSB
<b>April 1, 2008 to May 16, 2008</b>	FTRSB meetings to hear presentations, conduct deliberations, and determine final recommendations (multiple meetings, with a discrete "final recommendations" meeting)
<b>May 22, 2008</b>	Titles for agenda items due to BOG Corporate Secretary
<b>May 29, 2008</b>	Transmit final FTRSB recommendations and other agenda materials to the BOG Corporate Secretary
<b>June 5, 2008</b>	BOG agenda mailed to BOG members
<b>June 9-13, 2008</b>	BOG members briefed for June BOG Meeting
<b>June 18-19, 2008</b>	BOG approves final Centers of Excellence recommendations
<b>June 20-30, 2008</b>	COE awards distributed

## APPENDIX II

2007 Centers of Excellence Criteria Crosswalk	Proposal Page #(s)
<b><u>Vision, Leadership, and Research Focus</u></b> (clear and integrated vision and plan to assure success for developing innovative technologies and transferring them to the commercial sector; technology-centric research focus)	
<b><u>Additional Considerations:</u></b>	
<i>Evidence that the core team has a past track record of success in comparable endeavors.</i>	
<i>The scientific strength of the proposal (as supported by external review).</i>	
<i>The relevance of the research and the extent to which it is either waxing or waning.</i>	
<i>Whether or not the research is wholly new or has been attempted before.</i>	
<i>An identification and analysis of the national/world competition and the extent to which it might be displaced by the proposal.</i>	
<i>The extent to which the research addresses any Florida specific societal issues beyond the stated goals of the legislation.</i>	
<i>The interpretation of "innovative technologies to include technological processes or applications as well as products.</i>	
<i>Is the investment level appropriate and sufficient to make a difference in the identified technology area, and to result in a sustainable Center?</i>	
<b><u>Economic Opportunity</u></b> (potential for positive national and state impact, including a high-skilled, high-wage Florida workforce)	
<b><u>Required Criteria:</u></b>	
The regional economic structure and climate.	
The degree to which the applicant transfers advanced and emerging sciences and technologies from its laboratories to the commercial sector.	
The degree to which the applicant stimulates and supports the creation of new ventures.	
The existence of a plan to increase the likelihood of faculty and graduate students pursuing private-sector careers in the state.	

<b><u>Additional Considerations</u></b>	
<i>The extent to which Center will foster a high skilled, high wage workforce.</i>	
<i>The likelihood of new or expanded economic clusters as a result of Center.</i>	
<i>The interpretation of "economic development" to include the creation of jobs or the removal of barriers to further economic development.</i>	
<b><u>Management and Infrastructure</u></b>	
<b><u>Required Criteria:</u></b>	
The maturity of the applicant's existing programs relating to a proposed Center of Excellence.	
The ability of the applicant to provide capital facilities necessary to support research and development.	
The comprehensiveness and effectiveness of site plans relating to a proposed Center of Excellence.	
The existing amount of the applicant's resources dedicated to activities relating to a proposed Center of Excellence.	
The presence of a comprehensive performance and accountability measurement system.	
<b><u>Additional Considerations:</u></b>	
<i>An effective management structure showing clear lines of authority and responsibility.</i>	
<i>Evidence that the investment level is appropriate and sufficient to make a difference in the identified technology area.</i>	
<b><u>Leveraging Resources and Other Collaboration</u></b> (the ability to acquire public and private-sector funding; and the ability to value-add by creating multi-sectored partnerships with scholars, research center scientists and engineers, other educational institutions, and private businesses)	
<b><u>Required Criteria:</u></b>	
The degree to which the applicant identifies and seizes opportunities to collaborate with other public or private entities for research purposes.	
The ability of the applicant to raise research funds and leverage public and private investment dollars to support advanced and emerging scientific and technological research and development projects.	

The existence of a plan to enhance academic curricula by improving communication between academia and industry.	
<b><u>Additional Considerations</u></b>	
<i>The extent to which the Center supports the mission of each partner.</i>	
<i>Existence or development of a framework to encourage long-term university/industry collaboration.</i>	
<i>The demonstration of collaborative commitment by in-kind, matching funds, or other tangible investments.</i>	
<i>The level of industry consensus that supports the proposed Center.</i>	