AGENDA

1. Call to Order and Chair’s Remarks
   Cesar L. Alvarez

2. Approval of Minutes
   Cesar L. Alvarez

3. Action Items
   AP1. Honorary Degree Nomination
        Kenneth G. Furton
   AP2. Tenure as a Condition of Employment Nominations
        Kenneth G. Furton
   AP3. New Program Proposal: Bachelor of Science in Interdisciplinary Engineering
        Elizabeth M. Bejar
   AP4. New Regulation: Children’s Creative Learning Center
        Carlos B. Castillo

4. Information/Discussion Items (No Action Required)
   4.1 FIU/Torrey Pines Institute for Molecular Studies Update
       Kenneth G. Furton
   4.2 Strategic Plan Update
       Kenneth G. Furton
   4.3 Title IX Presentation
       Shirlyon J. McWhorter
   4.4 Academic Affairs Regular Reports
       - FIUBeyondPossible2020
         Pablo G. Ortiz
       - Academic and Career Success
         Valerie Johnsen
       - Engagement
         Saif Y. Ishoof
4.4 Academic Affairs Regular Reports (Continued…)

- Enrollment Management and Services
  Kevin B. Coughlin
- Information Technology
  Robert Grillo
- Research and Economic Development/ University Graduate School
  Andres G. Gil
- Student Affairs
  Elizabeth M. Bejar

5. New Business (If Any)
   Cesar L. Alvarez

6. Concluding Remarks and Adjournment
   Cesar L. Alvarez
Subject: Approval of Minutes of Meeting held: September 5, 2018 and November 2, 2018

Proposed Committee Action:
Approval of Minutes of the Academic Policy and Student Affairs Committee meeting held on Wednesday, September 5, 2018 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms and the Academic Policy and Student Affairs Committee meeting held on Friday, November 2, 2018, at the Modesto A. Maidique Campus, Graham Center room 355.

Background Information:
Committee members will review and approve the minutes of the Academic Policy and Student Affairs Committee meeting held on Wednesday, September 5, 2018 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms and the Academic Policy and Student Affairs Committee meeting held on Friday, November 2, 2018 at the Modesto A. Maidique Campus, Graham Center room 355.

Supporting Documentation: Minutes: Academic Policy and Student Affairs Committee Meetings, September 5, 2018 and November 2, 2018

Facilitator/Presentor: Cesar L. Alvarez, Academic Policy and Student Affairs Committee Chair
1. Call to Order and Chair’s Remarks
The Florida International University Board of Trustees’ Academic Policy and Student Affairs Committee meeting was called to order by Committee Chair Cesar L. Alvarez at 10:23 a.m. on Wednesday, September 5, 2018, at the Modesto A. Maidique Campus, Graham Center Ballrooms.

Committee Chair Alvarez welcomed all Trustees and University faculty and staff to the meeting.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Cesar L. Alvarez, Chair; Natasha Lowell, Vice Chair; Dean C. Colson, Joerg Reinhold, Marc D. Sarnoff, and Jose L. Sirven, III.

Trustees Jose J. Armas and Michael G. Joseph were excused.

Board Chair Claudia Puig, Trustees Leonard Boord, Justo L. Pozo, and Rogelio Tovar, and University President Mark B. Rosenberg were also in attendance.

Provost and Executive Vice President Kenneth G. Furton reported that Vice President of Student Affairs Larry Lunsford will be retiring at the end of the year and that a transition plan was in place for the future of Student Affairs. He explained that as of July 15, 2018, Dr. Elizabeth M. Bejar had agreed to serve as Senior Vice President for Academic and Student Affairs. Provost Furton provided an update on the Honors College and Enrollment Management and Services. He reported that Juan Carlos Espinosa and Kevin Coughlin Jr. have been appointed as the Dean of the Honors College and Vice President of Enrollment Management Services, respectively. He explained that during Dr. Espinosa’s time as interim dean, he expanded online courses by over 15% and elevated student success to a 96% retention rate. He noted that during Dr. Coughlin’s time as the Interim Vice President of Enrollment Management and Services (ERM), he strategically executed unique admission pathways, Personalized Success Pathways, which have allowed the University to attain the highest admission profile in its history.
2. Approval of Minutes
Committee Chair Alvarez asked if there were any additions or corrections to the minutes of the June 6, 2018 Academic Policy and Student Affairs Committee meeting. A motion was made and unanimously passed to approve the Minutes of the Academic Policy and Student Affairs Committee Meeting held on Wednesday, June 6, 2018.

3. Action Items
AP1. Tenure as a Condition of Employment Nomination
Committee Chair Alvarez noted that there was one candidate submitted for Tenure as a Condition of Employment based on the caliber of their scholarly work.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the FIU Board of Trustees approve the one candidate for Tenure as a Condition of Employment.

AP2. Legislative Budget Requests
Provost Furton presented the 2019-2020 Legislative Budget Requests (LBR) for Committee review. He explained that the Targeted STEM Initiatives mission is to transform and reengineer the university’s STEM programs and optimize retention and graduation marketability in the areas of science, math, engineering, and computer science. He noted that the second LBR, FIU Decision Laboratory is a platform for informed decision making around a variety of areas including policy, decision makers, and business leaders who will be able to test solutions and alternatives in a laboratory setting.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the FIU Board of Trustees approve the 2019-2020 Legislative Budget Requests:

Unique University Issues:
- Targeted STEM Initiatives Request: $4,998,664
- FIU Decision Laboratory Request: $3,500,000

AP3. Textbook and Instructional Materials Affordability Annual Report
Senior Vice President for Academic and Student Affairs Elizabeth M. Bejar presented the Textbook and Instructional Materials Affordability Annual Report for Committee review, delineating the requirements that are embedded in the Education Access and Affordability bill, HB 7019, which became effective July 1, 2016. She reported that under this bill, all State University System institutions are required to submit a Textbook and Instructional Materials Affordability Annual Report that determines the wide cost variance for required and recommended course materials for General Education and High Enrollment courses. In addition, she noted that the report includes an overview of institutional initiatives and policies designed to reduce the costs of course materials and promote college affordability.

Sr. VP Bejar reported that during Fall 2017 and Spring 2018, the University reached the State mandated adoption deadline for full compliance. She added that the minimum threshold was 95%
for full compliance, which means that textbooks are associated with a class 45 days ahead of the first day of class.

In response to Trustee Leonard Boord’s inquiry regarding publishers charging a yearly fee for unlimited online access to textbooks, Sr. VP Bejar explained that unlimited access is one of the initiatives of the first day pilot program. She added that FIU faculty are currently collaborating across multiple sections on common textbooks which will provide greater leveraging power with publishers.

For the next regularly scheduled committee meeting, Trustee Marc D. Sarnoff requested to know how FIU students use online textbooks compared to the market.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the Textbook and Instructional Materials Affordability Annual Report.

AP4. Revisions to Regulation FIU- 2501 Student Code of Conduct
Sr. VP Bejar presented the Revisions to Regulation FIU-2501 Student Code of Conduct (the Code) for Committee review. She noted that most of the revisions were grammatical errors followed by an update to the Vice President’s new title. She stated that the revisions of note related to clarifying language and behaviors with respect to hazing. She added that the Student Code of Conduct protects the accusers and the accused.

For the next regularly scheduled committee meeting where revisions to the Code are addressed, Committee Chair Alvarez requested the removal of the personal abuse reference in section P1 of the Code. He added that it should be deleted because it applies to the entire Code, not just that section.

In response to Trustee Jose L. Sirven’s inquiry regarding the Code’s applicability to students who live in off campus housing, Sr. VP Bejar explained that the Code applies to all students irrespective of where they are.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the revisions to the FIU- 2501 Student Code of Conduct.

4. Information/Discussion Items (No Action Required)
4.1 Academic Affairs Regular Reports
There were no questions from the Committee members in regards to the reports included as part of the agenda materials: FIUBeyondPossible2020; Academic and Career Services; Engagement; Enrollment Management and Services; Information Technology; Research and Economic Development/ University Graduate School; and Student Affairs.

5. New Business
No new business was raised.
6. Concluding Remarks and Adjournment
With no other business, Committee Chair Cesar L. Alvarez adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee meeting on Wednesday, September 5, 2018 at 10:49 a.m.

<table>
<thead>
<tr>
<th>Trustee Requests</th>
<th>Follow-up</th>
<th>Completion Date</th>
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<tr>
<td>1. Trustee Marc D. Sarnoff requested to know how FIU students use online textbooks compared to the market.</td>
<td>Senior Vice President for Academic and Student Affairs, Elizabeth M. Bejar</td>
<td>December Meeting</td>
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<tr>
<td>2. Committee Chair Alvarez requested the removal of the personal abuse reference in section P1 of the Student Code of Conduct.</td>
<td>Senior Vice President for Academic and Student Affairs, Elizabeth M. Bejar</td>
<td>Spring 2019</td>
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KS September 12, 2018
1. Call to Order and Chair's Remarks
The Florida International University Board of Trustees’ Academic Policy and Student Affairs Committee meeting was called to order by Committee Chair Cesar L. Alvarez at 2:36 p.m. on Friday, November 2, 2018, at the Modesto A. Maidique Campus, Graham Center room 355.

Committee Chair Alvarez welcomed all Trustees and University faculty and staff to the meeting.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Cesar L. Alvarez, Chair; Dean C. Colson; Michael G. Joseph (participated telephonically); Joerg Reinhold; Sabrina L. Rosell; and Marc D. Sarnoff. Trustee Natasha Lowell, Vice Chair, arrived after roll call.

Board Vice Chair Jose J. Armas was excused.

Trustees Leonard Boord, Gerald C. Grant, Jr., and Rogelio Tovar, and University President Mark B. Rosenberg were also in attendance. Board Chair Puig participated telephonically.

2. Discussion Item
AP1. FIU Strategic Plan 2025
University President Mark B. Rosenberg explained that meeting together with monthly update meetings serve as a means to engage the Board of Trustees in the strategic planning process.

Provost and Executive Vice President Kenneth G. Furton provided an update on actual and projected enrollment by category. Trustee Dean C. Colson expressed the concern of the Chair of the Board of Governors’ regarding enrollment growth and requested information on the adjunct faculty costs needed in order to support the projected growth. In response to Trustee Colson’s inquiry regarding space needs, Provost Furton stated that the strategic planning committees are looking at enrollment projections and final data, adding that an additional 4,200 square feet of space would be needed in order to accommodate 4,000 incoming students. Provost Furton noted that the adjunct faculty costs would be finalized based on the final projections.
Trustee Michael G. Joseph inquired on the revenues and expenditures by academic unit, requesting an analysis that detailed which units are supporting or subsidizing.

Trustee Leonard Boord made several inquiries with respect to financial information in terms of enrollment projections, return on investment for dual enrollment, and administrative overhead.

Committee Chair Alvarez requested a comparative analysis in terms of enrollment growth and population growth.

President Rosenberg explained that from a strategic perspective, direction for growth is critical, adding that the Board’s strategic understanding of the University’s responsibility to the community in terms of graduate education and just-in-time education, which will be the standard for the workforce, has gained significant importance. He indicated that the number of traditional students graduating will plateau by 2027, stating that the growth in adult learners returning to complete their degree or advance their skills is predicted to grow exponentially.

Senior Vice President and Chief Financial Officer Kenneth A. Jessell presented a detailed overview of the expenditures for the 2018-19 academic year, and the University’s operating budget history from FY 2005-06 through FY 2018-19. Sr. VP and CFO Jessell delineated the five-year capital improvement plan and legislative budget requests from FY 2019-20 through FY 2023-24 and stated that currently students are opting for less debt in terms of student loans than they did in 2012-13.

In response to Trustee Gerald C. Grant, Jr.’s comment regarding the growth of online education in terms of impacting space needs, Sr. VP and CFO Jessell stated that buildings and additional space are still needed to support the function of online programs.

Trustee Rogelio Tovar expressed his concern regarding deferred facilities maintenance and inquired as to the University’s current efficiency levels.

Provost Furton presented the FIU NextHorizon2025 proposed goals. President Rosenberg added that given their importance to the University’s funding, performance funding metrics must be embedded within the new strategic plan. Provost Furton added that the four pillars are centered around student success, preeminence, highest research, and expanded financial base. He then described each pillar and provided a detailed overview of the implementation workgroups, and noted that the workgroups meet on a weekly or bi-weekly basis with about half of the workgroup members being represented by faculty members.

Trustee Tovar stated that details on the strategies to achieve the proposed goals would be beneficial in terms of providing guidance. Senior Vice President for Academic and Student Affairs Elizabeth M. Bejar stated that the proposed strategic plan will be comprehensive, inclusive of strategies, budget implications, and return-on-investment.

Trustee Tovar requested year over year historical data for four-year graduation rates and made several inquiries relating to average cost per student and how that is measured, as well as the funding source that is being utilized to lower the average cost to the student.
In response to Trustee Tovar’s inquiries, Provost Furton explained that the workgroups are collaborating on those questions.

Trustee Tovar requested comprehensive information relating to the data and strategies to achieve the proposed goals, in addition to the calculations and definitions used.

Trustee Boord mentioned that in order to maintain the same level of services to the demographic, a 1.9% ratio to the general population is needed. Trustee Boord then inquired as to the rationale driving the projected increase to 61,000 instead of an approximate 10% increase, which is represented by approximately 57,000. In response to Trustee Boord’s inquiry, Provost Furton stated that the majority of the 4,000 online students are expected to be completer students, who are defined as adult learners who returned to complete their degrees after a break in their higher education pursuit. He added that completer students are one subset of the population that is projected to grow.

Trustee Boord made several data requests pertaining to online students in order to contrast traditional students with those who are considered completers, in addition to current and future projections in terms of completer enrollment.

President Rosenberg presented a historical perspective on state university funding prior to the recession, noting that the University reduced its operating budget by $460 million in a period of three to four years. He added that the University’s current finances are a function of a carefully developed strategy critically necessary to sustain programs and graduate students. In response to Trustee Tovar’s request for definitions, President Rosenberg explained that definitions are included as part of the Accountability Plans that the Board approves annually.

Trustee Colson suggested that dual enrollment students be removed from enrollment projections, adding that with regards to preeminence, the University should review key programs and present data on how critical investments in said programs could result in positive impacts. He would like to see accountability built into the strategic plan.

Trustee Boord requested that the goals and related strategies be presented once the workgroups have concluded their work. Committee Chair Alvarez noted that Trustee Boord’s request is the intention of the process.

Provost Furton stated that the strategic planning committees have delineated numerous student success strategies, adding that the workgroups are now collaborating on their prioritization and that feedback from the Board would be welcome by the committees and workgroups.

Committee Chair Alvarez expressed his concern over a perception relating to recent graduates lacking soft skills and stated the importance of effective collaboration and possessing interpersonal skills.

Provost Furton added that the workgroup being led by Sr. VP Bejar is focused on the competencies that employers are looking for in terms of hiring candidates. Sr. VP Bejar shared that the
workgroups are currently in an exploratory phase and explained that new areas are being reviewed in terms of incorporating badging or upscaling and exploring ways to potentially convert the non-credit experience as to stackable credentials within the curriculum. She added that four competencies have been identified as the most critical: critical thinking; teamwork and collaboration; cultural agility; and oral/written communication. Sr. VP Bejar stated that the workgroups are delving into creative problem solving, entrepreneurship and innovation, leadership, resilience, empathy, systems thinking design, ethical decision making, and civic engagement. She provided further detail on stackable badges and micro-masters, as well as credit versus non-credit mechanisms and indicated that it is the University’s responsibility to alumni and the community to reskill them with those competing paradigms.

Trustee Colson suggested that a discussion with the Board of Governors on badging could be beneficial.

Trustee Grant mentioned that soft skills are critical for professionals in today’s workforce and related his personal experience, attributing his success in graduate school due to involvement in group dynamics and group presentations. He indicated that the quality of the student will improve once soft skills are incorporated within all educational levels.

President Rosenberg reported that the University is currently evaluating an approach that would ensure that soft skills and technical skills are embedded in the staff evaluation program, adding that professional staff is expected to take continuing education courses to demonstrate proficiency in said skills sets.

President Rosenberg asked for input from all the Trustees.

Trustee Joerg Reinhold provided positive feedback on the current progress in terms of the strategic plan, adding that there is value not only for the Board members, but also for the faculty to receive a higher level of data.

Trustee Sabrina L. Rosell explained that the workgroups are developing strategies that are justified by research and best evidence, and noted that she is serving as one of the co-chairs for the committee focused on highest research.

Trustee Marc D. Sarnoff made several comments regarding the significance placed on performance funding and also inquired as to the University’s current and future vision and aspirations. In response, Trustee Grant stated that as a state institution, performance based funding is critical and that in order to minimize the reliance on BOG funding, an expanded fundraising base is necessary.

Trustee Natasha Lowell made several requests in terms of definitions and a proforma for each metric, action plan items, strategies, and return-on-investment. She also requested that the chair of each workgroup present at a future Board meeting. Trustee Boord requested that the Board review the top 10 recommendations from each workgroup in order to subsequently identify the top four priorities. He also made requests regarding definitions, context, costs associated with strategies, return on investment projections, and potential revenue.
3. New Business *(If Any)*
No new business was raised.

4. Concluding Remarks and Adjournment
With no other business, Committee Chair Cesar L. Alvarez adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee meeting on Friday, November 2, 2018 at 5:06 pm.

KS November 13, 2018
Subject: Honorary Degree Nomination

Proposed Committee Action:
Recommend that the Florida International University Board of Trustees endorse Mr. Joseph “Pepe” Badia as a recipient of a doctoral degree *honoris cau$a* from Florida International University.

Background Information:
The nomination was recommended by the Faculty Senate on Tuesday, March 27, 2018.

The nominee was approved by the University President and Provost to receive an honorary degree at Commencement.

Florida Board of Governors Regulation 3.004, Honorary Degrees, provides that each university board of trustees shall establish policies and procedures for recommending candidates for honorary degrees.

Supporting Documentation: Bio for Mr. Joseph “Pepe” Badia
Nomination letters for Mr. Joseph “Pepe” Badia

Facilitator/Presenter: Kenneth G. Furton
Joseph “Pepe” Badía is the President of Badía Spices, one of today’s leading family-owned Hispanic food companies. He was born in Cuba and came to the United States in 1960 at the young age of 14. He served in U.S. Army in the mid 60s, and when his family settled in Miami, Florida, he attended Miami-Dade Community College.

In 1967, his father José Badía, started a new business in Miami, in a small store at the corner of Southwest First Street and 22nd Avenue where he established Badía Spices. By 1970, when José needed an employee to help manage and grow the day-to-day operations of Badía Spices, he offered the job to his 23-years-old son Pepe, as he affectionately called him. Pepe and his father worked closely, in the late 1960s and ’70s, Pepe concentrated on growing their customer base among bodegas in Miami and surrounding areas. Badía Spices penetrated the Miami market at just the right time to meet a growing demand. Badía then expanded into South Florida supermarket chains within and outside the Hispanic community; selling quality products at affordable pricing; broadening their product line; taking calculated risks by entering new national and global markets; making steady investments, and hiring a top-notch team of dedicated employees.

Throughout the company’s journey over the last five decades, Badía's products have been sold and savored in 78 countries, including all corners of the United States. Pepe has done it all, from mopping floors, filling bottles, running machines, to driving trucks to sell his products. He is honored that Badía Spices has become an important supplier of products to national and global markets; he is modest about his achievements and never fails to give credit to his team of exceptional employees.

Badía Spices follows the example set forth by President, Joseph “Pepe” Badía, and continued by the Badía Family’s endeavor to enhance and strengthen the communities where our families live, work and play. As such, the company supports organizations such as The Dan Marino Foundation, National Breast Cancer Foundation, Here’s Help, Miami-Dade Community College, Florida International University, and La Liga Contra el Cancer to name a few.

Notable Recent Events:

- **Mr. Badía and his company Badía Spices, Inc. recently honored Dr. Padrón, President of Miami-Dade College with a $1 million donation to create the Dr. Eduardo J. Padrón Scholarship. Dr. Padrón is a recipient of the nation’s highest civilian honor, the Presidential Medal of Freedom which he received for his work in higher education and for making it accessible and inclusive.**

- **The advanced food production laboratory at FIU’s Chaplin School of Hospitality & Tourism Management has a new name, thanks to a gift from Badía Spices. In recognition of Badía’s endowed gift, the lab – which complements The Wine Spectator Restaurant Management Laboratory – has been recently named the Badía Spices Food Production Laboratory.**

- **The Patricia and Phillip Frost Museum of Science, currently under construction in downtown Miami’s Museum Park, recently received a $1 million gift from Badía Spices supporting the museum’s capital campaign.**

- **Miami Dade College Foundation chose to honor Mr. Badía as their honoree of the prestigious Donor Next Door Award because of his continued commitment to corporate social responsibility.**

- **In 2015, Badia Spices received the very prestigious MBE Supplier of the Year Award from the Florida State Minority Supplier Development Council.**
TO: Florida International University Honorary Degree and Awards Committee
FROM: Michael Cheng, Ph.D. CHE
Associate Professor / Director, Food and Beverage
SUBJECT: Recommendation of Honorary Degree for Mr. Pepe Badia

Joseph "Pepe" Badia is the President of Badia Spices, Inc., and a long-time supporter of the Chaplin School of Hospitality & Tourism Management. Arriving as an immigrant from Cuba at age 14 with no English speaking skills, Pepe Badia is a classic example of Hispanic entrepreneurship in the United States. Badia Spices was founded in 1967 by his father, Jose Badia. In 1971, Pepe Badia took over daily operations of the business, and has since grown the company exponentially. Today, Badia Spices products are distributed internationally in over 60 countries and across the United States.

Mr. Badia’s affiliation with the Chaplin School spans more than a decade, with the establishment of two scholarship funds at FIU in 2004 and 2006. Since then, Mr. Badia has supported the South Beach Wine and Food Festival annually, with all proceeds from the Festival supporting Hospitality Management students at the School.

In 2013, Mr. Badia sponsored the first of two spice competitions at FIU, and students from the Chaplin School created two new spices that are currently being sold in over 60 countries worldwide. The finalists of both competitions received scholarships, and the Chaplin School benefits from a percentage of global sales of the winning blends in perpetuity.

Mr. Badia exemplifies truth in the pursuit, generation, dissemination and application of knowledge. He is a firm believer in supporting student scholarship and enhancing experiential learning. In 2015, Mr. Badia solidified his support for FIU by donating $500,000 towards renaming the advanced food production laboratory space into the Badia Spices Food Production Laboratory - a 2,200 square feet of space with state-of-the-art instructional technology where students can develop, test, and taste new product ideas and solutions for the food industry. In addition, Badia Spices provides in-kind donation for all of Chaplin School's instructional needs.

As a Vietnam war veteran, Mr. Badia understands the value of freedom of thought and freedom of speech. His philanthropy includes creating the Dr. Educado J. Padron Presidential Medal of Freedom Scholarship at Miami Dade College. He also supports a variety of local and national charities, such as The Dan Marino Foundation, National Breast Cancer Foundation and Here’s Help.

Because of his support, I believe that Mr. Badia is a true friend of the University. Pepe Badia is an accomplished businessman who is recognized for his leadership, service and philanthropy to the community, and is deserving of a Honorary Degree from Florida International University. I have had the distinct pleasure of working with him since 2015, and his intelligence, personality, and humbleness never ceases to amaze me.
24 April 2017

FIU Honorary Degree Committee

Re: Mr. Pepe Badia

I am an Assistant Professor in the Chaplin School of Hospitality and Tourism Management at FIU. I am also Chair of the Faculty Assembly. Prior to teaching at FIU, I was a practicing attorney in Miami for over thirty years.

This letter is to recommend that Pepe Badia be selected for an honorary degree at FIU in light of his substantial contributions to the university.

Mr. Badia has been very supportive both personally and through his business. The students at the Chaplin School are motivated by Mr. Badia’s achievements in the business world which provide inspiration to be successful in their academic careers and in their future business careers.

In particular, Badia Spices has provided a contest which challenges students to be innovative in creating a spice blend which will be a product in the real world. This contest has been a productive challenge for students and an introduction to the competitive world of food products.

It would be a fitting recognition for Pepe Badia to be awarded an honorary degree in recognition of his support to the Chaplin School at FIU.

Very truly yours,

/s/ John H. Thomas

John H. Thomas,
Assistant Professor, Hospitality Law
Chair, Faculty Assembly
March 30, 2017

TO: Florida International University, Honorary Degree Committee

FROM: Barry H. Gump, Ph.D.
       Harvey R. Chaplin Eminent Scholar in Beverage Management

SUBJECT: Letter of Support for an Honorary Degree: Mr. Joseph “Pepe” Badia

Mr. Badia has been a significant supporter of the food and beverage science programs at the Chaplin School of Hospitality & Tourism Management. An innovator himself, Mr. Badia and Badia Spices have been challenging our students through a yearly contest to design a new spice blend formula and apply it in a cooking taste-off. The winning student receives a $5,000 scholarship, while the Chaplin School receives a 5% royalty from global sales of the winning spice blend in perpetuity.

This contest requires our students to create a new spice blend with a specific focus. It encourages the students to use their ability to envision how compatible a new spice blend will be with a particular prepared dish. Among others, the inventor must factor in the cooking process involving heat, time, and possibly various liquid and solid foods. As a consequence, the student must be well versed in culinary science, product development and creative thinking.

I have taught food science and currently teach food and wine pairing. In the latter instance, there are skills that one acquires based on basic principles and experience. Mr. Badia is allowing our students to stretch their abilities and create something new. He is also allowing the winner to take pride in their ability to be creative and in their ability to support our school.

I believe that Mr. Badia is a true friend of the University. As such, I also believe that the University would be well served by recognizing him and his support with an honorary degree.

Sincerely yours,

Barry H. Gump, Ph.D.
       Harvey R. Chaplin Eminent Scholar in Beverage Management
       bgump@fiu.edu
April 15, 2017

To the Honorary Degrees and Awards Committee:

Mr. Pepe Badia is a kind-hearted man with a noble spirit. I first met him when he launched a scholarship competition for the Chaplin students to create a spice for the Badia Spices product line. At the culmination of the first competition, Mr. Badia presented the scholarship to the student with the winning recipe. To the audience’s surprise, he very generously stated that there were “no losers in this effort” and awarded scholarships to all five finalists. The winning recipe from the first completion, "Holy Smokes", is one of Badia’s most popular and best-selling spices. Mr. Badia gives the Chaplin School a percentage of the gross sales in perpetuity. These funds provide student enrichment monies for students to attend conferences and undertake research projects; study abroad; and create opportunities for them to network globally.

It was shared with me that when Mr. Badia was asked to support of the School’s Food Production Lab, his humble response was that he was honored to be asked again to help our students. Initially he was not interested in receiving the naming of the facility, and felt it should be anonymous- which speaks volumes of his humbleness and genuine generosity.

He is a very special man who has dedicated his life to lead by example and make a difference in his community. We are beyond fortunate to have his light shine on our school.

I strongly support his nomination for an honorary degree from FIU.

Sincerely,

Diann Newman, Ed.D.
Associate Dean
Florida International University
Chaplin School of Hospitality & Tourism Management
(305) 919-4523
(305) 919 4555 (fax)
April 20, 2017

President Mark Rosenberg  
Florida International University  
11200 SW 8th ST  
PC-528  
Miami, FL 33199

Dear President Rosenberg,

On behalf of Dan and Claire Marino and The Dan Marino Foundation (Foundation), it is my pleasure to offer this letter in support of Joseph “Pepe” Badia as recipient of an honorary degree from Florida International University.

Known as the Spice King, Pepe Badia’s vision and hard work transformed a modest family business into a premiere, international award winning company. Pepe Badia has been pivotal in the lives of countless minority and underserved individuals and families, creating jobs and opportunities that opened doors for all to achieve.

Mr. Badia’s accomplishment in building Badia Spices would singularly merit his being awarded this honor. But it is his philanthropic efforts that truly distinguish him. Pepe cares about people and community, publically committing his time and resources to schools and charities, while anonymously giving to individuals and families in their times of greatest need.

Pepe Badia has made a real difference in the Foundation’s ability to serve others. Badia Spices support of the DMF Walkabout Autism and other events provides awareness and acceptance of individuals with special needs, as well as funding for life changing services.

Mr. Badia continues to build a legacy that includes excellence in business while insuring opportunities for all. Pepe is an extraordinary man, with the highest character and loyalty to his company, family and community. This recognition would be well deserved!

Sincerely,

Mary Partin, CEO

Empowering individuals with autism and other developmental disabilities.

400 North Andrews Ave. · Fort Lauderdale, FL 33301 · P: 954.368.6000 · F: 954.530.4325 · www.danmarinofoundation.org
April 19, 2017

To Whom It May Concern:

Ten years ago, I was fortunate enough to meet Pepe Badia. After hearing about Here’s Help from a board member, he agreed to come and see the campus. Here’s Help, founded in 1969, provides substance abuse treatment for adults and adolescents ages 13 and up. Licensed by Florida Department of Children and Families and accredited by the Commission on Accreditation and Rehabilitation Facilities (CARF) for 17 years, HH operates two facilities serving an average of 150 residential and 350 outpatient clients annually.

When Pepe walked through the doors of Here’s Help he had one thing on his mind... “how can I make a difference”? By the time we finished the tour of our campus, Pepe just said “how much do you need”? I told Pepe “don’t write me a check, build me a kitchen where the kids can learn a skill”! Two weeks later I got the call.... “Hello my name is Luis, Pepe hired me to build you a kitchen.” It was then and there that the Badia Spices Culinary School was born. To date, it is the MOST successful program Here’s Help has ever produced, thanks to Pepe. The Culinary Arts Program is 10-weeks of hands-on training, combining classroom with cooking experience in HH’s industrial kitchen. Curriculum includes preparation of healthy gourmet meals for clients in residential treatment. Our young men not only graduate our program with the skills they need to fight their addiction, they have a trade to survive in the real world and opportunities in the culinary field.

Ten years down the road, Pepe is still an integral part of Here’s Help. He is a member of our Board of Directors and has supported Here’s Help in so many ways, from donating vehicles to our organization, to sponsoring our two major fundraisers every year, to helping us build a sports field for our students. Just last month he bought all new equipment for the Badia Spices Culinary kitchen. We could not do it without him and are grateful for his friendship every day.

Thanks,

[Signature]

John "Footy" Kross
Here’s Help CEO
FIU Alumni

15100 NW 27th Ave. · Opa Locka, FL 33054 · (305) 685-8201 ext. 231 (office) · Fax (305) 685-0158
9016 SW 152 Street · Miami, FL 33157 · Phone (305) 238-8500 · Fax (305) 251-4118
www.hereshelpinc.com
THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
December 5, 2018

Subject: Tenure as a Condition of Employment Nominations

Proposed Committee Action:
Recommend to the Florida International University Board of Trustees the approval of two (2) candidates for Tenure as a Condition of Employment (TACOE).

Background Information:
Pursuant to the Florida Board of Governors Regulation 1.001(5)(a), each board of trustees shall provide for the establishment of the personnel program for all the employees of the university, including but not limited to tenure.

The TACOE nominees held tenure at their previous institutions and have been selected to receive TACOE based on the caliber of their work.

Supporting Documentation:
Attachment 1 – Tenure as a Condition of Employment Nominee Overview
Attachment 2- Tenure as a Condition of Employment Nominees’ Biographies
Attachment 3- Tenure as a Condition of Employment Nominees’ Curriculum Vitae

Facilitator/Presenter: Kenneth G. Furton
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<table>
<thead>
<tr>
<th>Name</th>
<th>College</th>
<th>Department</th>
<th>Proposed Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Sackstein</td>
<td>Medicine</td>
<td>Translational Medicine</td>
<td>Professor</td>
</tr>
<tr>
<td>Arijit Sengupta</td>
<td>Business</td>
<td>Information Systems and Business Analytics</td>
<td>Professor</td>
</tr>
</tbody>
</table>
Robert Sackstein, MD, Ph.D.  
Department of Translational Medicine  
College of Medicine

Robert Sackstein, MD, Ph.D. joins FIU as the newly appointed dean of the Herbert Wertheim College of Medicine (HWCOM) and senior vice president of health affairs. Prior to his appointment he was at Harvard Medical School (HMS), where he served as professor in two departments, dermatology and medicine, and co-director of the Glycoscience Center at HMS.

Dr. Sackstein received his undergraduate degree from Harvard College, Summa cum Laude in Biology, and his M.D. and Ph.D. degrees from Harvard Medical School, where he also received the James Tolbert Shipley Prize for outstanding research. He then completed internal medicine training and fellowships in immunology and hematology at the University of Miami, and received the Young Investigator Award for Excellence in the Field of Hematology from the International Society for Experimental Hematology. While at Harvard, Dr. Sackstein was recognized as an accomplished clinician, researcher, and educator. As both a basic and clinical scientist, he has focused on developing glycoscience, a branch of science concerned with the role of sugars in biological systems, and his work has yielded strategies to optimize cell-based therapeutics to regenerate damaged tissue and combat cancer. His work at Brigham & Women’s Hospital, a Harvard teaching hospital, garnered funding for the creation of the largest research infrastructure of any department of dermatology in the world. He also was an active educator, teaching medical and graduate students, interns/residents, and post-doctoral fellows, as well as running a Harvard undergraduate course on the scientific method.

Dr. Sackstein’s work has been recognized internationally. He serves on the Scientific Advisory Committee to the Board of Trustees of the Jose Carreras Leukemia Research Institute in Barcelona, he is the Chairperson of the International Advisory Committee to the Spanish National Cell Therapy Network, and is also on the International Advisory Board to the Swedish Government at the Wallenberg Center for Molecular Medicine Initiative in Stem Cell Therapeutics at Lund University in Sweden.
Arijit Sengupta, Ph.D.
Department of Information Systems and Business Analytics
College of Business

Dr. Sengupta joins FIU as the Professor and Associate Dean for Accreditation and Technology Systems in the College of Business. He received his MS and Ph.D. in Computer Science from Indiana University, Bloomington, and his bachelor of technology degree in Computer Science and Engineering from the Indian Institute of Technology, Kharagpur. Prior to coming to FIU, he was a member of the faculty member at Raj Soin College of Business, Wright State University since 2005 where he most recently served as Associate Dean and Professor of Information Systems and Supply Chain Management. He has also served on the faculty at Indiana University’s Kelley School of Business and the Robinson College of Business at Georgia State University.

Dr. Sengupta’s research interests include technology adoption in organizations (particularly RFID and mobile technologies), improving student assessment and engagement, data analytics, databases and XML, data modeling, query languages, data mining, and human-computer interaction. He has published over 20 refereed scholarly articles in leading journals, presented his work in many conferences and workshops, as well as authored several book chapters. While at Wright State University, Dr. Sengupta created and launched funded research centers and labs for RFID (Radio Frequency Identification) and Data Analytics. He also founded SmartRF Solutions, a startup commercializing SmartParkRF, an application of Automatic Vehicle Identification (AVI) technology. To support accreditation from the Association to Advance Collegiate Schools of Business (AACSB) of the college, Professor Sengupta developed AMP (Assess My Program) - the system that the College of Business now uses for its Assurance of Learning process. He also developed Passport to Success – a mobile application and environment for promoting student engagement and retention in the college of business.
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Harvard Medical School  
Curriculum Vitae

Date Prepared: May 29, 2018
Name: Robert Sackstein, M.D., Ph.D.
Academic Title: Professor (two departments: Dermatology and Medicine), Harvard Medical School
Office Address: Harvard Institutes of Medicine
77 Avenue Louis Pasteur, Room 671
Boston, MA 02115
Home Address: 26 Fox Run Road
Sudbury, MA 01776
Work Phone: 617-525-5601
Work E-Mail: rsackstein@rics.bwh.harvard.edu
rsackstein@partners.org
Work FAX: 617-525-5571
Place of Birth: Havana, Cuba

Education

<table>
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<tr>
<th>Year</th>
<th>Degree</th>
<th>Field</th>
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<tr>
<td>1977</td>
<td>A.B.</td>
<td>Biology</td>
<td>Harvard College, Cambridge, MA</td>
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<tr>
<td>1985</td>
<td>M.D., Ph.D.</td>
<td>Ph.D. in Immunology</td>
<td>Harvard Medical School, Boston MA</td>
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Postdoctoral Training

Internships and Residencies

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<th>Year</th>
<th>Type</th>
<th>Field</th>
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<tr>
<td>1985-1986</td>
<td>Internship</td>
<td>Internal Medicine</td>
<td>University of Miami/Jackson Memorial Hospital, Miami, FL</td>
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<tr>
<td>1986-1988</td>
<td>Residency</td>
<td>Internal Medicine</td>
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Clinical and Research Fellowships

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<th>Year</th>
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<tr>
<td>1987-1989</td>
<td>Postdoctoral Fellowship</td>
<td>Immunology</td>
<td>University of Miami/Jackson Memorial Hospital, Miami, FL</td>
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<tr>
<td>1989-1991</td>
<td>Clinical Fellowship</td>
<td>Hematology</td>
<td>University of Miami/Jackson Memorial Hospital, Miami, FL</td>
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</table>
### Faculty Academic Appointments

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<tr>
<th>Year</th>
<th>Position</th>
<th>Department(s)</th>
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<tbody>
<tr>
<td>1988-1989</td>
<td>Instructor</td>
<td>Medicine</td>
<td>University of Miami School of Medicine, Miami, FL</td>
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<tr>
<td>1989-1993</td>
<td>Assistant Professor</td>
<td>Medicine, Microbiology and Immunology</td>
<td>University of Miami School of Medicine, Miami, FL</td>
</tr>
<tr>
<td>1993-1996</td>
<td>Assistant Professor</td>
<td>Internal Medicine, Pathology and Laboratory Medicine</td>
<td>University of South Florida College of Medicine, Tampa, FL</td>
</tr>
<tr>
<td>1997-1999</td>
<td>Assistant Professor</td>
<td>Surgery</td>
<td>Harvard Medical School, Boston, MA</td>
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<tr>
<td>1997-2003</td>
<td>Assistant Professor</td>
<td>Medicine</td>
<td>Harvard Medical School, Boston, MA</td>
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<tr>
<td>2002-2003</td>
<td>Assistant Professor</td>
<td>Dermatology</td>
<td>Harvard Medical School, Boston, MA</td>
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<tr>
<td>2003-2011</td>
<td>Associate Professor</td>
<td>Medicine and Dermatology</td>
<td>Harvard Medical School, Boston, MA</td>
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<tr>
<td>2012</td>
<td>Professor</td>
<td>Dermatology and Medicine</td>
<td>Harvard Medical School, Boston, MA</td>
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### Appointments at Hospitals/Affiliated Institutions

<table>
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<tr>
<th>Year</th>
<th>Position</th>
<th>Department(s)</th>
<th>Institution</th>
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<tr>
<td>1988-1989</td>
<td>Chief Resident</td>
<td>Medicine</td>
<td>Jackson Memorial Hospital, Miami, FL</td>
</tr>
<tr>
<td>1988-1993</td>
<td>Attending Physician</td>
<td>Emergency Room and Medical Services</td>
<td>Jackson Memorial Hospital, Miami, FL</td>
</tr>
<tr>
<td>1989-1993</td>
<td>Attending Physician</td>
<td>Medical Service</td>
<td>Miami Veterans Affairs Medical Center, Miami, FL</td>
</tr>
<tr>
<td>1991-1993</td>
<td>Attending Hematologist</td>
<td>Hematology</td>
<td>Jackson Memorial Hospital, Miami FL and Miami Veterans Affairs Medical Center, Miami, FL</td>
</tr>
<tr>
<td>1993-1996</td>
<td>Attending Physician</td>
<td>Bone Marrow Transplant Service</td>
<td>Moffitt Cancer Center and Research Institute, University of South Florida College of Medicine, Tampa, FL</td>
</tr>
<tr>
<td>1997-2004</td>
<td>Physician</td>
<td>Bone Marrow Transplant Unit</td>
<td>Massachusetts General Hospital, Boston, MA</td>
</tr>
<tr>
<td>1997-1998</td>
<td>Senior Investigator</td>
<td>Transplantation Biology Research Center</td>
<td>Massachusetts General Hospital, Boston, MA</td>
</tr>
<tr>
<td>1999-2002</td>
<td>Associate Physician</td>
<td>Medicine</td>
<td>Brigham and Women’s Hospital, Boston, MA</td>
</tr>
<tr>
<td>2002-present</td>
<td>Physician</td>
<td>Dermatology and Medicine</td>
<td>Brigham and Women’s Hospital/Dana-Farber Cancer Institute, Boston, MA</td>
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### Other Professional Positions

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Department(s)</th>
<th>Institution</th>
</tr>
</thead>
</table>
1988-1989  Staff Physician
            Metro-Dade County, Florida
            Human Resources Health Center
            Genetics Institute, Cambridge, MA

1997  Visiting Scientist

Major Administrative Leadership Positions

1988-1990  Volunteer Medical Co-Director
            Brothers of the Good
            Shepherd/Camillus House Health
            Concern

1990-1992  Founding member and Associate Scientific Director
            University of Miami School of
            Medicine
            for the Bone Marrow Transplant Program

1990-1993  Faculty Director and Chairperson
            Eastern Student Research Forum
            (an international program to
            promote research by medical
            students)

1991-1993  Medical Director
            Lymphoma Cutis Program,
            University of Miami,
            NCI Comprehensive Cancer
            Center

1993-1996  Director,
            Jenkins Foundation Transplant Immunology
            Research Laboratory
            Moffitt Cancer Center and
            Research Institute, University of
            South Florida College of
            Medicine, Tampa, FL

1997-2008  Director, Translational Research Program, Bone
            Marrow Transplantation Unit
            Hematology-Oncology, Department of Medicine
            Massachusetts General Hospital,
            Boston, MA

2007-2011  Co-Director of MIT-HST Graduate Medical
            Education in Medical Sciences (GEMS) Training
            Program
            Massachusetts Institute of
            Technology

2008-2011  President
            Harvard Club in Concord (MA)

2008-2011  Board of Directors; Regional Director, Northeastern
            Massachusetts
            Harvard Alumni Association

2009-2015  International Taskforce Member, “Harvard Serves”
            (global call for public service by Harvard Alumni)
            Harvard Alumni Association

2011-present  Director, Program of Excellence in Glycosciences
            Brigham & Women’s Hospital
            Harvard Medical School

2014-2015  Committee Member, BWH Dermatology
            Promotions Committee
            Brigham & Women’s Hospital

2016-present  Committee Chair, BWH Dermatology Promotions
              Committee
            Brigham & Women’s Hospital

2016-present  Co-Director, Harvard University Glycoscience
              Center
            Harvard Medical School

Committee Service
**Local**

<table>
<thead>
<tr>
<th>Year</th>
<th>Position</th>
<th>Institution</th>
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<tbody>
<tr>
<td>1985-1993</td>
<td>Harvard Club of Miami, Schools and Scholarships Committee</td>
<td>Harvard College</td>
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<tr>
<td>1987-1988</td>
<td>Executive Housestaff Committee</td>
<td>Jackson Memorial Hospital, Miami, FL</td>
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<tr>
<td>1987-1993</td>
<td>Admissions Committee for the School of Medicine Latin American Training Program</td>
<td>University of Miami</td>
</tr>
<tr>
<td>1989-1993</td>
<td>Subcommittees for the Research and Development Committee: Equipment Subcommittee; Human Subjects Studies Subcommittee</td>
<td>Miami VA Medical Center, University of Miami</td>
</tr>
<tr>
<td>1989-1993</td>
<td>Chairperson, Animal Experimentation Subcommittee</td>
<td>Miami VA Medical Center, University of Miami</td>
</tr>
<tr>
<td>1995-1996</td>
<td>Invasive Procedure and Blood Utilization Review Committee</td>
<td>H. Lee Moffitt Cancer Center and Research Institute</td>
</tr>
<tr>
<td>1996</td>
<td>Medical Staff By-Laws, Rules and Regulations Committee</td>
<td>H. Lee Moffitt Cancer Center and Research Institute</td>
</tr>
<tr>
<td>1997-present</td>
<td>Bone Marrow Transplant Protocol Review Committee</td>
<td>Massachusetts General Hospital, Brigham and Women’s Hospital, Dana-Farber Cancer Institute</td>
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<tr>
<td>1998-2008</td>
<td>Project Success Advisory Committee</td>
<td>Harvard Medical School</td>
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<tr>
<td>2000-present</td>
<td>Memorial Minutes Committee</td>
<td>Harvard Medical School</td>
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<tr>
<td>2001-present</td>
<td>Schools and Scholarships Committee, Harvard Club in Concord</td>
<td>Harvard College</td>
</tr>
<tr>
<td>2002</td>
<td>Commencement Aid, Harvard College 25th Reunion Symposium Organizing Committee</td>
<td>Harvard University</td>
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<tr>
<td>2002-2005</td>
<td>Public Services Committee at The Countway Library of Medicine</td>
<td>Harvard Medical School</td>
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<tr>
<td>2004-2009</td>
<td>Steering Committee, Clinical Unit for Research Trials in Skin</td>
<td>Massachusetts General Hospital, Brigham and Women’s Hospital, Department of Dermatology</td>
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<td>2004-present</td>
<td>Steering Committee for Stem Cell Therapy/Tissue Engineering</td>
<td>Biomedical Research Institute, Brigham and Women’s Hospital</td>
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<tr>
<td>2006</td>
<td>Chairperson, 25th Reunion Committee, Class of 1981</td>
<td>Harvard Medical School</td>
</tr>
<tr>
<td>2006-present</td>
<td>Chairperson, HMS Department of Dermatology Collaborative and Translational Research Initiatives Committee</td>
<td>Harvard Medical School</td>
</tr>
<tr>
<td>2006-present</td>
<td>Director, Harvard Club in Concord</td>
<td>Harvard University</td>
</tr>
<tr>
<td>2007</td>
<td>Organizing Committee, Class of 1977 Reunion and Marshall, Harvard University Commencement</td>
<td>Harvard University</td>
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</table>
2010-present \hspace{2em} Clinical Investigation Committee \hspace{2em} Brigham and Women’s Hospital
2011 \hspace{2em} Reunion Committee, 30th Reunion, Harvard Medical School Class of 1981 \hspace{2em} Harvard Medical School
2011-2013 \hspace{2em} Reunion Committee, 35th Reunion, Harvard College Class of 1977 \hspace{2em} Harvard College
2011-present \hspace{2em} Admissions Committee \hspace{2em} Harvard Medical School

**Regional**

1985-1993 \hspace{2em} Board of Directors \hspace{2em} Miami Civic Music Association
1987-1993 \hspace{2em} Advisory Board to County Homeless Health Care Project \hspace{2em} Metro-Dade County, FL
1988-1989 \hspace{2em} Governor’s Council, Florida Chapter \hspace{2em} American College of Physicians
1991-1993 \hspace{2em} Chairperson, Planning Committee for Medicine and Allied Health Magnet School \hspace{2em} Dade County School Board, FL
1991-1993 \hspace{2em} Chairperson, Subcommittees for Middle School Science Curriculum Review and for Community Outreach. \hspace{2em} Dade County School Board, FL
1994-1997 \hspace{2em} Board of Directors \hspace{2em} Museum of Science and Industry, Tampa, FL
1997-present \hspace{2em} Education Advisory Board \hspace{2em} Discovery Museum, Acton, MA
2005-present \hspace{2em} Board of Overseers \hspace{2em} Boston Museum of Science
2007-present \hspace{2em} Board of Directors \hspace{2em} Whizkids Foundation

**National**

1977-1985 \hspace{2em} National Schools and Scholarship Committee and National Recent Graduate’s Committee \hspace{2em} Harvard Alumni Association
1990-1993 \hspace{2em} University of Miami Representative \hspace{2em} National Council of American Federation for Clinical Research
1993-1997 \hspace{2em} University of South Florida Representative \hspace{2em} National Council of American Federation for Medical Research
1996-2000 \hspace{2em} Question Author, Certification Examination, Subspecialty of Hematology \hspace{2em} American Board of Internal Medicine
1997-present \hspace{2em} National Board of Directors \hspace{2em} Museum of Science and Industry, Tampa, FL
2000-2002 \hspace{2em} Coordinating Reviewer, Review Committee Category “Hematopoiesis: Stem and Progenitor Cell Biology.” \hspace{2em} American Society of Hematology (Annual Meeting)
2001 \hspace{2em} Working Group on Glycobiology \hspace{2em} National Institutes of Health/NHLBI
2007  Coordinating Reviewer, Review Committee Category “Hematopoiesis: Microenvironment, Cell Adhesion and Mesenchymal Stem Cells.”  American Society of Hematology Annual Meeting

2008-present  Board of Directors; Regional Director, Northeastern Massachusetts; Member, National Schools and Scholarship Committee  Harvard Alumni Association

2009-present  External Advisory Board, NIH/NCRR, Integrated Technology Resource for Biomedical Glycomics  NCRR/University of Georgia

2013  Advisory Committee, NIH Glycomics Working Group  National Institute of Health, Bethesda, MD

2013-2014  National Chairperson, the NHLBI Program of Excellence in Glycosciences  National Institutes of Health/NHLBI

International

1993-present  Scientific Advisory Committee to the Board of Trustees  Jose Carreras International Leukemia Foundation

2005-present  Society of Glycobiology  Scientific Program Committee

2006-2010  Membership Committee  International Society of Experimental Hematology

2006-2010  Society of Experimental Hematology  Editorial Board for *Experimental Hematology*, the official journal of the International Society of Experimental Hematology

2006-present  Society of Glycobiology  Editorial Board for *Glycobiology*, the official journal for the Society of Glycobiology


2009-present  Member, International Scientific Advisory Committee of the Carreras Research Institute  Jose Carreras Leukemia Research Institute, Barcelona, Spain

2009-present  Course Director, “Cell Therapy from the Bench to the Bedside and Return”  Universidad Internacional del Mar and Universidad de Murcia, Murcia, Spain

2014-Present  Editorial Board Member
International Advisory Board to Swedish Government/Lund University Wallenberg Center for Molecular Medicine initiative in Stem Cell Therapeutics

Scientific Advisory Committee
Instituto de Investigacion Biomedica de Bellvitge (IDIBELL)

Professional Societies

1985-1995 American Association for the Advancement of Science Member
1985-1997 American Federation for Clinical/Medical Research Member
1992-present American Society of Hematology Member
1993-1997 International Society for Analytical Cytology Member
1993-2011 International Society for Experimental Hematology Member
1993-1997 New York Academy of Sciences Member
2000-2010 American Society of Clinical Oncology Member
2009-present American Association of Physicians Member

Grant Review Activities

1992-1997 Scientific Review Committees
  Fellowship Review Committee
  Career Development Award Committee
  Established Investigator Award Committee
  American Heart Association

1994-2014 Scientific Review Committee for Jose Carreras Research Fellowship
  Jose Carreras International Leukemia Foundation

1999-2003 Ad Hoc Reviewer, Immunobiology Study
  Section, Immunological Sciences Initial Review Group
  National Institutes of Health

  American Society of Hematology Annual Meeting

2003 Ad Hoc Reviewer, Career Enhancement Award Study Section
  National Institutes of Health/NHLBI

2004-2008 Standing Member, Hematopoiesis (HP) Study Section
  National Institutes of Health/NHLBI

2006 Ad Hoc Reviewer, Heart, Lung and Blood Program, (HLBP) Project Review Committee
  National Institutes of Health/NHLBI

2006 Scientific Review Committee, Research Fellowship Review Committee
  The Medical Foundation

2008-2012 Ad Hoc Reviewer, NHLBI Special Emphasis Panel, Hematopoietic Stem Cell Regulation
  National Institutes of Health/NHLBI

2009-2015 Ad Hoc Reviewer, Heart, Lung and Blood Program, (HLBP) Project Review Committee
  National Institutes of Health/NHLBI
2016-present Reviewer, NHLBI Conference Grant Application (R13) Review Committee National Institutes of Health/NHLBI

Editorial Activities

Other Editorial Roles

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<th>Role</th>
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<tr>
<td>2006-2010</td>
<td>Editorial Board</td>
<td>Experimental Hematology</td>
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<td>2006-present</td>
<td>Editorial Board</td>
<td>Glycobiology</td>
</tr>
<tr>
<td>2010-present</td>
<td>Editorial Board Member</td>
<td>Peer-eMed</td>
</tr>
<tr>
<td>2014-</td>
<td>Editorial Board Member</td>
<td>The Journal of Biological Chemistry</td>
</tr>
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Ad hoc Reviewer (most frequent)

- American Journal of Pathology
- Blood
- Cancer Research
- Cell Stem Cell
- Experimental Hematology
- Glycobiology
- Journal of Biological Chemistry
- Journal of Clinical Investigation
- Journal of Immunology
- Journal of Experimental Medicine
- Nature

Honors and Prizes

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<th>Award</th>
<th>Institution</th>
<th>Description</th>
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<tr>
<td>1974</td>
<td>Whittaker-Edwards Prize</td>
<td>Harvard College</td>
<td>Distinction for academic excellence as a freshman Academic Honor</td>
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<tr>
<td>1976</td>
<td>Phi Beta Kappa</td>
<td>Harvard College</td>
<td>Academic Honor</td>
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<tr>
<td>1977</td>
<td>Dr. Donald McKee Memorial Scholarship</td>
<td>Harvard College</td>
<td>Academic Honor</td>
</tr>
<tr>
<td>1985</td>
<td>James Tolbert Shipley Prize</td>
<td>Harvard Medical School</td>
<td>Award for best research by a graduating student</td>
</tr>
<tr>
<td>1988-1989</td>
<td>Chief Medical Resident</td>
<td>Jackson Memorial Hospital</td>
<td>Competitive award for career development</td>
</tr>
<tr>
<td>1989-1993</td>
<td>Veterans Affairs Research Career Development Award</td>
<td>US Department of Veterans Affairs</td>
<td>Recipient for medical community service</td>
</tr>
<tr>
<td>1990</td>
<td>Kelly’s Heroes Award</td>
<td>WTVJ-TV (CBS), Miami, FL</td>
<td>Given for excellence in teaching</td>
</tr>
<tr>
<td>1993</td>
<td>George Paff Award</td>
<td>University of Miami School of Medicine</td>
<td>Given for outstanding research productivity and achievement</td>
</tr>
<tr>
<td>1993</td>
<td>Stanley J. Glaser Foundation Award</td>
<td>University of Miami School of Medicine</td>
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</table>
1993  Peace and Unity Award  Archdiocese of Miami, FL  Recipient for medical community service
1996  Inaugural Speaker  Mayo Clinic, Rochester, MN  Mayo-Luther Forum on Stem Cells
1996  New Investigator Award  International Society for Experimental Hematology  Excellence in the field of hematology
2006  Inaugural Keynote Speaker  University of New Hampshire  Charles Warren Memorial Symposium on Structural Glycomics
2007  Inaugural Plenary Session Speaker  Beijing, China  First Pan-Asian Pacific Summit on Emerging Healthcare Strategies
2009  Elected member  Association of American Physicians  Recognition for advancement of medical knowledge
2009-2010 Leadership Training  Brigham & Women’s Hospital Leadership Program  Harvard Business School, Cambridge, MA

Report of Funded and Unfunded Projects

Funding Information (listing DIRECT COSTS FUNDING ONLY)

PAST FUNDING (only reporting “PAST FUNDING” AS PI WITHIN THE LAST 15 YEARS):

1997-2002  Co-Principal Investigator  $240,000/yr
Title: “Compatibility of Swine Cells and Human Stroma”
Goal: Molecular analysis of adhesion molecules on swine and human hematopoietic cells, with goal to “humanize” relevant pig cell molecules

1997-2002  Principal Investigator  $175,000/yr
Title: “Molecular Analysis of Hematopoietic Cell L-selectin Ligand”
Goal: To identify a novel selectin ligand expressed on human hematopoietic stem cells (which is now known as “HCELL”)

2000-2005  Principal Investigator  $250,000/yr
Title: “Adhesion Molecules Mediating Skin Tropism in Acute GVHD”
Goal: To elucidate the adhesion molecules that regulate skin tropism of alloreactive lymphocytes in acute GVHD

2003-2007  Principal Investigator NIH/NHLBI, R01 HL60528  $250,000/yr
Title: (renewal R01) “Structure and Biology of Hematopoietic Cell E-/L- selectin Ligand”
Goal: To determine the structure of Hematopoietic E-/L-Selectin Ligand (HCELL) on human hematopoietic stem cells and characterize its function in hematopoiesis.

2003-2007  Principal Investigator NIH/NHLBI, R01 HL073714-01  $350,000/yr
Title: “Analysis of Homing Receptors on Human Adult Stem Cells” (Competitively renewed in 2007)
Goal: To define the expression of adhesion molecules on adult stem cells that mediate migration of these cells into sites of inflammation
2003-2008 Co-Investigator NIH/NIADDK, R01 AI56084
Title: “Structure-Functions Analysis of T Cell E-Selectin Ligands”
Goal: To characterize the individual E-selectin ligands expressed on T cells

2003-2009 Co-Investigator NIH/NHLBI P01 HL070149
Title: “Mechanisms of Graft Versus Host Disease”
Goal: To elucidate the molecular basis of GVHD and design novel therapies and prophylactic regiments to prevent this complication

2004-2009 Co-Principal Investigator NIH/NHLBI, P01 HL075847 $200,000/yr
Title: “Minority K-12 Initiative for Teachers and Students”
Goal: To increase science literacy, aptitude and interest in science careers among Boston middle and high school students, particularly underrepresented minority and disadvantaged students.

2007-2009 Principal Investigator NIH/NIDDK, R21 DK075012 $175,000/yr
Title: “Characterization of a Novel 65kDa E-selectin Ligand on G-CSF Mobilized Leukocytes”
Goal: To identify an E-selectin ligand induced on human myeloid cells by G-CSF administration

2008 - 2010 Co-Investigator NIH/NCCR, COBRE RR018757
Title: “Innovative Approaches to Tissue Repair”
Goal: COBRE Program Project, dedicated to creating center for regenerative medicine at Roger Williams Hospital, Providence, Rhode Island

2007 - 2011 Principal Investigator NIH/NHLBI, R01 (renewal R01) R01 HL073714 $250,000/yr
Title: “Optimizing Osteotropism of Human Mesenchymal Stem Cells”
Goal: The objective of this project is to manipulate the expression of membrane molecules on mesenchymal stem cells that mediate migration of these cells into bone.

2007 - 2012 Principal Investigator NIH/NCI, R01 CA121335 $195,000/yr
Title: “Molecular Analysis of CD44 in Colon Cancer Cells”
Goal: To characterize the structural biology of CD44 on colon cancer cells and to define how expression of CD44 glycoforms mediates growth and metastasis of colon cancer.

CURRENT FUNDING (Direct Cost Funding):

2011-2019 Principal Investigator NIH/NHLBI, 1PO1HL107146-02 1,800,000/yr
Title: “Program of Excellence in Glycosciences: Biosynthesis and Function of Lactosaminyl Glycans in Hematopoiesis”
Goal: To characterize the structure and function of lactosaminyl glycans in hematopoiesis; to promote growth and education in the discipline of glycobiology both regionally and nationally, and to create the field of “translational glycobiology.”

2018-2023 Principal Investigator NIH/NHLBI, K12HL141953 $1,000,000/yr
Title: “Forging Translational Glycobiologists: Intermeshing Glycoscience Training and Clinical Education”
Goal: Career development/training for the next generation of “Translational Glycobiologists”
Report of Local Teaching and Training

Teaching of Students in Courses:

Harvard College

1975-1977
Undergraduates
Science, Harvard University Bureau of Study Council
Tutor, 6 hours/week

1976-1977
20 Biology Majors
Natural Sciences 5
Teaching Assistant, 6 hours/week for 2 terms (Fall & Spring)

1997
Undergraduates
Senior Common Room Winthrop House and Currier House
Member, 1 hour/month

1997-present
Undergraduates
Biology and Biochemistry, Winthrop House
Non-resident Tutor, 1 hour/week

2004-2007
2 students
91r (Independent Research/Study) for Harvard College Students
Preceptor, 8 hours/week

2011-present
1 student
91r (Independent Research/Study) for Harvard College Students
Preceptor, 8 hours/week

2012-2013
2 students
91r (Independent Research/Study) for Carlos Rodriguez-Russo (Harvard College)
Senior Honors Thesis Supervisor/Preceptor, 8 hours/week

2013-2014
2 students
91r (Independent Research/Study) for Ritika Walia (Brandeis University)
Senior Honors Thesis Supervisor/Preceptor, 8 hours/week

2010-present
12 students
Harvard Freshmen Seminar 23E: The Scientific Method: Roadmap to Knowledge
Professor, 18 hours/week, one Semester

Harvard Medical School

1979
110 students
Physiology and Biophysics 700.0
Teaching Assistant, 5 hours/week for 4 weeks

1999-2008
25 students
HST Hematology (HST – 080)
Course Lecturer, 2 hour lecture - 20 hours/year

2001-2006
2 students
Introduction to Clinical Medicine, HST Program (at BWH)
Full time Preceptor, 100 hours/year (spring term, 2nd year)

2005-2007
10 Students
GSAS Transplantation Biology – 300 level course
Course Lecturer, 2 hour lecture – 20 hours/year

2005-2007
15 high school students
Mentoring for Science Program (a Harvard Medical School program to provide
science education to high school students in the Boston Public School System)
Course Lecturer and Case Author,  
10 hours lecture, 390 hours of case authorship – 400 hours/year

2007-2010  
HST 240 - Translational Medicine Preceptorship  
20 MIT Graduate Students  
Course Director, 12 hours/month (144 hours/year)

2008-2012  
HST 594 - Translational Medicine Seminar  
20 MIT Graduate Students  
Course Director, 5 hours/month, fall-spring terms (40 hours/year)

2014-2015  
Patient-Doctor II (HMS Physical Diagnosis Course)  
2 students  
Full time Preceptor, 50 hours/year (spring term, 2nd year)

2015-present  
HST200 (HMS/MIT Physical Diagnosis Course)  
3 students  
Full time Preceptor, 50 hours/year (spring term, 2nd year)

University of South Florida College of Medicine

1993-1995  
Physical Diagnosis  
2 students  
Instructor, 5 hours/week, one term/year

1993-1996  
Medical Microbiology and Immunology Course (1993 – 1996) and Hematology  
130 medical students  
Course (1996)  
Course lecturer, 2 lectures in each course, 20 hours/year

University of Miami School of Medicine

1985-1992  
Core Immunology Course,  
150 students  
Laboratory/Conference Instructor, 4 hours/week for 3 weeks

1988-1992  
Physical Diagnosis Course  
3 second year students  
Instructor, 5 hours/week, one term/year

1990  
“Life Cycle” Module, Physician-Scientist Program  
M.D., Ph.D. students in tutorial  
Tutor, 10 hours/week for 8 weeks

1992  
“Autoimmune Disease”  
5 graduate students  
Course Director, 15 hours/week for 5 weeks

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

1988-1989  
Chief Medical Resident  
Audience  
Jackson Memorial Hospital, Miami, FL  
Full Time-60 hrs/week

Clinical Supervisory and Training Responsibilities

Year(s)  
Responsibility  
Institution  
Level of Effort
1988-1993 | Medical Attending  | Miami VA Medical Center, Jackson Memorial Hospital | Full time-4 mos/year
--- | --- | --- | ---
1993-1996 | Attending, BMT Service | H. Lee Moffitt Cancer Center and Research Institute | Full time-4 mos/year
1997-2002 | Attending, BMT Service | Massachusetts General Hospital | Full time-3 mos/year
2002-present | Attending, BMT Service | BWH/DFCI | Full time-1 mo/year

**Laboratory and Other Research Supervisory and Training Responsibilities**

<table>
<thead>
<tr>
<th>Period</th>
<th>Responsibilities</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-1993</td>
<td>Lab supervisor/advisor to high school students in the Secondary School Laboratory Research Program in Dade County, FL, and mentor to three college students and one post doc.</td>
<td>Daily mentorship for four years</td>
</tr>
<tr>
<td>1990-present</td>
<td>Supervision of post-doctoral fellows (University of Miami, University of South Florida, Harvard Medical School)</td>
<td>Daily mentorship (see below)</td>
</tr>
<tr>
<td>1993-1996</td>
<td>Lab supervisor/advisor to two college students, three graduate students and three post docs, University of South Florida</td>
<td>Daily mentorship for four years</td>
</tr>
<tr>
<td>1997-present</td>
<td>Laboratory research mentor to college students (&gt;30 students since 1997)</td>
<td>Daily mentorship - 3 mos/year (during summer)</td>
</tr>
</tbody>
</table>

**Formally Supervised Trainees:**

- **1990-1993** Lou Meng, M.D.  
  Post-doctoral fellow  
  Accomplishments: Now CEO of biotech company; previously served as Assistant Professor of Pathology at the University of Miami School of Medicine
- **1993-1995** Jane Messina, M.D.  
  Post-doctoral fellow  
  Accomplishments: Professor of Pathology and Cell Biology, Dermatology and Cutaneous Surgery, and Oncologic Services, University of South Florida College of Medicine
- **1993-1996** Katrina Allen, Ph.D.  
  Post-doctoral fellow  
  Accomplishments: Current position is unknown
- **1994-1996** Xhizuang Shu, M.D., Ph.D.  
  Post-doctoral fellow  
  Accomplishments: Senior scientist working in biotech industry in China
- **1997-1999** Han Chong Toh, M.D.; Ph.D.  
  Post-doctoral fellow  
  Accomplishments: Deputy Director, National Cancer Center Singapore
- **1997-1999** Pierre Theodore, M.D.  
  Post-doctoral fellow  
  Accomplishments: Associate Professor of Surgery, University of California San Francisco
- **2001-2002** Onir Leshem, DDS  
  Post-doctoral fellow
Accomplishments: After fellowship, completed Ph.D. at Forsythe Dental Center, Boston, MA; now on faculty at Forsythe Dental Center

1999-2003  Charles J. Dimitroff, Ph.D.  Post-doctoral fellow  
Accomplishments: Associate Professor of Dermatology, Harvard Medical School

2001-2003  Mirjana Milinkovic, M.D.  Post-doctoral fellow  
Accomplishments: Associate Professor of Dermatology, University of Belgrade, Serbia

2002-2004  Min Xu, M.D.  Post-doctoral fellow  
Accomplishments: Academic Urologist, Tufts Medical Center

2003-2007  Monica Burdick, Ph.D.  Post-doctoral fellow  
Accomplishments: Associate Professor of Chemical and Biomolecular Engineering, Ohio University

2004-2007  Nilesh Dagia, Ph.D.  Post-doctoral fellow  
Accomplishments: Head of Biology and Pharmacology, Opal Oncology

2004-2006  Vicente Resto, M.D., Ph.D.  Post-doctoral fellow  
Accomplishments: Professor of Surgery and Biochemistry, and Chair of Department of Otolaryngology, University of Texas, Galveston

2004-2010  Zeineb Gadhoum, Ph.D.  Post-doctoral fellow  
Accomplishments: Senior Research Scientist, King Abdullah University of Science and Technology, Jeddah, Saudia Arabia

2005-2009  Jasmeen Merzaban, Ph.D.  Post-doctoral fellow  
Accomplishments: Assistant Professor of Bioscience, King Abdullah University of Science and Technology, Jeddah, Saudia Arabia

2007-2010  Sai Thankamony, Ph.D.  Post-doctoral fellow  
Accomplishments: Senior Scientist, Biogen

2007-2009  Tomas Navarro, M.D.  Post-doctoral fellow  
Accomplishments: Assistant Professor, Hospital Universitari German Trias i Pujol (Barcelona, Spain)

2008  Yakov Peter, Ph.D.  Post-doctoral fellow  
Accomplishments: Assistant Professor of Biology, Albert Einstein School of Medicine, NY

2008-2011  Shwan Tawfiq, M.D.  Post-doctoral fellow  
Accomplishments: Chief of Bone Marrow Transplant at the University of Kurdistan, Iraq

2008-2012  Pieter Jacobs, Ph.D.  Post-doctoral fellow  
Accomplishments: Managing Scientist: Head of Cell Culture, Manufacturing Sciences and Technology Department, Genzyme Corporation (Geel, Belgium)

2009-2011  Shinobu Sakai, Ph.D.  Visiting Scientist, Japan Society for the Promotion of Science  
Accomplishments: Senior Research Scientist, National Institute of Health Sciences, Japan
2006-2014 Cristina Silvescu, Ph.D. Post-doctoral fellow
Accomplishments: Current position is unknown

2012-2014 Catalina Ruiz-Cañada, Ph.D. Post-doctoral fellow
Accomplishments: Instructor, University of Massachusetts Medical School, Worcester, MA

Accomplishments: Academic hospital private practice, Children’s Hospital Orange County

2012-2016 Brad Dykstra, Ph.D. Post-doctoral fellow
Accomplishments: Research Specialist, Harvard Medical School, Boston, MA

2012-present Olga Gisela Pachón-Peña, Ph.D. Post-doctoral fellow

2014-present Nandini Mondal, Ph.D. Post-doctoral fellow

2016-present Mariana Silva, Ph.D. Post-doctoral fellow

2017-present Brittany Pequegnat Post-doctoral fellow

Formal Teaching of Peers (CME and other continuing education courses):

2009, 2011 Immunology and Skin Disease: Frontiers in Cutaneous Immunology; presentation entitled “Mesenchymal Stem Cells” Harvard Medical School Speaker

Local Invited Presentations:

1984 “Effector Functions of the Macrophage” Harvard Medical Society Symposium (Boston, MA) Harvard Medical School Lecture

1985 “The Complement Genes of the Major Histocompatibility Complex” Harvard Medical School (Boston, MA) Department of Pathology Lecture

1986 “The Class III Genes of the MHC” University of Miami School of Medicine, FL Department of Immunology and Microbiology Seminar

1990 “Lymphocyte Migration” University of Miami School of Medicine (Miami, FL) Department of Immunology and Microbiology Seminar
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Location</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>“Chronic Lymphocytic Leukemia”</td>
<td>University of Miami School of Medicine (Miami, FL)</td>
<td>Grand Rounds</td>
</tr>
<tr>
<td>1992</td>
<td>“The Effects of Steroids on Lymphocyte Migration”</td>
<td>University of Miami School of Medicine (Miami, FL) Department of Immunology and Microbiology</td>
<td>Seminar</td>
</tr>
<tr>
<td>1994</td>
<td>“Lymphocyte Migration in Health and Disease”</td>
<td>University of South Florida, Department of Medicine</td>
<td>Grand Rounds</td>
</tr>
<tr>
<td>1994</td>
<td>“Regulation of L-Selectin Gene Expression”</td>
<td>University of South Florida Department of Biochemistry and Molecular Biology</td>
<td>Seminar</td>
</tr>
<tr>
<td>1998</td>
<td>“Pathobiology of Cutaneous GVHD”</td>
<td>Harvard Skin Disease Research Center Seminar Series (Boston, MA)</td>
<td>Seminar</td>
</tr>
<tr>
<td>1998</td>
<td>“The Selectins”</td>
<td>Massachusetts General Hospital (Boston, MA) Pathology Research Seminar Series</td>
<td>Lecture</td>
</tr>
<tr>
<td>1999</td>
<td>“The Structural Biology of the L-selectin Ligands”</td>
<td>Harvard Institutes of Medicine (Boston, MA) Immunology Seminar Series</td>
<td>Lecture</td>
</tr>
<tr>
<td>1999</td>
<td>“GI Complications of Bone Marrow Transplantation”</td>
<td>Massachusetts General Hospital (Boston, MA) Gastroenterology</td>
<td>Grand Rounds</td>
</tr>
<tr>
<td>1999</td>
<td>“Site-specific Migration of Lymphocytes in Graft-versus-Host Disease”</td>
<td>Dana-Farber Cancer Institute (Boston, MA) Bone Marrow Transplant Conference</td>
<td>Lecture</td>
</tr>
<tr>
<td>2001</td>
<td>“The Science and Politics of Embryonic and Adult Stem Cell Research”</td>
<td>Brigham and Women’s Hospital (Boston, MA) Chief Medical Resident’s Teaching Conference</td>
<td>Lecture</td>
</tr>
<tr>
<td>2001</td>
<td>“Hermes, HCELL and Hematopoiesis: Homing in on CD44”</td>
<td>Harvard Medical School (Boston, MA) Vascular Biology Seminar Series</td>
<td>Lecture</td>
</tr>
<tr>
<td>2002</td>
<td>“The ‘Roll’ of Selectins: How Stem Cells Migrate”</td>
<td>Massachusetts General Hospital (Boston, MA) Cancer Seminar Series</td>
<td>Seminar</td>
</tr>
<tr>
<td>2002</td>
<td>“The Pathobiology of Acute GVHD: A Double-edged Sword”</td>
<td></td>
<td>Lecture</td>
</tr>
</tbody>
</table>
Dana-Farber Cancer Institute (Boston, MA)
Bone Marrow Transplant Conference

2003  “Human Hematopoiesis: New ‘Roll’ for CD44”
Harvard Medical School (Boston, MA)
Center for Blood Research Seminar Series

2003  “Optimizing Homing of Hematopoietic Stem Cells for Regenerative Therapies”
Dana-Farber Cancer Institute (Boston, MA)
Bone Marrow Transplant Conference

2003  “The Peripatetic Adult Stem Cell”
Harvard Medical School (Boston, MA)
New England Regional Primate Center

2005  “Strategies to Enhance Lymphocyte Migration to Sites of Relapse Following Hematopoietic Stem Cell Transplantation”
Dana-Farber Cancer Institute (Boston, MA)
Bone Marrow Transplant Conference

2005  “The Lymphocyte Homing Receptors”
Dana-Farber Cancer Institute (Boston, MA)
Bone Marrow Transplant Conference

2006  “Molecular Basis of Hematopoietic Stem Cell Trafficking In Utero”
Children’s Hospital Medical Center (Boston, MA)
Fetal Medicine/Fetal Care Center Grand Rounds

2007  “Regulation of Stem Cell Trafficking by Glycan Engineering”
Brigham and Women’s Hospital (Boston, MA)
Division of Hematology

2007  “Applications of Mesenchymal Stem Cell-based Regenerative Therapeutics”
Dana-Farber Cancer Institute (Boston, MA)
Bone Marrow Transplant Conference

2008  “Chemical Engineering of Cell Migration”
Massachusetts General Hospital (Boston, MA)
Steele Laboratory Seminar Series

2009  “Home Sweet Home: Steering Cell Migration in the Vasculature via Glycoengineering”
Children’s Hospital (Boston, MA)
Harvard-wide Vascular Biology Seminar Series

2011  “Enabling Stem Cell Therapeutics through GPS”
Shriner’s Hospital (Boston, MA)
Report of Regional, National and International Invited Teaching and Presentations

Regional

No presentations below were sponsored by outside entities:

1986  “Acquired Immunodeficiency Disease”
       Greater Miami Interdenominational Faith Conference, FL

       Temple Israel Miami Health Symposium, FL

1987  “AIDS: The Facts”
       Dade County Family Services Center, FL

1988  “Health Care and the Homeless”
       Florida Division of American College of Physicians, Annual Meeting
       (Jacksonville, FL)

1992  “Immunobiology of Chronic Lymphocytic Leukemia”
       Leukemia Society of South Florida

1993  “Pathophysiology of Lymphocyte Migration”
       University of South Florida
       Department of Pathology and Laboratory Medicine

1999  “The Glycobiology of the Selectin Ligands”
       Boston Glycobiology Discussion Group (Boston, MA)

2001  “How is a Scientist ‘Made’”?  
       Southern New England Junior Science and Humanities Symposium

2002  “Stem Cell Therapies: Do We Need Embryonic Stem Cells
to Treat Disease?”
       Harvard University (Boston, MA)
       Harvard College Class of 1977 (25th Reunion)
       Reunion Symposia, Symposium on Biotechnology

2005  “The Role of Glycans in Stem Cell Migration”
       Boston Glycobiology Discussion Group
       Sponsor/Source Compensation

2008  “Stem Cells”
       Harvard Club in Concord (Concord, MA)

2008  “GPS for Stem Cells”
       Boston Museum of Science (Boston, MA)
       Current Science and Technology Seminar Series

2008  “Glycosyltransferase-Programmed Stereosubstitution (GPS) of

Sponsor/Source Compensation
2008
“Stem Cells”
Harvard Club in Concord (Concord, MA)

2009
“The Bioethics of Stem Cells”
Temple Shir Tikva (Wayland, MA)

2010
“The Biology and Bioethics of Stem cell-based Therapeutics”
Leonard Morse Hospital (Natick, MA)

2010
“Optimizing Cellular Therapeutics by Glycan Engineering of the Cell Surface”
The Medical Exchange Club (Boston, MA)

2011
“The Promise of Stem Cell-based Therapies”
Harvard Club of Cape Cod (Yarmouth Port, MA)

2012
“Desperately Seeking Cures: The Politics of Stem cell Therapeutics”
Harvard Club of the North Shore (Salem, MA)

2012
“Latino Leadership in Medicine”
Latino Leadership Initiative, Harvard Kennedy School of Government, Harvard University (Cambridge, MA)

2013
“The Dark Side of G-CSF”
Hematology Grand Rounds, Brigham and Women’s Hospital/Dana-Farber Cancer Institute (Boston, MA)

2013
“Latino Leadership in Medicine”
Latino Leadership Initiative, Harvard Kennedy School of Government, Harvard University (Cambridge, MA)

2013
“Stem Cell Therapeutics and the Future of Medicine”
Brandeis Global Youth Summit on the Future of Medicine

2013
“Trousseau: The Man, The Syndrome, and The Pathobiology”
Hematology Grand Rounds
Brigham and Women’s Hospital/Dana-Farber Institute (Boston, MA)

2014
“The Scientific Method”
The Medical Exchange Club (Boston, MA)

2014
“G-CSF Toxicity: Innate Immunity Gone Wild”
Immunology Seminar Series, Brigham and Women’s Hospital/Dana-Farber Cancer Institute (Boston, MA)
<table>
<thead>
<tr>
<th>Year</th>
<th>Title of Talk</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>“Translational Research: The Making of a Clinician-Scientist”</td>
<td>Speaker</td>
<td>Brandeis Global Youth Summit on the Future of Medicine Brandeis University (Waltham, MA)</td>
</tr>
<tr>
<td>2014</td>
<td>“Homing in on CD44: Steering Cell Migration”</td>
<td>Speaker</td>
<td>Hematology Grand Rounds (Boston, MA) Brigham and Women’s Hospital</td>
</tr>
<tr>
<td>2014</td>
<td>“What Can be Bad About G-CSF Administration?”</td>
<td>Speaker</td>
<td>Harvard Medical School Transfusion Medicine Grand Rounds (Boston, MA)</td>
</tr>
<tr>
<td>2015</td>
<td>“The Pathobiology of G-CSF-induced Angiototoxicity”</td>
<td>Speaker</td>
<td>Vascular Biology Seminar Series Harvard Medical School/Boston Children’s Hospital (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“The Scientific Method: An Unbiased Assessment”</td>
<td>Speaker</td>
<td>Hematology Grand Rounds Brigham and Women’s Hospital (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“Exploiting E-selectin Expression to Cure Skin Disease”</td>
<td>Seminar</td>
<td>CBRC Seminar Series Massachusetts General Hospital/Harvard Cutaneous Biology Research Center (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“Celebrating the Latino Spirit”</td>
<td>Keynote, Speaker</td>
<td>Latino Heritage Celebration Day Boston Children’s Hospital (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“Applying Lessons from Transfusion Medicine to Cure Osteoporosis”</td>
<td>Speaker</td>
<td>Harvard Medical School Transfusion Medicine Grand Rounds (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“GPS for Curing Osteoporosis”</td>
<td>Seminar</td>
<td>Endocrine Unit Seminar Series Massachusetts General Hospital (Boston, MA)</td>
</tr>
<tr>
<td>2016</td>
<td>“Enabling Translational Glycobiology”</td>
<td>Seminar</td>
<td>Human Glycome Project Radcliffe Institute for Advanced Study Harvard University (Boston, MA)</td>
</tr>
<tr>
<td>2017</td>
<td>“Reversing Osteoporosis via Hematology”</td>
<td>Grand Rounds</td>
<td>Department of Hematology Brigham and Women’s Hospital (Boston, MA)</td>
</tr>
</tbody>
</table>

**National**

*No presentations below were sponsored by outside entities:*

<table>
<thead>
<tr>
<th>Year</th>
<th>Title of Talk</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>“Lymphocyte Homing Receptors”</td>
<td>Grand Rounds</td>
</tr>
<tr>
<td>Year</td>
<td>Title</td>
<td>Location/Institution</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>1994</td>
<td>“Lymphocyte Migration: The Biology of L-Selectin”</td>
<td>NIH/NHLBI Hematology Branch</td>
</tr>
<tr>
<td>1994</td>
<td>“The Physiology of Lymphocyte Migration Following Bone Marrow Transplantation”</td>
<td>University of Washington (Seattle, WA) Fred Hutchinson Cancer Center</td>
</tr>
<tr>
<td>1995</td>
<td>“Lymphocyte Migration Following Bone Marrow Transplantation”</td>
<td>New York Academy of Sciences Conference (Orlando, FL)</td>
</tr>
<tr>
<td>1995</td>
<td>“Expression of an L-Selectin Ligand on Hematopoietic Progenitor Cells”</td>
<td>Gibco-BRL/Life Technologies (Bethesda, MD)</td>
</tr>
<tr>
<td>1995</td>
<td>“The Biology of L-Selectin Ligands”</td>
<td>Monsanto/Searle Visiting Scientist Seminar Series (St. Louis, MO)</td>
</tr>
<tr>
<td>1995</td>
<td>“Pathophysiology of Lymphocyte Migration following Bone Marrow Transplantation”</td>
<td>University of South Carolina School of Medicine (Columbia, SC)</td>
</tr>
<tr>
<td>1995</td>
<td>“The Biology of Selectins: Mediators of the Inflammatory Response”</td>
<td>University of South Florida Department of Pathology and Laboratory Medicine Grand Rounds</td>
</tr>
<tr>
<td>1995</td>
<td>“Structural Biology of L-selecting Ligands”</td>
<td>Genetics Institute (Cambridge, MA) Visiting Scientist Lecture Series</td>
</tr>
<tr>
<td>1995</td>
<td>“Adhesion Molecules and Hematopoiesis: Is CD34 and L-Selectin Ligand?”</td>
<td>Harvard Medical School (Boston, MA) Hematology/Oncology Grand Rounds, Brigham and Women's Hospital/Beth Israel Hospital</td>
</tr>
<tr>
<td>1995</td>
<td>“Tissue-Specific Lymphocyte Migration Following Bone Marrow Transplantation”</td>
<td>Harvard Medical School/Beth Israel Hospital (Boston, MA) Department of Pathology</td>
</tr>
<tr>
<td>1996</td>
<td>“The Biology of L-Selectin and its Ligands in Hematopoiesis”, and “The Pathophysiology of Lymphocyte Migration in GVHD”</td>
<td>City of Hope National Cancer Center (Duarte, CA)</td>
</tr>
<tr>
<td>1996</td>
<td>“L-Selectin Ligand as a Target for Gene Therapy”</td>
<td>University of Southern California (Los Angeles, CA) Gene Therapy Laboratories Seminar Series</td>
</tr>
<tr>
<td>Year</td>
<td>Title and Details</td>
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<tr>
<td>1996</td>
<td>“The Biology of L-Selectin in Hematolymphopoiesis” Lecture Mayo Clinic (Rochester, MN) Mayo-Luther Forum on Stem Cells</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>“Adhesion Molecules and Hematopoiesis” Grand Rounds University of Virginia School of Medicine (Charlottesville, VA) Hematology/Oncology Grand Rounds</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>“The Selectins and Their Ligands” Duke University (Durham, NC) Hematology/Bone Marrow Transplant Service Grand Rounds</td>
<td></td>
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<tr>
<td>1997</td>
<td>“Selectins and the Hematopoietic Microenvironment” University of Pittsburgh Hematology/Bone Marrow Transplant Service Grand Rounds</td>
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<tr>
<td>1997</td>
<td>“Graft-versus-Host Disease” Lecture Case Western Reserve University Cancer Center (Cleveland, OH) Hematology/Oncology Division Seminar Series Lecture</td>
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<tr>
<td>1998</td>
<td>“Characterization of a Novel L-selectin Ligand Expressed on Hematopoietic Progenitor Cells” Lecture NIH/NHLBI (Bethesda, MD) Hematopoietic Stem Cell Biology Meeting Lecture</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>“The Making of a Translationalist” Keynote Address University of Miami (Miami, FL) Eastern Student Research Forum Keynote Address</td>
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<tr>
<td>2000</td>
<td>“Characterization and Structural Biology of HCELL, A Novel L-selectin Ligand” Lecture Roswell Park Cancer Institute (Buffalo, NY) Department of Pharmacology and Developmental Therapeutics Seminar Series Lecture</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>“Biology and Pathobiology of Lymphocyte Migration” Medical Grand Rounds Roswell Park Cancer Institute (Buffalo, NY) Medical Grand Rounds</td>
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<tr>
<td>2000</td>
<td>“Leukocytes and the Mississippi: Rollin’ Along” Lecture Tulane University Cancer Center (New Orleans, LA) Lecture</td>
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<tr>
<td>2000</td>
<td>“The Molecular Basis of Tissue-specific Lymphocyte Migration” Lecture Hennepin County Medical Center/University of Minnesota (Minneapolis, MN) Nephrology/Renal Transplant Program Seminar Series Lecture</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>“Pathobiology of Lymphocyte Migration in Acute GVHD” Grand Rounds University of Minnesota Cancer Center (Minneapolis, MN) Bone Marrow Transplant Service Grand Rounds</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>“The Intern Asked the Question: So, How is it that Blood Cells Migrate into the Bone Marrow?” Keynote Address</td>
<td></td>
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</tbody>
</table>
University of Miami (Miami, FL)
Eastern Student Research Forum

2001 “Shear Madness: How Hematopoietic Cells Home to Bone Marrow” Grand Rounds
University of Washington School of Medicine (Seattle, WA)
Hematology/Oncology Division

2001 “Development and Use of the ‘Blot Rolling Assay’ to Identify a Lecture
Novel Selectin Ligand Expressed on Hematopoietic Progenitor
Cells”
NIH/NHLBI Hematopoietic Stem Cell Biology Meeting (Bethesda, MD)

2001 “Novel Methods to Improve the Clinical Diagnosis and Grand Rounds
Management of Acute Graft-versus-Host Disease”
Oregon Health Science University Cancer Center (Portland, OR)
Hematology/Oncology Division

2001 “Adult Stem Cells: Politics, Plasticity and Promise for the Future” Lecture
University of Miami School of Medicine (Miami, FL)
Dr. Larry M. Fishman Symposium

2002 “How Stem Cells Learn to ‘Crawl’” Lecture
Roger Williams Hospital Cancer Center (Providence, RI)
Seminar Series

2003 “The Trafficking of Adult Stem Cells” Lecture
52nd Annual Montagna Symposium on the Biology of Skin (Snowmass, CO)

2003 “The Discovery of ‘HCELL’, the Bone Marrow ‘Homing Receptor’” Lecture
Johns Hopkins School of Medicine (Baltimore, MD)
Department of Pharmacology Seminar Series

2003 “Recent Advances in Our Understanding of Acute Cutaneous GVHD” Lecture
Connecticut Society of Dermatology and Dermatologic Surgery
Annual Meeting (Hartford, CT)

2003 “The Molecular Basis of Acute GVHD” Lecture
All-Children’s Hospital (St. Petersburg, FL), Univ. of South Florida
College of Medicine Immunology Seminar Series

2003 “New ‘Avenues’ in Medicine: Hematopoietic Stem Cells and Grand Rounds
Regenerative Therapies”
All-Children’s Hospital (St. Petersburg, FL), Univ. of South
Florida College of Medicine

2004 “Regenerative Medicine: Implications for Future Clinical Management” Grand Rounds
University of Miami School of Medicine (Miami, FL)
Medical Grand Rounds

2004 “T Cell Depletion and Leukocyte-Endothelial Interactions in Lecture
Hematopoietic Stem Cell Transplantation”
Satellite Symposium, Annual Meeting of the American Society of Blood Marrow Transplantation (Orlando, FL)

2004
“Subverting the Inflammatory Response for Regenerative Medicine”
Cleveland Clinic Foundation (Cleveland, OH)
Cleveland Clinic Immunology Seminar Series

2005
“Stem Cell Migration: Homing in on CD44”
NIH/NHLBI (Bethesda, MD)
Bone Marrow Transplant Unit, Hematology Branch, Invited Seminar Series

2006
“Homing Receptors, Chemokines, and the Biology of Cellular Trafficking”
American Society of Blood and Marrow Transplantation Annual Meeting (Honolulu, HI)

2006
“Steering Stem Cells: Optimizing the Vascular Route for Regenerative Medicine”
Tulane University Health Science Center (New Orleans, LA)
Center for Gene Therapy

2006
“Convergence on Glycans: The Molecular Basis of Stem Cell Trafficking and Cancer Metastasis”
University of New Hampshire (Durham, NH)
Charles Warren Memorial Symposium on Structural Glycomics

2006
“Engineering Stem Cell Trafficking and Regenerative Therapeutics”
Fred Hutchinson Cancer Research Center (Seattle, WA)
Clinical Research Division

2006
“Optimizing Homing of Mesenchymal Stem Cells for Regenerative Medicine”
Annual NIH Gene Therapy Symposium (Sonoma, CA)

2006
“The ‘Rolls’ of Homing Receptors and Chemokines in Stem Cell Trafficking to Bone Marrow”
Weill Medical College-Cornell University/New York Presbyterian Hospital (New York, NY)
Hematology/Oncology Division

2007
“Braking’ the Barrier Towards Use of Adult Stem Cells in Regenerative Medicine”
City of Hope Cancer Center (Duarte, CA)
Stem Cell Biology Seminar Series

2007
“Enabling Mesenchymal Stem Cell-based Therapy for Osteogenesis Imperfecta”
Baylor College of Medicine (Houston, TX)
Feigen Center Pediatric Research

2007  “Ex Vivo Glycan Engineering of Cell Migration: Implications for Immunity and Stem Cell Therapeutics” Lecture
University of California (Los Angeles, CA)
ImmunoForum Lecture Series

2007  “The Discovery of HCELL” Lecture
NIH/NHLBI (Bethesda, MD)
Hematology Seminar Series

2008  “The Role of Cancer Cell Surface Glycans in Metastasis” Speaker
NCI Conference on the Biology of Brain Metastasis (Bethesda, MD)

2008  “GPS for Stem Cells: The Roadmap for Regenerative Therapeutics” Keynote Address
Rhode Island Science and Technology Advisory Council Symposium (Providence, RI)

2008  “Eradicating the Leukemia Stem Cell” Lecture
10th International Conference on Chronic Myeloid Leukemia (Boston, MA)

2008  “Stem Cell Therapeutics” Lecture
Bentley College (Waltham, MA)
Congressional Student Leadership Conference on Medicine and Healthcare

2009  “Stem Cell-based Therapies: Balancing Medical Need and Bioethics” Lecture
Baskin Memorial Lecture, Temple Judea (Coral Gables, FL)

2010  “Glycosyltransferase-Programmed Stereosubstitution (GPS): Directing Cell Trafficking in vivo” Speaker
Consortium for Functional Glycomics, National Workshop Meeting (Bethesda, MD)

2010  “Fulfilling the Promise of Stem Cell Therapeutics” Keynote Address
Indiana Life Sciences Summit (Indianapolis, IN)

2011  “The Past, Present, and Future of Stem Cells: At the Interface of Medical Necessity and Bioethics” Speaker
Harvard Club of Maryland: The Johns Hopkins Club (Baltimore, MD)

2011  “Unveiling the Devils in the Details: Optimizing Ex Vivo Glycan Engineering of Live Cell Surfaces” Keynote Address
Complex Carbohydrate Research Center, University of Georgia (Athens, GA)
Georgia Glycoscience Symposium/ Consortium for Functional Glycomics Workshop

2011  “Stem Cells: What is Happening… Today?” Speaker
Harvard Club of Princeton (Princeton, NJ)

2011  “Desperately Seeking Cures: Stem Cell Therapeutics, Translational Glycobiology, and the USPTO” Lecture
Sanford-Burnham Medical Research Institute (La Jolla, CA)
Translational Research Seminar Series

2011 “Optimizing Stem Cell Therapeutics for Cardiovascular Diseases” Speaker
South Miami Heart Center Comprehensive Cardiovascular Symposium

2011 “Enabling Stem Cell Therapeutics for Neurologic Diseases” Invited Speaker
University of Maryland, Center for Neurologic Diseases
(Baltimore, MD)

2011 “Practical and Bioethical Aspects of Stem Cell Therapeutics” Visiting Professor
Department of Biology, Yeshiva University (New York, New York)

2011 “GPS for Regenerative Medicine: Optimizing Stem Cells Therapeutics” Medical Grand Rounds Speaker
Department of Medicine, University of Massachusetts (Worcester, MA)

2012 “Fulfilling the Promise of Translational Biology” Plenary Speaker
National Academy of Sciences, Workshop on the Future of Glycoscience (Washington, DC)

2012 “Glycosyltransferase-Programmed Sterosubstitution (GPS): Sweetening The Applicability of Cellular Therapeutics” Plenary Speaker
National Institutes of Health, Glycoscience Symposium: Interfacing Glycoscience with Disease and Clinical Practice (Bethesda, MD)

2012 “Stem Cell Therapeutics: Separating Hype from Facts” Annual Keynote Speaker
Harvard Club of Miami (Miami, FL)

2012 “Latino Leadership in Medicine: Desperately Seeking Cures” Annual Keynote Speaker
Miami Dade College, 305 Rise Conference (Miami, FL)

2012 “Stem Cell Therapeutics: Political Controversy and Clinical Applications” Grand Rounds
Doctor’s Hospital at Renaissance, Edinburg, TX

2012 “Desperately Seeking Cures” Visiting Professor Lecture
Texas A&M International University, Laredo, TX

2012 “Leading with Your Passion” Annual Keynote Speaker
Texas A&M International University, Laredo, TX (Leadership Students’ Meeting)

2012 “Finding Paradise” Speaker
Texas A&M International University, Laredo, TX, Laredo High School District

2012 “The Biology of Lymphocyte Migration: Implications for Neurologic Diseases” Visiting Professor Lecture
Neurosciences Grand Rounds, University of California San Francisco, Dept. of Neurology

2013  “The Vascular Route to Stem Cell Therapeutics” Visiting Professor
Mount Sinai Medical Center, Miami, FL, Division of Cardiology Grand Rounds

2013  “The Future of Stem Cell Therapy” Annual Keynote
Harvard Club of Houston, Houston, TX Speaker

2013  “Optimizing Cellular Therapy via Cell Surface Glycan Engineering” Speaker
Glycoimmunology Symposium, Harvard Medical School, Boston, MA

2013  “Steering Stem Cells to Cure Osteoporosis” Visiting Professor, Medical Grand Rounds
Department of Medicine
University of Florida College of Medicine, Gainesville, FL

2013  “The Scientific Process” Keynote Speaker
NHLBI Lung Regeneration and Repair Consortium Meeting, University of Pennsylvania School of Medicine, Philadelphia, PA

2014  “HCELL: The Bone Marrow Homing Receptor” Grand Rounds Speaker
Bone Marrow Transplant Program Grand Rounds
MD Anderson Cancer Center, Houston

2015  “The E Selectin Ligands: The Good, the Bad and the (Extremely) Ugly” Visiting Professor Invited Lecture
Department of Biological Chemistry
Johns Hopkins University, Baltimore, MD

2015  “Stem Cell Therapeutics” Annual Keynote Speaker
Harvard Club of West Coast of Florida
Tampa, FL

2015  “Reversing Degenerative Discourse: The Promise of Stem Cell Therapeutics” Annual Keynote Speaker
Harvard Club of Central Florida
Orlando, FL

2015  “Glycoscience Innovation Inspired by Medical Necessity: The Impact of Translational Glycobiology” Invited Speaker
NHLBI Biomedicine Lecture Series
Bethesda, MD

2015  “Achieving the Promise of Regenerative Therapeutics” Oncology Grand Rounds Speaker
UF Health Cancer Center – Orlando Health
Orlando, FL

2016  “Stem Cell Therapeutics: The Politics, the Hype, and the Curative Deliverables” Annual Keynote Speaker
The Harvard Club of Broward County
Boca Raton, FL

2016  “The Curative Power of Sugar-coated Stem Cells” Invited Speaker
Gates Stem Cell Center Seminar Series
Denver, CO

2016  “GPS: Guiding a path to cure a disease by sugar coating stem cells” Invited Speaker
Biotechne/R & D Systems
Minneapolis, MN

2017  “GPS for CAR-T cells: Navigating Cell-based Therapeutics to Cure Cancer” Medical Grand Rounds
Memorial Sloan Kettering Cancer Center
New York, NY

International
No presentations below were sponsored by outside entities:

1983  "Phylogenetic Conservation of the MHC Protein Factor B" Speaker
International Complement Workshop (Mainz, Germany)

1992  “Immunobiology of Lymphoma and Leukemia” Speaker
International Congress of Cuban Physicians (Miami, FL)

1995  “The Hematopoietic Microenvironment: The Biology of L-Selectin” Speaker
Keystone Symposium on the Hematopoietic Microenvironment (Taos, NM)

1996  “L-Selectin Adhesive Interactions in Hematolymphopoiesis” Speaker
Jose Carreras International Leukemia Foundation Scientific Symposium (Barcelona, Spain)

1996  “A Novel L-selectin Ligand is Expressed on Normal Human Hematopoietic Cells” Speaker
25th Anniversary Meeting of the International Society for Experimental Hematology (NY, NY)

1996  “Lymphocyte Migration to Target Tissues in GVHD” Speaker
University of Murcia School of Medicine (Murcia, Spain)
Hematology/Oncology Division

2002  “Novel Methods of Diagnosing Graft-versus-Host Disease” Speaker
3rd International Workshop on Non-myeloablative Stem Cell Transplantation (Captiva Island, FL)

2003  “The ‘Roll’ of Hyaluronic Acid in Acute Cutaneous Graft-versus-Host Disease” Speaker
Hyaluronan 2003 International Conference (Cleveland, OH)

2003  “Strategies to Enhance Lymphocyte Migration to Sites of Relapse” Speaker
Following Non-myeloablative Stem Cell Transplantation”
4th International Workshop on Non-myeloablative Stem Cell Transplantation (Bermuda)

2004 “From Graft Failure to Graft-versus-Host Disease: The Central Role of Glycans in Allogeneic Bone Marrow Transplantation”
International Meeting of the Society of Glycobiology (combined with Japanese Society of Carbohydrate Research (Honolulu, HI))

2005 “Physiology and Pathobiology of Lymphocyte and Stem Cell Migration”
5th International Workshop on Non-myeloablative Stem Cell Transplantation (Cancun, Mexico)

2006 “Cellular Trafficking: Homing in on Glycosyltransferases”
Annual Meeting of the Society for Glycobiology (Los Angeles, CA)

2006 “Chemical Engineering of Stem Cell and Lymphocyte Trafficking”
University of Barcelona, Institute of Hematology and Oncology (Barcelona, Spain)

2007 “Reversing Degenerative Diseases: The Promise of Regenerative Medicine”
First Pan-Asian Pacific Summit on Emerging Healthcare Strategies (Beijing, China)

2007 “The Biology of Stem Cell Migration”
Peking Union Medical College (Beijing, China)
National Chinese Center for Tissue Engineering

2007 “Homing Receptors, Chemokines and Cellular Trafficking”
and “Biology and Pathobiology of Lymphocyte Migration after Bone Marrow Transplant”
11th Meeting of the Brazilian Society of Bone Marrow Transplantation (Gramado, Brazil)

Hadassah Medical Center (Jerusalem, Israel)
International Symposium Honoring Prof. David Naor

2007 “‘Braking’ in on CD44: Optimizing Homing of Mesenchymal Stem Cells for Regenerative Medicine”
International Conference on Hyaluronan (Charleston, SC)

2008 “Programming Stem Cell Migration”
Society for Glycobiology Annual Conference (Dallas, TX)

2009 “Biology of Cell Migration”
Universidad Internacional Del Mar/Universidad De Murcia (Mazarron, Spain)

2009 “Pathobiology of GVHD”
Universidad Internacional Del mar/Universidad De Murcia (Mazarron, Spain)

2009 “Mesenchymal Stem Cell Transplantation” Universidad Internacional Del Mar/Universidad De Murcia (Mazarron, Spain)

2009 “Moving Stem Cells via GPS” Lecture Hospital Universitari German Trias i Pujol (Barcelona, Spain)

2009 “Glycosyltransferase-programmed stereosubstitution (GPS) of CD44: Using GPS to Steer MSC Trafficking” Lecture MSC2009: Regenerative Medicine and Adult Stem Cell Therapy (Cleveland, OH)

2009 “Mesenchymal Stem Cells” Lecture Harvard Medical School (Boston, MA) Immunology and Skin Disease: Frontiers in Cutaneous Immunology (International Conference)

2010 “The Biology of Lymphocyte Trafficking” and “Creating a Roadmap for Stem Cell Therapeutics” Visiting Professor and “Highlights in Immunology” Visiting Professor, Weizmann Institute of Science, (Rehovot, Israel)

2010 “Optimizing Stem Cell-based Therapeutics” Speaker Curso Internacional Red Tercel: Nuevas Tecnologias de implante y modulación celular (Madrid, Spain)

2011 “Functional Pleiotropisms of E-selectin Ligands” Speaker Glycobiology Gordon Research Conference (Lucca, Italy)

2011 “Glycan Engineering and Stem Cells” (Discussion Session) Chairperson Glycobiology Gordon Research Conference (Lucca, Italy)

2011 “Mesenchymal Stem Cells (MSC): Hitting the Sweet Spot for Immunomodulation” Lecture Harvard Medical School (Boston, MA) Immunology and Skin Disease 2011 (International Conference)

2011 “Role of the E-Selectin Ligand HCELL in Hematopoiesis and Leukemogenesis” Invited Presentation American Society of Hematology (San Diego, CA), Myeloid Cell Workshop

2012 “Guiding Stem Cells to Cure Osteoporosis” Medical Grand Rounds Hospital Universitario, “Virgen de la Arrixaca” University of Murcia (Murcia, Spain)

2012 “Immunotherapy of Hematopoietic Stem Cell Transplantation” Lecture Universidad Internacional del Mar (Aguilas, Spain)

2012 “Glycosyltransferase – Programmed Stereosubstitution: A New Paradigm in Stem Cell Therapeutics” Lecture Universidad Internacional del Mar (Aguilas, Spain)
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<tr>
<th>Year</th>
<th>Title</th>
<th>Event</th>
<th>Type</th>
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<tr>
<td>2013</td>
<td>“Programming Stem cell Migration”</td>
<td>Hospital Virgen de la Arrixaca Clinical University Hospital (Murcia, Spain)</td>
<td>Lecture</td>
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<tr>
<td>2013</td>
<td>“Stem Cell Trafficking; Biology and Manipulation via GPS”</td>
<td>Universidad Internacional del Mar (Los Alcazares, Spain)</td>
<td>Lecture</td>
</tr>
<tr>
<td>2013</td>
<td>“The Future of Medicine: Regenerative Therapeutics”</td>
<td>Centro Unico de Ablacion e Implante de la Provincia de Buenos Aires (La Plata, Argentina)</td>
<td>Lecture</td>
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<tr>
<td>2013</td>
<td>“GPS: Navigating the future of Medicine”</td>
<td>Annual Glycoscience Ireland Meeting (County Mayo, Galway, Ireland)</td>
<td>Keynote Speaker</td>
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<tr>
<td>2014</td>
<td>“Stem Cell Trafficking: Biology and Manipulation via GPS”</td>
<td>Universidad Internacional del Mar (Los Alcazares, Spain)</td>
<td>Lecture</td>
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<tr>
<td>2014</td>
<td>“The Scientific Method: Theory and Practice”</td>
<td>Jose Carreras Research Institute (Barcelona, Spain)</td>
<td>Invited Lecture</td>
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<tr>
<td>2015</td>
<td>“GPS: Creating GPS for Cell Migration”</td>
<td>Universidad Internacional del Mar (Los Alcazares, Spain)</td>
<td>Lecture</td>
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<tr>
<td>2015</td>
<td>“Glycoengineering Cell Migration: Achieving the Promise of Cellular Therapeutics”</td>
<td>23rd International Symposium on Glycoconjugates (Split, Croatia)</td>
<td>Plenary Lecture</td>
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<tr>
<td>2016</td>
<td>“Use of GPS to Optimize Tissue Delivery of Stem Cells”</td>
<td>The Wallenberg Centre for Molecular Medicine (Lund, Sweden)</td>
<td>Lecture</td>
</tr>
<tr>
<td>2016</td>
<td>“Translational Glycobiology: Making Post-translational TRANSLATIONAL”</td>
<td>University of Nova, Faculty of Sciences and Technology (Lisbon, Portugal)</td>
<td>Lecture</td>
</tr>
<tr>
<td>2016</td>
<td>“Glycosyltransferases: the cornerstones of cellular immunotherapy”</td>
<td>10th International Symposium on Glycosyltransferases (Toronto, Canada)</td>
<td>Plenary Speaker</td>
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<tr>
<td>2016</td>
<td>“Terapia de células madre: la promesa de curación”</td>
<td>University of Leon/University of Vigo (Villafranca del Bierzo, Spain)</td>
<td>Plenary Lecture</td>
</tr>
<tr>
<td>2016</td>
<td>“Stem cell trafficking: Optimizing MSC therapeutics”</td>
<td>Universidad Internacional del Mar</td>
<td>Lecture</td>
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</table>
(Los Alcazares, Spain)

2016  “Sialyl Lewis X and E-Selectin: the drivers of cell therapeutics”  Speaker
Sialoglyco 2016 Conference
(Toronto, Canada)

2017  “Using the Inflammatory Response to Cure Disease”  Speaker
Graduate School Invited Seminar Series
Nova University (Lisbon, Portugal)

2017  “GPS for Stem Cells: Creating a Pathway to Cure”  Keynote Speaker
Inaugural Regenerative Medicine Symposium,
University of Buffalo, Roswell Park Cancer Institute (Buffalo, NY)

2017  “Glycosyltransferases as Tools to Identify Cell Surface Lactosaminyl Glycans”  Speaker
Gordon Research Conference: Chemical and Biochemical Approaches to Deciphering Glycan Function (West Dover, VT)

2017  “Innovaciones Para Mejorar el Tráfico Celular: GPS”  Lecture
University of Murcia/Universidad Internacional del Mar
(Los Alcazares, Spain)

2017  “Driving skin-specific stem cell migration via GPS”  Invited Speaker
International Pigment Center Conference (IPCC)
(Denver, CO)

2017  “GPS: La Ruta Glicocientífica de la Terapia Celular”  Keynote Lecture
4th Latin American Glycobiology Meeting
(Mexico City, Mexico)

2017  “GPS: Navigating the pathway for regenerative therapy”  Lecture
Ernst Klenk Symposium 2017
(Cologne, Germany)

Report of Clinical Activities and Innovations

Current License and Certification:

1986 - Florida Physician License
1989 - Diplomate, American Board of Internal Medicine (certified indefinitely)
1994 - Diplomate, Subspecialty of Hematology (certified until 2018)
1997 - Massachusetts Physician License

Practice Activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Setting of Practice</th>
<th>Name and Location of Practice</th>
<th>Level of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone Marrow transplantation</td>
<td>Teaching Hospital</td>
<td>Brigham &amp; Women’s Hospital/Dana-Farber Cancer Institute</td>
<td>Patient care 15%, teaching 20 %,</td>
</tr>
</tbody>
</table>
Clinical Innovations:

- Member of team that developed treatment plan - and was the bone marrow harvest physician and the assigned in-patient attending - for the first patient to undergo combined bone marrow-living related donor kidney transplant (patient with multiple myeloma and end-stage renal disease), Massachusetts General Hospital (September-October, 1998).
- Inventor of the glycoengineering technology known as “Glycosyltransferase-programmed Stereosubstitution” (GPS). The GPS technology enforces trafficking of intravenously administered cells to bone marrow, to skin, and to all sites of tissue injury. GPS technology is being applied in two clinical trials at present: (1) Use of Mesenchymal Stem Cells to Reverse Osteoporosis (at the Virgen de la Arrixaca Hospital/University of Murcia, Murcia, Spain); (2) Enhancing Engraftment of Cord Blood-derived Hematopoietic Stem Cells in Hematopoietic Stem Cell Transplantation (MD Anderson Cancer Center, Houston, Texas).

Report of Technological and Other Scientific Innovations

Innovation/Patent: Fluorinated Glucosamine Analogs Useful for Modulating Post-translational Glycosylations on Cells
Description: Creation of chemical agent to inhibit cell membrane glycosylations that regulate cellular trafficking

Innovation/Patent: Hematopoietic Cell E-Selectin/L-Selectin Ligand Polypeptides and Methods of Use Thereof
Description: Composition of matter for the molecule HCELL, and methods of use of HCELL for treating hematopoietic disorders, inflammatory conditions, and cancer, and for providing stem cell therapy in a mammal

Innovation/Patent: Hematopoietic Cell E-Selectin/L-Selectin Ligand Polypeptides and Methods of Use Thereof
European Patent EP 1421174, issued December, 2009
Description: Composition of matter for the molecule HCELL, and methods of use of HCELL for treating hematopoietic disorders, inflammatory conditions, and cancer, and for providing stem cell therapy.

Innovation/Patent: Antibody SACK-1 that binds CD44 glycoforms
United States Patent 7,816,500, issued October, 2010
Description: Composition of matter for an HCELL-specific mAb and methods of use in treating hematopoietic disorders, inflammatory conditions, and cancer, and for providing stem cell therapy in a mammal
Innovation/Patent: Hematopoietic Cell E-Selectin/L-Selectin Ligand Polypeptides and Methods of Use Thereof
Description: Composition of matter for the molecule HCELL, and methods of use of HCELL for treating hematopoietic disorders, inflammatory conditions, and cancer, and for providing stem cell therapy in a mammal

Innovation/Patent: Cytokine Induction of Selectin Ligands on Cells
Description: Methods for inducing expression of HCELL and other E-selectin ligands on myeloid cells using the cytokine G-CSF

Innovation/Patent: Composition and Methods for Modifying Cell Surface Glycans
United States Patent 8,084,236, issued December 27, 2011
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles)

Innovation/Patent: Hematopoietic Cell E-Selectin/L-Selectin Ligand Polypeptides and Methods of Use Thereof
Canadian Patent CA 2429625, issued May 1, 2012
Description: Composition of matter for the molecule HCELL, and methods of use of HCELL for treating hematopoietic disorders, inflammatory conditions, and cancer, and for providing stem cell therapy in a mammal

Innovation/Patent: Composition and Methods for Modifying Cell Surface Glycans
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles).

Innovation/Patent: Composition and Methods for Modifying Cell Surface Glycans
Australian Patent 2007254777, issued February, 2014
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles).

Innovation/Patent: Cytokine Induction of Selectin Ligands on Cells
Description: Method of enhancing expression of E-selectin ligands on myeloid cells by use of G-CSF

Innovation/Patent: Methods for Modifying Cell Surface Glycans
United States Patent 8,728,810, issued May 20, 2014
Description: Enforced cell surface expression of E-selectin ligands using glycosyltransferases specialized to function in absence of input co-factors

Innovation/Patent: Methods of Treating Complications and Disorders Associated with G-CSF Administration
United States Patent 8,765,126, issued July 1, 2014
Description: Use of inhibitors of myeloperoxidase and E-selectin ligands to treat inflammatory conditions associated with G-CSF expression/administration

Innovation/Patent: Methods for Modifying Cell Surface Glycans
United States Patent 8,852,935, issued October 7, 2014
Description: The composition of matter of mesenchymal stem cells expressing E-selectin ligands created by exofucosylation

Innovation/Patent: Composition and Methods for Modifying Cell Surface Glycans
United States Patent 8,852,935, issued October 7, 2014
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles).

Innovation/Patent: Composition and Methods for Modifying Cell Surface Glycans
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles).

Innovation/Patent: Increased In Vivo Circulation Time of Platelets After Storage With A Sialidase Inhibitor
United States Patent 20120321601 issued May 17, 2012
Description: Use of sialidase inhibitors to prolong platelet storage in vitro, and to prolong platelet survival in vivo.

Innovation/Patent: Platelet Additive Solution Having a beta-Galactosidase Inhibitor
United States Patent 20140099629 issued October 7, 2013
Description: Use of beta-galactosidase inhibitors to prolong platelet storage in vitro, and to prolong platelet survival in vivo.

Innovation/Patent: Platelet Additive Solution Having a beta-Galactosidase Inhibitor
United States Patent 20160174543 issued October 7, 2013
Description: Composition of matter of platelet storage solutions containing beta-galactosidase inhibitors.

Innovation/Patent: Platelet Storage and Reduced Bacterial Proliferation in Platelet Products Using a Sialidase Inhibitor
Description: Composition of storage solutions that inhibit bacterial growth in collected platelets for transfusion.

Innovation/Patent: METHODS TO IMPROVE CELL THERAPY
United States Patent 20160184367 issued December 29, 2015
Description: Methods and compositions for modifying cell surface glycans (e.g., glycans expressed on the surface of live cells or cell particles) using glycosyltransferases without need for input divalent cation cofactors.

Innovation/Patent: Platelet Protection Solution Having Beta-Galactosidase and Sialidase Inhibitors
Description: Use of combination sialidase inhibitors and beta-galactosidase inhibitors to prolong platelet storage in vitro, and to prolong platelet survival in vivo.

Innovation/Patent: Platelet Additive Solution Having a beta-Galactosidase Inhibitor
United States Patent 20170156310 issued February 17, 2017
Description: Composition of matter of platelet storage solutions containing beta-galactosidase inhibitors.
Innovation/Patent: Platelet Protection Solution Having Beta-Galactosidase and Sialidase Inhibitors
United States Patent 20180000066 issued September 13, 2017
Description: Compositions of platelet storage solutions that contain beta-galactosidase and sialidase inhibitors inhibit bacterial growth in collected platelets for transfusion.

Report of Education of Patients and Service to the Community

Activities

1985-1993 Board of Directors Miami Civic Music Association
1987-1993 Advisory Board to County Homeless Health Care Project Metro-Dade County, FL
1987-1993 Volunteer Physician Dade County Homeless Health Care Project
Brief Description – Ran free health care clinic 3 times a week during evening hours
1988-1989 Governor’s Council, Florida Chapter American College of Physicians
1988-1990 Volunteer Medical Director Brothers of the Good Shepherd/Camillus House Health Concern
Medical Director for free homeless healthcare clinic which I helped to establish
1990-1993 Mentor Laboratory Research Program, Dade County, FL School System
Mentor in program for high school student lab research at regional universities
1991-1993 Chairperson, Planning Committee for medicine and Allied Health Magnet School Dade County School Board, FL
Chairperson, Subcommittees for Middle School Science Curriculum Review and for Community Outreach Dade County School Board, FL
1992 Lead Judge Dade County, FL
Secondary School science fair, Lead judge
1992 Lead Judge Miam Herald Silver Knight Award
Science category, Lead judge
1994-1997 Board of Directors Museum of Science and Industry, Tampa, FL
1997  Non-resident tutor  John Winthrop House, Harvard College  
Tutored in Biology, Biochemistry, and Pre-Medical studies  
1997-present  Education Advisory Board  Discovery Museum, Acton, MA  
2001  Volunteer Physician  Pine Street Inn, Boston, MA  
Van physician; manned the traveling volunteer van  
2001-present  Schools and Scholarships Committee, Harvard Club in Concord  Harvard College  
2002  Organizer for Class of 1977  Harvard College  
25th Reunion Symposium on Biotechnology  
2002  Commencement Aid  Harvard University  
Served as honorary Marshall  
2002  Judge and organizer, Science fair  Peter Noyes Elementary School, Sudbury, MA  
2006-present  Director  Harvard Club in Concord, MA  
2005-present  Board of Overseers  Museum of Science, Boston, MA  
2007-2010  Board of Directors  Whizkids Foundation  
2008-2011  President  Harvard Club in Concord, MA  
2008-present  Board of Directors; Regional Director, Northeasten Massachusetts  Harvard Alumni Association  

**Community Service Recognitions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Name of Award</th>
<th>Organization</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>Kelly’s Heroes Award</td>
<td>WTVJ-TV (CBS), Miami, FL</td>
<td>Recipient for medical community service</td>
</tr>
<tr>
<td>1993</td>
<td>George Paff Award</td>
<td>University of Miami School of Medicine</td>
<td>Given for excellence in teaching</td>
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<tr>
<td>1993</td>
<td>Peace and Unity Award</td>
<td>Archdiocese of Miami, FL</td>
<td>Recipient for medical community service</td>
</tr>
</tbody>
</table>
Report of Scholarship

Publications

Journal Publications:


15. **Sackstein R**. Disruption of lymphocyte homing to lymph nodes following bone marrow transplantation: implications for immune reconstitution. Clinical Immunology Newsletter 1995, 15:144-149.


27. Toh HC, McAfee SL, Sackstein R, Cox BF, Colby C, Spitzer TR. Late-onset veno-occlusive disease following high dose chemotherapy and stem cell transplantation. Bone Marrow Transplantation 1999; 24:891-895.


80. Gadhoum SZ and Sackstein R. CD15/Lewis x Expression in Human Myeloid Cell Differentiation is Regulated by Sialidase Activity. Nature Chemical Biology 2008; 4:751-757. PMCID: PMC2597094


Books, chapters, monographs and editorials


Books/Textbooks for the medical or scientific community


Thesis

Analysis of the Murine Major Histocompatibility Complex Class III Genes C4 and Factor B. Ph.D., Immunology, Harvard University (Graduate School of Arts and Sciences), 1984.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings:

NOT LISTED (over 300 to date)

Narrative Report (limit to 500 words)

My efforts as a basic scientist and clinician are intimately intermeshed. I am a basic science immunologist/biochemist/molecular biologist with clinical expertise in internal medicine/hematology/immunology and, in particular, in hematopoietic stem cell transplantation (HSCT). Accordingly, my bench research efforts aim to elucidate biologic processes critical to improving outcomes for patients undergoing stem cell transplantation, such as: (1) hematopoiesis, and other cell and tissue regeneration from stem cell-based therapeutics; (2) tissue-specific lymphocyte migration (including the immunobiology of lymphocyte migration in host defense and in pathologic reactions such as graft-versus-host disease); and (3) pathobiology of tumor cell proliferation and tumor metastasis. The common thread for all these efforts is to manipulate the biology of cellular trafficking, as it pertains to stem cell transplantation and tissue regeneration (‘regenerative medicine’), to host defense/inflammation, and to cancer growth and metastasis. At the outset of my career as an HSCT physician (1980s), there were two principal obstacles to successful application of this life-saving technology: (1) Graft failure, and (2) Graft-versus-host disease (GVHD). In that era, the problem of graft failure was profound, as >20% of recipients died from lack of blood cell regeneration within certain transplant groups (e.g., aplastic anemia, T-cell depletion, unrelated donors, etc.). Though many factors contributed to graft failure, a fundamental piece of information related to solving this mystery was missing: there was essentially nothing known about the molecular basis of hematopoietic stem cell migration to the marrow. Just as the development of GVHD was clearly related to the capability of infused donor lymphocytes to preferentially migrate to certain target tissues (i.e., the skin, the gut and the liver), there was also no knowledge of the molecular effectors of such trafficking. I thus sought to define the specialized adhesion molecules on the surface of blood-borne cells called ‘homing receptors’ that bind to endothelial cells at target tissues under hemodynamic shear conditions, thus directing cellular migration patterns.

Early on, most of our understanding of cell migration was derived from studies of lymphocyte trafficking to lymph nodes. It was recognized that lymphocyte homing into peripheral lymph nodes was principally regulated by a lymphocyte membrane protein operationally known as the “lymph node homing receptor”
(now known as ‘L-selectin’) that adheres to its ligands expressed on lymph node high endothelial venules. Our laboratory identified that L-selectin expression is characteristic not only of lymphocytes but also of early hematopoietic progenitor cells, and this observation prompted us to examine the expression of selectin ligands among human bone marrow cells. These studies led to discovery of a novel selectin ligand present on hematopoietic progenitor cells. Our subsequent biochemical studies revealed that this selectin ligand, now known as Hematopoietic Cell E-/L-selectin Ligand (HCELL), is the most potent naturally-expressed E- and L-selectin ligand in the body. The HCELL molecule is a unique glycoform of CD44, and it is natively expressed on human hematopoietic stem cells. By mediating binding to marrow sinusoidal endothelium that constitutively expresses E-selectin, HCELL functions as the “bone marrow homing receptor”, directing human stem cell migration into the marrow. We are presently elucidating the role(s) of HCELL in hematopoiesis and in hematopoietic stem cell homing. We have also developed gateway technologies to glycan engineer the surface of stem cells to specifically enforce HCELL expression, thereby licensing osteotropism, and are currently examining whether HCELL+ mesenchymal stem cells (MSC) can be used to cure generalized bone diseases. Furthermore, because E-selectin expression is induced with inflammation or injury on vascular endothelium at all sites of tissue injury, we are investigating whether enforced HCELL expression will confer efficient vascular deliver of stem or tissue-specific progenitor cells for regenerative therapeutics. In related research, our studies are moving beyond normal stem cells to the biology of the ‘cancer stem cell’: we have found that HCELL is characteristically expressed on blasts of human acute leukemia and also among certain human cancer cells, and thus we are investigating how HCELL expression is related to leukemogenesis/carcinogenesis and to metastasis.

In other studies of the molecular basis of cellular trafficking, our laboratory is investigating the physiology of lymphocyte migration following stem cell transplantation to determine how pathologic tissue-specific migration patterns develop post-transplant, such as in acute GVHD. In particular, we are examining the adhesion molecules that regulate skin-specific migration of lymphocytes in cutaneous GVHD reactions, in order to elucidate the molecular basis of this process and develop therapeutic agents to treat or prevent this condition. We thus aim to devise novel therapies to eliminate the detrimental GVHD reaction of allogeneic transplantation without disturbing beneficial immune reactions such as the graft-versus-malignancy effect. Toward this goal, we are also testing whether enforced surface HCELL expression can improve the delivery of regulatory lymphocytes to blunt GVHD and/or can augment the capacity of MSC (which are immunomodulatory) to abrogate the GVHD reaction. In other studies, we are investigating the structural biology of key molecules that mediate adhesive interactions that create microenvironmental “niches” for tumor cell proliferation, the adhesion molecules that allow for tumor cell dissemination, and the adhesion molecules that regulate lymphocyte trafficking to sites of tumor. The goal in these studies is to utilize structural information for the rational design of drugs that disrupt key adhesion molecules in tumor cell growth and metastasis, and of agents/technologies that may improve immune effector cell infiltration of tumor tissue.
TENURE AND PROMOTION CURRICULUM VITAE
OF
Dr. Arijit Sengupta, Department of Information Systems and Business Analytics

EDUCATION  (List most recent degree first)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Institution</th>
<th>Field</th>
<th>Dates</th>
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</thead>
<tbody>
<tr>
<td>Ph.D.</td>
<td>Indiana University, Bloomington</td>
<td>Computer Science</td>
<td>1992-1997</td>
</tr>
<tr>
<td>MS</td>
<td>Indiana University, Bloomington</td>
<td>Computer Science</td>
<td>1992-1997</td>
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FULL-TIME ACADEMIC EXPERIENCE (list most recent first)

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<tr>
<th>Institution</th>
<th>Rank</th>
<th>Field</th>
<th>Dates (Month &amp;Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wright State University</td>
<td>Associate Dean, Academic Programs and AACSB Accreditation</td>
<td>Business</td>
<td>Oct 2013-Present</td>
</tr>
<tr>
<td>Wright State University</td>
<td>Professor</td>
<td>Information Systems</td>
<td>Jul 2012-Present</td>
</tr>
<tr>
<td>Wright State University</td>
<td>Associate Professor</td>
<td>Information Systems</td>
<td>Aug 2008-July 2012</td>
</tr>
<tr>
<td>Wright State University</td>
<td>Assistant Professor</td>
<td>Information Systems</td>
<td>Jun 2005-July 2008</td>
</tr>
<tr>
<td>Indiana University</td>
<td>Assistant Professor</td>
<td>Information Systems</td>
<td>Aug 2001-May 2005</td>
</tr>
<tr>
<td>Georgia State University</td>
<td>Assistant Professor</td>
<td>Computer Information Systems</td>
<td>Aug 1999-July 2001</td>
</tr>
<tr>
<td>Indiana University</td>
<td>Director of Educational Development and Assistant Professor</td>
<td>Computer Science</td>
<td>Aug 1997-July 1999</td>
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</tbody>
</table>

PART-TIME ACADEMIC EXPERIENCE (list most recent first)
N/A

NON-ACADEMIC EXPERIENCE

<table>
<thead>
<tr>
<th>Place of Employment</th>
<th>Title</th>
<th>Dates</th>
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<tbody>
<tr>
<td>Interactive Control Solutions</td>
<td>Senior Software Engineer/Chief Information Officer</td>
<td>Jun 2011-Current</td>
</tr>
<tr>
<td>TagMaster North America</td>
<td>Project Manager/Chief Technical Officer</td>
<td>2010-2015</td>
</tr>
<tr>
<td>Oil and Natural Gas Corporation</td>
<td>Software Engineer Intern</td>
<td>May-Aug 1991</td>
</tr>
</tbody>
</table>

EMPLOYMENT RECORD AT FIU
N/A

PUBLICATIONS IN DISCIPLINE
(List most recent first. List only items already in print or accepted for publication. For items accepted but not yet published, indicate “in press” and number of typewritten pages, single or double-spaced. If publication is co-authored, all authors must be listed as they appear in the publication—i.e., same order. If sole authored, author’s name must be given. Indicate by “NPR” any publications that were not peer reviewed.)

Books (give full bibliographical references)


Articles (give full bibliographical references)


Henry M. Kim, Mark S. Fox and Arijit Sengupta. “How to build enterprise models to achieve compliance to standards or regulatory requirements (and share data)”. Journal of the Association for Information Systems, JAIS, 8:2, pp. 105-128, Feb 2007.


Refereed Professional/Practitioner Journals


Invited Articles


Proceedings (give full bibliographical references: author(s); journal title, publisher, title, date, volume and page number)


Chapters in Books (give complete bibliographical references)


Government Reports or Monographs (give complete bibliographical references)
N/A

Book Reviews (give complete bibliographical references)
N/A

OTHER PUBLICATIONS (List publications outside of discipline. Give complete bibliographical references.)
N/A
PRESENTED PAPERS, AND LECTURES  (List title, date, and venue where presented)


CREATIVE WORK

Passport To Success  Developed a set of mobile apps and backend processes as an incentive program for students attending College events, 2017

Assess My Program  Developed an efficient and collaborative platform for performing assessment and assurance of learning data collection and analysis for accreditation purposes. 2008

SmartParkRF  Developed an automated parking solution for Wright State Faculty parking lot. 2009.

WORKS IN PROGRESS
Papers submitted to journals for consideration (list Journal and date of submission)


Other completed papers
N/A

Research in Progress
Arijit Sengupta and Scott Williams. “Using mobile technology to engage students: The Passport to Success story.”
Grant Proposals (list title of project, agency receiving proposal, and date of submission)

FUNDED RESEARCH
(List all investigators, title of project, funding agency [if the funding is a subcontract, from what organization], project dates, and amount of funding [when there are co-PIs on an award, give the portion of the total award coming to the candidate]).

Ohio State Infrastructure Capital Funding Grant. “D.A.V.E. – Data Analytics and Visualization Environment”. With Dr. Joanne Li and Dr. Shu Schiller. Funded $600,000.


“Preventive Maintenance of RFID implementations – Phase II.” Alien Technology Federal Pass-through Grant. PI with co-PI Dr. Vikram Sethi. Total grant value $25,000. Mar 2008


“Wright Research Initiative for the Technological Evolution with RFID (WRITER)” Wright State University Research Challenge/Major Collaboration Award. Award amount $25,000. PI, with co PIs Dr. Vikram Sethi and Dr. XinHui Zhang. May 2007.

“Preventive Maintenance of RFID implementations.” Alien Technology Federal Pass-through Grant. PI with co-PI Dr. Vikram Sethi. Total grant value $25,000. Mar 2007


“Managing data in the RFID-driven supply chain” Wright State University Research Initiation Grant. Awarded $10,000. April 2006.


“Microsoft .NET Curriculum Development Grant” – February 2002. Microsoft Corporation. William Perkins (project director), Arijit Sengupta (member of development team) and V. Ramesh. One time grant of $30,000 cash, hardware and software valued at $37,544, and training costs as requested.

“Incorporating Solaris and Java Technologies into the new MS Information Systems Curriculum” February 2002. Sun Microsystems – Arijit Sengupta (co-principal investigator), Ramesh Venkataraman and Tracy Connolly. One-time infrastructure grant, approximate total dollar value of $50,000.

Faculty Mentoring Grant. September 2000. Awarded $10,000 for conducting research on “DocBase II” – the next generation digital library system.

Research and Infrastructure Grant, National Science Foundation, 1996.

PROPOSALS SUBMITTED BUT NOT FUNDED
(List title of project, funding agency, project dates, and amount of requested funding)

N/A
PATENT DISCLOSURES, APPLICATIONS, AND AWARDS
N/A

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

National/External
Mid-American Business Deans Association (MABDA) Innovation in Business Award. First Place Award. Received for Proposal “Assess My Program (AMP) – Using a collaborative online approach to improve the assurance of learning process” Sep 2016
“Greater Dayton’s Top 40 under 40 Award” April 2009
National Talent Search Scholarship, Dept of Education, India, 1986-92; best 100 scores in nationally conducted tests/interviews among 100,000 high school graduates in India.
TERA (Teaching Excellence Recognition Award), March 1998.

Department
Raj Soin College of Business Outstanding ISOM Teacher Award, June 2012. Received this award five years in a row.
Raj Soin College of Business Outstanding ISOM Teacher Award, June 2011.
Raj Soin College of Business Outstanding ISOM Teacher Award, June 2010.
Raj Soin College of Business Outstanding ISOM Teacher Award, June 2009
Raj Soin College of Business Outstanding ISOM Teacher Award. May 2008.
Best B.Tech. Project Award, Indian Institute of Technology, Kharagpur, India, 1992; one of two best undergraduate projects among 200.

School/College

University
Nominated for the Wright State University Presidential Award for Early Faculty Achievement. May 2007.
OFFICES HELD IN PROFESSIONAL SOCIETIES

Job Placement Coordinator, Decision Sciences Institute, 2005-2011.

*Information Technology Committee Member*, Decision Science Institute 1999-2011.

*Membership Services Committee Member*, Decision Sciences Institute, 2007-Current.

*Information Technology Liaison*. Decision Sciences Institute. Assist the Institute with development of new IT projects and manage current projects and their implementation. 2009-2010

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

*Advisory Board Member*, Physician Leadership Development Program (PDLP). Wright State University. 2017-Present

Beta Gamma Sigma Chapter Advisor for Wright State University. 2016-Present
THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
December 5, 2018

Subject: New Program Proposal: Bachelor of Science in Interdisciplinary Engineering

Proposed Committee Action:
Recommend to the Florida International University Board of Trustees approval of the New Program Proposal: Bachelor of Science in Interdisciplinary Engineering (CIP 14.0101).

Background Information:
The School of Universal Computing, Construction, and Engineering EDucation (SUCCEED) in the College of Engineering and Computing at Florida International University is proposing a new Bachelor of Sciences degree in Interdisciplinary Engineering under the Science, Technology, Engineering, and Mathematics (STEM) CIP code 14.0101.

This is a 120-credit undergraduate degree. The B.S. in Interdisciplinary Engineering would be the first of its kind in the Florida State University System, housed in a College that is among the top-30 producers of Engineering Bachelor’s degrees, and the nation’s #1 producer of Hispanic Engineering and #9 producer of African American Engineering undergraduate degrees.

Rather than focusing exclusively on an existing Engineering subfield such as Biomedical, Civil, Environmental, Electrical, Computer, or Mechanical Engineering, this will be a uniquely interdisciplinary program with broad flexibility and student-guided focus. The U.S. Bureau of Labor Statistics (BLS) from department of labor website projects employment growth for engineers, with nearly 140,000 new jobs expected for engineers over the 2016–26 decade.

Each university board of trustees shall approve for implementation new degree programs at the bachelor’s, master’s, advanced master’s, and specialist levels in accordance with Florida Board of Governors Regulation 8.011 – Authorization of New Academic Degree Programs and Other Curricular Offerings.

Supporting Documentation: Executive Summary: Bachelor of Science in Interdisciplinary Engineering (CIP 14.0101) New Program Proposal

Facilitator/Presenter: Elizabeth M. Bejar
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Proposed B.S. in Interdisciplinary Engineering
School of Universal Computing, Construction, and Engineering EDucation
College of Engineering and Computing
Florida International University

EXECUTIVE SUMMARY

The School of Universal Computing, Construction, and Engineering EDucation (SUCCEED) in the College of Engineering and Computing at Florida International University is proposing a new Bachelor of Sciences degree in Interdisciplinary Engineering under the Science, Technology, Engineering, and Mathematics (STEM) CIP code 14.0101.

This is a 120-credit undergraduate degree. The B.S. in Interdisciplinary Engineering would be the first of its kind in the Florida SUS, housed in a College that is among the top-30 producers of Engineering Bachelor’s degrees, and the nation’s #1 producer of Hispanic Engineering and #9 producer of African American Engineering undergraduate degrees.

Rather than focusing exclusively on an existing Engineering subfield such as Biomedical, Civil, Environmental, Electrical, Computer, or Mechanical Engineering, this will be a uniquely interdisciplinary program with broad flexibility and student-guided focus. The core vision is providing a customizable degree for students so they may optimize their opportunities to enter the workforce, including emergent entrepreneurial businesses. The curriculum will combine a core encompassing math, sciences, business, communication, and engineering courses from all disciplines along with a secondary field that could include traditional existing engineering areas such as Biomedical Engineering, Computer Engineering, Telecommunications Engineering, and Transportation Engineering, or potentially others such as Internet of Things, Engineering Management, etc. Students and graduates will tackle complex engineering and business situations.

The students will learn all aspects of project management, working in multiple disciplines, and getting results in a real-world team environment. Research in faculty laboratories, summer internships, and the three-semester Interdisciplinary Senior Engineering Project complement the classroom curriculum with hands-on experience working for industry. A B.S. in Interdisciplinary Engineering will prepare students to do well in all aspects of industry, including health care, communications, environmental stewardship, government, and business producing more of the highest paid STEM graduates. Available jobs through online job websites include numerous opportunities for a “generalist” or “interdisciplinary” engineer, including in the Department of Defense and the US Navy. According to a February 2018 report at the
U.S. Department of Labor website, the U.S. Bureau of Labor Statistics (BLS) projects employment growth for engineers, with nearly 140,000 new jobs expected for engineers over the 2016–26 decade. And in 2016, engineers had a median annual wage of $91,010—more than twice the median wage for all workers, also noting that “Architectural and Engineering Managers” are in especially high demand with a median annual wage of $134,730 and nearly 10,000 projected new jobs.

<table>
<thead>
<tr>
<th>Implementation Timeframe</th>
<th>Projected Enrollment (From Table 1)</th>
<th>Projected Program Costs (From Table 2)</th>
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<td></td>
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<td>FTE</td>
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<td>Year 1</td>
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<td>Year 2</td>
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<td>Year 3</td>
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<tr>
<td>Year 5</td>
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THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
December 5, 2018

Subject: Approval of the creation of Regulation FIU-2502 Children’s Creative Learning
Center at FIU

Proposed Committee Action:
Recommend that the Florida International University Board of Trustees approve the creation of Regulation FIU-2502 Children’s Creative Learning Center at FIU (CCLC).

Background information:
The basis for this regulation is to establish the purpose and mission of the CCLC, permit the University President to delegate responsibility for the operation and supervision of the CCLC, outline the duties of the CCLC Director, establish and outline the responsibilities of the Advisory Board, publish fees charged for child care and services, specify funding for the CCLC, and outline opportunities for internships and clinical experiences for students.

Florida Board of Governors Regulation 10.004, Educational Research Centers for Child Development, provides, in relevant part, that each university board of trustees shall adopt regulations for the operation of an Educational Research Center for Child Development on its campus which shall include fees for child care and services, the establishment of an advisory board, and priority of admission. Proposed Regulation FIU-2502 ensures FIU is compliant with Board of Governors’ Regulation 10.004. All fees included in proposed Regulation FIU-2502 reflect fees currently charged to children enrolled in the CCLC that have not been increased since 2014.

Florida Board of Governors Regulation 1.001(3)(j)(l) provides, in relevant part, that each board of trustees is authorized to promulgate university regulations in accordance with the Regulation Development Procedures adopted by the Board of Governors; and each board of trustees shall be responsible for campus safety and emergency preparedness, to include safety and security measures for university personnel, students, and campus visitors.

Supporting Documentation:
- Executive Summary for New Regulation 2502 Children’s Creative Learning Center
- Board of Governors Regulation 10.004 Educational Research Centers for Child Development
- Proposed Regulation FIU-2502 Children’s Creative Learning Center

Facilitator/Presenter:
Carlos B. Castillo
Executive Summary for New Regulation 2502
Children’s Creative Learning Center

Board of Governors’ Regulation 10.004 and section 1011.48, Florida Statutes, permit each university to establish an educational research center for child development. Although FIU’s Children’s Creative Learning Center (CCLC) was established in 1987, the promulgation of this regulation ensures the University is in compliance with statutory and BOG requirements.

Children enrolled in the CCLC are now called Panther Cubs.

In pertinent part, new FIU-2502:

- Outlines the purpose of CCLC as specifically stated in section 1011.48, Florida Statutes;
- Specifies that the University President is responsible for, and may delegate, responsibility for the operation and supervision of the CCLC;
- Details how the CCLC Director is selected and the Director’s responsibility for the day-to-day operation and management of the CCLC;
- Establishes the responsibilities and composition of the CCLC Advisory Board. FIU’s CCLC shall have an Advisory Board instead of a Board of Directors in compliance with BOG Regulation 10.004 because the CCLC is a part of the university instead of separately incorporated;
- Grants admission priority for students, faculty, staff, alumni, and members of the University community;
- Lists the registration fee, supply fee, and tuition for children enrolled at the CCLC. Such fees have not been increased since 2014 and no increase is proposed at this time;
- Delineates responsibility for student internships and clinical experiences; and
- Mandates all research involving children at the CCLC be approved by the Institutional Review Board prior to commencement.
10.004 Educational Research Centers for Child Development.

(1) Each university board of trustees shall adopt regulations for the operation of an Educational Research Center for Child Development on its campus. Such regulations shall be consistent with the university mission and Board of Governors regulations.

(2) Upon approval of the university president, the student government association of any state university may establish an educational research center for child development. Each such center shall be an early childhood center established to provide education and care for the children of students, both graduate and undergraduate, faculty, and other staff and employees of the university and to provide an opportunity for interested schools or departments of the university to conduct educational research programs and establish internship programs within such centers. Whenever possible, such center shall be located on the campus of the university. There shall be a director of each center, selected by the hiring official and approved by the center’s board of directors or advisory board.

(3) Each center shall give highest priority to serving the children of students, followed by the children of staff and faculty.

(4) Each educational research center for child development shall be funded by a portion of the Capital Improvement Trust Fund fee established by the Board of Governors. Each university that establishes a center shall receive a portion of such fees collected from the students enrolled at that university, usable only at that university, equal to 22.5 cents per student per credit hour taken per term, based on the summer term and fall and spring semesters. This allocation shall be used by the university for the establishment and operation of a center as provided in this regulation. Said allocation may be made only after all bond obligations required to be paid from such fees have been met.

(5) Funds appropriated for the Educational and General activities of the State University System shall not be used to staff and operate centers. Operations may be financed either through the capital improvement trust fund fee, activity and service fee allocations, user charges, grants and donations, or any combination of these sources. Funds subject to bond commitment may be used only to the extent that current bond obligations and the terms of the trust indenture are met.

(6) University facilities constructed for the accomplishment of the university’s academic mission may be used for university research centers for child development provided that rent is charged, which may be minimal. Such centers will not generate a requirement for fixed capital outlay.
(7) The president shall be responsible for the operation and supervision of the educational research center for child development. The university board of trustees shall promulgate regulations for the operation of the educational research center for child development, including guidelines for the use and supervision of student interns, the receipt and monitoring of funds in accordance with the laws of the State of Florida and regulations of the university and the Board of Governors, and participation by the student government association. It is recognized that intent of this program is to provide research and training activities which are representative of a comprehensive scope of child development needs throughout the community. To this end, university regulations shall include an admission process that is inclusive race, ethnicity, socio-economic status, gender, as well as mental and physical ability.

(8) Each university board of trustees which establishes an educational research center for child development shall provide for an advisory board if the center is part of the university, or a board of directors, if the center is separately incorporated. The board of directors for each educational research center for child development shall consist of the president of the university or his or her designee, the student government president or his or her designee, the chair or designee from one of the departments participating in the center, and a representative number of parents of children enrolled in the center, elected by parents of children enrolled in the center. The director of the center shall be an ex officio, nonvoting member of the board. The board of directors shall establish local policies and perform local oversight and operational guidance for the center and shall insure that the center is operated according regulations of the Board of Governors and the university.

(9) Each university board of trustees is authorized to establish fees for child care and services provided by the center. Fees should be set at the level required to support the cost of providing the service. Exceptions should be made for the children of students and may be made for low-income faculty and staff. These fees must be approved by the Board of Governors and in accordance with BOG Regulation 7.003(17).

Authority: Section 7(d), Art. IX, Fla. Const., History--Formerly 6C-2.79, 10-7-74, Amended and Renumbered 12-17-74, 10-7-74, Amended 2-18-80, 8-11-85, Formerly 6C-10.04, Amended 12-25-86, 11-29-94, Amended and Renumbered 1-29-09.
NOTICE OF PROPOSED REGULATION

REGULATION NO.: FIU-2502
REGULATION TITLE: Children’s Creative Learning Center at FIU

SUMMARY: This Regulation establishes the purpose and mission of the Children’s Creative Learning Center (CCLC), permits the University President to delegate responsibility for the operation and supervision of the CCLC, outlines the duties of the CCLC Director, establishes and outlines the responsibilities of the Advisory Board, publishes fees charged for child care and services, specifies funding for the CCLC, and explains opportunities for internships and clinical experiences for students.

TEXT OF REGULATION: The full text of the Proposed Regulation can be viewed below and on the website of The Florida International University Board of Trustees at http://regulations.fiu.edu/. If you would like a copy of the Proposed Regulation, please contact Eli Deville, Departmental Administrator, Office of the General Counsel, (305) 348-2103, devillee@fiu.edu.

AUTHORITY: Florida Board of Governors’ Regulation 10.004

NAME OF PERSON INITIATING PROPOSED REGULATION: Dr. Elizabeth Bejar, Senior Vice President Academic & Student Affairs

ANY PERSON SEEKING TO COMMENT ON THE PROPOSED REGULATION MUST SUBMIT COMMENTS IN WRITING TO THE CONTACT PERSON LISTED BELOW. ALL WRITTEN COMMENTS MUST BE RECEIVED BY THE CONTACT PERSON WITHIN 14 CALENDAR DAYS OF THE DATE OF PUBLICATION OF THIS NOTICE.

CONTACT PERSON REGARDING THE PROPOSED REGULATION: Eli Deville, Departmental Administrator, Office of the General Counsel, Florida International University, 11200 SW 8th Street, PC 511, Miami, FL 33199. Phone: 305-348-2103, Fax: (305) 348-3272, email: devillee@fiu.edu.

DATE OF PUBLICATION: November 1, 2018

THE FULL TEXT OF THE REGULATION IS PROVIDED BELOW:
FIU-2502 Children’s Creative Learning Center at FIU

(1) The Florida International University (University) Board of Trustees established the Children’s Creative Learning Center (CCLC) an educational research center for child development, to:
   a. Serve as an early childhood center for the children of students, employees, and other members of the University community;
   b. Provide an opportunity for interested schools and colleges of the University to conduct educational research programs; and
   c. Establish internship opportunities within CCLC.

(2) The University President shall be responsible for the operation and supervision of the CCLC. The President may delegate this authority.

(3) The Director of the CCLC shall be selected by the hiring official after consultation with the CCLC Advisory Board. The Director is responsible for the day-to-day operation and management of the CCLC.

(4) The CCLC Advisory Board shall recommend Center policies and procedures, support the CCLC’s mission, provide recommendations regarding matters brought forth by the CCLC Director, advocate for adequate resources to meet the operational needs of the Center, and enhance the Children’s Creative Learning Center’s public standing.
   a. The Advisory Board shall not exceed thirteen (13) members and consist of University faculty members, parents of children in the CCLC, and one (1) representative from the Student Government Association (SGA) chosen by the SGA President. Members of the community may be added to the Advisory Board based on their expertise. The Director shall serve as a non-voting ex officio member of the Advisory Board.
   b. The Director shall recommend applicable policies and procedures to the President or his/her designee with input from the Advisory Board for approval. All approved policies and procedures shall be published in the Children’s Creative Learning Center’s Family Handbook.

(5) Admission of children into the Children’s Creative Learning Center shall be inclusive of race, ethnicity, socio-economic status, gender, and mental and physical ability. First priority for admission is given to children of University students. On a space available basis, second priority for admission is given to children of University faculty and staff, and third priority is given to children of alumni.

(6) As an auxiliary within the Division of Academic and Student Affairs, the Children’s Creative Learning Center is partly funded by Capital Improvement Trust Fund Fees, user fees, Student Activity and Service Fees, grants, and donations in accordance with state law. The receipt and monitoring of all funds are in accordance with state law and regulations of the Board of Governors and University.
The Children’s Creative Learning Center may charge fees for child care and services. Fees may be staggered based on family income or the child’s parent/legal guardian’s relationship to the University. The fees shall be as follows:

<table>
<thead>
<tr>
<th>Registration Fee</th>
<th>Semester</th>
<th>Affiliation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Session</td>
<td>Fall - Summer A</td>
<td>All</td>
<td>$250.00</td>
</tr>
<tr>
<td>Summer Camp</td>
<td>Summer B</td>
<td>All</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supply Fee</th>
<th>Semester</th>
<th>Affiliation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Session</td>
<td>Fall - Summer A</td>
<td>Students</td>
<td>$200.00</td>
</tr>
<tr>
<td></td>
<td>Fall - Summer A</td>
<td>Non-Students</td>
<td>$225.00</td>
</tr>
<tr>
<td>Summer Camp</td>
<td>Summer B</td>
<td>All</td>
<td>$150.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tuition</th>
<th>Semester</th>
<th>Affiliation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>Year Round</td>
<td>Students</td>
<td>$475.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff</td>
<td>$675.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faculty</td>
<td>$700.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alumni</td>
<td>$700.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Community</td>
<td>$725.00</td>
</tr>
</tbody>
</table>

The Children’s Creative Learning Center may furnish internships and clinical experiences for students of the University. Students shall be supervised by CCLC staff and function under guidelines of the CCLC and the respective academic department.

Any research involving human subjects proposed at the Children’s Creative Learning Center shall be submitted to the Institutional Review Board (IRB) for approval prior to commencement.

Authority: Board of Governors’ Regulation 10.004; History—New
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ACADEMIC AFFAIRS REGULAR REPORTS

I. FIUBeyondPossible2020
II. Academic and Career Success
III. Engagement
IV. Enrollment Management and Services
V. Information Technology
VI. Research and Economic Development / University Graduate School
VII. Student Affairs
I. FIU Beyond Possible 2020

1. FIU ComPASS
FIU’s Communication Protocol for Accountability and Strategic Support (ComPASS) was developed in 2016 to aid in the University’s achievement of its FIU Beyond Possible 2020 Performance Funding goals. The efforts of which are being actualized through significant improvements in the university’s four-year graduation rate of our students, from 28% to 33% in the last two years of this exercise.

ComPASS is comprised of a series of meetings that monitor the University’s immediate instructional, curricular, and operational needs and their impact on FIU’s mission and position relative to the State’s Performance Funding Model. More specifically, ComPASS sessions focus on three target areas of strategic planning; Completion and Employment, Strategic Enrollment and Research and Revenue. Through these sessions, FIU is able to bridge increasing accountability demands with opportunities for improvement at the University and individual unit level. Thus far, the University has held eight successful ComPASS meetings involving the President, Provost, vice presidents, deans, chairs, and college staff.

On August 9, 2018, we continued the conversation of Completion and Employment. The ComPASS session focused heavily on strategies supporting our achievement of our current university wide four-year graduation rate goal of 45% for the 15-16 cohort. This goal of 45% will ensure a successful pathway to the university’s ultimate goal of achieving a 60% four-year graduation rate for the 18-19 cohort. Colleges shared recent successes as well as obstacles in the areas of retention, progression, graduation and employment.

The October 23, 2018, session focused on the Pathway to Preeminence with a particular emphasis on improving research preeminence, enhancing the university’s reputation and rankings. This session highlighted the first instance where specific strategies to improve the University’s reputation was discussed. The session identified strategies that can be implemented by the university and colleges that will improve local, national and international rankings to include initiatives to encourage faculty awards, increase postdoctoral fellows and doctoral degrees across the university.

2. BEYOND POSSIBLE STRATEGIC PROJECTS
The FIU Beyond Possible 2020 strategic project plans have made significant progress within the last quarter. The Office of the Provost has been meeting with project leads on a regular basis in order to evaluate project performance and set milestones for future achievements. Below is a brief status report highlighting progress of some of the 33 approved projects.

International Requirement
Many of the efforts towards international recruitment are in conjunction with International Dual Enrollment and Recruitment strategic endeavors performed within Office of Faculty and Global Affairs (OFGA). The team has spent significant time in the field to engage prospective students to encourage them to select FIU as their educational destination. International
Recruitment has started a project called “JumpStart” and has launched a website, soon to be translated to Chinese to attract those native speakers. The team is actively involved in the creation of strategies for developing and increasing transfer and dual degree programs with key international institutions.

**Panther Alumni Recruitment Team (PART)**
The PART project boasts one of the highest rates of accomplishments as they are engaging FIU alumni and using them to increase recruiting of prospective students. All of their volunteer training initiatives have been launched, and plans are in place to offer these training programs in different languages. There are now more than 300 PART volunteers (+25% active, 61% female, 72% in state) with an average age of 40 (previously +50) who help with and/or contribute to an annual giving of more than $88,500. PART volunteers have already represented FIU at over 10 college fairs in six strategic markets (including Maryland, D.C. and NY), raising awareness among over 2,000 students.

**Improve and Increase Hybrid Courses**
The team added 103 new courses to the directory of hybrids within the 17-18 year. They have held regular workshops for faculty to inspire and support them to start offering hybrid courses. The project has been successful in the development of required infrastructure and human resources, and the team is now fully focused on achieving 2020 and 2025 strategic goals/percentages as planned. They are also working on more ways to incentivize faculty which would eventually result in a higher ratio of hybrid to traditional face-to-face courses offered. More than 14,000 students were enrolled in FIU hybrid courses through 17-18 academic year, and the team has recently exceeded their Certified Instructor Goal of 300.

**II. ACADEMIC AND CAREER SUCCESS**

1. **EAB Student Success Collaborative (SSC)**
   EAB Student Success Collaborative officially launched on September 17, 2018. By the end of September, nearly 5,000 students had signed on to the platform. The program has been renamed Panther Success Network and will lay the foundation for the development of a collaborative care student support system throughout the university. Outreach campaigns designed to target specific student populations will run and be tracked through the system.

2. **Career and Talent Development**
   In an effort to both increase the career readiness and professional development of our students and to become more responsive to the needs of our employer-partners, the leadership team of Career and Talent Development (CTD) has finalized the reorganization of the unit. The new structure has expanded the traditional Career Development/ Employer Relations organizational paradigm by identifying four key areas to guide all career readiness initiatives: Career Development and Coaching, Operations and Events, Employer Engagement, and Strategic Connections and Communication. Each area will be led by an Associate Director who
will work closely with the Director to leverage this new approach for the benefit of our students.

Between September and November, CTD has offered programming that facilitated interactions between 6,059 students and alumni, 424 employers and 62 graduate programs. Some of the activities included On-Campus Interviews, Career Fairs (3), Internship Fair, Career Bash, Graduate School Week, Panels, Webinars, Mentor Mondays, Information Sessions and Resume Fest. Additionally, as of Fall 2018, Handshake (a Career Management System) is being used by all three career centers. Students are now able to manage their career development through one system. Some of the features include 24/7 access to thousands of jobs and internships, appointment scheduling with career coaches, on-campus interview scheduling, and the ability to RSVP for all career events. New employer registrations have risen by over 50 percent in the past year. Currently, there are 4,779 full-time and 1,215 internship opportunities available to FIU students.

3. Academic Advisor Initiatives
To assure that FIU students are provided with an effective and efficient support network, ACS is committed to providing the university advising community with quick access to the information and resources they need to assist our students. ACS, in collaboration with student support partners across the university, is developing an Advising Portal. The primary goal of the portal will be to provide an up-to-date knowledge base and resource center for advisors, faculty member, and other staff members who may need to access current policies, procedures, best practices, or resources as they are working with students. This will be a 24/7 interactive source of information related to various areas across campus such as the Career and Talent Development, Center for Student Engagement, Enrollment Management, OneStop, Registrar’s Office, Financial Aid, Global Affairs, Honors, SAAC, and Student Affairs. As part of this initiative, an AI powered chatbot is being developed within the portal. The chatbot will be connected to the existing DoIT and OneStop chatbots as repositories of up-to-date information. The portal is projected to launch by Spring 2019.

III. ENGAGEMENT REPORT

1. Carnegie Community Engagement Classification and launch of #FutureIsUs
Engagement launched the inter-disciplinary and university wide #FutureIsUs Taskforce in Spring 2018. The team will work to attain the 2020 Carnegie Community Engagement Re-Classification, led by co-chairs VP Saif Ishoof and SVP Academic and Student Affairs Elizabeth M. Bejar. This group will also work to develop infrastructure to allow for the appropriate tracking and evaluation of university-wide community engagement activities. The infrastructure will also allow the university to tell the story of impact related to activities. The Community Engagement Classification is awarded to institutions that demonstrate collaboration with their larger communities for the mutually beneficial exchange of knowledge and resources in a context of partnership and reciprocity. Furthermore, a critical component of
the Florida State University System’s mission is public service and the commitment of state universities to engage with Florida’s communities and businesses. In fact, *Community & Business Engagement* is one of the goals detailed in the SUS 2025 strategic plan.

The #FutureIsUs launch party and official social media launch occurred on September 24, 2018 with over 200 members of the university community in attendance. The day including much online traffic with over 1.5 million impressions on social media focused on the community-engaged work of FIU.

2. **Future of Work: Urban Potential Laboratories**
On August 1, 2018, the JP Morgan Chase Foundation approved a grant of $500,000 for the launch of UP Labs – a proposal submitted by the Office of Engagement in partnership with the FIU Foundation.

UP Labs is a new workforce development concept. Through an articulated sequence of courses and work experiences, UP Labs will meet employer demand for middle-skills workers and secure 21st-century employment for participants. UP Labs will start as a one-year pilot with two cohorts comprised of non-traditional learners starting in January 2019. Learners will engage in a series of labs over the course of 14 weeks that will prepare them for middle-skill jobs in healthcare. Participating employers will identify high-demand jobs and work collaboratively with FIU staff and faculty to develop learning labs around targeted workforce skills development.

An internal working group has been established with representatives from Continuing Education, Academic Planning and Accountability, Stempel College of Public Health and Social Work, Wertheim College of Nursing and Health Sciences, and NeighborhoodHELP. FIU Continuing Education is designing the curriculum in preparation of program launch.

The public announcement with Chase took place during the Forward Cities Conference on November 8, 2018 in conjunction with a Workforce Innovation panel featuring Maria Escorcia of Chase and Marshall Ames of Lennar Foundation.

3. **Public-Private Partnerships: Royal Caribbean Ltd.**
Twenty-six FIU students participated in Royal Caribbean’s 10-week Summer Internship Experience in Summer 2018. This is the largest cohort of FIU students to participate to date. Fifty-five students interviewed for the program. Twenty-six students completed the program and three students were offered and accepted full-time positions following the internship.

4. **Municipal Partnerships: City of Miami Beach**
The City of Miami Beach Commission approved FIU Dual Enrollment at Miami Beach Senior High School for the 2018-19 school year at $62,000 – an increase from previous years. Since the Spring 2015 semester, the City of Miami Beach has funded twenty unique FIU Dual Enrollment courses at Miami Beach Senior High
School. Six hundred, seventy-one students have participated in twenty-nine class sections.

The City of Miami Beach has changed their internship policy and internships are now unpaid. This decision was made due to internal budgeting within the City and will be reviewed in September 2019. The internship positions are closely aligned to current working groups. Since the Summer 2015 semester, the City of Miami Beach has hired 49 FIU interns, with seven of those interns receiving promotions to full time positions within the City.

IV. ENROLLMENT MANAGEMENT AND SERVICES REPORT

1. University Enrollment

   Summer 2018

   Early Fall/Summer Point in Time Comparisons by Count Type and Term

<table>
<thead>
<tr>
<th>Count Type</th>
<th>Summer 2017</th>
<th>Summer 2018</th>
<th>Diff</th>
<th>% Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td>37,012</td>
<td>39,473</td>
<td>2,461</td>
<td>6.65%</td>
</tr>
<tr>
<td>Fundable FTE's</td>
<td>7,480</td>
<td>8,124</td>
<td>644</td>
<td>8.61%</td>
</tr>
<tr>
<td>Student Credit Hours</td>
<td>252,120</td>
<td>270,386</td>
<td>18,266</td>
<td>7.24%</td>
</tr>
</tbody>
</table>

   10/10/2018 Reporting Date

   As of October 10, 2018, we enrolled 39,473 students in courses for the summer 2018 term. This represents a nearly 7% increase as compared to summer 2017 enrollment of 37,012.

   Fundable FTE’s have increased by almost 9% or by 644, from 7,480 in summer 2017 to 8,124 in summer 2018. Student credit hour production increased by 18,266 or 7.24%, from 252,120 in summer 2017 to 270,386 in summer 2018.

   Fall 2018

   Fall Point in Time Comparisons by Count Type and Term

<table>
<thead>
<tr>
<th>Count Type</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Diff</th>
<th>% Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td>56,886</td>
<td>57,803</td>
<td>917</td>
<td>1.61%</td>
</tr>
<tr>
<td>Fundable FTE's</td>
<td>17,811</td>
<td>18,061</td>
<td>250</td>
<td>1.40%</td>
</tr>
<tr>
<td>Student Credit Hours</td>
<td>579,641</td>
<td>588,396</td>
<td>8,755</td>
<td>1.51%</td>
</tr>
</tbody>
</table>

   10/10/2018 Reporting Date

   As of October 10, 2018, 57,803 students enrolled in fall 2018 courses. This represents a nearly 2% increase as compared to fall 2017 enrollment of 56,886. Fundable FTE’s have increased from 17,811 in 2017 to 18,061 in 2018, a 1.40% increase. Student credit hour production increased by 8,755 or 1.50%, from 579,641 in fall 2017 to 588,396 in fall 2018.
The Office of Admissions hosted Showcase FIU on September 29. This is an on-campus program designed to attract new FTIC and transfer students to the university for the 2019-2020 academic year. Three hundred and ten prospective students were in attendance and 26 of the prospective students applied on-site.

The Office of Admissions hosts on-campus events for transfer students as well – Transfer Tuesday and Transfer Day by the Bay – to educate prospective transfer students about the benefits of an FIU education. In addition, the Office of Admissions has attended six community college fairs at the Florida state colleges in Broward, Miami Dade and Palm Beach counties.

A Graduate Student Orientation was hosted at the start of the semester. The Office of Admissions has attended four college fairs in the State of Florida including in Fort Myers and Orlando.

2. **International Admissions**

As of October 12, 2018, our fall 2019 applicants and admitted students exceed fall 2018 for both FTIC and transfer students. For the academic year 2018-2019, FTIC enrolled student numbers are down 28.37% (61 FTIC all terms) when compared to this point in the 2017-2018 cycle; due to the increase in fall entry requirements, we expected this dip in enrollment. Fall 2018 alone saw a reduction in 87 enrolled students. Given that we have 34% more admitted students for the upcoming spring 2019 term, we project spring enrollments to meet or exceed the enrollments from spring 2018.

For the academic year 2018-2019 (as of 10/12/2018), we enrolled 13.44% more transfer students (70 transferring students) than we did last year at this time. We believe that this improvement is related directly to our more efficient credential evaluation, communications, and admission decision processes. We improved the quality of incoming student class and the size of these classes in a context which includes national trends of declining international students.

### Summer, Fall, and Spring 2018-19 Point in Time Comparisons 10/12/2018

<table>
<thead>
<tr>
<th></th>
<th>SU17</th>
<th>FA17</th>
<th>SP18</th>
<th>SU18</th>
<th>FA18</th>
<th>SP19</th>
<th>SU</th>
<th>FA</th>
<th>SP</th>
<th>Actual Difference</th>
<th>Percentage Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>199</td>
<td>1,102</td>
<td>359</td>
<td>305</td>
<td>808</td>
<td>398</td>
<td>106</td>
<td>-294</td>
<td>39</td>
<td>53%</td>
<td>-27%</td>
</tr>
<tr>
<td>Admitted</td>
<td>92</td>
<td>395</td>
<td>93</td>
<td>215</td>
<td>278</td>
<td>125</td>
<td>123</td>
<td>-117</td>
<td>32</td>
<td>134%</td>
<td>-30%</td>
</tr>
<tr>
<td>Matriculated</td>
<td>48</td>
<td>237</td>
<td>40</td>
<td>78</td>
<td>111</td>
<td>41</td>
<td>30</td>
<td>-126</td>
<td>1</td>
<td>63%</td>
<td>-53%</td>
</tr>
<tr>
<td>Enrolled</td>
<td>34</td>
<td>181</td>
<td>0</td>
<td>60</td>
<td>94</td>
<td>0</td>
<td>26</td>
<td>-87</td>
<td>0</td>
<td>76%</td>
<td>-48%</td>
</tr>
<tr>
<td>Transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied</td>
<td>197</td>
<td>1,056</td>
<td>355</td>
<td>186</td>
<td>1,128</td>
<td>454</td>
<td>-11</td>
<td>72</td>
<td>99</td>
<td>-6%</td>
<td>7%</td>
</tr>
<tr>
<td>Admitted</td>
<td>96</td>
<td>623</td>
<td>126</td>
<td>111</td>
<td>690</td>
<td>134</td>
<td>15</td>
<td>58</td>
<td>8</td>
<td>16%</td>
<td>9%</td>
</tr>
<tr>
<td>Matriculated</td>
<td>80</td>
<td>501</td>
<td>46</td>
<td>96</td>
<td>549</td>
<td>51</td>
<td>16</td>
<td>48</td>
<td>5</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Enrolled</td>
<td>63</td>
<td>458</td>
<td>0</td>
<td>82</td>
<td>509</td>
<td>0</td>
<td>19</td>
<td>51</td>
<td>0</td>
<td>30%</td>
<td>11%</td>
</tr>
</tbody>
</table>
3. Financial Aid

Disbursement
As of October 8, 2018, the Financial Aid Office has disbursed $194 million to 33,246 students for the fall semester. For the same time period last year $185 million was disbursed to 33,870 students. This represents a 5% increase in funding. Final 2017-2018 aid disbursed totaled $500 million to 43,392 students, a 5% increase compared to 2016-2017 $478 million to 41,359.

Cohort Default Rate
FIU’s 3-Year Cohort Default rate showed a decrease for the 2015 cohort. This is the lowest it has been since the advent of the 3-Year Cohort Default Rate was instituted. The following table provides a comparison to all 4-year public institutions and the national rates for all institutions.

<table>
<thead>
<tr>
<th>Institution/Type</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIU</td>
<td>10.5%</td>
<td>8.9%</td>
<td>6.8%</td>
<td>5.4%</td>
<td>5.8%</td>
<td>5.3%</td>
</tr>
<tr>
<td>4-Year Public</td>
<td>9.3%</td>
<td>8.9%</td>
<td>7.6%</td>
<td>7.3%</td>
<td>7.5%</td>
<td>7.1%</td>
</tr>
<tr>
<td>National All</td>
<td>14.7%</td>
<td>13.7%</td>
<td>11.8%</td>
<td>11.3%</td>
<td>11.5%</td>
<td>10.8%</td>
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4. Office of Scholarships

Identifying Unspent Scholarship Dollars
In the last year, the Office has worked with units across the university to identify unspent foundation scholarship dollars and develop awarding strategies to meet enrollment goals. During this time, we increased fund utilization by 27%. We continue working on implementing awarding strategies and spending plans to ensure no funds are left unspent.

Leveraging Scholarships to support State Metrics
We continue to work with Department leads to identify students in graduation cohorts that are in need of financial assistance to complete their degrees. We work closely with Academic Affairs to administer the Braman Completion Grant and Graduation Success Initiative Grant in support of student success.

5. University Registrar

We concluded our work with our consultants to implement the “sessions within term” academic calendar redesign pilot test. For the fall 2018 term, we included two seven-week sessions within our 16-week semester. We concluded this pilot term with 44 courses that served 1,189 students. We will include seven-week A and B sessions and a 16-week C session for the spring 2019 term. Once completed, this effort should diminish the number of dynamic class sections that we cannot serve via automation and self-service enrollment, improve our credit hour per student measures, and provide students with greater enrollment flexibility.
6. OneStop
From August 13 to August 31, 2018, the One Stop served 9,692 students at our MMC and BBC locations; we addressed questions regarding Financial Aid, Registration, and Admissions. We were able to service 84% of the students who signed into our OneStop queue system. Due to the a-systematic increase in the number of our students selected for verification, we encountered slightly longer service time for each student served.

As part of our efforts to improve the student experience, One Stop has partnered with Student Financials. Student Financials is now included in the student line management queue. In addition to the information desk, we now use the multi-purpose room to provide a pleasant shared space for students. One Stop adjusted our hours to open 30 minutes earlier, to reflect Student Financials hours, in addition to our extended hours in the evening to assure that students were able to sign into the student line management queue to meet with a representative.
7. Customer Relationship Management (CRM) & Enrollment Communications

As of August 2018, the CRM office has completed integration between Salesforce and Marketing Cloud. Our office decided to manage this implementation in-house to save university funds. This is the beginning of communication automation to prospective students. We currently have complete automation with our applicant communication plans as well as prospect and inquiry communication plans. In addition to this, we have built segmentation to support major specific communications for students interested in the Steven J. Green School of International and Public Affairs (SIPA). This includes undergraduate, graduate I & II.

We are close to executing our first pilot for graduate 1 major specific communications with SIPA. We have developed content for the following majors: Global Affairs, Latin American & Caribbean Center (LACC), History, Religious Studies, International Studies, Political Sciences, Public Administration, Criminology and Criminal Justice, Spanish, Asian Studies, and African and African Diaspora Studies. A total of 123 communications have been written for this population specifically. However, we will launch our pilot with majors of strategic emphasis first and that includes: Asian Studies, LACC, Global Affairs, International Studies, and Spanish.

V. INFORMATION TECHNOLOGY REPORT

1. Technology Fee for the 2018/2019 Academic Year

The Technology Fee Council reviewed one-hundred and eighty-two proposals (182) from academic and administrative units. The final recommendations were submitted to the Vice President and CIO Robert Grillo and Executive Vice President and Provost Dr. Kenneth G. Furton for approval. Based on recommendations made by the Technology Fee Council, a total of fifty-three (53) proposals were approved. The proposals include 3D printing and virtual reality simulators for instructional learning and an Internet of Things (IoT) Teaching and Resource Lab for the newly established Bachelor of Science in Internet of Things. Also included is the continued expansion and improvements of the University’s classroom and technologies across all our campuses, in addition to updates to technology equipment in our labs and libraries and enhancements to our wireless infrastructure.

2. Science DMZ

The Division of Information Technology has established the FIU Science Demilitarized Zone DMZ, a separate portion of the network specifically engineered for high-performance scientific applications rather than for general-purpose campus enterprise systems. Research is global in scope, requiring collaborations across institutions nationally and internationally. Resources for research, such as devices that either generate or consume data, computational clusters for data intensive computations or storage clusters to store data, are increasingly used by researchers at FIU. These resources, connected to the FIU campus network, are referred to as Research Cyberinfrastructure (or Research CI) – examples of this include our Wall of Wind (WOW), High-Performance Computing (HPC) Cluster, and the Magnetic Resonance Imaging (MRI) instrument. The FIU Science DMZ facilitates faculty and student research projects by supporting the data movement requirements of data intensive science without interfering with
the FIU network designed for business operations. This project was supported by the National Science Foundation (NSF) Award for Campus Cyberinfrastructure – Data, Networking and Innovation (CC*DNI) and the FIU Student Technology Fee.

3. Institutional Business Intelligence and Analytics Update
One of the largest challenges for administrators across units has been to be able to find as much information about a student without going to multiple systems, navigations, pages and links. The Division of Information Technology has implemented the Student 360 Dashboard as part of the FIU Business Intelligence and Analytics project. This dashboard provides users with a complete view of student information ranging from admissions to enrollment, financial aid to student financials. This view of student information can be integrated to any business intelligence analytics dashboard or report within the system to provide comprehensive coverage and usability.

VI. Research and Economic Development / University Graduate School

1. External Grant Awards’ Performance
During the first quarter of fiscal year (FY) 2017-18, the value of awards received was $53.63M, which represents a 22% increase when compared with the same period last FY 2016-17. The distribution of funds received by federal sources increased by $8.1M (21%), private/other sources by $200K (7%), and state/local government by $1.48M or 61%. Notable increases among colleges include the College of Business (177%), Steven J. Green School of International and Public Affairs (81%), Nicole Wertheim College of Nursing and Health Sciences (42%), and the College of Arts, Sciences and Education (69%). Overall, centers and institutes experienced a 24% decline in funds received when compared with the same period last year. Nonetheless, noteworthy increases include 707% ($2.12M) for the Jack D. Gordon Institute of Public Policy and Citizenship, 180% ($2.59M) for Center for Children and Families, 135% ($303K) for LACC, 110% ($154K) for the Metropolitan Center, 54% ($152K) for the Institute of Neurommune Pharmacology, 47% ($1.6M) for the Southeast Environmental Research Center, and 41% ($520K) for the STEM Transformation Institute.

2. Innovation, Partnerships and Economic Development
StartUP FIU received two new grants totaling $627,000 ($377,000 from JP Morgan Chase for a procurement project and $250,000 from Citi Foundation for a high school entrepreneurship program.) The procurement project targets to increase minority-owned company sales to Miami anchor institutions above the current 9 percent of total purchases. Anchors include educational institutions, hospitals and government agencies. The new Citi grant supports the development of a high school entrepreneurship program in Miami-Dade County Public Schools where low-income students will actually design and sell their products through e-commerce. This program prepares students for jobs and micro-entrepreneurship and visits to FIU should encourage some of these students to apply to FIU. Collectively, the Empower companies had revenue in the most recent quarter of over $2.6 million and revenue of $7.8 million since inception. The companies raised $110,000 in new equity capital in the last quarter...
and $1.9 million since program inception. The Proof of Concept Studio completed two studios in the quarter. Twenty-seven teams in total completed the program, which included four student teams. All of the teams presented at their Pitch Day. The Miami-Dade County (MDC) IT Department chose StartUP FIU to facilitate their annual one day retreat in July. This event lead to a student project at MDC to do a data analytics project for the public housing department and another project is under discussion. These projects provide real experience in preparation for the Decision Lab that is under development by a University team lead by StartUP FIU. During the first quarter of FY 2018-2-19, FIU researchers disclosed 27 inventions, filed 11 patent applications and received 17 patents.

3. University Graduate School (UGS)

The final enrollment numbers for new students during Fall 2018 yielded 442 doctoral students, a 29.24% increase compared to last year, and 2,472 master’s students, a 5.19% increase compared to last year. Notable increases include the College of Business (enrolled 39 doctoral compared to seven last fall) and the College of Engineering and Computing, which enrolled 87 doctoral students (compared to 46 last fall). The NSF Louis Stokes Alliances for Minority Participation (LSAMP) Bridge to the Doctorate awarded FIU $1.07M to support 12 underrepresented graduate students in STEM fields. In partnership with the Center for Leadership, the Academy of Leaders now has a graduate student track with 44 students. The track engages students in interactive learning activities that include self-assessment, reflection, group problem solving, feedback, and goal setting. The first Alumni Colloquium was held on August 27, in which Dr. Bryan Dewsbury (MSc 2006, PhD 2014) spoke to 44 graduate students regarding transitioning from graduate student to faculty.

VII. STUDENT AFFAIRS REPORT

1. The Culturally Engaging Campus Environments (CECE) Model results

The Division of Student Affairs welcomed researchers from the Culturally Engaging Campus Environments (CECE) project on October 29 to provide an overview of the CECE survey model and conduct three distinct learning sessions surrounding FIU results from the 2017-2018 survey administration. Discussion focused on strategies that will support student engagement, foster inclusive and equitable classrooms, and learning environments.

During the 2017-2018 academic year, Student Affairs worked with the National Institute for Transformation and Equity (NITE) to conduct a school-wide assessment for its undergraduate students. The purpose of this assessment was to understand how FIU cultivates an inclusive, equitable, and supportive campus environment for its diverse students. Through analyzing the data collected from the CECE survey(s), this assessment produces insights regarding undergraduate students’ perceptions and experiences with the campus environments at FIU. This report offers a summary of the key findings to inform institutional policies and practices that aim to enact FIU’s mission towards “collaborative engagement with our local and global communities”
The CECE model is derived from three decades of published research in higher education, over 180 interviews conducted across several qualitative studies, and the findings of many quantitative analyses that examine the experiences and outcomes of diverse colleges students. It explains the ways in which campus environments shape the experiences and outcomes of diverse student populations in college.

The CECE four-year college survey measures four-year college students’ perceptions of their campus environments. Specifically, the CECE four-year college survey measures the degree to which students perceive their campus environments to be characterized by the following: Cultural familiarity, Culturally relevant knowledge, Cultural community service, Meaningful cross-cultural engagement, Cultural validation, Collectivist orientations, Humanized educational experiences, Proactive philosophies and Holistic support.

2. Veteran and Military Affairs Collaboration
The Veteran and Military Affairs office in collaboration with FIU Office of Engagement, Student Veterans of America, and external partners hosted a special 9/11 edition of Office of Engagement’s signature event, Tostada Tuesday, focusing on leadership, service, and community. The initiative seeks to spark new collaborations and partnerships with the community over a cafecito and tostada. Community partner, The Mission Continues- a nonprofit, non-partisan organization dedicated to bringing together veterans and innovative community organizations to create transformational change for communities in need all across the country, lead an impactful service project as part of the program. Over 100 hygiene kits were created for homeless veterans to be donated at an event later that week. Dr. Thompson, a full time humanitarian volunteer working in the largest disasters around the world for the past 25 year the keynote speaker. Dr. Thompson was a first responder during the September 11 attacks in New York City, she volunteered at ground zero for 9 months where 64 of her friends had died in the North Tower which changes the direct of her life towards full time service.

3. CCAMPIS Grant
The Children’s Creative Learning Center was awarded a $1.1 million dollar over 4-years Child Care Access Means Parents in School Program (CCAMPIS) grant from the Department of Education. The CCAMPIS Program is governed by the Higher Education Opportunity Act (Public Law 110-315) (HEOA) This program supports the participation of low-income parents in postsecondary education through the provision of campus-based childcare services. Funds are used to support or establish campus-based child care programs primarily serving the needs of low-income students enrolled in IHEs. Grants may be used for before- and after-school services. In addition, grants may be used to serve the child care needs of the community served by the institution.