FAU

BOARD OF TRUSTEES

Florida Atlantic University

Item: V: C

Wednesday, January 20, 2010

SUBJECT: Termination of Interim Medical Education Affiliation Agreement with the University of Miami

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PROPOSED BOARD ACTION

Approve the termination of the interim medical education affiliation agreement with the University of Miami.

BACKGROUND INFORMATION

On February 17, 2006, the University entered into a tri-partite affiliation agreement (the "Affiliation Agreement") with the University of Miami ("UM") and Boca Raton Community Hospital ("BRCH") for the establishment of an academic medical center and a regional medical school campus on the FAU Boca Raton Campus. Under the Affiliation Agreement, UM and FAU were responsible for the development and delivery of a four-year medical education program, and BRCH was to construct a replacement hospital facility on the FAU Boca Raton campus that would serve as the academic medical center for the medical education program.

In accordance with the Affiliation Agreement, FAU and UM developed a four-year medical education program, and a four-year regional campus of the UM medical education program is now fully operational on the Boca Raton campus, under the name of UMMSM@FAU. Due to severe financial pressures, however, BRCH was not be able to meet its obligations under the Affiliation Agreement or the Ground Lease. As a result of BRCH's inability to perform, this Board approved the termination of the Affiliation Agreement on January 21, 2009.

Despite the termination of the tri-partite Affiliation Agreement, FAU and UM continued their affiliation and the UMMSM@FAU medical education program under certain interim agreements, with the latest agreement being that certain Interim Medical Education Affiliation Agreement effective June 30, 2009 (the "Interim Agreement"). The Interim Agreement expires on June 30, 2010.

The FAU Administration has been examining alternative strategies to continue the medical education program when the Interim Agreement terminates. The Administration considered (i) extending the affiliation with the University of Miami under a new, long-term agreement; (ii) affiliating with a different medical school; or (iii) obtaining authorization from the Board of

Governors and the Florida Legislature to issue the M.D. degree and continue the program independently. After careful analysis of all three options, the Administration has determined that the third alternative, obtaining authorization to issue the M.D. degree and continuing the program independently, is in the best interests of the University and the State of Florida.

The Administration's determination was based in large measure upon the agreement of The Scripps Research Institute ("Scripps) to partner with FAU on a joint degree program that would offer students an M.D. from FAU and a Ph.D. from Scripps. The proposed joint degree program is described in detail in the attached Executive Summary materials. To begin the implementation of this initiative, the Administration requests Board authorization to terminate the Interim Agreement with UM.

IMPLEMENTATION PLAN/DATE

Termination of the Interim Affiliation Agreement will be effective immediately upon FAU's providing written notice to UM. However, termination of the affiliation and the UMMSM@ FAU medical education program will require a transition period for the winding down of the program. The transition period and all associated obligations will expire at the conclusion of the 2010-2011 academic year.

The projected timeline for the authorization of the M.D. degree and the implementation of the joint degree program with Scripps is set forth at Tab VII of the Executive Summary. In accordance with the timeline, the Administration will present a formal request to pursue degree authorization to the Board within the next month.

FISCAL IMPLICATIONS

If FAU is authorized to award the M.D. degree, it will be enabled to collect and retain tuition from the medical education students. FAU will charge the average tuition charged by the other public medical schools in the State of Florida. As set forth at Tab VI and Appendix 2 of the Executive Summary, when tuition is added to FAU's existing appropriation for its medical education program, the joint degree program will be operated without the need for any additional legislative appropriations.

Supporting Documentation: Interim Medical Education Affiliation Agreement with the University of Miami effective June 30, 2009

Executive Summary of Proposed Joint M.D./Ph.D. Program with The Scripps Research Institute

Presented by: John Pritchett, President

EXECUTIVE SUMMARY

Florida Atlantic University/Scripps Research Institute
Biomedical Science and Technology Institute

Key Components:

- Independent FAU Medical Education Program

- Strategic Bioscience Research Partnership Between FAU, Scripps and Max Planck Institute

Authority Sought by FAU From the Board of Governors:

- Authority to grant the MD degree; and

- Authority to collect medical tuition at the average SUS rate

Funding Highlights:

- ***FAU will commit to operating its medical education program with no additional G.R.***
- Existing G.R. plus tuition more than adequate to support independent FAU medical education program.
- Existing FAU facilities (Schmidt Biomedical Science Center & Satellite FAU Research Park Facility) are adequate to house the program.
- G.R. per student when the program reaches full enrollment of 246 students = $51,515. Less than FIU COM and UCF COM at comparable enrollment levels (FIU = $85,071/282 students; UCF= $65,350/280 students).

Economic Impact:

- Independent FAU medical education program would have roughly **six times** the economic, employment, government revenue and research impact of a regional medical campus.
- Within 5 years, the overall economic impact of the FAU-Scripps Research Institute Partnership to the State of Florida will be $144.8 million – a ten fold return on the state's $14.4. M investment in the independent FAU medical education program.

MD Program Highlights:

- Inaugural class starts in 2011; total enrollment of 246 reached by 2014
- MD degree program built on strengths of the existing FAU regional medical campus curriculum
- Prominent dual MD/PhD degree option w/MD conferred by FAU; PhD conferred by Scripps

- 15% of each medical class ultimately enrolled in MD/PhD program.
- MD/PhD program will help Florida meet the critical shortage of physician-scientists required to: (a) grow the state's biomedical science research and business/industrial sectors; and, (b) assure an adequate number physician-scientist faculty for Florida's medical schools.

- Continued Expansion of New Residency Programs:
  - New programs in internal medicine, surgery, pediatrics and ob/gyn with total positions of
  - Additional residencies and fellowships in surgical and medical specialties, including geriatrics, emergency medicine, family practice, etc.
  - Goal of 250-300 new residency positions affiliated with/sponsored by FAU

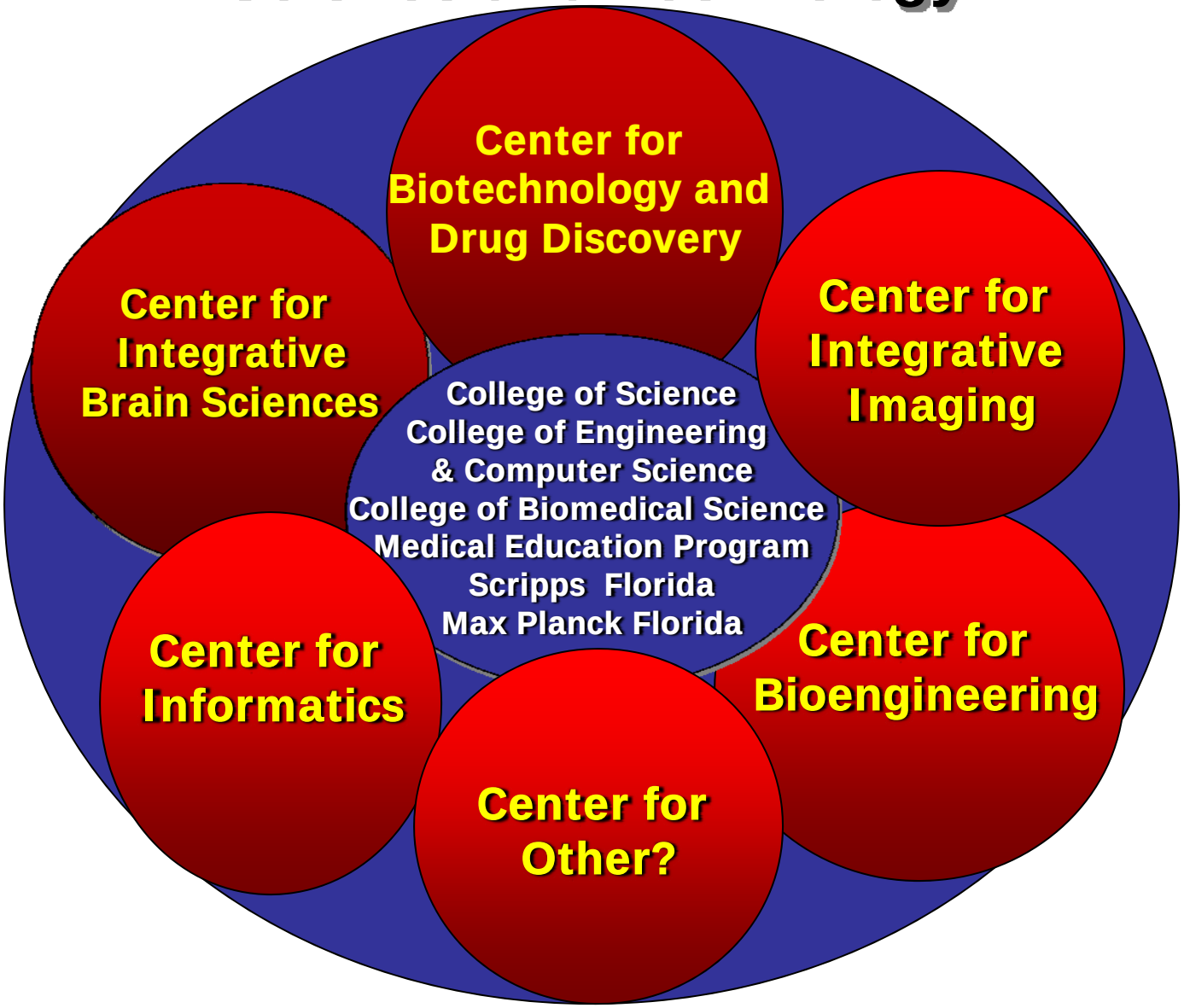
Strategic Bioscience Research Partnership Between FAU, Scripps and Max Planck Institute;

- Collaborative, interdisciplinary and integrated research programs in biomedical science, bioinformatics, bioengineering and biotechnology.
- Research component of the Institute will be a world-class center for innovation, and scientific discovery, sparking economic development for the region and state
- Institute's integrative approach to discovery will foster close collaborations with industry and facilitate development of innovative diagnostics and therapeutics. These discoveries will lead to more efficient and cost-effective delivery of healthcare services to the public, and will have a transforming impact on the practice of medicine.
- Collaborative research initiatives will provide strong base for increased federal funding opportunities in basic, emerging, and translational research programs for FAU.
- Interdisciplinary research enterprise will enable FAU to attract the highest quality graduate and postdoctoral students and build FAU's reputation as a premier destination for training in the biomedical sciences.

LCME Accreditation of Independent FAU Medical Education Program:

- The FAU regional medical education program underwent comprehensive scrutiny by the LCME during February, 2009 accreditation review of the UM School of Medicine.
- 10/09 LCME accreditation team site visitor's report found the FAU regional medical campus to be "well-conceived and implemented" and cited the FAU regional medical program as one of the five strengths of the UM medical school.
  - These recent, highly favorable, LCME findings related to the FAU regional medical campus program suggest that the LCME's response to FAU's application for accreditation of an independent FAU medical education program will also be favorable.

Institute for Biomedical Science and Technology



1 Requested Action by Board Of Governors

Overview of Current FAU-UM Regional Medical Campus Program

3 Strategic FAU-Scripps Research Institute Partnership .....Technology

4 Continued Expansion of New Residency Programs

5 Economic Impact of Independent FAU Medical Education Program....Campus

6 Budget

7 Proposed Timeline for Approval and Accreditation Process

8 Transition from UM Partnership

9 Consultant's Report

10 **APPENDIX 1:** Tripp-Umbach Economic Impact Study UMMSM at FAU/ **A :** FAU & Scripps

11 **APPENDIX 2:** Budget

12 **APPENDIX 3:** Consultant's Report by Dr. Michael Whitcomb

13

14

15

TAB I

Requested Action By Board of Governors

I. Requested Action By BOG at March 17-18, 2010 Meeting

- Authorization for FAU to offer the M.D. degree

- Authorization to collect medical tuition at the average SUS rate
  - 2009-10 SUS average tuition = $21,752 plus fees
  - 2009-10 UM tuition approximately $30,000 plus fees

TAB II

Overview of Current FAU-UM Regional Medical Campus Program

II. Overview of Current FAU-UM Regional Medical Campus Program

- 128 students in years 1-3

- 45 FTE faculty (20 FAU basic science, 11 FAU clinical, 14 UM clinical)

- Housed in Schmidt Biomedical Science Center- facility built with private gift and state matching funds specifically for regional medical campus program and related biomedical science education and research infrastructure

- LCME accreditation status:
  - regional campus under UM medical school accreditation.
  - regional campus cited as 1 of 5 areas of strength in 10/09 LCME accreditation report findings
- Affiliation agreements with JFK Medical Center, Boca Raton Community Hospital, Bethesda Memorial Hospital to provide 3rd year clerkships

- Affiliated Residency Program:

  - First new internal medicine residency program opened in 2008 at JFK Medical Center and West Palm Beach VA Medical Center (UM sponsored)

Current Program Funding

- FAU regional medical program has been fully funded by Legislature at $14.4 M

- $12.673 M in G.R. supporting program after state budget cuts

- Tuition collected and retained by UM (at UM rate)

Status of UM-FAU Affiliation Agreement

- Currently operating under temporary "bridge" agreement that expires 6/30/10.

TAB III

Strategic FAU-Scripps Research Institute Partnership
to Create the
FAU-Scripps Institute for Biomedical Science and Technology

III. New Program; Strategic Partnership Between FAU and The Scripps Research Institute to Create FAU-Scripps Institute for Biomedical Science and Technology

Creation of Independent FAU Medical Education Program

- Inaugural class starts in 2011
- Total enrollment of 246 reached by 2014
- M.D. degree program built on strengths of the existing FAU regional medical campus curriculum:
  - ✓ The LCME accreditation team site visitor's report released in October, 2009 found the FAU regional medical campus curriculum to be "well-conceived and implemented" and cited the FAU regional medical program as one of the five strengths of the University of Miami Medical School.
  - ✓ The FAU regional campus curriculum has been recognized by the Association of American Medical Colleges (AAMC) for its innovation. In 2006-07, the Regional Medical Campus was among only 10 U.S. medical schools, including Vanderbilt and UCLA, to receive an AAMC grant to facilitate implementation of the curricular emphasis on comprehensive chronic disease management.
  - ✓ The first cohort of FAU regional medical campus students to sit for Part 1 of the United States Medical Licensing Examination (USMLE), which all students are required to take at the end of their second year of medical school, scored in the top 95th percentile of all U.S. medical students sitting for the exam.

Proposed MD/PhD Degree Option

- MD conferred by FAU; PhD conferred by Scripps Kellogg School of Science and Technology (Top 5 in the U.S.A. in Biology and Chemistry).

- Partnership with Scripps will enable FAU to attract the most competitive students.

- Accelerated program integrating MD and PhD curricula will enable qualified students to complete combined degree 1 year earlier than traditional MD/PhD program.

- The medical curriculum for those students entering the MD/PhD program will be modified as follows:

  - MD/PhD students will be organized into special learning communities that are mentored by both a clinical and basic science faculty member.

  - Case-based and problem-based learning for these students will have a greater emphasis on the scientific context of the diseases under discussion and students will be required to do a more extensive review of the applicable scientific literature.

- 15%- 30% of each medical class ultimately enrolled in MD/PhD program.

- MD/PhD program will help Florida meet the critical shortage of physician-scientists required to:

  - Grow the state's biomedical science research and business/industrial sectors; and,

  - Assure an adequate number physician-scientist faculty for Florida's medical schools.

- MD-only students will participate in enriched Basic Science offerings by Scripps faculty.

Creation of Strategic Bioscience Research Partnership Between FAU, The Scripps Research Institute and The Max Planck Institute

- Collaborative, interdisciplinary and integrated research programs in biomedical science, bioinformatics, bioengineering and biotechnology.

- FAU will relocate components of its Colleges of Science and Engineering to the FAU Jupiter campus where Scripps and Max Planck Institutes are located.

- The research component of the Institute will be a world-class center for innovation, sparking economic development for the region through scientific discovery.

- Collaborative research initiatives will provide a strong base for increased federal funding opportunities in basic, emerging, and translational research programs for FAU.

- Interdisciplinary research enterprise will enable FAU to attract the highest quality graduate and postdoctoral students and build FAU's reputation as a premier destination for training in the biomedical sciences.

- The Institute's integrative approach to discovery will foster close collaborations with industry and facilitate development of innovative diagnostics and therapeutics. These discoveries will lead to more efficient and cost-effective delivery of healthcare services to the public, and will have a transforming impact on the practice of medicine.

TAB IV.

Continued Expansion of New Residency Programs

IV. Continued Expansion of New Residency Programs

- New residency programs in internal medicine, surgery, pediatrics and obstetrics/gynecology sponsored by FAU as first priority.

- Potential for additional residencies and fellowships in medical and surgical specialties, emergency medicine, family practice, etc. opening thereafter.

- Goal of a minimum of approximately 200-300 new residency positions in the FAU service area.

- Anticipated that Boca Raton Community Hospital, JFK Medical Center, Holy Cross Hospital, Cleveland Clinic and other hospitals in the FAU service area will serve as GME affiliates.

Tab V.

Economic Impact of
Independent FAU Medical Education Program vs.
UM-FAU Regional Medical Campus

V. Economic Impact of Independent FAU Medical Education Program vs. UM-FAU Regional Medical Campus

- The firm of Tripp-Umbach was retained by FAU in spring, 2009 to perform an economic impact study. (See Appendix 1- TAB X and X-a for full report)

- Summary findings of 2009 Tripp-Umbach study:

  - The economic impact of the UM-FAU regional campus is comparable to other regional campuses around the country. As is typical, the FAU-UM regional medical campus does not have the economic and research impacts associated with the main campus of the UM medical school.

  - Overall, an independent FAU medical education program would have roughly **six times** the economic, employment, government revenue and research impact of a regional medical campus.

TAB VI.

Budget

VI. **Budget** (See Appendix 2 – TAB XI for budget detail)

- ***FAU will commit to operating its medical education program with no additional G.R.***

- Current G.R. and tuition revenue are more than sufficient to support the proposed FAU medical education program.

- Existing FAU facilities (Schmidt Biomedical Science Center & Satellite FAU Research Park Facility) are adequate to house the program.

- G.R. per student when the program reaches full enrollment of 246 students (assumes a minimum of 10 students in the MD/Ph.D program) = $51,515.

TAB VII.

Proposed Timeline for Approval and Accreditation Process

VII. Proposed Timeline for Approval and Accreditation Process

01/20/2010	FAU Board of Trustees: (a) abrogates FAU-UM affiliation agreement; (b) approves development of BOG application for M.D. degree granting and tuition authority
Jan-Feb 2010	Internal FAU approvals FAU Board of Trustees approves BOG application
	Application materials submitted to BOG
3/18/2010	Board of Governor's approves FAU's application
Mar - May 2010	FAU submits application for preliminary accreditation to LCME
6/2010	Legislature authorizes and Governor approves legislation creating of FAU medical education program

TAB VIII.

Transition From UM Partnership

VIII. Transition From UM Partnership

- FAU will cooperate with UM to ensure that UM students enrolled in the FAU regional campus program have an orderly transition into UM Miami campus program.

- UM students may continue to be enrolled in the regional campus program during the 2010-11 academic year if this is necessary to minimize disruption to their academic progress.

- The charter class of proposed independent FAU medical education program would begin, after LCME preliminary accreditation.

TAB IX.

Consultant's Report

IX. **Consultant's Report** (See Appendix 3 – TAB XII for full consultants report)

- Dr. Michael Whitcomb, formerly Senior Vice President for Medical Education, Association of American Medical Colleges, and a national expert on US regional medical campuses, was engaged by FAU to evaluate the feasibility of transitioning the UM-FAU regional campus program into an independent FAU medical education program.

- Dr. Whitcomb concluded that FAU is following the typical pattern for US four year regional medical campuses, which naturally evolve into independent medical education programs as they develop their own curricula, governance structures, research initiatives, etc. that progressively create a unique identity for the regional campus that is distinct from the parent medical school.

- Consistent with the findings of the Tripp-Umbach Economic Impact Study, Dr. Whitcomb's study concludes that an independent FAU medical education program will have a far greater positive impact on the evolution of FAU as a comprehensive, research-intensive university than will the continued existence of the current UM-FAU regional medical campus relationship.

Appendix 1

Tripp-Umbach Economic Impact Study

F L O R I D A A T L A N T I C
U N I V E R S I T Y

July 11, 2009

ECONOMIC IMPACT
UNIVERSITY OF MIAMI MILLER SCHOOL OF MEDICINE
AT FLORIDA ATLANTIC UNIVERSITY

CURRENT, FUTURE AND POTENTIAL IMPACT



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Table of Contents

Chapter 1: Introduction 2

- Project Overview 2
- Project Objectives 2
- Project Methodology 3

Chapter 2: Economic Impact of UMMSM at FAU 4

- Overview 4
- Economic Impact 6
- Employment Impact 8
- Government Revenue Impact 10
- Conclusion 11

Chapter 3: Impact of an Independent FAU School of Medicine 12

- Overview 12
- Potential Economic Impact 12
- Conclusions 17

Chapter 4: Impact of Bioscience Industry in Florida 18

- Introduction 18
- Key Findings 19
- Implications for FAU 19

Glossary of Terms 20

Linear Cash Flow Methodology 21

2007 Analysis of the Bioscience Industry in Florida 24

Chapter 1: Introduction

Project Overview

In March 2009, Florida Atlantic University retained the services of Pittsburgh-based research firm Tripp Umbach to analyze the current, future and potential impact of the University of Miami Miller School of Medicine at Florida Atlantic University (UMMSM at FAU). Tripp Umbach developed customized models that calculate the economic, employment and government revenue impacts associated with the current operations of UMMSM at FAU and its future impact as a mature regional campus. Tripp Umbach also developed a scenario which examines the potential of an FAU owned and operated medical school not affiliated with the University of Miami.

Project Objectives

FAU required a program of economic impact research that:

- Profiled the economic benefits associated with the operations and partnerships of the current (2008) UMMSM at FAU's operations on the state of Florida and the Southeast Florida region where FAU has operations and relationships.
- Measured the prospective economic, employment, and government revenue impacts of an expanded four-year FAU regional campus in 2015 and 2025 under various future scenarios.
- Quantified the economic and social value that an FAU expanded four-year program will have on the state of Florida in terms of community health improvement, research and education, and placement of future healthcare workers.
- Quantified the economic, employment, and government revenue impacts associated with hospital partnerships, graduate medical education, and the clinical enterprises in the region.







Project Methodology

To calculate the economic impact of UMMSM at FAU on the state of Florida and Southeast Florida, Tripp Umbach used a methodology derived from the original set of research tools and techniques developed for the American Council on Education (ACE). The ACE-based methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area (described in *Linear Cash Flow Methodology* in the appendix). Tripp Umbach also obtained raw and secondary data from Florida Atlantic University, hereafter noted as 2008 data.

Chapter 2: Economic Impact of UMMSM at FAU

Overview

In 2004, Florida Atlantic University partnered with the University of Miami's Leonard Miller School of Medicine to establish a regional campus of the Miller School of Medicine at Florida Atlantic University's Boca Raton campus. This unique public/private partnership enables students to complete their medical education in Boca Raton, FL. The University of Miami Miller School of Medicine at Florida Atlantic University (UMMSM at FAU) is one of only ten medical schools in the United States to receive an Association of American Medical Colleges (AAMC) grant, supported by the Josiah Macy Foundation, to enhance medical students' and medical residents' ability to care for patients with chronic diseases.[1]







The regional campus at Florida Atlantic University is fully accredited under the accreditation granted to the University of Miami School of Medicine by the Liaison Committee on Medical Education (LCME), the accrediting body for all MD-granting medical schools in the United States and Canada. Enrollment at UMMSM at FAU is currently limited to 64 students per class when it reaches capacity; however, the school is currently enrolling 48 students per class.[2] Plans originally called for the construction of a new teaching hospital in coordination with Boca Raton Community Hospital on the UMMSM at FAU campus. However, following successive budgets deficits, the hospital delayed its participation indefinitely in 2007.[3][4][5][6] At the time of writing this report, it is unclear what the relationship with Boca Raton Community Hospital will be in the future.

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[1] Florida Atlantic University: University Communications and Marketing (2006-06-20). University of Miami Miller School of Medicine at FAU Receives Grant to Enhance Patient Care with Chronic Diseases Press release.

[2] "UMMSM at FAU Questions". Florida Atlantic University. Retrieved on April 6, 2009.

[3] "UMSM@FAU". The University of Miami. Retrieved on April 6, 2009.

[4] "UMMSM at FAU Questions". Florida Atlantic University. Retrieved on April 6, 2009.

[5] PNN Online (2006-01-30). Boca Raton Community Hospital Receives $75 Million. Press release. Retrieved on 2007-10-12.

[6] Pensa, Patty (2008-01-05). "Boca Raton Community Hospital loses $28 million, replaces CEO: Plan to build teaching facility set back". South Florida Sun-Sentinel.

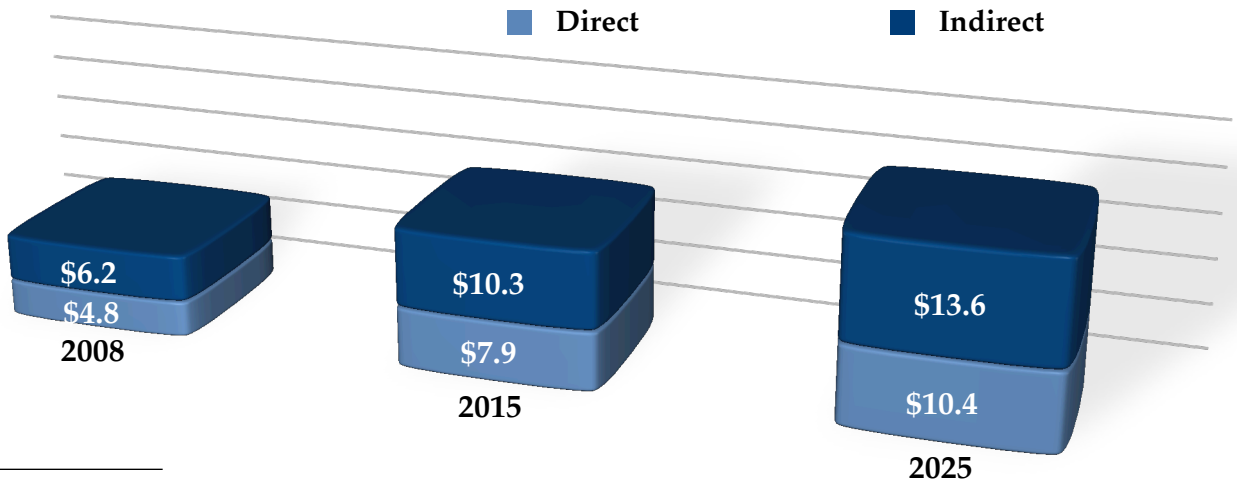
The goal of this portion of the study is to quantify the economic impact of UMMSM at FAU upon the state of Florida and Southeast Florida. For the purposes of this analysis, Southeast Florida is defined as Palm Beach, Broward, Martin, Indian River, Okeechobee and St. Lucie counties. The impact numbers presented reflect only the impact of the regional campus and do not include numbers for staff, faculty and other operational impacts employed by the main campus of the school of medicine based in Miami. It is also noteworthy that currently there are only very modest research revenues and no clinical practice revenue associated with the regional campus.

Economic Impact

In 2008, the business volume operations of UMMSM at FAU generated more than $11.0 million of business volume impact[7] annually on the state of Florida. This impact can be divided into two parts: direct and indirect. In 2008, the direct impact[8] of UMMSM at FAU was $6.2 million and stems from the spending by the medical school for capital improvements, goods and services, the spending of staff and faculty, the spending of medical trainees, and the spending (external to the institution) of visitors to the proposed school. The indirect impact[9] of UMMSM at FAU in 2008 was $4.8 million and is derived from the direct, first-round expenditures, which will be received as income by businesses and individuals in the state and re-circulated through the economy in successive rounds of re-spending. The end result is a multiplied economic impact that is a linear result of the school's presence and its spending patterns.

In 2015, Tripp Umbach assumes that budget cuts will not be restored, necessitating that UMMSM at FAU enrollment remain at 192 (48 students per class). The models assume modest increases in staff and faculty. Based upon this assumption, by 2015 the total impact is projected to jump to $18.2 million. In 2025, Tripp Umbach assumes that the total class size at UMMSM at FAU will be 256 students (64 students per class), which is the original class size proposed in the agreement between FAU and the University of Miami Miller School of Medicine. Based upon this assumption, the economic impact of UMMSM at FAU in 2025 is expected to equal over $24.0 million (see Figure 1).

Figure 1: Current and Projected Impact of UMMSM at FAU on the State of Florida (in millions)



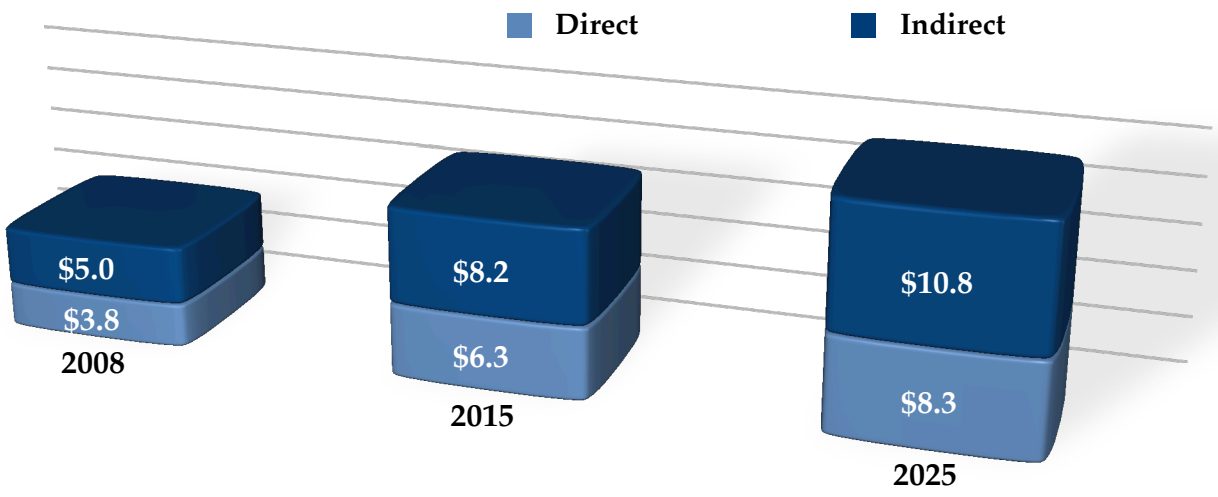
[7] Business Volume Impact is the total economic impact of an institution includes the direct and indirect economic impact generated in the economy as a result of the direct impact.

[8] Direct economic impacts represent the impact for the expenditures and/or production values specified as direct final demand changes related to University of Miami Miller School of Medicine at Florida Atlantic University. Direct effects are economic impacts directly attributable to the operations and presence of the UMMSM at FAU.

[9] Indirect economic impact represents the iteration of industries purchasing from industries resulting from the direct impact of UMMSM at FAU. Indirect effects are business-to-business economic impacts.

The economic impact of UMMSM at FAU on Southeast Florida[10] is expected to be $8.8 million (direct and indirect) in 2008. The total impact on Southeast Florida is estimated to be over $14.5 million in 2015 and increase to $19.1 million in 2025 (see Figure 2).

Figure 2: Current and Projected Impact of UMMSM at FAU on Southeast Florida (in millions)



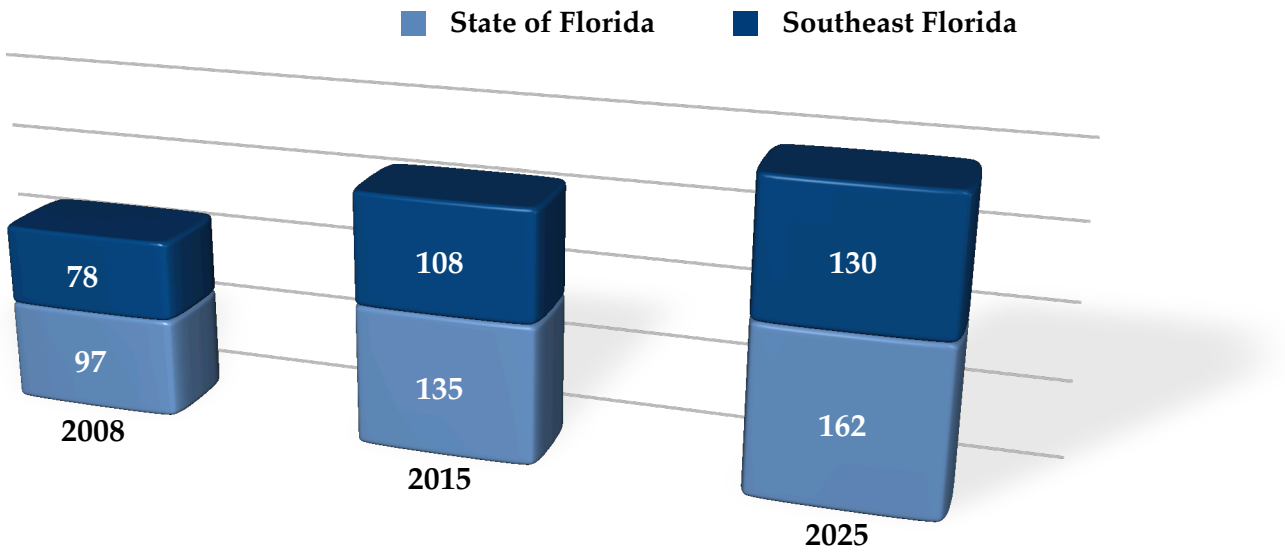
[10] Southeast Florida is defined as Palm Beach, Broward, Martin, Indian River, Okeechobee and St. Lucie counties.

Employment Impact

The employment impact of UMMSM at FAU is comprised of direct and indirect impacts. Direct employment impact[11] represents full-time equivalent (FTE) positions created directly by the school. The positions included in the direct employment for this analysis include faculty, administration and support staff who are employed because of the operations of UMMSM at FAU. Indirect employment impact[12] represents full-time equivalent positions created as a result of the school's spending and the spending of faculty, staff, students and visitors in the defined study geography.

In 2008, the total impact of employment of UMMSM at FAU on the state of Florida was 97 direct and indirect jobs. The impact of employment generated by UMMSM at FAU in 2015 is projected to be 135 jobs. In 2025, the total employment impact will be over 162 new direct and indirect jobs in the state of Florida (see Figure 3 and Table 1).

Figure 3: Overall Employment Impact of UMSSM at FAU (Direct and Indirect FTEs)



[11] Direct Employment is the total number of employees at UMMSM at FAU based on Full-Time Equivalents (FTEs).

[12] Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, creating an employment multiplier.

During 2008, UMMSM at FAU generated 78 new direct and indirect jobs for the Southeast Florida economy. Job creation is expected to reach 108 jobs in 2015 and 130 jobs in 2025 (see Figure 3 and Table 1).

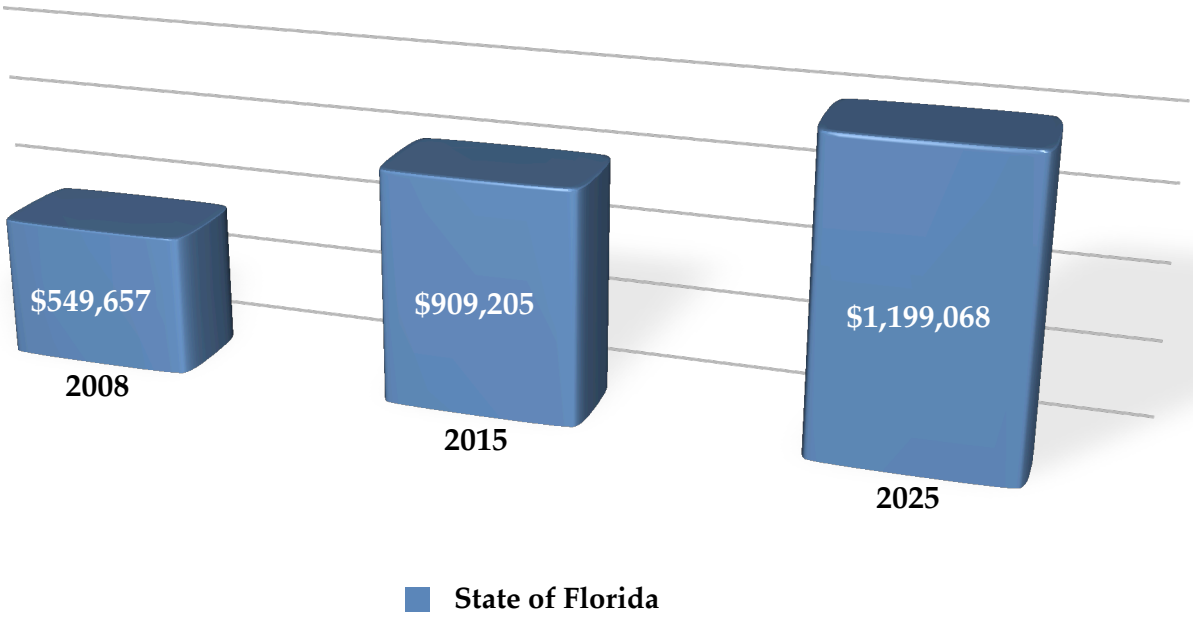
TABLE 1: EMPLOYMENT IMPACT (IN FTES)			
STATE OF FLORIDA	**CURRENT (2008)**	**PROJECTED (2015)**	**PROJECTED (2025)**
Total Employment	97	135	162
Direct Employment	54	75	90
Indirect Employment	43	60	72
SOUTHEAST FLORIDA	**CURRENT (2008)**	**PROJECTED (2015)**	**PROJECTED (2025)**
Total Employment	78	108	130
Direct Employment	43	60	72
Indirect Employment	35	48	58

Government Revenue Impact

A major misconception held by business leaders, elected officials and the general public is that medical colleges do not generate government revenue. Medical schools are significant generators of state tax revenue. The academic health care industry continues to demonstrate an organizational capability to produce medical school graduates and generate jobs for the region, which in turn will produce more tax dollars for state and local governments. While medical schools are not-for-profit institutions, the state still receives substantial revenues as a result of both the direct and indirect influence of these institutions.

In order to quantify the financial returns to the state of Florida, the models include a government revenue impact component (direct[13] and indirect[14]), which calculates the total state tax revenue generated by UMMSM at FAU. In 2008, UMMSM at FAU generated $549,657 in tax revenue for the state of Florida. Tripp Umbach projects that the state will receive $909,205 in state tax revenues in 2015, and by 2025 annual tax revenue will reach nearly $1.2 million (see Figure 4).

Figure 4: Overall Government Revenue Impact on the State of Florida (Direct and Indirect)



[13] Direct government revenue is the the direct tax payments made by an institution to a unit of government.

[14] Indirect government is revenue that is collected by governmental units in addition to those paid direct by an institution, it includes taxes paid directly by employees of the institution, visitors to the institution, and vendors who sell products to the institution.

UMMSM at FAU Graduates who Practice in Florida

The impact of a medical school goes far beyond its day-to-day operational impacts. For every doctor that remains in the state of Florida to practice medicine after his or her residency training, an additional $1.3 million dollars will be generated in the statewide economy. This impact is in addition to the operational impacts of UMMSM at FAU.

Conclusion

The impact of UMMSM at FAU is comparable to other regional campuses around the country and, because it is a regional campus, the impact is far less than that of an independent medical school. The full economic impact of this regional campus is not captured in the above analysis because the revenues collected and generated by the University of Miami and other employees (physicians and staff) at the main campus are not accounted for in this study.

Chapter 3: Impact of an Independent FAU School of Medicine

Overview

In this chapter, Tripp Umbach will evaluate the potential economic impact of FAU establishing a new medical school which operates independently of the University of Miami. Tripp Umbach will show the economic impact of an independent medical school with a class size of 64.





Potential Economic Impact

As previously noted in the first section of this report, the economic impact of a medical school is far greater than that of its operational impacts. It is quite typical that regional campuses do not have the economic and research impacts associated with the parent medical school. Thus, the economic numbers shown previously for UMMSM at FAU are consistent with other regional campuses across the country for which Tripp Umbach has completed analysis.

In the past 5 years, the AAMC's call for class size expansion or new medical school start ups to address the physician workforce shortage has resulted in a nationwide response. In that time, five new medical schools have been accredited, with two new medical schools provisionally accredited in the state of Florida, namely the University of Central Florida and Florida International University. Approximately 15 other programs nationally are currently under consideration.[15]

The development of medical education in a region results in a significant infusion of economic growth to the community. Medical education means business. Medical education attracts dollars to the region and also is a foundation for the training of needed primary care physicians and specialists in medically underserved regions of the United States. While medical education already has a presence in the Boca

[15] Tripp Umbach has been involved in completing feasibility studies for 14 new or expanding medical schools.

Raton/Southeast Florida region, it could be argued that the full potential of medical education is not being realized in its current form or arrangement.

Class Size of 64 (256 students)

Based upon Tripp Umbach's national experience, it is important to note that the proposed class size of 64 would be considered small in comparison to other new medical schools starting around the country. Faculty to student ratios of peer schools of this size, along with all Florida schools, are presented in the table below (see Table 2).

TABLE 2: FLORIDA MEDICAL SCHOOLS AND POTENTIAL PEERS FOR AN INDEPENDENT FAU SCHOOL OF MEDICINE

Institution		Total Medical Students	Full Time Faculty (Including Instructors)	Ratio Faculty to Students	Full Time Basic Science Faculty	Year 1 + Year 2 Students	Ratio Faculty to Students	Full Time Clinical Science Faculty	Year 3 + Year 4 Students	Ratio Faculty to Students
FLORIDA MEDICAL SCHOOLS										
Univ of Miami	Pvt	681	1283	1.88	120	341	0.35	1163	341	3.41
Univ of Florida	Pub	509	1287	2.53	166	255	0.65	1121	255	4.40
South Florida	Pub	480	666	1.39	167	240	0.70	499	240	2.08
Florida State	Pub	416	112	0.27	41	208	0.20	71	208	0.34
POTENTIAL PEER MEDICAL SCHOOLS (60-70 students per class)										
Ponce SOM	Pvt	279	196	0.70	36	140	0.26	160	140	1.15
South Alabama	Pub	279	239	0.86	67	140	0.48	172	140	1.23
Caribe	Pvt	258	121	0.47	31	129	0.24	90	129	0.70
Hawaii-Burns	Pub	254	258	1.02	90	127	0.71	168	127	1.32
Marshall Edwards	Pub	246	221	0.90	45	123	0.37	176	123	1.43

TABLE 2: FLORIDA MEDICAL SCHOOLS AND POTENTIAL PEERS FOR AN INDEPENDENT FAU SCHOOL OF MEDICINE										
Institution		Total Medical Students	Full Time Faculty (Including Instructors)	Ratio Faculty to Students	Full Time Basic Science Faculty	Year 1 + Year 2 Students	Ratio Faculty to Students	Full Time Clinical Science Faculty	Year 3 + Year 4 Students	Ratio Faculty to Students
North Dakota	Pub	245	138	0.56	66	123	0.54	72	123	0.59
Mercer	Pvt	243	216	0.89	37	122	0.30	179	122	1.47
Eastern Tennessee	Pub	242	195	0.81	50	121	0.41	145	121	1.20
All Schools (Average)		559	1020	1.82	126	280	0.45	895	280	3.20

It is also noteworthy that the average class size of new medical schools is between 80 - 120 students per class (320 to 480 students total, respectively). This range of class size is most common because these student numbers have proven to be the most cost-effective and financially viable when beginning a new medical school.

Based upon Tripp Umbach's economic impact database for new medical schools, the following can be stated about a medical school with 64 students per class (256 students total):

- On average, the overall economic impact of a medical school of this size is **$52.0 million** (direct and indirect).
- On average, the overall employment impact of a medical school is **496 FTEs** (direct and indirect).
- On average, the overall government revenue impact of a medical school of this size is **$2.6 million** (direct and indirect).
- The average amount of research revenue for a medical school is **$8.0 million.**
- The average clinical practice plan revenue generated is **$2.0 million**.

In order to show a range of potential impact of physicians who stay in the state of Florida to practice medicine after medical school and residency training, Tripp Umbach developed two scenarios to look at the impact of training and retaining more physicians in the state of Florida.

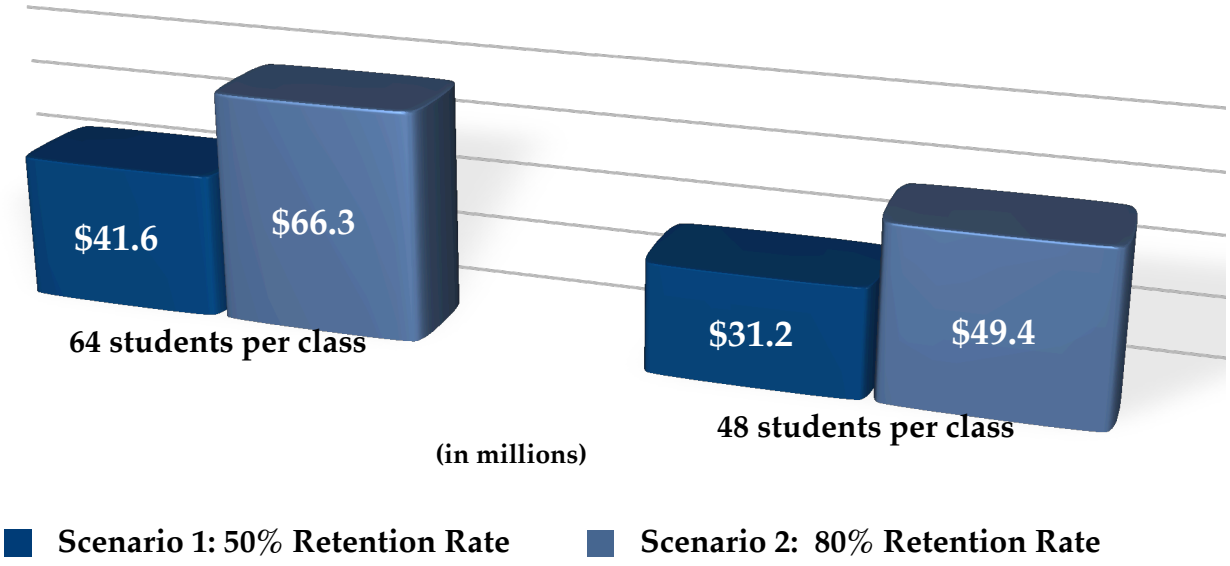
Scenario 1: Assumption of 50% retention rate of medical students who graduate from a Florida-based school regardless of where the student completes residency training.

In Scenario 1, there is no assumption that graduates from Florida-based medical schools will remain in the state of Florida to complete their residency training. Based upon AAMC data, it is assumed that 50% of all medical students who graduate from a Florida-based medical school will practice in the state of Florida regardless of where they pursued their residency training. If an FAU-based medical school is able to insure that 50% of new doctors in a class size of 64 (n=32 practicing physicians) stay in the state of Florida every year, the newly created economic impact would be $41.6 million per class. If the class size is reduced to 48 students per class (n=24 practicing physicians) then the economic impact would be $31.2 million per class.

Scenario 2: Assumption of 80% retention rate of medical students who graduate from a Florida-based school if the student also completes residency training in Florida.

Scenario 2 assumes that graduates of Florida-based medical schools will also remain in the state of Florida to complete their residency training. Based upon data from the AAMC, if Florida medical students also remain in the state of Florida to complete their residency training, 80% of these students will practice in Florida. Assuming that 80% of new doctors in a class size of 64 (n=51 practicing physicians) stay in the state of Florida every year, the newly created economic impact would be $66.3 million per class. If the class size is reduced to 48 students per class (n=38 practicing physicians) then the economic impact would be $49.4 million per class.

Figure 5: Per Class Impact of Medical Students who Practice in Florida after Residency Training



It is critical to note that the aforementioned economic benefits are not dependent upon FAU being an independent medical school. These impacts would occur in the economy whether FAU remains a part of the University of Miami Miller School of Medicine or chooses to become an independent medical school.

Table 3 below illustrates the projected impact of UMMSM at FAU as a regional campus with 48 students per class, no research revenue and no faculty practice plan revenue, compared to the scenario of an independent FAU medical school with 64 students (see Table 3).

TABLE 3: COMPARISON OF IMPACT BY SCENARIO		
	PROJECTED IMPACT OF REGIONAL CAMPUS (48 STUDENTS PER CLASS)	POTENTIAL IMPACT OF AN INDEPENDENT SCHOOL (64 STUDENTS PER CLASS)
Operational Impact	$18.2 million	$52.0 million
Overall Employment Impact	97 FTES	496 FTEs
Government Revenue Impact	$909,205	$2.6 million
Annual Research Revenue	$0.0	$8.0 million

TABLE 3: COMPARISON OF IMPACT BY SCENARIO		
	PROJECTED IMPACT OF REGIONAL CAMPUS (48 STUDENTS PER CLASS)	POTENTIAL IMPACT OF AN INDEPENDENT SCHOOL (64 STUDENTS PER CLASS)
Faculty Practice Plan Revenue	$0.0	$2.0 million
Scenario 1: Impact of Physicians Practicing in State of Florida (50% retention rate)	$31.2 million (24 physicians)	$41.6 million (32 physicians)
Scenario 2: Impact of Physicians Practicing in State of Florida (80% retention rate)	$49.4 million (38 physicians)	$66.3 million (51 physicians)

Conclusions

Overall, the potential impact of an independent FAU medical school would have roughly six times the economic, employment, government revenue and research impact than a regional campus. However, the cost and effort required to start a new medical school should not be underestimated. While it is clear that the benefits could be greater for FAU, and ultimately Southeast Florida and the state of Florida, if more physicians entered into the workforce as a result of a larger, independent medical school, starting a new medical school would need to be thoroughly investigated and evaluated. In addition, it must be stressed that Tripp Umbach's previous research in the states of Georgia, Pennsylvania, California, Arizona and Florida has shown that the state of Florida will achieve a significant return on investment for a new medical school, provided that the school adds and retains physicians in the regional and statewide workforce.

Chapter 4: Impact of Bioscience Industry in Florida

Introduction

Florida has focused energy, time, and resources to establish the state as a worldwide leader in the biosciences. Organizations, businesses, research institutions and industry focused leadership partner to accelerate and build on the bioscience foundation already established in Florida. The bioscience sector generally benefits from a strong background of scientific research and development, which Florida achieves through renowned universities, hospitals, and targeted areas of biotechnology, pharmaceuticals and medical technologies.

Florida benefits from a sustainable bioscience industry in the form of innovation, technology, business development and increased employment in a global economy. Biosciences generate high-paying jobs and revenue sources for Florida and its six geographic regions (as defined by the bioscience industry organization, BioFlorida), which in turn ripples through the economy. Specific bioscience initiatives in Florida relate to capital formation, public policy, workforce development, education and commercialization of research.

In this report, Tripp Umbach quantified the impact that the bioscience industry provides to Florida, specifically the overall economic output and employment impact of bioscience.







Key Findings

Florida's bioscience industry is comprised of three components: Healthcare and Providers, Academic Medicine and the Commercial Bioscience industries. Florida's bioscience industry has an overall economic impact of more than **$166 billion** on the state.

Florida's bioscience industry accounts for almost **1.43 million** full-time equivalent positions (FTEs) in the state. Approximately 1 in 10 Florida residents is employed directly or indirectly by Florida's bioscience industry.

The commercial bioscience industry in Florida has an overall operational impact of **$36.9 billion**.

The commercial bioscience industry provides over **68,500** high paying full-time equivalent (FTEs) jobs directly to Florida's economy. In addition, the commercial bioscience industry supports over **110,500 FTEs** the indirect and induced FTEs in the State of Florida.

The full analysis is available in an Appendix entitled 2007 Analysis of the Bioscience Industry in Florida at the end of this report.

Implications for FAU

There exists great potential for the current school of medicine or an independent FAU school of medicine to further tap into this growing sector of the economy and increase the impact of research and research commercialization at FAU. The current positioning of the medical school within the College of Biomedical Sciences is advantageous for this research. Throughout the country, there are strong examples of an academic health center serving as a catalyst for research and economic growth in the bioscience field. An example of an academic health center campus still in its fledgling development is the University of Arizona College of Medicine Phoenix Biomedical Campus. This campus is a partnership between the College of Medicine, Translational Genomics Research Institute (TGen), Arizona State University and other research partners. This campus has shown great promise in becoming a center of research and education.

Tripp Umbach estimates that for every $1.00 of economic impact of an independent medical school, a total of $8.00 is generated within the biomedical industry cluster. Therefore, an independent medical school at FAU would generate $500 million in economic impact for the service region over the next 20 years.

Glossary of Terms

A) Southeast Florida

Includes Palm Beach, Broward, Martin, Indian River, Okeechobee and St. Lucie counties.

B) Total Economic Impact

The total economic impact of an institution includes the direct, indirect and induced economic impact generated in the economy as a result of the direct impact.

C) Direct Economic Impact

Direct economic impacts represent the impact for the expenditures and/or production values specified as direct final demand changes related to University of Miami Miller School of Medicine at Florida Atlantic University. Direct effects are economic impacts directly attributable to the operations and presence of the UMMSM at FAU.

D) Indirect Economic Impact

Indirect economic impact represents the iteration of industries purchasing from industries resulting from the direct impact of UMMSM at FAU. Indirect effects are business-to-business economic impacts.

E) Total State Business Volume

Total sales receipts generated within a given geographic area (State of Florida). Business volume includes wholesale, retail, service sector spending as well as value added in the manufacturing process.

F) Multiplier Effect

The multiplier effect is the additional economic impact created as a result of the institution's direct economic impact. (Indirect and Induced).

G) Direct Government Revenue

Direct tax payments made by an institution to a unit of government.

H) Indirect Government Revenue

Government revenue that is collected by governmental units in addition to those paid direct by an institution, including taxes paid directly by employees of the institution, visitors to the institution, and vendors who sell products to the institution.

I) Direct Employment

Total Employees based on Full-Time Equivalents (FTEs).

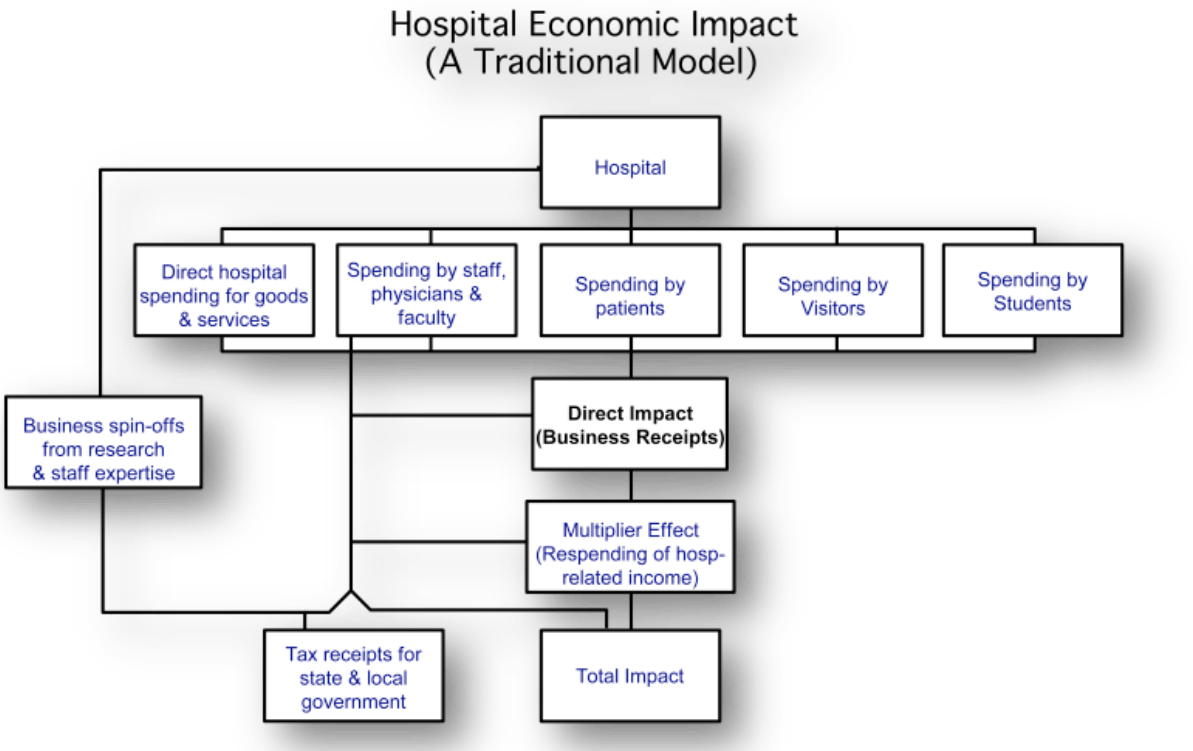
J) Indirect Employment

Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, creating an employment multiplier.

Linear Cash Flow Methodology

The methodology employed in the economic impact section of this report was derived from an original set of research tools and techniques developed for the American Council on Education (ACE). The ACE-based methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area.

In 1996, Tripp Umbach began a consulting relationship with the Association of American Medical Colleges (AAMC) and completed the first national study showing the economic impact of academic medical centers. For this study, the Tripp Umbach research team felt it important to distinguish the economic impact of the institutions that are attributable to funds brought into the state from out-of-state sources. The application of this "fresh dollar" model provides a first-line measure of the initial direct expansion in the state economy caused by the academic health centers. The final model concept evolved into a hybrid model including a fresh-dollar approach feeding into a traditional model which tracks hospital in-state spending. Thus the final model used for this research (see figure below) measures funds brought into the state together with the ultimate flow of these funds through the Florida economy and the effect on economic expansion, job growth and enterprise development. The final methodology closely matches the impact study methodology recommended for individual medical schools and teaching hospitals by AAMC.

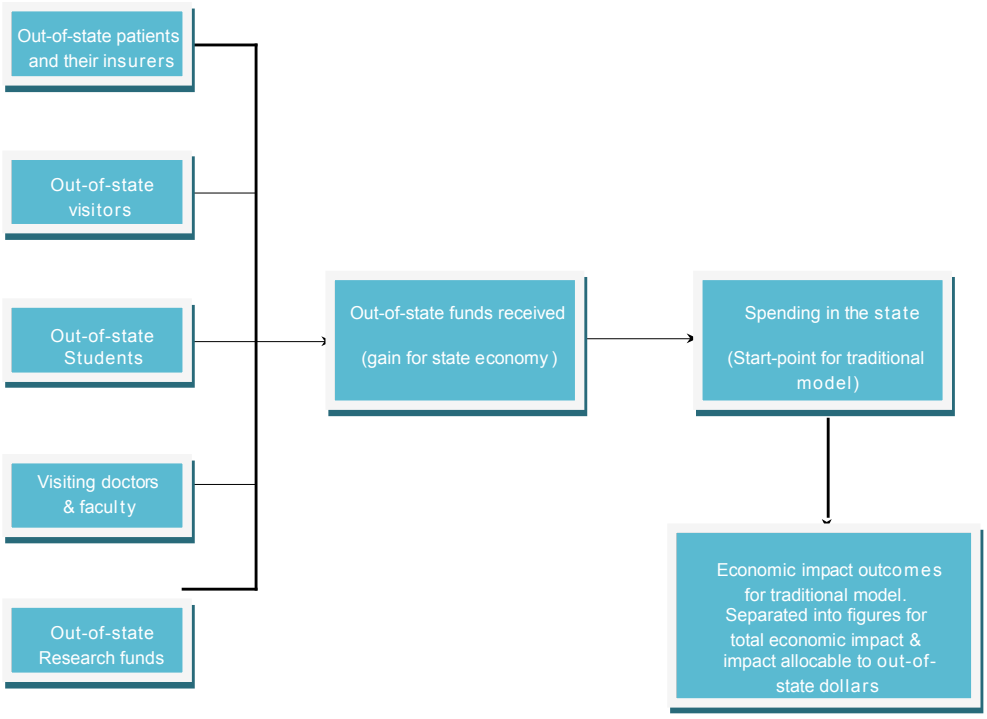


Based on previous economic impact studies performed for academic health centers in Pennsylvania and Virginia, Tripp Umbach recommended that the traditional model of economic impact for hospitals (see Figure above), based on the ACE model, be modified for the purposes of this research.

The "traditional" model of hospital economic impact provides a good measure of the impact of hospital expenditures and their flow within an economy. However, the model does not account for the origination of hospital revenues, and thus counts the spending of revenues received by the hospital from in-state sources. The traditional model counts some of the spending of dollars that already existed in the Florida economy.

The application of this "fresh dollar" model provides a first-line measure of the initial direct expansion in the state economy caused by the UMMSM at FAU. The final model concept evolved into a hybrid model including a fresh-dollar approach feeding into a traditional model which tracks in-state spending. Thus the final model used for this research measures funds brought into the state together with the ultimate flow of these funds through the Florida economy and the effect on economic expansion, job growth and enterprise development (see Figure below). The final methodology closely

matches the impact study methodology recommended for individual medical schools by the Association of American Medical Colleges (AAMC).



Tripp Umbach researchers worked closely with representatives from Florida Atlantic University to acquire the primary data utilized in this study.

2007 Analysis of the Bioscience Industry in Florida

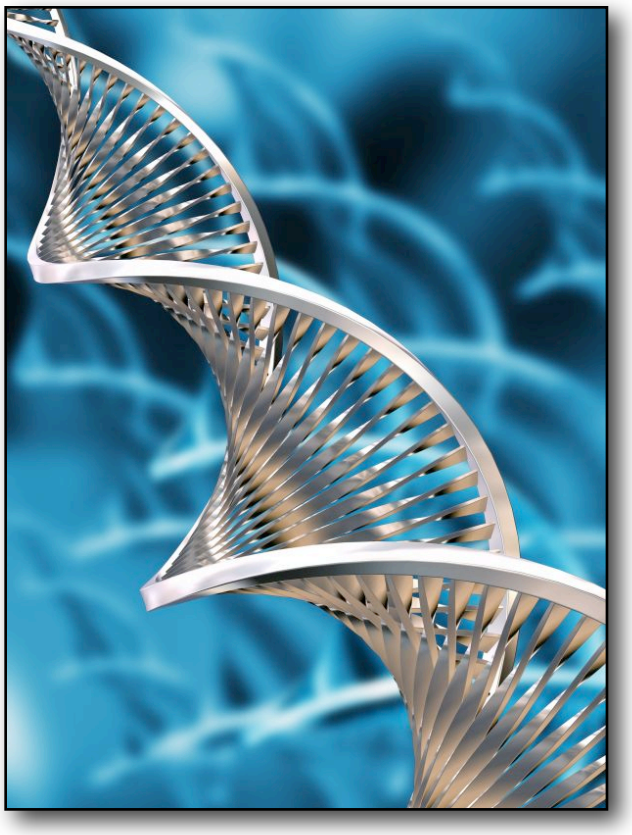
The following PowerPoint was prepared by Tripp Umbach in 2009 this year.

F L O R I D A A T L A N T I C
U N I V E R S I T Y

November 8, 2009

ECONOMIC IMPACT STUDY
FLORIDA ATLANTIC UNIVERSITY AND
SCRIPPS RESEARCH INSTITUTE PARTNERSHIP

(BIOMEDICAL RESEARCH INSTITUTE, FAU MEDICAL SCHOOL, RESEARCH PARTNERSHIPS, COMMERCIALIZATION AND BUSINESS SPIN-OFFS)



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Table of Contents

Introduction 2

- Project Overview 2
- Project Objectives 2
- Project Methodology 2

Projected Impact of FAU and Scripps Research Institute Partnership 4

- Introduction 4
- Overview of FAU and Scripps Research Institute Partnership and Assumptions 5
- State of Florida Economic Impact 7
- State of Florida Employment Impact 10
- Government Revenue Impact 13
- Conclusion 14

Glossary of Terms 15

Linear Cash Flow Methodology 16

Introduction

Project Overview

In the Fall of 2009, Florida Atlantic University retained the services of Pittsburgh-based research firm Tripp Umbach to analyze the potential impact of the collaboration between FAU and Scripps Research Institute Partnership[1]. To accomplish this project, Tripp Umbach developed customized models that calculate the projected economic, employment and government revenue impacts associated with the proposed biomedical research institute, an independent FAU Medical School, additional research and industry partnerships and research commercialization and spin-offs.

Project Objectives

FAU required a program of economic impact research that:

- Measured the prospective economic, employment, and government revenue impacts of the proposed FAU and Scripps Research Institute Partnership in 2015, 2020 and 2025.
- Quantified the future economic, employment, and government revenue impacts associated with spin-off biomedical and commercial development in the Southeast Florida[2] region and State of Florida based on the Partnership.







Project Methodology

To calculate the potential economic impact of the FAU and Scripps Research Institute Partnership on the state of Florida and Southeast Florida, Tripp Umbach used a methodology derived from the original

[1] For the purposes of this report, the term "FAU and Scripps Research Institute Partnership" refers to the proposed biomedical research institute, an independent FAU Medical School, additional research and industry partnerships and research commercialization and spin-offs.

[2] For the purposes of this analysis, Southeast Florida is defined as Palm Beach, Broward, Martin, Indian River, Okeechobee and St. Lucie counties. It is noteworthy that these numbers are based on a series of assumptions and that a change in the assumptions could result in a change in the projected impact.

set of research tools and techniques developed for the American Council on Education (ACE). The ACE-based methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area (described in *Linear Cash Flow Methodology* in the appendix). Tripp Umbach also obtained primary and secondary data from Florida Atlantic University and Scripps Research Institute[3]. It is important to note that these numbers are preliminary estimates and based upon assumptions, further study is required as the final plan business plan for operations is developed.

[3] The economic impact data presented in this report and based on the experiences of four similar research institutes: TGen, The Institute for Systems Medicine, The Minnesota Biomedical Partnership, and IGNITE. These studies indicate that a research institute at maturity (five years) will have 200 employees and an economic impact from operations of $34.4 million annually.

Projected Impact of FAU and Scripps Research Institute Partnership

Introduction

Florida benefits from a sustainable bioscience industry in the form of innovation, technology, business development and increased employment in a global economy. Biosciences generate high-paying jobs and revenue sources for Florida and its six geographic regions (as defined by the bioscience industry organization, BioFlorida), which in turn ripples through the economy. Specific bioscience initiatives in Florida relate to capital formation, public policy, workforce development, education and commercialization of research.





According to a study completed by Tripp Umbach in 2007, Florida's bioscience industry is comprised of three components: Healthcare and Providers, Academic Medicine and the Commercial Bioscience industries[4].

- Florida's bioscience industry has an overall economic impact of more than **$166 billion** on the state.
- Florida's bioscience industry accounts for almost **1.43 million** full-time equivalent positions (FTEs) in the state. Approximately 1 in 10 Florida residents is employed directly or indirectly by Florida's bioscience industry.
- The commercial bioscience industry in Florida has an overall operational impact of **$36.9 billion**.
- The commercial bioscience industry provides over **68,500** high paying full-time equivalent (FTEs) jobs directly to Florida's economy. In addition, the commercial bioscience industry supports over **110,500 FTEs** indirect and induced in the State of Florida.

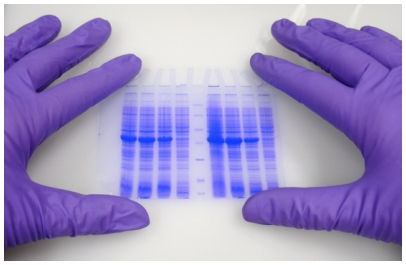
[4] In this report, Tripp Umbach quantified the impact that the bioscience industry provides to Florida, specifically the overall economic output and employment impact of bioscience.

Overview of FAU and Scripps Research Institute Partnership and Assumptions

Over the past five years, the State of Florida and County of Palm Beach have made substantial investments to create and sustain a vibrant bioscience industry. In keeping with this bold initiative and to facilitate its realization, FAU and The Scripps Research Institute[5] propose to undertake a transformation of their Jupiter campuses to create a Biomedical Science and Technology Institute. The Institute will have two strategic components: 1) a portfolio of collaborative, cutting-edge research programs with world-class graduate and postdoctoral training in the biosciences, and 2) an independent medical school with an enhanced science curriculum and a prominent MD/PhD degree option.







The economic impact presented in this study is based upon numerous assumptions and concepts developed by FAU and Scripps. These assumptions include:

- FAU will relocate components of its Colleges of Science and Biomedical Sciences to the Jupiter campus and develop a formal strategic partnership with Scripps Florida and Max Planck Florida. Initially, the Center for Molecular Biology and Biotechnology and the Center for Complex Systems and Brain Sciences will move to Jupiter and be expanded.
- New centers/programs in Bioinformatics, Bioengineering, and Bioimaging will be created jointly among the campus partners, creating a premiere destination for integrated biomedical research.
- Other research-based institutions in the region (e.g., Torrey Pines Institute for Molecular Studies) would be invited to form affiliations with the Biomedical Science and Technology Institute.
- The University of Florida / Florida Department of Health partnership that operates the A.G. Holley Hospital would be invited to co-locate it on the Jupiter campus and expand its research initiatives there, with a focus on emerging pathogens.

[5] Scripps Florida currently has approximately 350 employees and already has an large economic impact of more than $500 million in terms of direct and indirect economic impact, research commercialization, and related business spin–off activities.

The research component of the Institute will be a technological powerhouse and will become a center for innovation that will spark economic development for the region through scientific discovery. Collaborative research initiatives will provide a strong base for increased federal funding opportunities in basic, emerging, and translational grant programs. The varied and interdisciplinary offerings of the research enterprise will attract the highest quality graduate and postdoctoral students and build the Institute's reputation as a world-class destination for research training. The Institute's integrative approach to discovery will foster close collaborations with industry and facilitate development of innovative diagnostics and therapeutics. These discoveries will lead to more efficient and cost-effective delivery of healthcare services to the public, and have a profound and transforming impact on the practice of medicine.

The accelerated pace of discovery afforded by the Institute will also serve as an engine for growth of the bioscience industry in the region and realization of the bioscience cluster originally envisioned when the State brought Scripps Research to Florida. New companies will be created and others will relocate to take advantage of the scientific expertise and technology offerings at the Institute. Blue-chip Florida has focused energy, time, and resources to establish the state as a worldwide leader in the biosciences. Organizations, businesses, research institutions and industry focused leadership partner to accelerate and build on the bioscience foundation already established in Florida. The bioscience sector generally benefits from a strong background of scientific research and development, which Florida achieves through renowned universities, hospitals, and targeted areas of biotechnology, pharmaceuticals and medical technologies.

Independent FAU Medical School

As a part of the new Partnership and campus plan in Jupiter, a new FAU medical school will be formed to produce MDs who are well grounded in the basic biomedical sciences and a large cohort of MD/PhDs. Physicians with this kind of training will be capable of understanding and applying cutting-edge scientific technologies to the practice of modern medicine. The program will combine the unique preclinical and clinical training programs currently in place at FAU with basic and specialty science courses offered through the Scripps Kellogg School of Science and Technology, a school whose graduate programs in chemistry and biology are continually ranked among the top five in the nation. MD/PhD students will complete 3 years of study at FAU and then transfer to Scripps for their PhD. These students will receive their MD degree after completion of the first year of the PhD program at Scripps.

Class size would be limited to 64 students annually, with the inaugural class beginning study in 2011. Students admitted to the school may elect to follow either an MD or an MD/PhD track. All students will complete two years of preclinical training, with an interdisciplinary curriculum enriched in

modern bioscience and technology. Students continuing on to the PhD degree would then enter the graduate program at Scripps, where they would conduct additional coursework and thesis research within the laboratory of faculty members of the program. Following completion of the PhD, these students would return to FAU for their clinical training, culminating in the MD degree.

The establishment of the Biomedical Science and Technology Institute and Medical School will be transformative on several levels.

1. They will transform the Jupiter campus by making it a world-class destination for innovation in scientific research and medical training. They will contribute to the continued transformation of the region and State by fostering growth of the bioscience industry and providing a solid foundation to sustain a knowledge-based economy.

2. They will have a transformative impact on the delivery of healthcare services, the practice of medicine, and, ultimately, the citizens' of Florida quality of life.

State of Florida Economic Impact

In 2015, the business volume operations of the FAU and Scripps Research Institute Partnership is projected to generate more than $144.8million of business volume impact[6] annually on the state of Florida. This impact can be divided into two parts: direct and indirect. In 2015, the direct impact[7] of the FAU and Scripps Research Institute Partnership is projected to be $62.7 million and stems from the spending by the partners for capital improvements, goods and services, the spending of staff and faculty, the spending of researchers, medical trainees, and the spending (external to the institutional partnerships) of visitors to the campus. The indirect impact[8] of the FAU and Scripps Research Institute Partnership in 2015 is projected to be $82.1 million and is derived from the direct, first-round expenditures, which will be received as income by businesses and individuals in the state and re-circulated through the economy in successive rounds of re-spending. The end result is a multiplied economic impact that is a linear result of the FAU and Scripps Research Institute Partnership's presence and its spending patterns. (See Figure 1 below)

In 2020, the projected impact of the FAU and Scrips Research Institute Partnership on the state of Florida is projected to be $210.3 million of which $91.3 million is direct impact and $119.0 is indirect

[6] Business Volume Impact is the total economic impact of an institution includes the direct and indirect economic impact generated in the economy as a result of the direct impact.

[7] Direct economic impacts represent the impact for the expenditures and/or production values specified as direct final demand changes related to FAU and Scripps Research Institute Partnership activities. Direct effects are economic impacts directly attributable to the operations and presence of the components of the research partnership.

[8] Indirect economic impact represents the iteration of industries purchasing from industries resulting from the direct impact of the FAU and Scripps Research Institute Partnership. Indirect effects are business-to-business economic impacts.

impact. In 2025, the overall impact is projected to be $298.2 million ($129.3 million in direct impact and $168.9 million in indirect impact). The details of the projected impact by entity and activity are presented in Table 1 below.

Figure 1 : Overall Projected Economic Impact on the State of Florida (in millions)

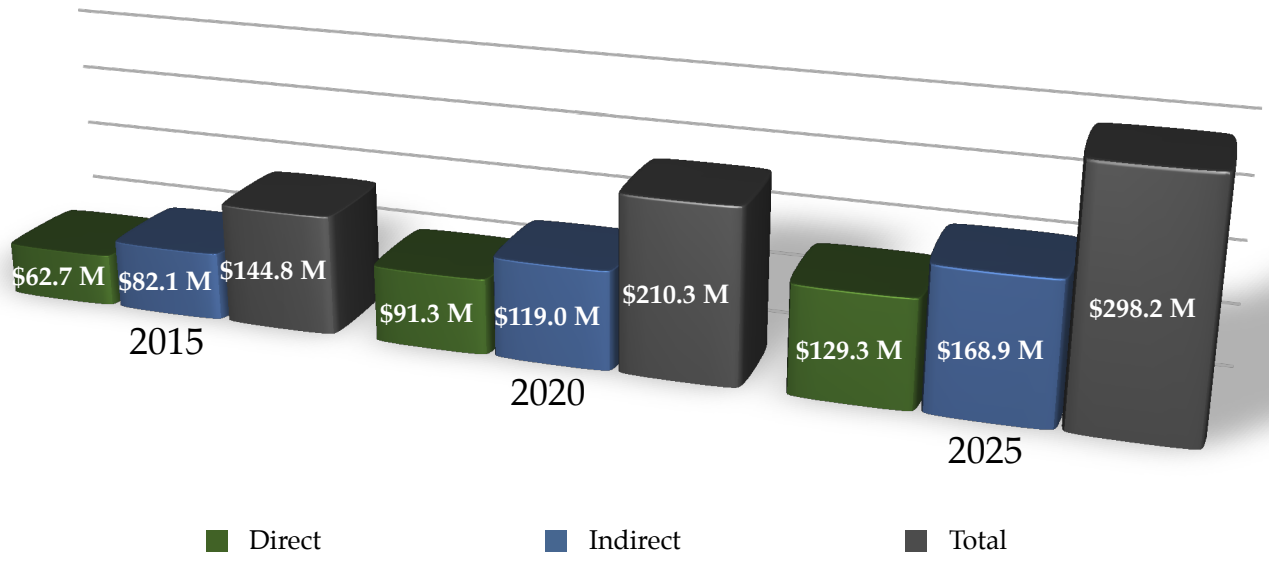


TABLE 1. ECONOMIC IMPACT ON THE STATE OF FLORIDA

	2015 (PROJECTED)			2020 (PROJECTED)			2025 (PROJECTED)		
(in millions)	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
FAU - Scripps Research Institute	$15.0	$19.4	$34.4	$20.0	$26.0	$46.0	$31.0	$41.4	$72.4
FAU Medical School (PhD/MD)	$11.3	$14.7	$26.0	$22.6	$29.4	$52.0	$22.6	$29.4	$52.0
Other Research Partnerships	$7.5	$10.5	$18.0	$10.0	$13.3	$23.3	$15.7	$20.3	$36.0
Research Commercialization and Business Spin-Offs	$28.9	$37.5	$66.4	$38.7	$50.3	$89.0	$60.0	$77.8	$137.8
Total Economic Impact	$62.7	$82.1	$144.8	$91.3	$119.0	$210.3	$129.3	$168.9	$298.2

Southeast Florida Economic Impact

In 2015, the projected impact of the FAU and Scripps Research Institute Partnership on Southeast Florida is projected to be $112. million of which $48.6 million is direct impact and $63.6 is indirect impact (See Figure 2). In 2020, the projected impact of the FAU and Scripps Research Institute Partnership on Southeast Florida is projected to be $163.0 million of which $70.8 million is direct impact and $92.2 is indirect impact. In 2025, the overall impact is projected to be $231.1 million ($100.2 million in direct impact and $130.9 million in indirect impact). The details of the projected impact by entity and activity are presented in Table 2 below.

Figure 2: Overall Projected Economic Impact on Southeast Florida (in millions)

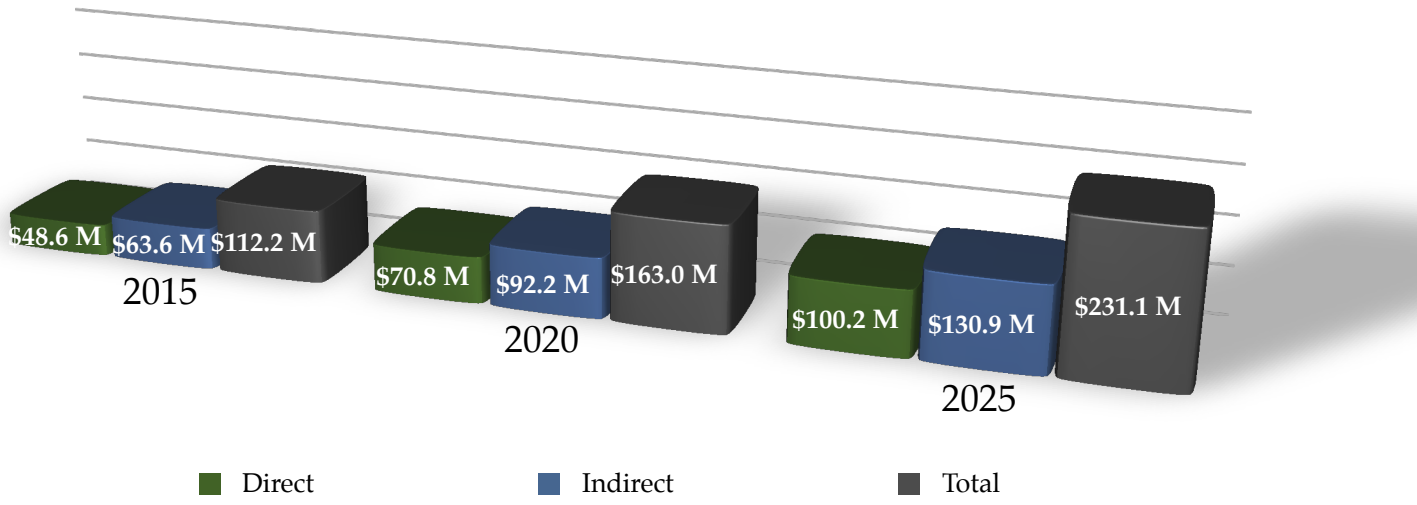


TABLE 2: PROJECTED ECONOMIC IMPACT IN SOUTHEAST FLORIDA

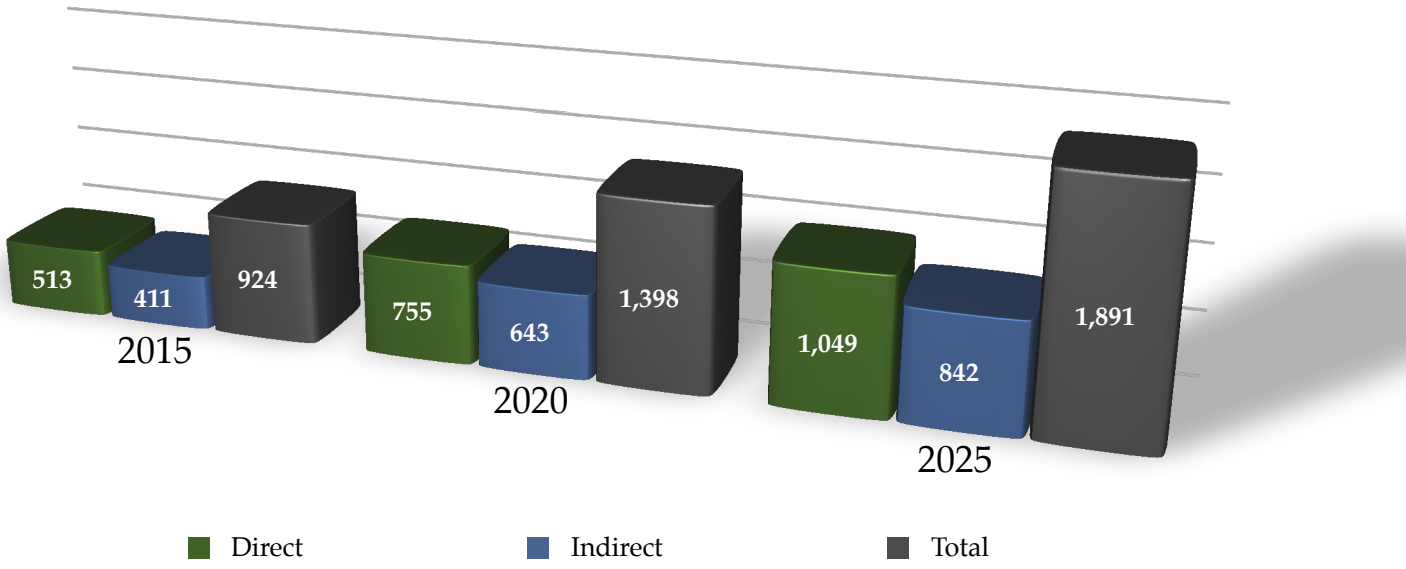
	2015 (PROJECTED)			2020 (PROJECTED)			2025 (PROJECTED)		
(in millions)	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
FAU - Scripps Research Institute	$11.6	$15.0	$26.7	$15.5	$20.2	$35.7	$24.0	$32.1	$56.1
FAU Medical School (PhD/MD)	$8.8	$11.4	$20.2	$17.5	$22.8	$40.3	$17.5	$22.8	$40.3
Other Research Partnerships	$5.8	$8.1	$14.0	$7.8	$10.3	$18.1	$12.2	$15.7	$27.9
Research Commercialization and Business Spin-Offs	$22.4	$29.1	$51.5	$30.0	$39.0	$69.0	$46.5	$60.3	$106.8
Total Economic Impact	$48.6	$63.6	$112.2	$70.8	$92.2	$163.0	$100.2	$130.9	$231.1

State of Florida Employment Impact

The employment impact of the FAU and Scripps Research Institute Partnership is comprised of direct and indirect impacts. Direct employment impact[9] represents full-time equivalent (FTE) positions created directly by the Partnership. The positions included in the direct employment for this analysis include faculty, researchers, administration and support staff who are employed because of the operations of FAU and Scripps Research Institute Partnership. Indirect employment impact[10] represents full-time equivalent positions created as a result of the Partnerships's spending and the spending of faculty, staff, students and visitors in the defined study geography.

In 2015, the projected employment impact of the Partnership on the state of Florida is expected to be 924 FTEs (513 direct FTEs and 411 indirect FTEs). In 2020, the overall employment impact on the state of Florida is expected to be 1,398 FTEs (755 direct FTEs and 643 indirect FTEs). In 2025, the FAU and Scripps Research Institute Partnership is expected to generate 1,891 FTEs (1,049 direct FTEs and 842 indirect FTEs). See Chart 3 and Table 3 for additional details.

Figure 3: Overall Projected Employment Impact on the State of Florida (FTEs)



[9] Direct Employment is the total number of employees based on Full-Time Equivalents (FTEs).

[10] Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, creating an employment multiplier.

TABLE 3: PROJECTED EMPLOYMENT IMPACT ON THE STATE OF FLORIDA									
	2015 (PROJECTED)			2020 (PROJECTED)			2025 (PROJECTED)		
(in FTEs)	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
FAU - Scripps Research Institute	112	88	200	148	120	268	230	185	415
FAU Medical School (PhD/MD)	137	111	248	275	221	496	275	221	496
Other Research Partnerships	50	40	90	65	52	117	100	80	180
Research Commercialization and Business Spin-Offs	214	172	386	267	250	517	444	356	800
Total Economic Impact	513	411	924	755	643	1,398	1,049	842	1,891

Southeast Florida Employment Impact

In 2015, the projected employment impact of the Partnership on the Southeast Florida is expected to be 716 FTEs (398 direct FTEs and 319 indirect FTEs). In 2020, the overall employment impact on Southeast Florida is expected to be 1,083 FTEs (585 direct FTEs and 498 indirect FTEs). In 2025, the FAU and Scripps Research Institute Partnership is expected to generate 1,466 FTEs (813 direct FTEs and 653 indirect FTEs). See Chart 4 and Table 4 for additional details.

Figure 4: Overall Projected Employment Impact on Southeast Florida (FTEs)

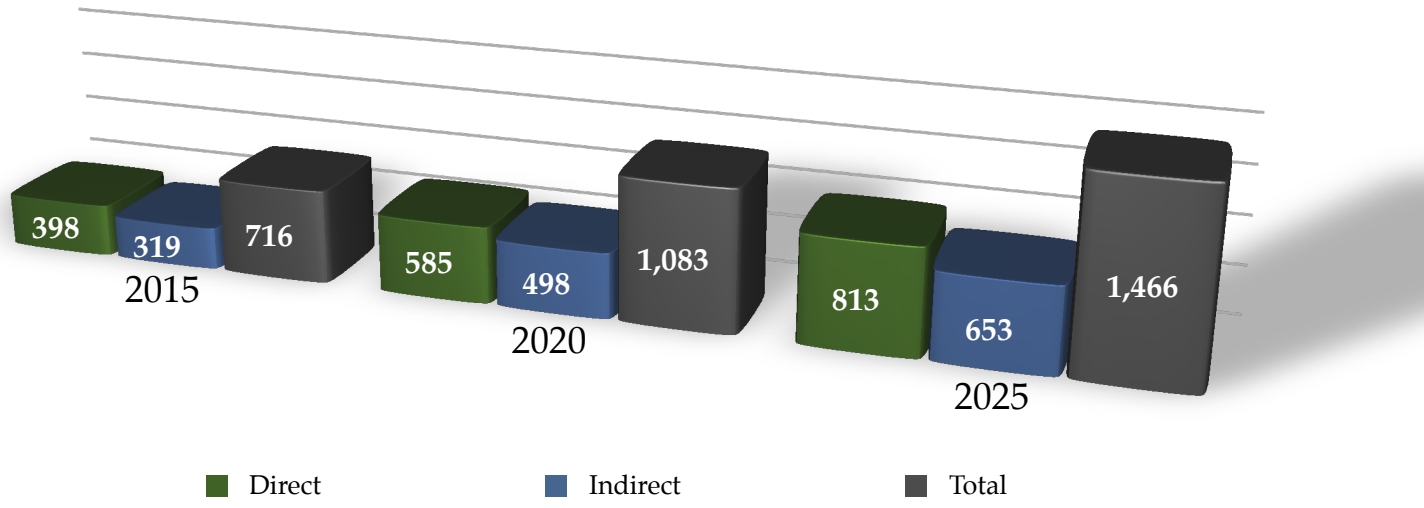
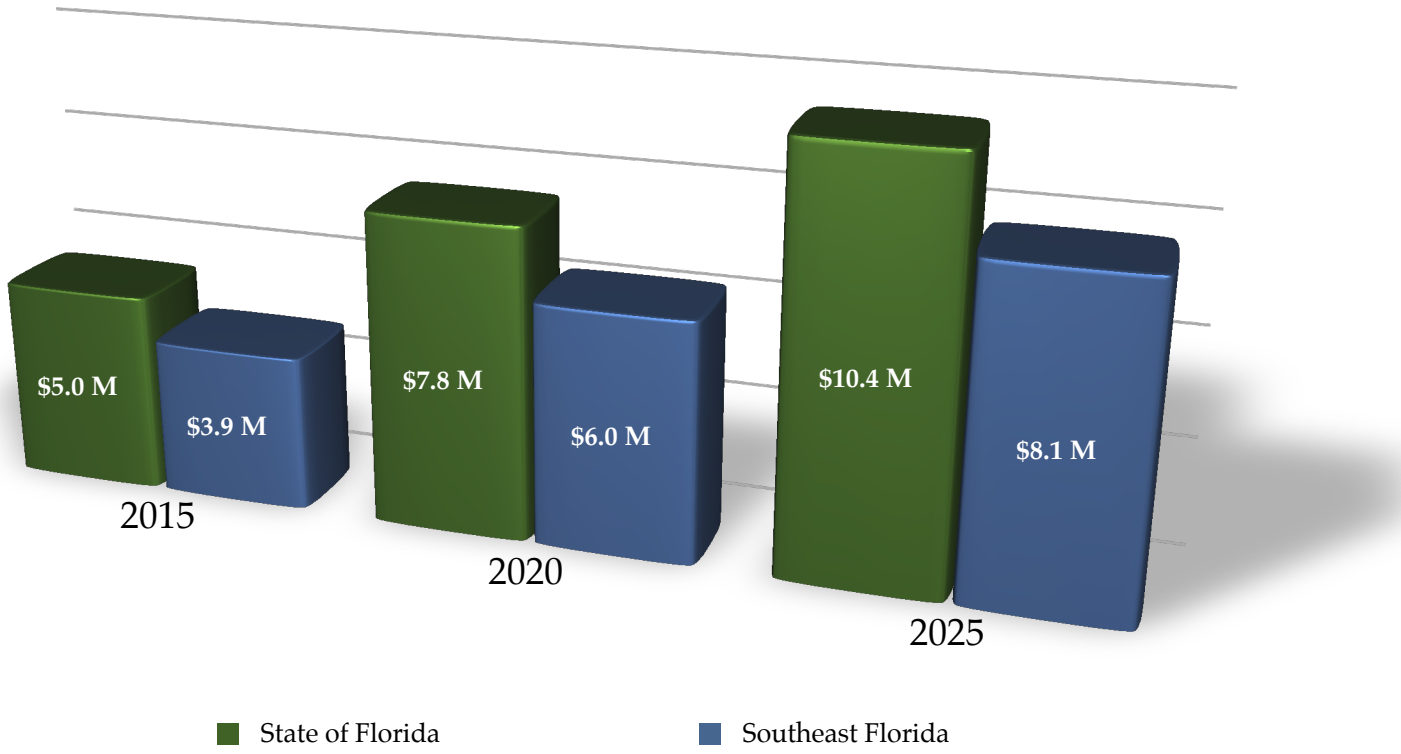


TABLE 4: PROJECTED EMPLOYMENT IMPACT ON SOUTHEAST FLORIDA									
	2015 (PROJECTED)			2020 (PROJECTED)			2025 (PROJECTED)		
(in FTEs)	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
FAU - Scripps Research Institute	87	68	155	115	93	208	178	143	322
FAU Medical School (PhD/MD)	106	86	192	213	171	384	213	171	384
Other Research Partnerships	39	31	70	50	40	91	78	62	140
Research Commercialization and Business Spin-Offs	166	133	299	207	194	401	344	276	620
Total Economic Impact	398	319	716	585	498	1,083	813	653	1,466

Government Revenue Impact

In order to quantify the financial returns to the state of Florida, the models include a government revenue impact component (direct[11] and indirect[12]), which calculates the total state tax revenue projected to be generated by the FAU and Scripps Research Institute Partnership. In 2015, the combined operations of the FAU and Scripps Research Institute Partnership are expected to generate $5.0 million in tax revenue for the state of Florida and $3.9 million (direct and indirect) for Southeast Florida. Tripp Umbach projects that in 2020, the state will receive $7.8 million in tax revenues, and by 2025 annual tax revenue will reach nearly $10.4 million (see Figure 5 and Table 5).

Figure 5: Overall Projected Government Revenue Impact (in millions)



[11] Direct government revenue is the the direct tax payments made by an institution to a unit of government.

[12] Indirect government is revenue that is collected by governmental units in addition to those paid direct by an institution, it includes taxes paid directly by employees of the institution, visitors to the institution, and vendors who sell products to the institution.

TABLE 5: PROJECTED GOVERNMENT REVENUE IMPACTS			
STATE OF FLORIDA	2015 (PROJECTED)	2020 (PROJECTED)	2025 (PROJECTED)
(in millions)	Total (Direct + Indirect)	Total (Direct + Indirect)	Total (Direct + Indirect)
FAU - Scripps Research Institute	$1.1	$1.4	$2.2
FAU Medical School (PhD/MD)	$1.3	$2.6	$2.6
Other Research Partnerships	$0.5	$0.8	$1.1
Research Commercialization and Business Spin-Offs	$2.1	$3.0	$4.5
Total Economic Impact	$5.0	$7.8	$10.4
SOUTHEAST FLORIDA	2015 (PROJECTED)	2020 (PROJECTED)	2025 (PROJECTED)
(in millions)	Total (Direct + Indirect)	Total (Direct + Indirect)	Total (Direct + Indirect)
FAU - Scripps Research Institute	$0.9	$1.1	$1.7
FAU Medical School (PhD/MD)	$1.0	$2.0	$2.0
Other Research Partnerships	$0.4	$0.6	$0.9
Research Commercialization and Business Spin-Offs	$1.6	$2.3	$3.5
Total Economic Impact	$3.9	$6.0	$8.1

Conclusion

The economic impact analysis completed for this project clearly demonstrate the FAU and Scripps Research Institute Partnership will greatly benefit the state of Florida and Southeast Florida in terms of economic, employment and government revenue impact. These impacts from the creation of a new biomedical research institute on the Jupiter campus in conjunction with the development of an independent FAU medical school will add to the already strong biotechnology and biomedical industry sector in the state of Florida.

Glossary of Terms

A) Southeast Florida

Includes Palm Beach, Broward, Martin, Indian River, Okeechobee and St. Lucie counties.

B) Total Economic Impact

The total economic impact of an institution includes the direct, indirect and induced economic impact generated in the economy as a result of the direct impact.

C) Direct Economic Impact

Direct economic impacts represent the impact for the expenditures and/or production values specified as direct final demand changes related to the FAU and Scripps Research Institute Partnership. Direct effects are economic impacts directly attributable to the operations and presence of the the FAU and Scripps Research Institute Partnership.

D) Indirect Economic Impact

Indirect economic impact represents the iteration of industries purchasing from industries resulting from the direct impact of the FAU and Scripps Research Institute Partnership. Indirect effects are business-to-business economic impacts.

E) Total State Business Volume

Total sales receipts generated within a given geographic area (State of Florida and Southeast Florida). Business volume includes wholesale, retail, service sector spending as well as value added in the manufacturing process.

F) Multiplier Effect

The multiplier effect is the additional economic impact created as a result of the institution's direct economic impact. (Indirect and Induced).

G) Direct Government Revenue

Direct tax payments made by an institution to a unit of government.

H) Indirect Government Revenue

Government revenue that is collected by governmental units in addition to those paid direct by an institution, including taxes paid directly by employees of the institution, visitors to the institution, and vendors who sell products to the institution.

I) Direct Employment

Total Employees based on Full-Time Equivalents (FTEs).

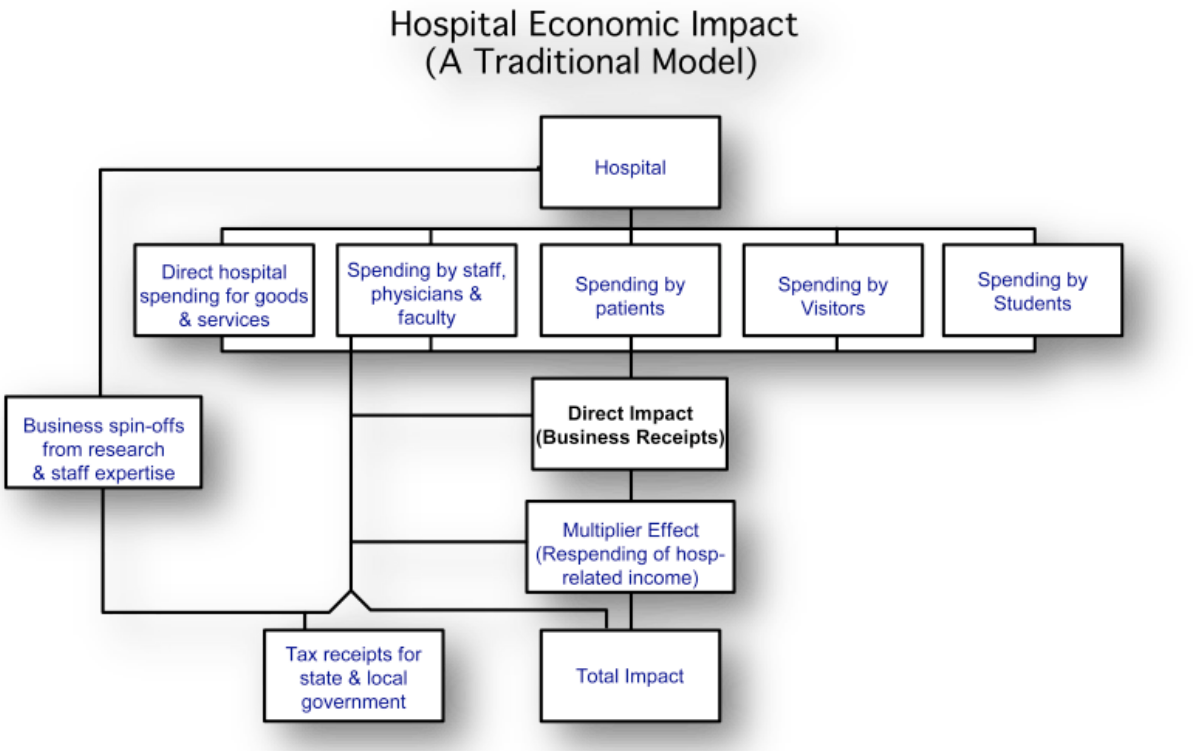
J) Indirect Employment

Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, creating an employment multiplier.

Linear Cash Flow Methodology

The methodology employed in the economic impact section of this report was derived from an original set of research tools and techniques developed for the American Council on Education (ACE). The ACE-based methodology employs linear cash flow modeling to track the flow of institution-originated funds through a delineated spatial area.

In 1996, Tripp Umbach began a consulting relationship with the Association of American Medical Colleges (AAMC) and completed the first national study showing the economic impact of academic medical centers. For this study, the Tripp Umbach research team felt it important to distinguish the economic impact of the institutions that are attributable to funds brought into the state from out-of-state sources. The application of this "fresh dollar" model provides a first-line measure of the initial direct expansion in the state economy caused by the academic health centers. The final model concept evolved into a hybrid model including a fresh-dollar approach feeding into a traditional model which tracks hospital in-state spending. Thus the final model used for this research (see figure below) measures funds brought into the state together with the ultimate flow of these funds through the Florida economy and the effect on economic expansion, job growth and enterprise development. The final methodology closely matches the impact study methodology recommended for individual medical schools and teaching hospitals by AAMC.

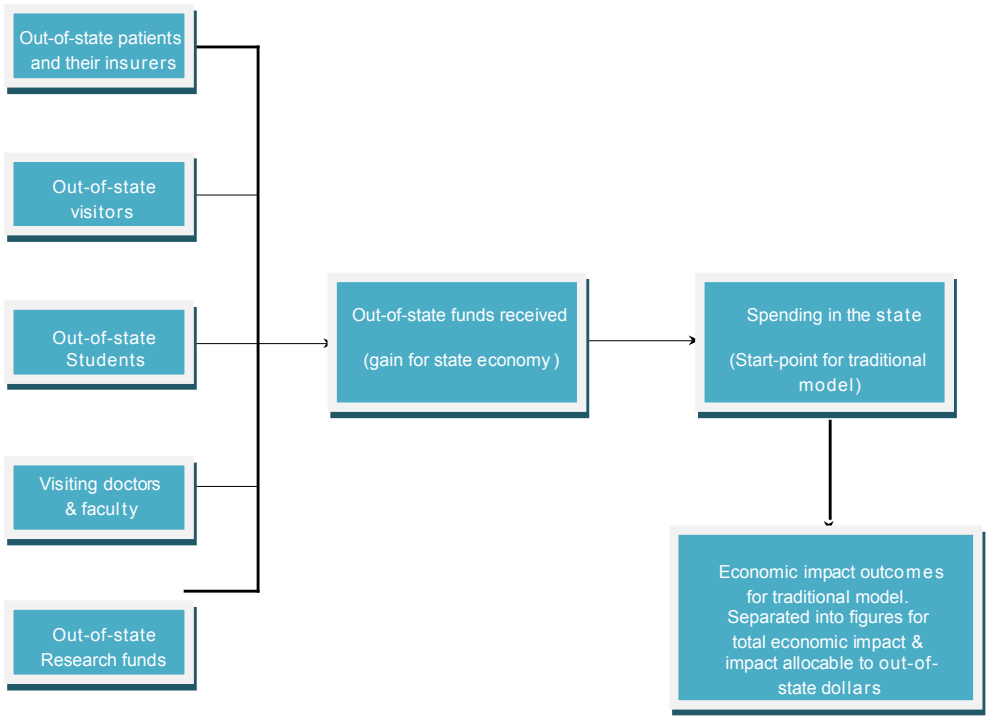


Based on previous economic impact studies performed for academic health centers in Pennsylvania and Virginia, Tripp Umbach recommended that the traditional model of economic impact for hospitals (see Figure above), based on the ACE model, be modified for the purposes of this research.

The "traditional" model of hospital economic impact provides a good measure of the impact of hospital expenditures and their flow within an economy. However, the model does not account for the origination of hospital revenues, and thus counts the spending of revenues received by the hospital from in-state sources. The traditional model counts some of the spending of dollars that already existed in the Florida economy.

The application of this "fresh dollar" model provides a first-line measure of the initial direct expansion in the state economy caused by the operations. The final model concept evolved into a hybrid model including a fresh-dollar approach feeding into a traditional model which tracks in-state spending. Thus the final model used for this research measures funds brought into the state together with the ultimate flow of these funds through the Florida economy and the effect on economic expansion, job growth and enterprise development (see Figure below). The final methodology closely matches the

impact study methodology recommended for individual medical schools by the Association of American Medical Colleges (AAMC).



Tripp Umbach researchers worked closely with representatives from Florida Atlantic University and Scripps Florida to acquire the primary data utilized in this study.

Appendix 2

Budget Detail

FBOG TABLE 2M

SUMMARY COSTS FOR PROPOSED DOCTOR OF MEDICINE

FINANCIAL SUMMARY (Constant 2005 Dollars)	Existing Resources	Planning Year Year 1	Planning Year Year 2	Classes begin Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 10 Inflation adjusted
I & R EXPENSES														
Faculty Salary and Benefits	$5,047,468	$5,047,468		$9,365,550	$10,465,550	$10,965,550	$11,265,550	$11,265,550	$11,265,550	$11,265,550	$11,265,550	$11,265,550	$11,265,550	
A&P Salary and Benefits	$1,390,289	$1,390,289		$1,520,289	$1,715,289	$1,780,289	$1,975,289	$1,975,289	$1,975,289	$1,975,289	$1,975,289	$1,975,289	$1,975,289	
USPS Salary and Benefits	$456,000	$456,000		$542,000	$585,000	$774,550	$774,550	$774,550	$774,550	$774,550	$774,550	$774,550	$774,550	
Other Personnel Services	$492,274	$492,274		$492,000	$558,265	$569,430	$580,819	$649,423	$667,399	$667,399	$667,399	$667,399	$667,399	
Expenses	$3,129,451	$1,386,764		$1,468,756	$1,690,291	$1,922,996	$2,307,787	$2,339,183	$2,371,207	$2,466,207	$2,661,207	$2,761,207	$3,011,207	
Operating Capital Outlay		$400,000		$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	$200,000	
Electronic Data Processing										$200,000	$200,000	$200,000	$200,000	
Library resources		$300,000		$300,000	$300,000	$400,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	
Special Categories	$2,157,313	$3,200,000		$465,000	$540,000	$585,000	$615,000	$615,000	$615,000	$615,000	$615,000	$615,000	$615,000	
Total I&R Expenses:	$12,672,795	$12,672,795		$14,353,595	$16,054,395	$17,197,815	$18,168,995	$18,268,995	$18,318,995	$18,613,995	$18,808,995	$18,908,995	$19,158,995	
START-UP INVESTMENTS														
Investment 1						$250,000	$800,000	$800,000	$750,000	$500,000	$350,000	$250,000		
Total Facilities Investments:						$250,000	$800,000	$800,000	$750,000	$500,000	$350,000	$250,000		
Gross Medical School Funds Required	$12,672,795	$12,672,795		$14,353,595	$16,054,395	$17,447,815	$18,968,995	$19,068,995	$19,068,995	$19,113,995	$19,158,995	$19,158,995	$19,158,995	$26,822,593
RECEIPTS														
Tuition	N/A	N/A		$1,580,800	$3,161,600	$4,555,020	$6,076,200	$6,076,200	$6,076,200	$6,076,200	$6,076,200	$6,076,200	$6,076,200	
Community donations	$10,000,000													
Clinical Practice Plan (NET)								$100,000	$100,000	$125,000	$150,000	$150,000	$150,000	
Contract and Grant (NET)				$100,000	$220,000	$220,000	$220,000	$220,000	$220,000	$240,000	$260,000	$260,000	$260,000	
Other														
Total Receipts:	$10,000,000			$1,680,800	$3,381,600	$4,775,020	$6,296,200	$6,396,200	$6,396,200	$6,441,200	$6,486,200	$6,486,200	$6,486,200	
Net Medical School Funds Required				$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	16,474,634
STATE APPROPRIATIONS														
Recurring														
Headcount G.R. Appropriation	$12,672,795	$12,672,795		$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	$12,672,795	16,474,634
Per Headcount Appropriation				$198,012	$99,006	$66,004	$51,515	$51,515	$51,515	$51,515	$51,515	$51,515	$51,515	66,970
Non-Recurring														
G.R. Special Appropriation														
PECO														
State Match - Contributions														
FEDERAL APPROPRIATIONS														
Faculty Hiring Schedule														
Basic Science Faculty	20													
Clinical Science Faculty	11			20	5	3	2							
Affiliated Faculty (Headcount)	71				4	5	5							
Other														
Total I&R faculty														
Students	128	128		64	128	192	246	246	246	246	246	246	246	

Optional Narrative to Explain Budget Information

FAU INDEPENDENT MEDICAL EDUCATION PROGRAM
BUDGET NARRATIVE

Revenues:

The $12,672,795 in general revenue available to support an independent FAU medical education program reflects state budget cuts to total G.R. appropriations of $14.4M.

FAU will commit to operate the program with no additional state G.R. appropriations.

Instructional, research and office space in the Schmidt Biomedical Science Center and instructional and office space being leased in the FAU Research Park are adequate to accommodate the program without the construction of additional facilities.

In order to indicate clearly that current general revenue funding levels and projected tuition revenue will be sufficient to operate the FAU medical education program, operating revenues from contracts and grants, clinical practice and community donations are conservatively estimated by design:

- Contracts and grants revenue reflects current C & G funding to the Schmidt College of Biomedical Science. It is anticipated that the planned partnership with the Scripps Institute will result in a significant increase in C & G funding to FAU. However, during the 5 year ramp up, we are indicating a conservative growth pattern.

- No community donations are projected to support the program for the first five years. However, it is anticipated that more private donations will be made to an independent FAU medical education program than have been made to the UM-FAU regional medical campus.

- No net profit from faculty clinical practice is shown until the 5th year of the progran, when clinical revenue is estimated to be $100,000. It is possible that an FAU faculty practice plan can be established during the 1st year of the program and that modest profits can be generated from the practice as early as the 2nd or 3rd year of the program.

Tuition receipts are calculated to assume that 90% of students will pay instate tuition of $21,700 (average FY 2009-10 instate tuition charged by Florida public medical schools) and 10% of students will pay out-of state tuition (approx. $30,000 more per student.)

As of FY 2009-10, FAU has approximately $9.4 M in non-recurring carry-forward funding This carry-forward has occurred because: (a) state funding for full regional medical campus enrollment has been received, although current enrollment is only 128 students; (b) UMMSM has hired fewer clinical faculty to date than FAU has budgeted for; and (c) in FY 2006-2007, FAU received a one-time appropriation of $5.0 million with $2.9 million held in reserve for future growth of the program. During the transition year (FY 2010-11) a total of $500,000 in carry-forward funding will be used to purchase equipment and the print and electronic materials required for a core FAU

medical library. Remaining carry-forward funds will be held in reserve for unanticipated non-recurring costs associated with implementation of the FAU medical education program.

Expenditures:

FAU paid approximately $2.2 M to UM in FY 2009-10. $3.2 M has been budgeted for payments to UM in FY 2010-11. These payments appear as a line item in the " I & R Expense" under "Special Categories" The majority of these payments are for faculty salaries for 14.0 FTE clinical faculty. Beginning in 2011-12 and each year thereafter, the faculty effort previously contracted from UM is included in FAU faculty salaries and benefits.

The budget assumes that FAU will need to hire 30.0 FTE clinical faculty, in addition to the 11.0 FAU clinical faculty currently serving in the regional medical campus program. (total of 41.0 FTE clinical faculty required by the time the medical education program reaches full enrollment). It is possible than some of the UM clinical faculty (14.0 FTE) currently teaching on the regional campus may be offered FAU clinical faculty appointments, although faculty will also be recruited regionally and nationally.

The budget assumes that FAU will need to hire additional administrative and support staff to perform various functions (admissions/registrar, student services, financial aid, library, etc.) for the FAU medical education program. Salaries and benefits for the additional staff are phased in beginning in the 1st year of the program..

By the time the FAU medical education program reaches full enrollment of 246 students(assuming a minimum of 10 students in the MD/Ph.D. program), general revenue appropriations per medical student are projected to be $51,515.

Enrollment:

The enrollment plan assumes that 64 students per year will enter the medical education program, beginning in year 1 of the program and that 15 % of each entering class will be in the dual MD/PhD program. Students in the MD/PhD program will complete the MD component of the dual degree in 3 years. Therefore, beginning in year 4, the medical education program will reach full enrollment of 246 students, which is 10 students less than the originally proposed 256 students, because of the accelerated MD/PhD program option.

The budget assumes that the 128 UM students currently enrolled at the regional medical campus during the 2009-10 academic year will all continue to matriculate the FAU campus during the 2010-11 transition year. This assumption is based on the fact that a shortage of space already exists on the UM Miami campus, which will make it difficult for UM to accommodate regional campus students on the Miami campus. However, it is not possible to predict what action UM may take regarding students currently enrolled on the regional campus if FAU rescinds the UM-FAU affiliation agreement.

Appendix 3

Consultants' Report by Dr. Michael Whitcomb

Regional Academic Medical Center Agreement
Among
Boca Raton Community Hospital, Inc.
Florida Atlantic University
University of Miami

Status Report

Submitted By
Michael E. Whitcomb, M.D.

12 June 2008

Introduction

In January 2006, the University of Miami (UM), Florida Atlantic University (FAU), and the Boca Raton Community Hospital (BRCH) entered into an agreement (Regional Academic Medical Center Agreement) to establish an academic medical center on the campus of FAU in Boca Raton, Florida (UMMSM@FAU). The agreement is far reaching in scope. It includes provisions calling for the development on the FAU campus of a four-year, separate track, undergraduate medical education program of the University of Miami Miller School of Medicine (UMMSM); the construction by BRCH of a new hospital on the campus; the development of graduate medical education programs in the new hospital and other hospitals in the county; the development of a UMMSM clinical practice group in Boca Raton; the development of a collaborative research program; and the establishment of joint initiatives for private fund raising. Despite the incredibly far reaching scope of the agreement, none of the provisions called for the conduct of periodic external reviews to monitor the state of implementation of the various initiatives.

It is also noteworthy that the agreement did not establish a review process that would allow the parties to monitor the use of the funds appropriated by the Florida legislature in support of the UMMSM@FAU (the Program) to ensure that the funds were being used to serve the interests of the public in the best way possible. However, the agreement does acknowledge that the FAU President has ultimate authority over how FAU and State of Florida resources are to be used in support of the agreement. Recognizing his responsibility to be accountable for the use of those resources, the President commissioned an external review to document the current state of implementation of the Regional Academic Medical Center Agreement. The purpose of the review is to determine if the agreement is being implemented in a way that serves the best interests of FAU and the citizens of the State. This report summarizes the findings of that review.

The findings presented in the report are based on information obtained from a variety of sources. Prior to interviewing a number of individuals actively involved in various aspects of the Program, a number of documents relevant to the development and implementation of the UMMSM@FAU program were reviewed in detail.

- Regional Medical Campus at FAU: A Better Way (Presentation to the Florida Board of Governors, March 2005)
- Business Plan for an Affiliation Supporting the Regional Academic Medical Campus in Boca Raton, Florida (The Lewin Group, January 2006)
- Regional Academic Medical Center Agreement (January 2006)
- Strategic Plan: University of Miami Miller School of Medicine at Florida Atlantic University 2007-2012
- University of Miami Miller School of Medicine Regional Medical Campus Self-Study (March 2008)

Interviews were then conducted with individuals holding key positions relevant to the implementation of the Program.

- UMMSM@FAU faculty and administrative staff responsible for the educational program at FAU
- Chief executive officers at several hospitals in Palm Beach County
- Chief medical affairs officers at several hospitals in Palm Beach County
- UMMSM@FAU financial affairs staff
- UMMSM@FAU institutional planning staff

During the course of the various interviews, it was also possible to review internal documents that provided insight into certain operational issues (e.g. invoices submitted by UMMSM, faculty salary structure for full time clinician educators based at FAU, etc).

Following the development of a draft report, it was possible to review an independent consultant report completed earlier in the year (Educational Program Consultant Report, May 2008).

Background

The development of the UMMSM@FAU is a natural extension of a relationship between UM and FAU that began in the late 1990s. At that time the State of Florida approached UM to explore the possibility that the university's medical school might be willing to establish an undergraduate medical education program at one of the public universities in South Florida. The state was interested in establishing such a program, because at that time none of the public universities in that region contained a medical school. Early discussions focused on the development at either Florida Atlantic University or Florida International University of a Program in Medical Sciences (PIMS) similar to the program conducted by the University of Florida College of Medicine at Florida State University. Following a series of discussions, the Florida legislature appropriated funds in 1999 to support planning for a UMMSM PIMS at FAU.

In the ensuing years, the UMMSM presence at FAU expanded well beyond the PIMS. A two year regional campus program (Partnership for Quality Education) with an enrollment of thirty-two students was established in 2004, and the next year UMMSM and FAU submitted a proposal to the Board of Governors to expand the program to a full four year program with a total enrollment of two hundred and fifty-six students. Once approved, the terms governing the implementation of the educational program became embedded within the Regional Academic Medical Center Agreement of 2006.

The educational program that exists at FAU is unique in that it represents a partnership between a private and a public university. Although the program is located on the campus of a public university and is almost entirely financed by public funds, the program is administratively situated for accreditation purposes within UMMSM, and the students who graduate from the program receive the M.D. degree from UM. The first

class of thirty-two students enrolled in the four year program in August 2007, and a second class of forty-eight students will be enrolled in late summer 2008.

At the present time, there are two other four-year, separate track programs in this country. The first of these was established as a partnership between the Case Western Reserve University (CWRU) School of Medicine and The Cleveland Clinic. Under the terms of the agreement, CWRU established The Lerner College of Medicine of Case Western University at The Cleveland Clinic. While graduates receive the M.D. degree from CWRU, the educational program is distinct from that offered by the University Program at CWRU in that it is a five year program which emphasizes training for careers in clinical research. The second program is one established by the University of Arizona (UofA) College of Medicine. The UofA has partnered with Arizona State University in Tempe, Arizona, to create a four-year, separate track program on a newly established Biomedical Research Campus in Phoenix.

The institutions involved in the development of those four-year, separate track programs have begun to encounter very real challenges related to the management and administration of the programs. In a relatively short time, it has become apparent that the establishment of the programs has led to conflicts between the institutional partners. It is now clear that the creation of a distinct medical school campus at a regional site distant from the parent medical school leads to a series of almost inevitable conflicts once the regional campus has begun to develop its own identity. Not surprisingly, the flow of funds from one institution to the other and the centralization of programmatic control at the parent school are at the core of many of the conflicts. But it is also the case that efforts by the parent medical school to develop clinical care programs in the community where the regional campus is located has led to significant conflicts with local physicians and health care organizations, which have affected adversely the standing of the local university in its community.

Regional Academic Medical Center Agreement
Key Provisions

As noted above, the development of the UMMSM@FAU is a collaborative venture involving UMMSM, FAU, and BRCH. Key provisions included in the Regional Academic Medical Center Agreement relate not only to the development of an undergraduate medical education program on the FAU campus, but also to the construction of a new teaching hospital on the campus, the development of new graduate medical education programs in the region, the development of a clinical practice group in Boca Raton, and the development of collaborative research and private fund raising programs. Key elements of the agreement are summarized below.

Governance and Management

A ten person Affiliation Committee was to be established to fully implement the Program and coordinate decisions concerning it. The committee was to be composed of three persons appointed by the UMMSM Dean, three persons appointed by the FAU President,

three persons appointed by the BRCH President, and the Regional Dean of the Program. The committee, which is chaired by the UMMSM Dean, is responsible for joint planning, operational coordination, and dispute resolution. Importantly, the committee is charged with the development and ratification of annual operating budgets. The committee was also to develop a Strategic Plan for the development of the program by 1 July 2006.

A qualified physician holding a UMMSM faculty appointment was to be appointed as the Regional Dean. The individual is to exercise customary authority over the Program consistent with the provisions of the agreement, subject to the authority of the FAU President over the use FAU and Sate of Florida resources and the ultimate academic authority of the UMMSM Dean. The Regional Dean reports to the UMMSM Dean, the FAU President, and the Affiliation Committee (the Regional Dean happens also to be a member of the Affiliation Committee). The UMMSM Dean may remove the Regional Dean after consultation with the FAU President and the BRCH CEO. The Regional Dean's dual responsibility to FAU and UMMSM was to be more fully defined in a separate agreement between FAU and UMMSM.

The Program was to operate on the basis of an Annual Approved Budget that was to be developed and ratified by the Affiliation Committee. FAU is to pay for educational expenses from state funds as set forth in the Approved Budget. UMMSM is entitled to receive and retain all tuition and fee revenues. Students enrolled in the UMMSM@FAU Program are to pay UMMSM tuition, and UMMSM is to make reasonable efforts to provide scholarship support that will over a reasonable period of time make the tuition comparable to tuition and fees charged at Florida's public medical schools. BRCH is to pay Annual Academic Support of $750 K to UMMSM once the land transaction between FAU and BRCH is effectuated.

It is noteworthy that the agreement also allows UMMSM to establish other affiliations in Palm Beach County as long as they are at least ten miles distant from the location of BRCH and FAU in Boca Raton. FAU is precluded from entering into comparable affiliations unless UMMSM agrees to the affiliation, or FAU determines it has made a reasonable effort to involve UMMSM in the proposed affiliation activity.

Undergraduate Medical Education

UMMSM committed to the development of a regional medical education program as a fully integrated component of the UMMSM undergraduate medical education program accredited by the Liaison Committee on Medical Education (LCME). UMMSM agreed to appoint individuals base at FAU as UMMSM faculty in accordance with the UMMSM Faculty Manual standards, and to integrate them fully in UMMSM programs, committees, educational opportunities, and other appropriate activities. FAU committed to make available instructional facilities, as well as the support services and space required for the educational program. FAU is to provide all student support services required by the LCME. UMMSM agreed to explore the possibility of establishing joint degree programs at FAU under an acceptable financial and operational model.

FAU is to pay the costs of the basic science and medical education faculty who are required to meet the educational needs of the program as determined by the UMMSM Dean in consultation with the Regional Dean. The Dean, in consultation with the Regional Dean, may approve the allocation of salary support for all program faculty. Given the challenges of developing an adequate faculty for the educational program, which must include full time clinical faculty, BRCH medical staff members, and community-based practitioners, the parties agreed to jointly develop a Strategic Staffing Plan by 30 September 2006. Preliminary staffing plans for three departments were to be completed no later than 15 September 2006.

Graduate Medical Education

The parties committed to cooperating in establishing GME programs in hospitals in the county. BRCH was to serve as the Institutional Sponsor for programs developed at BRCH, and FAU (and/or UMMSM) was to serve as the Institutional Sponsor for programs developed at other affiliated hospitals. The Institutional Sponsors were to develop a GME plan by 30 June 2006. The number of residents at BRCH and the sites for clinical experiences were subject to the approval of the UMMSM Dean in consultation with the Regional Dean. The Institutional Sponsors were to employ the residents enrolled in the programs, and thus were to be responsible for providing salary and fringe benefits. The sponsors were to recover the costs from the involved hospitals, which are entitled to recover federal reimbursement in accordance with applicable law. It was anticipated that GME programs in internal medicine, surgery, and obstetrics/gynecology would start at the new BRCH hospital in 2009.

Faculty Practice

UMMSM agreed to establish a Faculty Practice Group (FPG) to provide clinical practice opportunities for faculty based in Boca Raton. UMMSM alone is responsible for the policies, management, and finances of the practice and retains the operating margins. The management of the FPG is solely under the authority of UMMSM, and the "Dean's Tax" (to be determined solely by the UMMSM Dean) generated by billings for clinical services was to support the academic functions of UMMSM that make possible the accredited program. UMMSM may enter into clinical practice affiliations with other institutions as long as they are located at least ten miles from BRCH and FAU. UMMSM or the FPG was to be reimbursed fairly by FAU for the cost of academic services performed by FPG physicians pursuant to an Approved Budget.

Research

The parties agreed to systematically explore opportunities for combining existing research strengths at UMMSM with those at FAU and BRCH, and to produce a strategic research portfolio that could increase their research productivity and standing, and thereby help to recruit research leaders.

Philanthropy

As soon as sensible, the parties agreed to establish a plan to create a permanent endowment of at least $25 million to support the Program. BRCH was to use its best efforts (with the cooperation of UMMSM and FAU) to raise the funds required. The funds were to be used both to offset tuition costs of students and to support other program purposes as determined by the Dean in consultation with the Affiliation Committee.

The parties were to develop no later than 30 September 2006 a Coordinated Development Plan which would specify top priorities for support and equitably allocate donor funds in support of the Strategic Plan for UMMSM@FAU.

New Teaching Hospital

BRCH committed to use it "best efforts" to construct and open a new hospital on the FAU campus as soon as feasible (projected for 2011). BRCH also committed to pay fair market value for services provided to BRCH by UMMSM@FAU faculty. Payment was to be made to the involved individuals or to their respective employers. A Professional Services Agreement was to be developed to govern payment for services provided.

Regional Academic Medical Center Agreement
State of Implementation

The affiliation agreement has been in place for two and one-half years. The state of implementation of the key provisions of the agreement is presented below.

Governance and Management

The Affiliation Committee called for in the agreement has been established and has met on several occasions. It appears, however, that meetings of the Affiliation Committee have been held sporadically, and that scheduled meetings have been cancelled on a number of occasions. In order to guide the implementation of the agreement, a committee was appointed to develop a Strategic Plan for the period 2007-2012. The plan developed by the committee sets forth in more detail some of the specific objectives to be achieved in the development of the Program.

Of particular note, the Affiliation Committee, which is chaired by the UMMSM Dean, has not developed or ratified a budget for the operation of the Program. At present, UMMSM submits invoices for expenses that UMMSM staff apparently believe should be paid for by state funds appropriated to FAU. Since there is no agreement in place clearly defining financial responsibility for various expenses, the invoices are not automatically honored by FAU staff. Each invoice creates a situation in which FAU and UMMSM staffs find themselves in conflict over certain expense items. FAU staff believe that some of the expenses incurred by UMMSM at Miami, which appear on the invoices, should be covered by the tuition revenue collected and retained by UMMSM.

A Regional Dean has been appointed, but a separate agreement between FAU and UMMSM defining the dual responsibility of the Regional Dean to FAU and UMMSM, as called for in the agreement, has not been developed. The lines of authority and responsibility of the Regional Dean have been blurred recently by the appointment of an Executive Dean for Clinical Affairs by the UMMSM Dean. The agreement is silent on the development and existence of such a position. The range of responsibilities set forth in the individual's job description overlaps with those of both the Regional Dean and the Senior Associate Regional Dean for Medical Education.

The recruitment and appointment of new faculty has proven to be cumbersome for FAU because of the policies and practices in place at UMMSM. As a result of those policies, salaries for individuals based at FAU who have identical responsibilities can vary significantly. At the present time, no FAU based faculty member serves on any college or departmental committee at UMMSM and no UMMSM based faculty member serves on a committee at FAU.

Undergraduate Medical Education

In 2005, the Liaison Committee on Medical Education (LCME) approved FAU as a site for the development of a four-year, separate track program of the UMMSM. Accordingly, faculty and staff of FAU, working in collaboration with faculty and staff at UMMSM, proceeded with the development of the educational program. In 2007, thirty-two students enrolled in the program. Forty-eight students will be enrolled in the program this coming year.

The admission process for the initial class was managed almost entirely at the Miami campus of UMMSM, and at the present time certain student affairs activities continue to be managed there. For example, the Office of Student Financial Assistance is based entirely at UMMSM. However, all of the other student affairs activities are now conducted at least to some degree on the FAU campus.

Although the UMMSM Dean retains administrative responsibility for the program for accreditation purposes, the FAU faculty, the Regional Dean, and the Regional Dean's staff are largely responsible for the design and conduct of the UMMSM@FAU curriculum. The curriculum conducted at FAU varies in important ways from the curriculum conducted at the UMMSM Miami campus. It should be noted that it is much more consistent with the trends in curriculum development occurring in medical schools across the country.

The first two years of the FAU curriculum are structured as a series of integrated modules that emphasize small group, case-based learning experiences. This approach varies significantly from the very traditional program conducted in Miami. It is also noteworthy that the FAU program begins with a three week course (Introduction to the Medial Profession) that focuses the students' attention at the very outset of their study of medicine on the importance of a number of issues that relate to the role of physicians in society. This course is not a part of the educational program in Miami. In addition, the

students at FAU have the opportunity during the initial two years to experience the major clinical challenges facing American medicine by spending two half-days each week in a clinical practice setting (public health clinics). Students at Miami have limited clinical experiences in the first two years.

Efforts are now underway to develop operating agreements with clinical partners (hospitals and other clinical practice sites), which will provide the required clinical experiences for medical students in Year-3 of the educational program at FAU. The clinical experiences offered by FAU will be quite different from those offered in Miami. Instead of the traditional clerkship model employed in Miami, students at FAU will participate in integrated clerkship experiences that will emphasize the management of patients with chronic illness, and provide students the opportunity to establish longitudinal relationships with a panel of patients, as well as with faculty preceptors.

Graduate Medical Education

The academic affiliation agreement includes provisions governing the development of new graduate medical education (GME) programs in BRCH, as well as identifying additional sites for the development of new programs. The Regional Dean initiated discussions regarding the development of GME programs with officials of various hospitals in the county soon after the agreement was in place. In the course of those ongoing discussions, UMMSM staff unilaterally assumed primary responsibility for that activity. During the past year, the UMMSM Dean established a new administrative position at FAU - Executive Dean for Clinical Affairs – and vested the individual appointed to the position with the responsibility for developing GME programs in Palm Beach County. FAU staff are not involved in the process despite the fact that the development of GME programs in the county is a critical issue for the FAU undergraduate medical education program. This is an important issue because the accrediting body (LCME) strongly recommends that medical students have some interactions with residents in training during their clinical clerkship experiences.

The only new GME program that has been developed in the county to date (residents to begin in July 2008) is an internal medicine program based at JFK Hospital (in collaboration with the local Veterans Administration Hospital). After the planning process was well underway, UMMSM staff imposed themselves in the development of the program and ultimately limited JFK's ability to fill PGY-3 positions with transfers from other programs. There is very limited activity underway for the development of additional programs in other hospitals in the county. It is clear that BRCH, which was to be the primary site for GME program development, will not establish new programs within the timeframe set forth in the agreement. It is also clear that the distribution of GME programs proposed by the Strategic Planning Committee will not be realized within the timeframe set forth in the Strategic Plan document.

Since the supply of physicians for the state is related to the number of residents training in state GME programs, rather than the number of students enrolled in state medical schools, the development of new GME programs is an issue of great importance to the

State of Florida. This issue was central to the debate that occurred at meetings of the Florida Board of Governors during 2006 when the Board was considering whether to approve the development of two new medical schools in the state.

Faculty Practice

UMMSM is entirely responsible for the development of a clinical practice group in Palm Beach County. A very small practice has been established on the FAU campus. No significant clinical practice agreements have been reached with hospital medical staff members based at any of the local community hospitals. It is clear that hospital officials are quite concerned about the UMMSM desire to establish a clinical practice presence in the county and would prefer that any practice arrangements be organized and managed by FAU.

Research

No substantive collaborative research efforts between faculty based in Miami or on the FAU campus have developed. There is at present no strategic plan for accomplishing that objective. The lack of a joint initiative agreement creates obstacles for the development of a more robust research program at FAU because of uncertainty over the focus of future joint research efforts.

Philanthropy

No substantive joint efforts have been initiated. The Coordinated Development Plan called for in the agreement has not been developed.

New Teaching Hospital

BRCH has indicated that it will not meet the timeframe set forth in the agreement for the construction of a new hospital on the FAU campus. Because of the hospital's current financial situation, it is unlikely that it will be able to do so at any time in the near future.

Implementation of Agreement: Summary Analysis

The Regional Academic Medical Center Agreement has been in effect for two and one-half years (Ten Year Term). It is quite clear that a number of the objectives set forth in the agreement have yet to be realized. Perhaps more important is that it appears unlikely that many of the key objectives will be realized in the near future. There are four key provisions of the agreement that have not, or will not, be accomplished in a timely manner.

1) Most important is that the development of a new teaching hospital on the FAU campus will not occur in the timeframe set forth in the agreement, and given BRCH's financial situation, it is unlikely to occur during the Term of the

Agreement. As a result, the development of an academic medical center in Boca Raton is almost certainly not going to be realized within a reasonable period of time.

2) Also of critical importance is that annual operating budgets defining the responsibility that FAU and UMMSM have for program expenses have not been developed during the two and one-half years that the agreement has been in effect. The Affiliation Committee, chaired by the UMMSM Dean, is responsible for seeing that such agreements are in place. Since the Affiliation Committee has failed to develop annual operating budgets, it is not possible to show that there is agreement among the parties on how FAU and State of Florida resources should be used in support of the Program. In the absence of approved budgets, it is not possible to be certain that there is agreement among the parties on how the funds should be used to best serve the public's interest. The invoices submitted by UMMSM in the absence of an approved budget show rather clearly that significant disagreement exists between UMMSM and FAU on the appropriate use of the funds.

3) It is also noteworthy that a number of the planning documents that relate primarily to the FAU-UMMSM relationship have not been produced. For example:

- Dual agreement between FAU and UMMSM defining the joint responsibilities of the Regional Dean to FAU and UMMSM
- Strategic Staffing Plan defining the need for clinical faculty
- Coordinated Development Plan
- Development of a strategic research portfolio

4) Finally, it should be noted that the UMMSM Dean has recently appointed an individual to a previously, non-existent senior administrative position at FAU (Executive Dean for Clinical Affairs). This appointment has created a significant degree of administrative confusion for several key programmatic efforts underway in Boca Raton and Palm Beach County, because responsibilities included in the job description for the new position overlap with responsibilities set forth in the job descriptions of the Regional Dean and the Senior Associate Regional Dean for Medical Education.

It should be noted that the findings noted above that relate to organizational and administrative arrangements between UMMSM and FAU are entirely consistent with findings made by a previous educational program consultant. The two external reviews were conducted entirely independent of each other.

Affiliation Agreement: Opportunity Costs for FAU

Given the current state of implementation of key provisions of the affiliation agreement, it is clear that the agreement is not serving the primary purpose for which it was established. Accordingly, the agreement is not serving the purpose for which FAU and

State of Florida resources were committed. Given this situation, it is appropriate for the university to consider how those resources might be used to better serve the public's interest. And in that regard, it is appropriate to consider whether the resources could be better used to serve the development of FAU as a more comprehensive public university by establishing an independent medical school on the campus.

To put that issue in perspective, it is important to recognize that the existence of a medical school within a university clearly contributes to the university's prestige within the academic community. To a very great extent this results from the fact that universities with medical schools rank among the leaders in receiving both federal and private support for the conduct of research, and strong biomedical and health services research programs affect positively a number of academic programs conducted by other colleges within the university.

But the existence of a medical school also enhances the prestige of the university within the community where it is located. This occurs because medical schools, unlike other academic units within the university, are highly visible to the citizens living in the communities where the schools are located, primarily because the school's clinical faculty often provide specialized health care services and conduct cutting edge clinical and translational research within the community. The prestige that accrues to a public university as a result of the medical school presence benefits the institution by enhancing private support for the university from individuals within the community, as well as generous support from state government.

There is no question that an independent medical school will have a far greater impact over time on the evolution of FAU as a more comprehensive university than will the continued existence of the current UMMSM@FAU Program. It is now clear from experience across the country that a four-year, separate track program seriously limits the benefits that might accrue to a university if it operated its own independent medical school, primarily because the regional campus site is not free to invest resources in developing its own research, clinical care, and community services programs. As is the case with the Regional Academic Medical Center Agreement, and the agreements that have established to govern separate track programs elsewhere in the country, the parent medical school retains a great deal of control over the establishment of those programs and how they are branded (which university gets credit). Accordingly, the medical school's parent university will be identified within the community as the responsible institution and, therefore, is likely to reap any benefits that might be forthcoming.

It is very clear that if FAU wishes to continue to evolve as a comprehensive university, the current agreement carries with it a substantial opportunity cost for the university. That is, FAU agreed on entering into the agreement to forego acquiring funds that could be used to invest in further development of the university, an almost universal practice by universities that have their own medical schools. To put this in perspective, it is useful to examine the financial advantages that accrue to UMMSM under the terms of the current agreement.

Under the current agreement, the existence of the UMMSM@FAU Program provides revenue to UMMSM well in excess of the program costs borne by UMMSM. Since this revenue can be invested in the development of other UMMSM academic ventures, it provides a tremendous benefit to UMMSM. There are three important sources of revenue involved.

- The terms of the affiliation agreement between the institutions allows UMMSM to charge students attending FAU the same private school tuition that is charged to students enrolled at UMMSM. At full enrollment, the tuition and fees revenue will exceed $7.5 million. UMMSM is entitled to retain all of the net revenue after covering its share of the expenses of the program. Although there is no actual accounting of the UMMSM expenses, the amount will be well below the collected revenue.

- UMMSM is in the process of establishing a faculty practice group in Boca Raton, which will be a part of the school's faculty practice group. Under the terms that govern the plan's finances, the faculty practice activities in Palm Beach County will be required to pay a Dean's Tax to UMMSM, and the funds that are realized can be used at the discretion of the UMMSM dean.

- UMMSM is to receive an Annual Academic Support payment of $750 K from Boca Raton Community Hospital.

Under the terms of the agreement UMMSM may invest those funds in programs of interest to UMMSM without regard for how those programs might benefit FAU. It is also important to recognize that the UMMSM @FAU Program has provided UMMSM a presence within Palm Beach County from which it can expand its interest in growing its clinical practice activities and in private fund raising efforts. These efforts are already well underway.

Given the current status of the Regional Academic Medical Center Agreement, FAU needs to consider how it can best position itself to become a more comprehensive university. There is no question that the development of its own medical school would contribute greatly to that effort by eliminating the opportunity costs that FAU currently bears. In considering its ability to become an independently accredited medical school, it is important to note that the development and implementation of the educational program at FAU by FAU based faculty and staff is the singular positive accomplishment of the affiliation agreement. Therefore, FAU has demonstrated already its ability to develop and implement a cutting edge undergraduate medical education program that will undoubtedly be accredited by the LCME. The educational program consultant who recently reviewed the program reached this same conclusion.

It is interesting to note that UMMSM's reputation also benefits from the educational program at FAU. The existence of the UMMSM@FAU program distinguishes UMMSM from almost all other medical schools in the country because of the unique nature of the private-public partnership that exists (the medical school of a private university

partnering with a public university to create a four-year, separate track program). In addition, UMMSM can claim to be among the national leaders in innovation in medical student education by virtue of the nature of the curriculum established at FAU even though the curriculum was developed primarily by FAU based faculty and staff. Both of these features of the relationship affect positively how UMMSM is viewed by those in the medical education community nationally.

Since the current agreement is, from a practical sense, null and void, the university has an opportunity to build on the current experience gained in developing the four-year, separate track program to develop its own medical school. In considering that option, the university needs to weigh what is in best interest of the university and the citizens of the state. The lessons learned from the current partnership relationship, as well as those emanating from similar relationships across the country, should inform the thinking of university officials, as well as state officials, in deciding how to proceed. The opportunity costs involved should be uppermost in the minds of FAU officials as they consider how to restructure the current agreement.