



FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
ACADEMIC POLICY AND STUDENT AFFAIRS COMMITTEE

FIU, Modesto A. Maidique Campus, Graham Center Ballrooms

Livestream: <http://webcast.fiu.edu/>

Thursday February 23, 2023

10:45 AM

or

Upon Adjournment of Previous Meeting

Chair: Natasha Lowell

Members: Cesar L. Alvarez, Jose J. Armas – *Health Affairs liaison*, Deanne Butchey, Dean C. Colson, Cristhofer E. Lugo, Chanel T. Rowe, Marc D. Sarnoff, Roger Tovar – *Athletics liaison*

AGENDA

- | | |
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| 1. Call to Order and Chair's Remarks | Natasha Lowell |
| 2. Approval of Minutes | Natasha Lowell |
| 3. Action Items | |
| AP1. Tenure as a Condition of Employment Nominations | Elizabeth M. Bejar |
| AP2. Proposed Regulation FIU-2507 Examinations and Assessments | Elizabeth M. Bejar |
| AP3. Proposed Amendment to Regulation FIU-1305 Students in Military Service | Elizabeth M. Bejar |
| AP4. New Program Proposal: Bachelor of Science in Sport and Exercise Science | Elizabeth M. Bejar |
| 4. Discussion Items <i>(No Action Required)</i> | |
| 4.1 Enrollment Discussion | Kenneth A. Jessell
Elizabeth M. Bejar |
| 4.2 Student Government Updates | Cristhofer E. Lugo |
| 4.3 Faculty Senate Updates | Deanne Butchey |

5. Academic Affairs Regular Reports *(For Information Only)*

- Academic and Student Affairs
- Enrollment Management and Services
- Information Technology
- Research and Economic Development/ University Graduate School

6. New Business *(If Any)*

Natasha Lowell

7. Concluding Remarks and Adjournment

Natasha Lowell

FIU Board of Trustees Academic Policy and Student Affairs Committee Meeting

Time: February 23, 2023 10:45 AM - 12:30 PM EST

Location: FIU, Modesto A. Maidique Campus, Graham Center Ballrooms | Livestream: <http://webcast.fiu.edu/>

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THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
February 23, 2023

Subject: Approval of Minutes of Meeting held on December 6, 2022

Proposed Committee Action:

Approval of Minutes of the Academic Policy and Student Affairs Committee meeting held on December 6, 2022 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms.

Background Information:

Committee members will review and approve the minutes of the Academic Policy and Student Affairs Committee meeting held on December 6, 2022 at the FIU, Modesto A. Maidique Campus, Graham Center Ballrooms.

Supporting Documentation: Minutes: Academic Policy and Student Affairs Committee Meeting, December 6, 2022

Facilitator/Presenter: Natasha Lowell, *Chair, Academic Policy and Student Affairs Committee*



**Academic Policy and Student Affairs Committee
December 6, 2022
FIU, Modesto A. Maidique Campus, Graham Center Ballrooms**

MINUTES

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 Natasha Lowell on Tuesday, December 6, 2022, at 9:58 AM.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Trustees Natasha Lowell, *Committee Chair*; Cesar L. Alvarez; Dean C. Colson, *Board Chair*; Cristhofer E. Lugo; Chanel T. Rowe; Marc D. Sarnoff; and Roger Tovar, *Board Vice Chair and Athletics Liaison*.

Trustees Jose J. Armas and Deanne Butchey were excused.

Trustees Carlos A. Duart and University President Kenneth A. Jessell were also in attendance.

Committee Chair Lowell welcomed all Trustees and members of the University administration. She also welcomed the University community and general public accessing the meeting via the University's webcast.

As a follow-up request from a prior Board of Trustees meeting, Interim Provost and Executive Vice President Elizabeth M. Bejar referred to the handout relating to the definitions of class modalities at FIU.

Interim Provost Bejar indicated that at its November meeting, the Florida Board of Governors (BOG) approved public notice of intent to adopt a new Post-Tenure Faculty Review regulation. She pointed out that the regulation is a result of a 2022 Legislative passed Senate Bill, which requires faculty to undergo a comprehensive post-tenure review every five (5) years. She indicated that the regulation addresses: accomplishments and productivity; assigned duties in research, teaching, and service; performance metrics, evaluations, and ratings; and recognition and compensation considerations, including improvement plans and consequences for underperformance. She noted that the FIU Faculty Senate passed a resolution related to the proposed regulation and also responded to the BOG during the open public comment period.

Interim Provost Bejar remarked that on November 15, 2022, in partnership with the Division of Academic and Student Affairs, Student Health and Wellness, Student Access and Success, Florida Power and Light, and the FIU Alumni Association, FIU hosted a panel on mental health in

entrepreneurship, entertainment and hospitality. She added that the panel was created and moderated by Trustee Chanel T. Rowe.

Interim Provost Bejar commented on the \$10M naming gift from Mr. and Mrs. Lee Caplin to establish the Lee Caplin School of Journalism and Media within the College of Communication, Architecture + The Arts. She stated that the transformational gift is one of the largest donations to a journalism and media program in the State University System of Florida and will support a wide range of student support initiatives including student scholarship and financial assistance, enhancements to the curriculum, and capital improvements of facilities and equipment.

2. Approval of Minutes

Committee Chair Lowell asked if there were any additions or corrections to the minutes of the Academic Policy and Student Affairs Committee meeting held on September 22, 2022. Hearing none, a motion was made and unanimously passed to approve the minutes of the Academic Policy and Student Affairs Committee meeting held on September 22, 2022.

3. Action Items

AP1. Proposed Amendment to Regulation FIU-402 Admission to the University

Interim Provost Bejar presented the proposed amendment to Regulation FIU-402 Admission to the University for Committee review. She indicated that the proposed amendment clarifies that University admissions criteria does not include preferences related to race, color, national origin, disability, religion, or sex. She explained that while this is in line with the University's standard practice, the language is being added to satisfy a BOG regulation requirement.

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 revisions to Regulation FIU-402 Admission to the University, and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the Florida Board of Governors.

AP2. Proposed Regulation FIU-412 Undergraduate Admissions

Interim Provost Bejar presented proposed Regulation FIU-412 Undergraduate Admissions for Committee review. She explained that the proposed regulation details FIU's undergraduate admission requirements for First Time-In-College (FTIC) students, including the definition of FTIC students, documents required for submission, and stipulates that BOG regulations set minimum criteria for standardized test scores. She pointed out that eligibility for admission does not guarantee admission to the requested degree program and preference for admission is given to those applicants whose credentials indicate the greatest potential for academic success. She indicated that the regulation also includes information for admission of transfer students including applicable definitions, admission criteria, and specifies applicants who receive an Associate in Arts (AA) degree from a public Florida state college or university will be considered for admission without restriction, except for published University specialized admissions programs or programs with prerequisites which were not met. Interim Provost Bejar pointed out that students not meeting the applicable admission requirements may petition to be admitted through the Alternative Admissions process. In terms of said process, she stated that each applicant is accessed based on evidence provided by the

applicant and the academic unit to determine the individual's potential to succeed at the University. She added that the rates of retention, academic success, and graduation rates of students admitted to FIU through the Alternative Admissions process will be annually reviewed and presented to the Board of Trustees.

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 proposed Regulation FIU-412 Undergraduate Admissions, and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the Florida Board of Governors.

AP3. Proposed Regulation FIU-414 Admission of Graduate and Post-Baccalaureate Professional Students

Interim Provost Bejar presented proposed Regulation FIU-414 Admission of Graduate and Post-Baccalaureate Professional Students for Committee review. She explained that BOG Regulation 6.003, Admission of Graduate and Post-Baccalaureate Professional Students, requires the establishment of graduate and post-baccalaureate student admissions by regulation. She pointed out that the proposed regulation outlines admission requirements for graduate and post-baccalaureate professional students and the process for applicants in need of a modification or substitution of admission requirements due to a recognized disability. Interim Provost Bejar pointed out that, in addition to the requirements outlined in FIU Policy 380.0443 Graduate Admission Criteria and Denial, additional admission requirements may be established by the College/School or Program. She added that the University Graduate School will periodically review said regulation to ensure unnecessary impediments to access are minimized, while maintaining academic quality and integrity. She commented that all graduate admission requirements and any changes are approved by the Graduate Council, Faculty Senate, and Dean of the University Graduate School.

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 proposed Regulation FIU-414 Admission of Graduate and Post-Baccalaureate Professional Students, and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the Florida Board of Governors.

AP4. Florida International University Institutes and Centers Annual Report

Senior Vice President for Research and Economic Development and Dean of the University Graduate School Andres G. Gil presented FIU's institutes and centers annual report for Committee review. He stated that the University has a policy on centers and institutes that follows BOG regulations and was recently updated to reflect BOG changes. He pointed out that said policy designates the Provost as the University official responsible for centers and institutes. He added that evaluations of the centers/institutes are conducted by a committee chaired by the Senior Vice President of Research and representatives from the CFO's Office, Provost's Office and Faculty Senate. Sr. VP Gil added that review recommendations are submitted to the Provost for final approval. He indicated that the annual report requires approval by the FIU Board of Trustees and includes data related to expenditures for all centers/institutes, staffing, date of most recent evaluation, and reasons for any missing data.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend to the FIU Board of Trustees approval of FIU's Institutes and Centers Annual Report.

AP5. Florida International University Institutes and Centers 2022 Evaluations and Evaluation Summary

Sr. VP Gil presented FIU's institutes and centers 2022 evaluations and evaluation summary for Committee review. He indicated that the institute and center evaluations are formal reviews that are required at least every seven (7) years. He noted that 11 FIU centers were reviewed in the current year. He added that during said review, nine (9) centers were approved for continuation and two (2) centers were recommended for termination, namely the Engineering Manufacturing Center and the International Center for Tropical Botany. Sr. VP Gil noted that the functions of the Engineering Manufacturing Center are already taking place within the department in the College of Engineering and Computing. He presented a listing detailing the 11 institutes and centers that were evaluated and the evaluation criteria.

At the request of Committee Chair Lowell and Board Vice Chair Roger Tovar, Todd Crowl, Professor and Director of the Institute of Environment, provided a brief overview of the Institute's work and Christopher Baraloto, Professor and Associate Director of the Institute of Environment, commented on the status of the National Tropical Botanical Garden site in Coconut Grove, Florida.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend to the FIU Board of Trustees approval of FIU's Institutes and Centers 2022 Evaluations and Evaluation Summary.

4. Discussion Items

4.1 Student Government Updates

Trustee Cristhofer E. Lugo, Student Government Association (SGA) President, commented on increased student outreach. He remarked on the Meet Your Dean event where students had the opportunity to interact with their respective deans and on hosting a President's Round Table to develop a strategic plan for increasing student engagement. He mentioned that SGA's Recharge Late Night Breakfast provided free breakfasts to help students as they studied for finals. Trustee Lugo also commented on the Campus Safety Walks at the Modesto A. Maidique and Biscayne Bay campuses.

4.2 Faculty Senate Updates

The Faculty Senate update was deferred to the next regularly scheduled meeting of the Academic Policy and Student Affairs Committee.

5. Academic Affairs Regular Reports

There were no questions from the Committee members in terms of the Academic Affairs regular reports included as part of the agenda materials.

6. New Business

No new business was raised.

7. Concluding Remarks and Adjournment

With no other business, Committee Chair Natasha Lowell adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee on Tuesday, December 6, 2022 at 10:32 AM.

THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
February 23, 2023

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

Supporting Documentation: Tenure as a Condition of Employment Nominations

- Overview
- Bios
- Curriculum Vitas

Facilitator/Presenter: Elizabeth M. Bejar

Florida International University
Tenure as a Condition of Employment Nominations - February 2023

Name	College	Department	Proposed Rank
Maria Clara Franco	Herbert Wertheim College of Medicine	Cellular Biology and Pharmacology	Associate Professor
Kyung Bo Kim	Herbert Wertheim College of Medicine	Cellular Biology and Pharmacology	Professor

Maria Clara Franco
Cellular Biology and Pharmacology
Herbert Wertheim College of Medicine

Dr. Franco received her PhD in Biological Chemistry from Universidad de Buenos Aires, Argentina in 2008. She was a postdoctoral fellow at Cornell University from 2008 to 2009, and a Postdoctoral Investigator at University of Central Florida from 2010 to 2013. Dr. Franco later took on the role of Assistant Scholar/Scientist at University of Central Florida from 2010 to 2017. In 2017, she joined Oregon State University as a Research Assistant Professor and later became a tenure track Assistant Professor in the fall of 2020.

Dr. Franco's research focuses broadly on redox reactions that modulate cellular signaling and metabolism. She studies the role of oxidants regulating signaling processes that drive disease in the nervous system. Dr. Franco has developed novel methodological approaches to study the role of nitrated proteins in pathology—which in turn, have impacted the redox biology and neuroscience fields tremendously.

Dr. Franco also has an outstanding record of scholarship, funding, teaching, and mentorship. Currently, she is the Principal Investigator of an NIH RO1 grant (2019-2024) for \$1,583,968, Co-Principal Investigator of several other grants, and has one grant pending. In addition, Dr. Franco has a significant publication record in her field with manuscripts that have been published in high-impact journals such as PNAS, Redox Biology, and JBC.

Dr. Franco has an excellent teaching record—including curriculum development and mentorship. She has demonstrated commitment to teaching and mentorship at both the undergraduate and graduate levels, while also having served as a member of the Biochemistry and Biophysics (BB) advising team, thus engaging in both academic and pre-graduate school advising.

Kyung Bo Kim
Cellular Biology and Pharmacology
Center for Translational Science
Herbert Wertheim College of Medicine

Dr. Bo Kim received his PhD in Biochemistry/Organic Chemistry from Ohio State University in 1997. He was a postdoctoral fellow at Yale University from 1998 to 2002. In 2002, he joined the University of Kentucky as a tenure track Assistant Professor and later became Associate Professor in 2008. Since 2019, he has served as the President of Arisu Therapeutics Inc in Lexington, KY.

Dr. Bo Kim's research broadly focuses on Immunoproteasome inhibitors for the treatment of Alzheimer's disease. His research aims to develop macrocyclic peptide epoxyketone-based drugs to alleviate cognitive deficits in Alzheimer's disease (AD) patients independently of amyloid deposits and tau polymerization. His research also aims to establish the basis for therapeutic inhibition of the ubiquitin-proteasomes and autophagy to eliminate HLA antibody-producing plasma cells (PC) for improving transplant outcomes.

Dr. Bo Kim has an outstanding record of scholarship, funding, and mentorship. Currently, he is the Principal Investigator of an NIH RO1 grant (AG073122) and Co-Principal Investigator of NIH RO1 grant (AI139141-A1). In addition, Dr. Bo Kim has a significant publication record in his field and an impressive number of patents. Dr. Bo Kim also has an excellent mentorship record with postdoctoral students, graduate assistants, and other research personnel. Dr. Bo Kim provides outstanding service to his profession by having long served as a referee for numerous, top tier medical journals and as an ad hoc reviewer for several NIH study sections.

MARIA CLARA FRANCO

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Department of Biochemistry and Biophysics
 2011 Agricultural and Life Science Building
 Oregon State University
 Corvallis, OR 97331

A. EDUCATION AND EMPLOYMENT INFORMATION

Education

- 2008 **Ph.D. in Biological Chemistry.** Universidad de Buenos Aires, Argentina
Thesis title: “*Regulation of the expression and activity of mitochondrial nitric oxide synthase by thyroid hormones*”
 Advisors: María Cecilia Carreras, Ph.D. and Juan José Poderoso, MD, Ph.D.
- 2001 **B.S./non-thesis M.S. in Cell and Molecular Biology.** Universidad de Buenos Aires, Argentina
Project title: “*Role of IL-9 in the cytotoxicity against Mycobacterium leprae and Mycobacterium tuberculosis*”
 Advisors: Susana Fink, Ph.D. and Marta Finiasz, Ph.D.

Employment

- Sep 2020-present **Assistant Professor.**
 Department of Biochemistry and Biophysics, OSU
- June 2017- Sep 2020 **Assistant Professor (Senior Research)**
 Department of Biochemistry and Biophysics, OSU
- 2013-2017 **Assistant Scholar/Scientist**
 Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, FL
- 2010-2013 **Postdoctoral Investigator**
 Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, FL
- 2010 **Postdoctoral Investigator**
 Department of Biochemistry and Biophysics, OSU
- 2008-2009 **Postdoctoral Fellow**
 Burke Neurological Institute, Weill Medical College of Cornell University, NY
- 2007 **Visiting Graduate Student**
 Burke Neurological Institute, Weill Medical College of Cornell University, NY

B. TEACHING, ADVISING AND OTHER ASSIGNMENTS

2. Instructional Summary

2.1. *Credit courses* (not including research supervision credits)

Oregon State University, Department of Biochemistry and Biophysics (BB)

Notations: eBB: Ecampus course; Guest presenter (1 lecture)*

Number	Title	Credit Hours	Term/Year	Enrollment	Role
BB 460/560	Advanced Cell Biology	3	Spring 2022	19	100%
eBB 314	Cell and Molecular Biology	4	Fall 2021	68	100%
BB 111*	Introduction to BB Research	1	Fall 2021		
BB 599 Lab	Culture of Mammalian Cells	3	Summer 2021	14	100%
BB 314	Cell and Molecular Biology	4	Spring 2021	162	100%
eBB 314	Cell and Molecular Biology	4	Fall 2020	43	100%
BB 111*	Introduction to BB Research	1	Fall 2020		
eBB 314	Cell and Molecular Biology	4	Winter 2020	56	100%
BB 599 Lab	Culture of Mammalian Cells	3	Summer 2019	9	100%
BB 599 Lab	Culture of Mammalian Cells	3	Summer 2018	11	100%

University of Central Florida

2011-2015 Cellular Metabolism - Mixed level class, 1 invited lecture per term

2.2. *Noncredit Courses and Workshops*

Role: participant

Teaching

- Nov 17, 2021 Blending Your Teaching with Instructional Media. Center for Teaching and Learning, OSU
- Summer 2020 HHMI 6-week Scientific Teaching Short Course Summer Session - Engaging in learning evidence-based teaching practices for STEM education

BB-OSU sponsored Justice, Equity, Diversity, and Inclusivity events

- Feb 17, 2022 Unconscious Bias webinar. Sponsored by the American Society for Biochemistry and Molecular Biology (ASBMB) Women in Biochemistry and Molecular Biology Committee and Minority Affairs
- May 7, 2021 Peace Literacy workshop Part 2, with Shari Clough and Paul Chappell
- June 5, 2020 Peace Literacy workshop Part 1, with Shari Clough and Paul Chappell
- Feb 14, 2020 Growing a Culture of Dialogue: Skills for Listening, Learning, Collaborating workshop
- April 9, 2019 Dr. Sharona Gordon workshop on NAS report on prevalent sexual harassment in academic settings

EJI Related leadership training

- May 10-14, 2021 **CIMER Facilitator training:** Training to facilitate the *Entering Mentoring* curricula based on work done by the Center for the Improvement of Mentored Experiences in Research (CIMER) at the University of Wisconsin. This training addresses the new NIGMS guidelines regarding the preparation of mentors involved in training grants.
- April 10, 2019 Workshop “Train the Trainer” lead by Dr. Sharona Gordon to implement a peer support group as a component of the Below the Waterline support
- May 31, 2018 ADVANCE. 1-day training for leading a grad seminar on EJI topics

2.3. Curriculum development

- 2022 BB 460/560, “Advance Cell Biology”. Full responsibility for redesign and teaching. Completely restructured course content to incorporate active learning activities aimed to integrate basic content and the development of concept maps with the study of novel methodologies and case studies. The 3 hour-weekly class was divided into one 50 min lecture to cover basic concepts, one 50 min lecture on up-to-date methodologies, 30 min for the development of concept maps, and 30 min for the discussion of case studies, both using the strategy of think-pair-share.
- 2021 Remote offering of BB 314, “Cell and Molecular Biology”. I developed lectures, case studies, and integration activities for M-W-F classes. Additional content including complementary lectures, recitation worksheets, and supporting material in Canvas was originally developed by Lauren Dalton.
- 2018 BB 599, “Culture of Mammalian Cells”. Full responsibility for curriculum development and teaching of the laboratory portions. Teamed with Alvaro Estevez who developed and taught the lecture portions. This hands-on course covered the maintaining and working with mammalian cell culture models.

2.4. Mentorship (Graduate and Undergraduate Students, Postdoctoral Trainees and Research Scientists)

- **Graduate students – Major Advisor** (Total: 6; Current: 4)

Since joining OSU (5 total)

Abbreviations: SfrBM, Society for Redox Biology and Medicine; ASBMB, American Society for Biochemistry and Molecular Biology; CQLS, Center for Quantitative Life Sciences, OSU; YIA, Young Investigator Award

Student	Years	Current	
		Degree	Awards/Fellowships
Melinda Rydberg	06/2022-Present (expected 2026)	Ph.D.	
Monica Vidal-Franco	06/2021-Present (expected 2025)	Ph.D.	
Tilottama Chatterjee	10/2020-Present (expected 2024)	Ph.D.	ASBMB Graduate Research Award (2022)
Kyle Nguyen	03/2020-Present (expected 2024)	Ph.D.	SfrBM Trainee Award (2020); ASBMB Graduate Research Award (2021)

Graduated				
Student	Years	Degree	Awards/Fellowships	Current Position
Miranda Leek	06/2019-03/2021	M.S. (non-thesis)	SfRBM Travel Award (2019); CQLS Fall Conference, Best Poster Award (2019)	Research Assistant. Texas A&M University

Prior to position at OSU (1 total)

Universidad de Buenos Aires

Student	Role	Degree	Graduation	Current position
Maria F. Molinas	Co-mentor	M.S.	2008	Medical Science Liaison in Vaccines for rear diseases, Sanofi Pasteur, Argentina

▪ **Postdoctoral Scholars - Mentorship** (Total and Current: 1)

Since joining OSU

Postdoc	Years	Awards/Fellowships
Isabelle Logan, Ph.D.	March 2021-Present	Young Investigator Grant - Children's Tumor Foundation \$89,000/2 years (07/2021-06/2023); Collins Medical Trust Award \$30,000/1 year (07/2021-06/2022); SfRBM YIA (2021); ASBMB Postdoctoral Research Award (2022)

▪ **Graduate students – Mentored but not as major advisor**

Since joining OSU (8 total, current mentees not included)

Rotations - First year doctoral students

Student	Term/Year
Reginald Appiah-Kubi	Winter 2022
Sarah McGee	Fall 2021
Jun Yang	Spring 2021
Felisha Imholt	Winter 2021
Sanjay Ramprasad	Winter 2021
Cat Vesely	Fall 2020
Rachel Franklin	Winter 2020
Ruben Riordan	Spring 2018

Prior to position at OSU (while a Postdoctoral Investigator and/or Assistant Scientist, 3 total)

University of Central Florida

Student	Years	Degree	Current position
Marisa Fuse	2016-2017	Ph.D.	Lecturer in Chemistry and Health Professions Advisor, Rollins College, FL.

Cassandra Dennys	2011-2016	Ph.D.	Research Scientist, Nationwide Children's Hospital, Columbus, OH.
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Weill Cornell Medicine, Burke Neurological Institute

Student	Years	Degree	Current position
Amy Strayer	2008-2009	Ph.D.	Scientific Translator and Editor, Argentina

▪ **Undergraduate students - Mentorship** (34 total)

Since joining OSU (27 total)

Abbreviations:

YIA: *Young Investigator Award.*

URSA: *Undergraduate Research, Scholarship & the Arts at OSU provides first and second year students opportunities to pursue research under the guidance of a Faculty mentor.*

CURE: *Cripps Undergraduate Research Experience at OSU provides support to perform research during the Summer months (\$2,500 + \$2,500 matching funds).*

SURE: *Summer Undergraduate Research Experience at OSU provides support to perform research during the Summer months (\$5,000).*

Honors thesis mentees (9 total; 2 current)

Student	Years	Class	Awards/Fellowships/Scholarships	Current Position
Rebecca Bingham	2022-	2024	SURE	
Evelyn Sixta	2021-	2022		Applying to medical school
Maxwell Fry	2021-	2024		
Sarina Grant (co-mentor)	2019-2022	2022	CURE	
Isabella Karabinas (co-mentor)	2019-20	2020	CURE; Fulbright Scholarship; Goldwater Scholarship; DeLoach Work Scholarship – Honors College, OSU; SfrBM YIA (2019)	MD-PhD student, Weill Cornell Medicine
Sharon Kim	2018-21	2021	CURE; SURE	Applying to medical school
Oliver Graumann	2018-21	2021	URSA	School of Dentistry, Creighton University
Mihir Palan	2018-21	2021	URSA; CURE	MD student, OHSU
Lydia Bastian	2018-20	2020	URSA	Applied Ethics Master's student, OSU

Non-thesis mentees (14 total)

Student	Years	Class	Awards/Fellowships/Scholarships	Current Position
Aldair Acosta	2022	2022		
Daniel Howell	2022	2022		Research Assistant in my lab
Alexandre Sathler	2020-2022	2022	CURE; SfrBM YIA (2021); OSU CQLS Fall Conference, Best Poster and Best Lightening Talk Awards (2021); Honorable Mention at poster competition ASBMB (2022)	NIH Postbac program
Anna Sung	2020-2022	2023	SURE	
Dorice Goune Goufack	2019-2022	2022	CURE	Research Assistant, University of Washington
Asra Noor (co-mentor)	2018-2020	2020	URSA; CURE	PhD student, University of Texas Health, San Antonio
Geethanjali Panikar	2018-2019	2021	URSA	BGMP Master's student, University of Oregon
Jaileen Castillos-Granado	2018-2019	2021	URSA	
McKenna Jenkins	2018-2019	2021	URSA	
Saylor Miller	2018-2019	2021	URSA	Applying to medical school
Rina Mullendore	2018-2021	2021	URSA; SURE	OSU PharmaD Program
Justine Deisher	2018	2019	URSA	Member Assistance Representative II, Service Employees International Union
Jeanine Pestoni	2017-2019	2019	SfrBM YIA (2018); Linus Pauling Institute 10th International Conference YIA (2019)	PhD student, Ludwig-Maximilians-Universitat Munchen, Germany
Oliver Valdivia-Camacho	2017-2019	2019	SURE	MD student, OHSU

URSA, CURE and SURE students presented posters and lightening talks at several OSU meetings and conferences.

Heritage University NSF- Research Experience for Undergraduates (REU) – OSU (4 total)

Undergraduate students from first-generation underrepresented minorities perform a 10-week Summer research internship in the context of the Heritage University NSF-REU.

Student	Year	Awards/Fellowships	Home Institution
Isabel Romero	2022		California State Polytechnic University, Pomona
Camila Ayala	2022		Pennsylvania State University, PA
Tzelzin Hernandez	2020	SfRBM YIA (2020)	University of California, Santa Cruz
Maria Morcos	2020		Rochester Institute of Technology, NY

Prior to position at OSU (7 total)

University of Central Florida

Abbreviations:

RAMP: *Research and Mentoring Program (UCF) aimed to encourage more students from underrepresented populations to attend graduate school. Undergraduate students receive up to \$2,800 each year.*

McNair: *Ronald E. McNair Scholar Program, dedicated to preparing low-income, first-generation, and underrepresented undergraduate students for graduate education. Scholars receive up to \$2,800, tuition and assistance with room and board.*

Student	Years	Awards/Fellowships	Current position
Maria Onatunde	2016-2017	RAMP	Medical student, Wake Forest School of Medicine
Megan Jandy	2015-2017		Ph.D. student at the University of Wisconsin, Madison
Ivory Paulk	2015-2016	RAMP; McNair	Ph.D. student, University of California, LA
Kristina Ramdial, M.D.	2014-2017		University of Miami School of Medicine
Natalie Perdomo, M.D.	2013-2016	RAMP	Family Physician, Florida Hospital
Sarah B. Gitto, Ph.D.	2013-2016		Postdoctoral researcher, University of Pennsylvania
Pascal Nelson, M.S.	2013-2016	RAMP; McNair	First regulatory affairs professional, Hill Dermaceuticals

▪ ***Mentorship as Supervisor of the Biochemistry & Biophysics Cell Culture Facility*** (16 total)

I mentor and train students in general methodologies and experimental design regarding cell and redox biology, cell culture, cell metabolism and extracellular flux analysis. My students and postdoc also train other students for collaborative projects. Departments: Biochemistry and Biophysics, Integrative Biology, Chemistry, Computational Biology, Bioengineering, Microbiology, Environmental Engineering, Nutrition, Electrophysiology Facility, GCE4All NIH Center, Technology Development (Hewlett Packard).

2019-Present 11 graduate students, 2 postdoctoral investigators, and 3 undergraduate students

▪ **Thesis Committee Service** (22 total, all since joining OSU; 15 current)

Graduate Students (15 current, 5 completed)

Current			
Student	Program	Mentor	Role
Rachel Franklin	BB, PhD	Beckman	member
Brandy Nagamine	Biomedical Sciences, PhD	Dolan	GCR
Nessima Gatchalian	Chemistry, PhD	Field	GCR
Nathan Waugh	BB, non-thesis MS	Hendrix	member
Amanda Radke	BB, PhD	Hagen	member
Jesse Howe	BB, PhD	Barbar	member
Christine Tataru	Microbiology, PhD	David	member
Dunping Cao	Chemistry, PhD	Field	GCR
Erin McGowan	Public Health, PhD	Newsom/Robinson	member
Philip Batterson	Public Health, PhD	Newsom/Robinson	member
Alex Eddins	BB PhD	Mehl	member
Isabel Brinck	Public Health, PhD	Newsom/Robinson	member
Felisha Imholt	BB, PhD	Johnson	member
Sanjay Ramprasad	BB, PhD	Nyarko	member
Jun Yang	BB, PhD	Hendrix	member

Completed				
Student	Program	Graduation	Mentor	Role
Kayla Jara	BB, PhD	2022	Barbar	member
Ruben Riordan	BB, PhD	2022	Perez/Magnuson	member
Lillian Padgitt-Cobb	BB, PhD	2022	Hendrix	member
Elise Van Fossen	BB, PhD	2021	Mehl	member
Daniel Breyse	BB, MS	2019	Merrill	member

Honors thesis students (2 completed)

Completed				
Student	Program	Graduation	Mentor	Role
Rees Rosene	Bioengineering	2022	Giers	member
Sonia Grutzius	BB	2020	Mehl	member

▪ **Supervision of Research Operations Manager 2**

2017-Present Carrie Marean-Reardon (MS, 2016)

▪ **Supervision of Faculty Research Assistant**

2020-2021 Lydia Bastian (BS, 2020)

2.5. Team or Collaborative Efforts

Since joining OSU

Collaborative Disciplines: Cell Biology; Structural Biology; Evolutionary Genetics

2021-present COS SciRIS program with Elisar Barbar, Patrick Reardon, Afua Nyarko and Michael Blouin.

Role: I provide training and expertise in cell biology for the development of a bioreactor to grow prokaryote and eukaryote cells to perform in-cell NMR.

2.6. International teaching

Universidad de Buenos Aires, Department of Biological Chemistry, Argentina

2007 Instructor, Department of Biological Chemistry

As a fourth-year graduate student, I was selected for a part-time instructor position by a search committee. This position is normally filled by a faculty member or postdoctoral investigator. I was the first graduate student in the history of the Department to be selected for this position.

Course	Semester/Year	Number of students
Microbiology and Immunology Lab	Spring 2007	~40
Immunochemistry Lab	Fall 2007	~40

Upper levels courses (equivalent to a 5 credits course, 8 hours/week)

2004-2006 Teaching Assistant, Department of Biological Chemistry, by a highly competitive selection process:

- Microbiology and Immunology (Fall semester, 8 hours/week)
- Immunochemistry (Spring semester, 8 hours/week)

2003-2005 Teaching Assistant, Department of Microbiology, Immunology and Biotechnology

- Genetic and Molecular Biology

3. Student-based Evaluation Summary (maximum score is 6)

BB 460/560 – Advanced Cell Biology – Corvallis Campus (first offering)

Course	Term/Year	Responses/ Enrolled	Instructor median / Department median	Course median / Department median
BB 460/560	Spring 2022	11/19	5.9 / 5.4	5.8 / 5.0

BB 314 – Cell and Molecular Biology – Corvallis Campus

Course	Term/Year	Responses/ Enrolled	Instructor median / Department median	Course median / Department median
BB 314	Spring 2021	121/161	5.4 / 5.2	5.0 / 4.9

BB 314 – Cell and Molecular Biology – Ecampus

Course	Term/Year	Responses/ Enrolled	Instructor median / Department median	Course median / Department median
eBB 314	Fall 2021	52/68	5.7 / 5.4	5.0 / 5.0

eBB 314	Fall 2020	28/42	5.6 / 5.0	5.1 / 4.8
eBB314	Winter 2020	13/55	4.2 / 4.9	3.5 / 4.6

BB 599 – Culture of Mammalian Cells – Corvallis Campus

No eSETs were filled out. Graduate students provided feedback by email.

4. Peer Teaching Evaluations

Letter to be included elsewhere in dossier

5. Advising

Academic Year Undergraduate Advising – Number of 30 min advising appointments per term are listed in the table below. In these appointments, we discuss academic progress, career goals, research opportunities and course plans with the goal of holistically supporting our students' educational and ultimate career goals.

Term/Year	Number of students
Spring 2022	47
Winter 2022	28
Fall 2021	40
Spring 2021	48
Winter 2020	17
Fall 2020	43
Spring 2020	65
Fall 2019	21

6. Other Assignments

N/A

B. SCHOLARSHIP AND CREATIVE ACTIVITY

1. Publications

Total publications including primary research articles (26), invited reviews (8), and book chapters (4): 38; Total citations: 1425; h-index: 18 (source: [Google Scholar](https://scholar.google.com/) as of August 15, 2022)

1.1. Peer-Reviewed Primary Research Articles (26 total)

Since joining OSU (10 total)

Notations: Graduate mentee; postdoctoral scholar/research scientist mentee**; undergraduate mentee and co-mentee underlined; under-represented minority†; Equal contribution‡; ☒ I was senior author and led the work, developed the conceptual framework, funded the project, supervised the experimental design, data collection and analysis, and writing and editing of the manuscript.*

Accepted for Publication (1 total)

26. Dennys C**, Roussel F, Rodrigo R, Zhang X, Sierra Delgado A, Hartlaub A, Saelim-Ector A, Ray W, Heintzman S, Fox A, Kolb J, Beckman JJ, **Franco MC**, Meyer K. “CuATSM effectively reverses astrocyte mediated motor neuron toxicity in C9ORF72 and sporadic ALS patient lines”. *Glia*. Accepted with revisions.

Role: I trained Dr. Cassandra Dennys in extracellular flux analysis, supervised data collection and analysis and contributed to the analysis and writing of the manuscript.

Published (9 total)

25. Jandy M^Y, Noor A^Y, Nelson P⁺, Dennys CN**, Karabinas IM⁺, Pestoni JC⁺, Singh GD, Luc L, Devyldere R, Perdomo N⁺, Mitchell CE, Adams L, Fuse MA*, Mendoza FA⁺, Merean-Reardon CL, Mehl RA, Estevez AG, **Franco MC**✉. “Nitration of Tyr 56 in Hsp90 by peroxynitrite induces PC12 cell death through P2X7R-dependent PTEN activation”. 2022. *Redox Biology* 50:102247.
doi:[10.1016/j.redox.2022.102247](https://doi.org/10.1016/j.redox.2022.102247)

Role: I was senior author and led the work.

24. Tsakadze N, Catania J, Hoffmann M, Benes-Lima L, Estevez AG, **Franco MC**, Rossi F. “Case Report: Length-dependent Small Fiber Polyneuropathy Caused by Coxsackie and Influenza Virus Co-Infection”. 2019. *Journal of Neurology & Experimental Neuroscience* 5(2): 103-105.
doi: [10.17756/jnen.2019-061](https://doi.org/10.17756/jnen.2019-061)

Role: I helped write the manuscript.

23. Pestoni JC⁺, Klingeman Plati S, Valdivia Camacho O⁺, Fuse MA*, Onatunde M⁺, Sparrow NA, Karajannis, MA, Fernandez-Valle C, **Franco MC**✉. “Peroxynitrite supports a metabolic reprogramming in merlin-deficient Schwann cells and promotes cell survival.” *Journal of Biological Chemistry*. 2019. 294(30):11354-11368. **JBC Top 50 most read articles July-August, 2019.**
doi: [10.1074/jbc.RA118.007152](https://doi.org/10.1074/jbc.RA118.007152).

Role: I was senior author and led the work.

22. Strayer, A*, Dennys-Rivers*, C, Ricart, K, Narae, B, Beckman, J, **Franco MC**^Y, Estevez, AG^Y. “Ligand-independent activation of the P2X7 receptor by Hsp90 inhibition stimulates motor neuron apoptosis.” *Experimental Biology and Medicine*. 2019. 244(11):901-914. **Highlighted article.**
doi: [10.1177/1535370219853798](https://doi.org/10.1177/1535370219853798)

Role: I co-developed the conceptual framework, trained students, funded part of the project, supervised data collection and analysis, and contributed to the analysis and writing of the manuscript.

21. Robinson MM, Bergen KS, Burney ER, Ehrlicher AE, Stierwalt HD, **Franco MC**, Newsom SA. “Robust intrinsic differences in mitochondrial respiration and H₂O₂ emission between L6 and C2C12 cells.” 2019. *APJ Cell Physiology*. 1;317(2):C339-C347.
doi: [10.1152/ajpcell.00343.2018](https://doi.org/10.1152/ajpcell.00343.2018)

Role: I provided expertise in the study of metabolic changes by extracellular flux analysis, and contributed to the experimental design and writing of the manuscript.

20. Fuse MA*, Dinh CT, Vitte J, Kirkpatrick J, Mindos T, Klingeman Plati S, Young JI, Huang J, Carlstedt A, **Franco MC**, Brnjos K, Nagamoto J, Petrilli A, Copik AJ, Soulakova JN, Bracho O, Yan D, Mittal R, Shen R, Telischi FF, Morrison H, Giovannini M, Liu XZ, Chang LS, Fernandez-Valle C. “Preclinical Assessment of MEK1/2 Inhibitors for Neurofibromatosis Type

2-Associated Schwannomas Reveal Differences in Efficacy and Drug Resistance Development.” *Neuro-Oncology*. 2019. 18;21(4):486-497.

doi: [10.1093/neuonc/noz002](https://doi.org/10.1093/neuonc/noz002)

Role: I provided expertise in cell signaling, performed experiments, trained students and contributed to the experimental design, analysis and writing of the manuscript.

19. Rossi FH, Liu W, Tsakadze N, Hoffmann M, Rodriguez-Cruz R, Rossi, E, Gonzalez E, Castaneda S, Khaku A, **Franco MC**, Estevez AG. “An undulating tongue: Post-irradiation myokymia and Neuromyotonia of the tongue following radiation therapy for tonsillar cancer” *Medical & Clinical Reviews* 2018. 4:6.

doi: [10.21767/2471-299X.100069](https://doi.org/10.21767/2471-299X.100069)

Role: I helped write the manuscript.

18. Rossi FH, Rossi EM, Hoffmann M, Liu W, Cruz RR, Antonovich N, Rezaei A, Gonzalez E, **Franco MC**, Estevez A, Thomas F. “Permanent Cerebellar Degeneration After Acute Hyperthermia with Non-toxic Lithium Levels: A Case Report and Review of Literature.” *Cerebellum*. 2017. 5-6):973-978.

doi: [10.1007/s12311-017-0868-3](https://doi.org/10.1007/s12311-017-0868-3)

Role: I helped write the manuscript.

17. Fuse MA*, Plati SK, Burns SS, Dinh CT, Bracho O, Yan D, Mittal R, Shen R, Soulakova JN, Copik AJ, Liu XZ, Telischi FF, Chang LS, **Franco MC**, Fernandez-Valle C. “Combination Therapy with c-Met and Src Inhibitors Induces Caspase-Dependent Apoptosis of Merlin-Deficient Schwann Cells and Suppresses Growth of Schwannoma Cells.” *Molecular Cancer Therapeutics*. 2017. 16(11):2387-2398.

doi: [10.1158/1535-7163.MCT-17-0417](https://doi.org/10.1158/1535-7163.MCT-17-0417)

Role: I provided expertise in cell signaling, performed experiments, trained students, and contributed to the experimental design, analysis, and writing of the manuscript.

Prior to position at OSU (16 total)

16. Williams JR, Trias E, Beilby PM, Lopez NI, Labut EM, Bradford CS, Roberts BR, McAllum EJ, Crouch PJ, Rhoads TW, Pereira C, Son M, Elliott JL, **Franco MC**, Estevez AG, Barbeito L, Beckman JS. “Copper delivery to the CNS by CuATSM effectively treats ALS in SODG93A mice co-expressing the Copper-Chaperone-for-SOD.” *Neurobiology of Disease*. 2016. 89:1-9.

doi: [10.1016/j.nbd.2016.01.020](https://doi.org/10.1016/j.nbd.2016.01.020)

Role: I helped write the manuscript.

15. Rossi F.H., Rossi E.M., Gonzalez E., **Franco M.C.**, Estevez A.G. “A Case of Episodic Ataxia Type-2 with a Novel Gene Mutation and Complex Phenotype.” *Journal of Neurological Disorders*. 2016. S1: 004. doi:[10.4172/2329-6895.S1-004](https://doi.org/10.4172/2329-6895.S1-004)

Role: I helped write the manuscript.

14. **Franco MC**✉, Ricart KC, Gonzalez AS, Nelson PA#, Dennys CN, Janes M, Mehl RA, Landar A, Estévez AG. “Site-specific nitrated Hsp90 regulates mitochondrial metabolism”. *Journal of Biological Chemistry*. 2015. 290(31):19055-66.

doi: [10.1074/jbc.M115.663278](https://doi.org/10.1074/jbc.M115.663278)

Role: I developed the conceptual framework, performed most of the experiments, trained students, supervised data collection and analysis, performed the analysis, and wrote the manuscript.

13. Dennys CN, Armstrong J, Levy M, Ramdiel KR, Bott M, Rossi FH, Fernández-Valle C, **Franco MC**, Estévez AG. "Chronic Inhibitory effect of Riluzole on Trophic Factor Production." *Experimental Neurology*. 2015. pii: S0014-4886(15)30003-0. doi: [10.1016/j.expneurol.2015.05.016](https://doi.org/10.1016/j.expneurol.2015.05.016)
Role: I performed experiments, trained students and contributed to the experimental design, analysis, and writing of the manuscript.
12. **Franco MC**, Ye Y, Refakis CA, Feldman JL, Stokes AL, Basso M, Melero Fernández de Mera RM, Sparrow NA, Calingasan NY, Kiaei M, Rhoads TW, Ma T, Grumet M, Barnes S, Beal MF, Beckman JS, Mehl R, Estévez AG. "Nitration of Hsp90 induces cell death." *Proceedings of the National Academy of Sciences USA Plus*. 2013. 110(12):E1102-11. doi: [10.1007/s00018-014-1662-8](https://doi.org/10.1007/s00018-014-1662-8)
Role: I led the experimental work, data collection, and analysis and writing of the manuscript.
11. Viera L, Radmilovich M, Vargas MR, Dennys CN, Wilson L, Barnes S, **Franco MC**, Beckman JS, Estévez AG. "Temporal patterns of tyrosine nitration in embryo heart development." *Free Radical Biology and Medicine*. 2013. 55C:101-108. doi: [10.1016/j.freeradbiomed.2012.10.535](https://doi.org/10.1016/j.freeradbiomed.2012.10.535)
Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.
10. Sahawneh MA, Ricart KC, Roberts BR, Bomben VC, Basso M, Ye Y, Sahawneh J, **Franco MC**, Beckman JS, Estevez AG. "Cu,Zn superoxide dismutase (SOD) increases toxicity of mutant and Zn-deficient superoxide dismutase by enhancing protein stability." *Journal of Biological Chemistry*. 2010. 285(44):33885-97. doi: [10.1074/jbc.M110.118901](https://doi.org/10.1074/jbc.M110.118901)
Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.
9. Antico Arciuch VG, Galli S, **Franco MC**, Lam PY, Cadenas E, Carreras MC, Poderoso JJ. "Akt1 intramitochondrial cycling is a crucial step in the redox modulation of cell cycle progression." *PLoS One*. 2009. 4(10):e7523. doi: [10.1371/journal.pone.0007523](https://doi.org/10.1371/journal.pone.0007523)
Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.
8. Finocchietto PV, Barreyro F, Holod S, Peralta JG, **Franco MC**, Méndez C, Converso DP, Estévez AG, Carreras MC, Poderoso JJ. "Control of Muscle Mitochondria by Insulin Entails Activation of Akt2-mtNOS Pathway: Implications for the Metabolic Síndrome." *PLoS ONE*. 2008; 3(3):e1749. doi: [10.1371/journal.pone.0001749](https://doi.org/10.1371/journal.pone.0001749)
Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.
7. Finiasz MR, **Franco MC**, De la Barrera S, Rutitzky L, Pizzariello G, Sasiain MC, Renauld JC, Van Snick J, Fink S. "IL-9 promotes anti-Mycobacterium leprae cytotoxicity: involvement of IFN γ ." *Clinical and Experimental Immunology*. 2007; 147(1):139-47. doi: [10.1111/j.1365-2249.2006.03241.x](https://doi.org/10.1111/j.1365-2249.2006.03241.x)
Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.
6. **Franco MC**, Antico Arciuch VG, Peralta JG, Galli S, Levisman D, Lopez LM, Romorini L, Poderoso JJ, Carreras MC. "Hypothyroid phenotype is contributed by mitochondrial complex

I inactivation due to translocated neuronal nitric oxide synthase.” *Journal of Biological Chemistry*. 2006; 281(8):4779-86.

doi: [10.1074/jbc.M512080200](https://doi.org/10.1074/jbc.M512080200)

Role: I performed the majority of the lab work and data analysis, and led the writing and editing of the manuscript.

5. Agote Robertson M, Finochietto P, Gamba CA, Dagrosa MA, Viaggi ME, **Franco MC**, Poderoso JJ, Juvenal GJ, Pisarev MA. “Nicotinamide increases thyroid radiosensitivity by stimulating nitric oxide synthase expression and the generation of organic peroxides.” *Hormone and Metabolic Research*. 2006; 38(1):12-5.

doi: [10.1055/s-2006-924966](https://doi.org/10.1055/s-2006-924966)

Role: I contributed to the experimental work and data analysis, and participated in editing the manuscript.

4. Carreras MC, **Franco MC**, Converso DP, Finocchietto P, Galli S, Poderoso JJ. “Cell H₂O₂ Steady-State Concentration and Mitochondrial Nitric Oxide.” *Methods in Enzymology*. Section V, Cell Biology and Physiology. 2005; (396):399-414.

doi: [10.1016/S0076-6879\(05\)96034-5](https://doi.org/10.1016/S0076-6879(05)96034-5)

Role: I contributed to the experimental work and data analysis, and participated in writing of the manuscript.

3. De La Barrera S, Finiasz M, Fink S, Ilarregui J, Aleman M, Olivares L, **Franco MC**, Pizzariello G, Sasiain MC. “NK cells modulate the cytotoxic activity generated by Mycobacterium leprae hsp65 in leprosy patients: role of IL-18 and IL-13”. *Clinical and Experimental Immunology*. 2004; 135(1):105-13.

doi: [10.1111/j.1365-2249.2004.02334.x](https://doi.org/10.1111/j.1365-2249.2004.02334.x)

Role: I contributed to the experimental work and data analysis.

2. Beigier Bompadre M, Aleman M, Barrionuevo P, **Franco MC**, Rubel CJ, Palermo MS, Abbate E, Sasiain MC, Isturiz MA. “Monocytes and neutrophils from tuberculosis patients are not sensitive to anti-inflammatory effects triggered by a prototypic N-formyl peptide (FMLP).” *Clinical and Experimental Immunology*. 2003; 132(3):450-61.

doi: [10.1046/j.1365-2249.2003.02212.x](https://doi.org/10.1046/j.1365-2249.2003.02212.x)

Role: I contributed to the experimental work and data analysis.

1. De la Barrera SS, Finiasz M, García A, Alemán M, Ruschioni-Martín C, Barrionuevo P, Fink S, **Franco MC**, Abbate E, Sasiain MC. “Specific lytic activity against mycobacterial antigens is closely related to the severity of tuberculosis.” *Clinical and Experimental Immunology*. 2003; 133(2):267-74.

doi: [10.1046/j.1365-2249.2003.02176.x](https://doi.org/10.1046/j.1365-2249.2003.02176.x)

Role: I contributed to the experimental work and data analysis.

1.2. **Peer-Reviewed Invited Reviews** (8 total)

Role: In all cases, I contributed to the content development and writing.

Since joining OSU

8. Rossi FH, **Franco MC**, Estevez AG. “Two Decades of Riluzole Showed No Clear Benefit on ALS: Case Close, or Isn’t? Clinical Implications of Basic Neuroscience Research” *AS Neurology*. 2018 1(1):12-13. Short Communication.

<https://actascientific.com/ASNE/pdf/ASNE-01-0008.pdf>

Prior to position at OSU

7. Ramdial K, **Franco MC**, Estevez AG. Cellular mechanisms of peroxynitrite-induced neuronal death. *Brain Research Bulletin*. 2017 Jul;133:4-11.
doi: [10.1016/j.brainresbull.2017.05.008](https://doi.org/10.1016/j.brainresbull.2017.05.008)
6. Adams L, **Franco MC**, Estévez AG. "Reactive Nitrogen Species in Cellular Signaling." *Experimental Biology and Medicine*. 2015. 240(6):711-7. 2014.
doi: [10.1177/1535370215581314](https://doi.org/10.1177/1535370215581314)
5. **Franco MC** and Estevez AG. "Tyrosine nitration as mediator of cell death". *Cellular and Molecular Life Sciences*. 2014.
doi: [10.1007/s00018-014-1662-8](https://doi.org/10.1007/s00018-014-1662-8)
4. Dennys CN, **Franco MC** and Estévez AG. "Trophic factor production by glial cells in the treatment of amyotrophic lateral sclerosis." *Austin Journal of Biomedical Engineering*. 2014. 1(5): 1021. ISSN: 2381-9081.
<https://austinpublishinggroup.com/biomedical-engineering/fulltext/ajbe-v1-id1021.php>
3. Finocchietto PV, **Franco MC**, Holod S, Gonzalez AS, Converso DP, Antico Arciuch VG, Serra MP, Poderoso JJ, Carreras MC. "Mitochondrial nitric oxide synthase: a master piece of metabolic adaptation, cell growth, transformation and death." *Experimental Biology and Medicine*. 2009; Sep;234(9):1020-8.
doi: [10.3181/0902-MR-81](https://doi.org/10.3181/0902-MR-81)
2. Carreras MC, **Franco MC**, Finocchietto PV, Converso DP, Antico Arciuch VG, Holod S, Peralta JG, Poderoso JJ. "The biological significance of mtNOS modulation". *Frontiers in Bioscience*. 2007; (12):1041-1048.
doi: [10.2741/2124](https://doi.org/10.2741/2124)
1. Carreras MC, **Franco MC**, Peralta JG, Poderoso JJ. "Nitric oxide, complex I, and the modulation of mitochondrial reactive species in biology and disease". *Molecular Aspects of Medicine*. 2004; (25):125-139.
doi: [10.1016/j.mam.2004.02.014](https://doi.org/10.1016/j.mam.2004.02.014)

1.3. Peer-Reviewed Book Chapters (4 total)

Role: In all cases, I contributed to the content development and writing.

4. Ramdial K*, Rossi FH, **Franco MC**, Estevez AG. Amyotrophic Lateral Sclerosis - Present understanding of the role of SOD. In "Redox-Active Therapeutics." Edited by Batinic-Haberle, Reboucas, and Spasojevic. Chapter 26:597-604. October 2016, Springer International Publishing, Switzerland.
3. **Franco MC**, Dennys C, and Estevez AG. "Superoxide dismutase and oxidative stress in amyotrophic lateral sclerosis" in Current Advances in Amyotrophic Lateral Sclerosis, Chapter 5:141-158. September 2013, InTech Publisher.
2. Rossi FH, **Franco MC** and Estevez AG. "Pathophysiology of Amyotrophic Lateral Sclerosis" in Current Advances in Amyotrophic Lateral Sclerosis, Chapter 1:1-33. September 2013, InTech Publisher.
1. **Franco MC** and Estevez AG. "Reactive Nitrogen Species in Motor Neuron Apoptosis" in Amyotrophic Lateral Sclerosis, Chapter 13:313-334. January 2012, InTech Publisher.

2.1. Editorials (2 total, both since joining OSU)

Role: In all cases, I contributed to the content development and writing

2. Poderoso C☒, Filippi BM☒, Maloberti PM☒, **Franco MC☒**. “Mitochondrial Dynamics in Endocrine Physiology and Disease”. **2022**. *Frontiers in Endocrinology*. <https://www.frontiersin.org/articles/10.3389/fendo.2022.844842/full>
1. **Franco MC☒**, Carreras MC, Hannibal L. “Molecular Basis of Redox Signaling.” *Oxidative Medicine and Cellular Longevity*. **2019**. doi: [10.1155/2019/6414975](https://doi.org/10.1155/2019/6414975)

2. Invited and Peer Selected Presentations

2.1. Major Talks and Invited Lectures (24 total)

International and National Meetings (16 total)

Since joining OSU (4 total)

16. Winter Conference on Brain Research. “Nitrated proteins as tumor-directed targets in NF2”. Snowmass, CO. Jan 30-Feb 4, **2022** - *Invited speaker*
15. Society for Redox Biology and Medicine (SfRBM) Annual Conference (Virtual). Nov 17-20, **2021**. “What are radicals and ROS?” – *Invited Speaker, Sunrise Free Radical School*
14. Society for Redox Biology and Medicine 27th Annual Conference (Virtual), Nov 18-20, **2020**. “Nitrated Proteins as Tumor Directed Targets” – *Plenary Session Speaker & Chair*
13. Third Neurofibromatosis Conference, School of Medicine, University of Buenos Aires, Buenos Aires, Argentina. Oct 15-16, **2019**. “Nitrated proteins: New tumor-direct therapeutic targets”, and “Nitrated Hsp90 as a novel therapeutic target for NF2” – *Plenary Session Speaker*

Prior to position at OSU (12 total)

12. Second Conference of the Latin American Chapter of the Cell Stress Society International, Bogotá, Colombia. April 6-8, **2016**. “Role of tyrosine nitration in tumor survival” – *Plenary Session Speaker & Chair*
11. Society for Redox Biology and Medicine 21st Annual Meeting, November 19-23, **2014**. Seattle, WA. “Site-specific nitrated Hsp90 is a target for drug development in cancer” – *Invited speaker*
10. First Conference of the South American Chapter of Cell Stress Society International, Montevideo, Uruguay. March 11-14, **2014** – *Plenary Session Speaker*
9. Society for redox Biology and Medicine 18th Annual Meeting, Nov 16-20, **2011**. Atlanta, GA. “Nitrated Hsp90 induces apoptosis in motor neurons by a Fas-dependent mechanism” – *Invited speaker*
8. Society for redox Biology and Medicine 16th Annual Meeting. Nov 18-22, **2009**. San Francisco, CA. “Nitration of a single Hsp90 tyrosine residue is sufficient to induce cell death” – *Invited speaker*
7. Jornadas de Investigadores Jóvenes. Universidad de Castilla-La Mancha. Albacete, Spain, **2009** – *Plenary Session Speaker*
6. Sociedad Argentina de Investigacion Clinica (SAIC) anual meeting, November **2007**. “Estudio de la translocación de iNOS a la mitocondria en modelos de transcripción in vitro y en cultivos celulares”. Volumen 66 (II), 227. – *Invited speaker*

5. SAIC annual meeting, November **2006**. “La localización subcelular de Óxido Nítrico Sintasa neuronal (nNOS) determina la regulación del metabolismo redox celular por el estado tiroideo” – *Invited speaker*
4. IV Meeting of the South American Group of the Society for Free Radical Biology and Medicine. June 29 to July 2, **2005**. Águas de Lindóia, SP, Brazil. “nNOS- α up-regulation and translocation into mitochondria contribute to hypothyroid phenotype” – *Invited speaker*
3. SAIC annual meeting, November **2005**. “La translocación mitocondrial de Oxido Nítrico Sintasa inducible es responsable del daño mitocondrial hepático en la endotoxemia” – *Invited speaker*
2. SAIC annual meeting, November **2004**. “Regulación génica de Oxido Nítrico Sintasa mitocondrial (mtNOS) y su relación con la nitración del complejo I en el hipotiroidismo” – *Invited speaker*
1. SAIC annual meeting, November **2003**. “Modulación de oxido nítrico sintasa mitocondrial (mtNOS) y del metabolismo redox celular por el estado tiroide” – *Invited speaker*

Regional meetings (3 total)

Since joining OSU (2 total)

3. Center for Quantitative Life Sciences Fall Conference. Oregon State University. Oct 12, **2018**. “Role of Redox Signaling in Tumor Metabolic Reprogramming” – *Invited speaker*
2. Center for Quantitative Life Sciences Fall Conference. Oregon State University. Sept 8, **2017**. “The Two Faces of Nitrated Proteins: Neurodegeneration and Cancer” – *Invited speaker*

Prior to position at OSU (1 total)

1. Society for Neuroscience, Oregon Chapter Meeting, McMinnville, OR. March 26-27, **2010**. “Hsp90 Nitrated in a Single Tyrosine Residue Induces Motor Neuron Death and Is Present in Neurodegenerative Conditions” – *Invited speaker*

Invited Seminars and Lectures (10 total)

Since joining OSU (7 total)

10. Seminar, Center for Translational Science, Florida International University, Port St. Lucie, FL. Feb, 10, **2022**. “Oxidized proteins as disease-drivers and therapeutic targets”
9. Seminar, College of Medicine, Florida International University, Miami, FL. Jan 18, **2022**. “Nitrated Proteins as therapeutic targets: from bystanders to disease-drivers”
8. Lecture, Association for Lifelong Learning (Virtual) Feb 17, **2021**. “Oxidants in Neurological Disorders: Bystanders or Disease Drivers?”
7. Center for Genome Research and Biocomputing Seminar Series, Oregon State University, Jan 20, **2021**. “The relevance of oxidatively-modified proteins as therapeutic tumor directed-targets”
6. International Seminar Series, Instituto de Biología y Medicina Experimental (IBYME), Buenos Aires, Argentina, Sep 11, **2020**. “Role of Nitrated Proteins in Tumor Biology”
5. Seminar, Institut Curie, Paris, France. Nov 6, **2018**. “Nitrated proteins: Uncovering a Novel Category of Tumor-Directed Targets”

4. Special Seminar, Department of Biochemistry and Biophysics, Oregon State University. Nov 17, **2017**. “Redox Signaling by Tyrosine Nitration: From Neurodegeneration to Tumors of the Nervous System”

Prior to position at OSU (3 total)

3. Joint Seminar - Instituto de Biología y Medicina Experimental (IBYME) and Instituto de Investigaciones en Ingeniería Genética y Biología Molecular (INGEBI), Buenos Aires, Argentina. March 20, **2014**. “Rol de la nitración de tirosinas en cáncer.”
2. Seminar. Linus Pauling Institute, Oregon State University, **2010**. “Dual Role of nitrated Hsp90 in cell death and cancer.”
1. Seminar, Burke Neurological Institute, Weill Medical College of Cornell University, March **2007**. “Study of the role of nitrated Hsp90 in neurodegeneration.”

2.2. Student Presentations at Meetings (28 total, 16 awards to mentees *in blue*)

National and International Meetings

Oral presentations

Since joining OSU (8 total, 6 awards)

Notations: First author is the presenter; graduate mentee; postdoctoral scholar/research scientist mentee**; undergraduate mentee and co-mentee underlined; under-represented minority†.*

- 2022 American Society for Biochemistry and Molecular Biology Annual Meeting (ASBMB), Philadelphia, PA. April 2-5.
8. Logan IE**, Kim S, Nguyen K*, Sixta E†, Bastian L, Fernández-Valle C, Estevez AG, **Franco MC**. “Nitration of Hsp90 Affects its Spatial Distribution and Promotes Schwannoma Cell Proliferation.”
Postdoctoral Research Award (to IEL)
 7. Nguyen K*, Sathler A†, Sung A, Marean-Reardon C**, Estevez AG, **Franco MC**. “Nitrated Hsp90 Supports Glioblastoma Multiforme Cell Survival and Migration.”
- 2021 SfrBMB Annual Conference (Virtual). Nov 17-20, 2021
6. Logan IE**, Kim S, Nguyen K*, Sixta E†, Bastian L, Fernández-Valle C, Estevez AG, **Franco MC**. “Nitration of Heat Shock Protein 90 Affects its Spatial Distribution and Promotes the Survival/Proliferation of Schwannoma Cells”.
Young Investigator Award (to IEL)
 5. Sathler A†, Nguyen K*, Marean-Reardon C**, Estevez AG, **Franco MC**. “A Computational Method to Visualize Nitrated Hsp90 Distribution in 3D Culture Models.”
Young Investigator Award (to AS)
 4. Nguyen K*, Sathler A†, Sung A, Marean-Reardon C**, Estevez AG, **Franco MC**. “Nitrated Hsp90 Supports Glioblastoma Multiforme Cell Survival and Migration.”
- 2021 ASBMB Annual Meeting. April 27-30. Virtual.

3. Nguyen K*, Palan M, Marean-Reardon C**, Estevez AG, **Franco MC**. “Tyrosine Nitration Supports Glioblastoma Multiforme Cell Survival and Regulates Migration.”
Graduate Student Research Award (to KN)
- 2020 SfRBM Annual Conference (Virtual). Nov 20-24.
2. Nguyen K*, Palan M, Marean-Reardon C**, Estevez AG, **Franco MC**. “Tyrosine Nitration Supports Glioblastoma Multiforme Cell Survival and Regulates Migration.”
Trainee Award (to KN)
- 2019 SfRBM Annual Conference. Nov 20-24. Las Vegas, NV.
1. Leek M*, Marean-Reardon C**, Goune Goufack D†, Reardon P, Estevez AG, **Franco MC**. “A Biochemical and Biophysical Investigation into the Pathological Gain-of-Function of Nitrated Hsp90.”
Travel Award (to ML)

Poster presentations (18 total, 7 awards)

Since Joining OSU (15 total, 7 awards)

- 2022 Neurofibromatosis Conference, June 18-21, Philadelphia, PA.
15. Logan IE**, Kim S, Nguyen K*, Sixta E†, Bastian L, Chatterjee T*, Marean-Reardon C**, Fernández-Valle C, Estevez AG, **Franco MC**. “Nitrated Hsp90 Drives Schwannoma Cell Proliferation and Metabolic Reprogramming.”
- 2022 Biennial International Chemical Biology and Physiology Conference, April 28-May 1, Oregon Health & Science University, Portland, OR.
14. Logan IE**, Kim S, Nguyen K*, Sixta E†, Bastian L, Chatterjee T*, Marean-Reardon C**, Fernández-Valle C, Estevez AG, **Franco MC**. “Nitrated Hsp90 Drives Schwannoma Cell Proliferation and Metabolic Reprogramming.”
 13. Chatterjee T*, Marean-Reardon C**, Estevez AG, **Franco MC**. “Structural Changes Induced in Hsp90 by Nitration lead to a Pathological Gain-of-function.”
- 2022 American Society for Biochemistry and Molecular Biology Annual Meeting (ASBMB), April 2-5, Philadelphia, PA.
12. Chatterjee T*, Marean-Reardon C**, Estevez AG, **Franco MC**. “Structural Changes Induced in Hsp90 by Nitration lead to a Pathological Gain-of-function.”
Graduate Student Research Award (to TC)
 11. Sathler A†, Nguyen K*, Marean-Reardon C**, Estevez AG, **Franco MC**. “A Computational Method for the Visualization of Nitrated Hsp90 Distribution in 3D Culture Models.”
Honorable mention – Poster competition (to AS)
- 2022 Orthopedic Research Society Annual Meeting, Feb 4-8, Tampa, FL.
10. Benage LG, Chatterjee T*, **Franco MC**, Giers MB. “Metabolic Profiling of Inflamed Intervertebral Disc Cells.” J Orthop Res (2022)
- 2020 SfRBM Annual Conference (Virtual), Nov 20-24.

9. Hernandez T[†], Morcos M[†], Ortiz K, Bertetta R, Fernandez-Valle C, **Franco MC**. “Focused Proteome Analysis of the Antioxidant Defenses and Oxidant Production in Merlin Deficient-Schwann Cells.”
Young Investigator Award (to TH)
- 2020 1st International Electronic Conference on Brain Sciences (Virtual), Nov 10-25.
8. Dennys C^{**}, Roussel F, Zhang X, Rodrigo R, Hartlaub A, Sierra-Delgado, Ray W, Beckman J, Kolb S, **Franco MC**, Meyer K. “Rapid reprogramming of ALS patient fibroblasts differentiates CuATSM responders from nonresponders.”
Best Poster Award (to CD)
- 2020 Neurofibromatosis Conference (Virtual), June 15-16, 2020.
7. Leek M^{*}, Marean-Reardon C^{**}, Goune Goufack D[†], Reardon P, Estevez AG, **Franco MC**. “A Biochemical and Biophysical Investigation into the Pathological Gain-of-Function of Nitrated Hsp90.”
- 2019 Biennial International Chemical Biology and Physiology Conference, Dec 12-15, Portland, OR.
6. Leek M^{*}, Marean-Reardon C^{**}, Goune Goufack D[†], Reardon P, Estevez AG, **Franco MC**. “A Biochemical and Biophysical Investigation into the Pathological Gain-of-Function of Nitrated Hsp90.”
- 2019 SfRBM Annual Conference. Nov 20-24. Las Vegas, NV.
5. Karabinas I[†], Jandy M, Nelson P[†], Pestoni JC[†], Duc L, Noor A, Singh G, DeVylde R, **Franco MC**, Estevez AG. “Nitrated Hsp90 Mediates Peroxynitrite-Induced Apoptosis.”
Young Investigator Award (to IK)
- 2019 10th Linus Pauling Institute International conference with SfRBM Regional Symposium. Aug 14-16, Oregon State University, Corvallis, OR.
4. Pestoni JC[†], Camacho Valdivia O[†], Klingeman Plati S, Onatunde MO[†], Sparrow NA, Fuse MA, Fernández-Valle C, **Franco MC**. “Tyrosine nitration supports schwannoma cell survival.”
Young Investigator Award (to JCP)
- 2018 Joint Global Neurofibromatosis Conference, Nov 2-6, Paris, France.
3. **Franco MC**, Pestoni JC[†], Valdivia Camacho O[†], Klingeman Plati S, Onatunde M[†], Sparrow NA, Fuse MA^{*}, Fernández-Valle C. “Tyrosine Nitration Regulates Neurofibromatosis Type 2 Schwannoma Energy Metabolism and Cell Survival.”
- 2018 SfRBM Annual Conference. Nov 14-18, Chicago, IL.
2. Pestoni JC[†], Camacho Valdivia O[†], Riordan R^{*}, Kim S, Fernández-Valle C, **Franco MC**. “Tyrosine nitration induces a metabolic reprogramming in neurofibromatosis type 2-associated Schwannoma cells.”
Young Investigator Award (to JCP)

1. Camacho Valdivia O[†], Pestoni JC[†], Fernández-Valle C, **Franco MC**. “Tyrosine nitration regulates signaling pathways involved in Neurofibromatosis type 2-associated Schwannoma growth.”

Prior to position at OSU (3 total)

2014 The International Nitric Oxide Conference, June 16-20, Cleveland, OH

3. Nelson P[†], Perdomo N[†], Thomas K, Fuse M, Mehl R, **Franco MC**, Estevez AG. “Nitrated Hsp90-induced PC12 cell apoptosis requires p38 and JNK MAP kinase activation.”

2013 American Society for Cell Biology (ASCB) Annual Meeting, Dec 14-18, New Orleans, LA

2. Dennys CN*, Strayer A*, Gitto S, **Franco MC**, Estevez AG. “Geldanamycin Induces Motor Neuron Apoptosis by Inhibition of the PI3K/AKT Pathway.”

2012 SfrBM Annual Conference, Nov 14-18, San Diego, CA

1. Gitto S, Estevez AG, **Franco MC**. “Nitrated Hsp90 Regulates Mitochondrial Membrane Potential and Oxygen Consumption in Cancer Cells.”

Regional Meetings

Poster presentations and lightening talks (2 total, 3 awards, all since joining OSU)

2021. Center for Quantitative Life Sciences Fall Conference, Sep 17. Oregon State University.

2. Sathler A[†], Nguyen K*, Marean-Reardon C**, Estevez AG, **Franco MC**. “A Computational Method to Visualize Nitrated Hsp90 Distribution in 3D Culture Models.” – *Poster presentation and Lightening talk*
Best Poster Award and Best Lightening Talk Award (to AS)

2019. Center for Quantitative Life Sciences Fall Conference, Sep 20. Oregon State University.

1. Leek M*, Marean-Reardon C**, Goune Goufack D[†], Reardon P, Estevez AG, **Franco MC**. “A Biochemical and Biophysical Investigation into the Pathological Gain-of-Function of Nitrated Hsp90.” – *Poster presentation*
Best Poster Award (to ML)

3. Grant and contract support

Total awards as PI: 6; Total costs: \$2,621,184

Since joining OSU, total awards as PI: 5; Total costs: \$2,471,184

Since joining OSU

Role: PI

- NIH/NINDS: R01 NS102479 \$1,583,968
“Redox Signaling in Neurofibromatosis” Feb 15, 2019-January 31, 2024

Employing vestibular schwannomas from NF2 patients, the goal of this project is to determine the signaling pathways regulated by tyrosine nitration in NF2 schwannomas, and the specific nitrated proteins supporting schwannoma growth.

- Administrative Diversity Supplement to R01 NS102479 \$151,672
 “Redox Signaling in Neurofibromatosis” Jan 1, 2022-Dec 31, 2023
This administrative supplement to promote diversity in health-related research supports the training of graduate student Monica Vidal-Franco.
- Access to Pacific Northwest Center for CryoEM (PNCC): Proposal approved
 “Structural characterization of nitrated Hsp90” June 2021- May 2023
Includes hands-on training and sample analysis, and up to 480 hours of instrument use.
- DoD-CDMRP: Neurofibromatosis Research Program, \$653,252
 New Investigator Award W81XWH-17-1-0409 Aug 1, 2017-July 31, 2021
 “Nitrated proteins as a target for drug development in Neurofibromatosis type 2”
This project employed genetically manipulated mouse and human cell culture models of neurofibromatosis type 2 (NF2) to uncover the role of nitrated proteins in the metabolic reprogramming of NF2 schwannoma cells to support cell proliferation.
- Intramural - Research Equipment Reserve Fund \$82,292
 Oregon State University June 2019
 Franco (PI)
 For the purchase of a Seahorse XFe96 Analyzer (Agilent)
 Total cost: \$137,153 | Matching funds: \$54,861

Role: Co-PI

- Intramural - SciRIS team Phase I: \$20,000
 PIs: Barbar, Reardon, Blouin, Nyarko, Franco 15 Sep 2021-14 Sep 2022
Multi-scale approaches to understand the roles of dynamic protein complexes in biology using in-cell NMR.
Role: I provide expertise in Cell Biology and mammalian cell culture.

Role: Co-Investigator

- NIH/NIGMS: R01 GM145986 \$1,700,912 (Franco: \$71,000)
 5% effort/year (PI: Hendrix) “to be paid” – Nominal dates Apr 2022- March 2027
 “Interpretable Deep Learning for Protein-Coding Prediction and Elucidation of Disease-Associated Synonymous Mutations”
This project performs integrative transcriptomics analysis to uncover functional elements and disease-associated variants in RNA. My role in this project is to provide expertise and training in cell biology and culture of mammalian cells.
Role: I provide expertise and will train students in Cell Biology and mammalian cell culture.

Role: Project Mentor (Total costs as mentor: \$119,000)

- Children’s Tumor Foundation: Young Investigator Award \$89,000
 PI: Logan, postdoctoral fellow July 1, 2021-June 30 2023

Young Investigator Award covers postdoctoral salary and 10% indirect costs

Role: I provide support on experimental design, and cover the costs of supplies

- Collins Medical Trust \$30,000
 PI: Logan, postdoctoral fellow July 1, 2021-June 30 2022

This project studies the potential of nitrated membrane proteins as neoantigens for the development of immunotherapies for Neurofibromatosis type 2.

Role: I provide support on experimental design

Prior to position at OSU (Total costs as PI: \$150,000)

- Goldsmith Award. Burke Neurological Institute, Well Cornell Medicine, NY \$150,000
 Franco (PI) 2008-2009

This award covered postdoctoral salary and \$25,000/year to support an independent research project

4. Patents Awards/Inventions

N/A

D. UNIVERSITY/COLLEGE/DEPARTMENT/PROFESSION SERVICE

1. University Service

Since arriving to OSU

Department

Committees

2018-Present Graduate Program Committee member

Role: Recruitment- each year read 60+ applications and provide objective review of applicants' qualifications, participate in communication efforts with prospective students and conduct interviews. Since July 2022 I am also the Graduate Advisor.

2020-Present Justice, Equity, Diversity and Inclusion (JEDI) Committee member

Search Committees

Winter 2022 Program Coordinator/Assistant to the Head position

Spring 2022 Administrative Program Assistant

Other responsibilities

2017-Present Director, Cell Culture Facility.

Role: I oversee the Cell Culture Facility that was not operational at the time of my arrival to OSU in 2017. The Facility provides cell culture support to over 11 different research groups within the BB department, Integrative Biology, Microbiology, Bioengineering and Public Health, and to the NIH Center GCE4All and the Electrophysiology Facility.

Fall 2021. Career Development workshop – Organizer

College of Science**Panelist**

- Feb 19, 2020 *Getting the Most from Undergraduate Research*. Student professional development workshop (111 attendees)
- Feb 6, 2020 *Engaging Undergraduates in Research*. Faculty professional development session (~100 attendees)

Committees

- Jun 2021 Martin-O'Neill Endowed Fellow Selection Committee

Other responsibilities

- 2019-Present Reviewer - SURE Science Program Award proposals (~7-10/year)

University**Workshop facilitation - CIMER mentoring training**

Role: Co-facilitation of the Entering Mentoring curricula developed by the Center for the Improvement of Mentoring Experiences in Research (CIMER) at the University of Wisconsin – Madison.

- April 8, 2022 Workshop 2: “Aligning expectations & Fostering Independence” - Department of Fisheries, Wildlife and Conservation Sciences, College of Agricultural Sciences.
- Feb 4, 2022 Elective Workshop: “Addressing Equity and Inclusion” - Department of Biochemistry and Biophysics, College of Science.
- Jan 22, 2022 Workshop 1: “Introduction to Mentorship training” - School of History, Philosophy and Religious Studies, College of Liberal Arts.
- Oct 26, 2021 Workshop: “Engaging Undergraduates in Your Research Program” - College of Agricultural Sciences. Introduction to Workshop 1 within the *Entering Mentoring Training*.

Search Committees

- May-June 2021 URSA Associate Director position

Other responsibilities

- April 2020 OSU-Internationalization and Global Engagement (IGE) Strategic Planning Focus Group
- 2020-Present Honors College Mixer/Honors College Faculty Research Showcase
- 2020 Mentor - Beaver Connect Program
- Aug 2018 Panelist. STEM Leaders Program Panel

Prior to arriving to OSU**University of Central Florida**

- 2014-2015 Seminar Series Committee member
- 2014-2015 Student Affairs Committee member
- 2012-2015 Education Committee member

2. Service to Profession

2.1. Service in Professional Societies

Society for Redox Biology and Medicine

Leadership - Council

- 2016-Present Elected Council member - <https://sfrbm.org/about/committees/>
 2016-Present Committee Chair, Regional Meetings Committee
 2013-2015 Elected Student/Trainee Council member

Committees

- 2021-Present Diversity, Equity and Inclusion Committee member
 2020-Present Ethics Committee member
 2015-Present Young Investigators/Trainees Committee member
 2012-Present Women in Science Committee member
 2014-2016 Free Radical School Committee member

Workshops at Annual Conference

- 2019 Panelist, Opening Doors Event: Professionalism - Building Success in Science
 2015-2018 Organizer, Opening Doors Event workshop

2.2. Conferences & Meetings

- 2020 Chair and Organizer. Plenary Session on “Peroxynitrite and Tyrosine Nitration: From Biomarker of Oxidative Stress to Signaling Molecule.” SfrBm Annual Conference
 2018-2019 Co-Chair of Organizing Committee with Linus Pauling Institute Director Richard van Breemen, 10th Linus Pauling Institute International Conference with SfrBm Regional Symposium
 2015-2016 Scientific Committee member and Chair of the session on Cellular Metabolic Stress. Second Conference of the Latin American Chapter of the Cell Stress Society International. Bogotá, Colombia, April 2016

2.3. Scientific Journals Editorial Roles

Oxidative Medicine and Cellular Longevity

- 2020-Present Lead Guest Editor. Annual Special Issue on “Molecular Basis of Redox Signaling” ([Annual Special Issue on "Molecular Basis of Redox Signaling"](#))
 2017-2018 Lead Guest Editor. Special Issue on “Molecular Basis of Redox Signaling” (<https://www.hindawi.com/journals/omcl/si/343092/cfp/>)

Frontiers in Endocrinology

- 2019-Present Guest Editor. Research Topic on “Mitochondrial Dynamics in Endocrine Physiology and Disease”

<https://www.frontiersin.org/research-topics/10874/mitochondrial-dynamics-in-endocrine-physiology-and-disease>

Frontiers in Pharmacology

2018-Present Review Editor. Editorial Board of Experimental Pharmacology and Drug Discovery, a specialty of Frontiers in Pharmacology

Role: The review editor is a member of the Editorial Board, provides expert review for the journal and interacts collaboratively with authors and editors to improve the manuscripts.

2.4. Reviewer Activities

Grant proposals

2019-Present Ad hoc Reviewer: Department of Defense - Congressionally Directed Medical Research Programs (CDMRP) - Neurofibromatosis Research Program (NFRP) (4-5 proposals/year)

2018-Present Ad hoc Reviewer: Florida Breast Cancer Foundation (6 proposals/year)

2018 Ad hoc Reviewer: The United States – Israel Binational Science Foundation (2 proposals)

2018 Ad hoc Reviewer: The Missouri Spinal Cord Injury/Disease Research Program (2 proposals)

2015 External reviewer for the CSIC, Universidad de la República, Montevideo, Uruguay, (2 proposals)

Manuscripts (Ad hoc reviewer)

2018-present ~ 6-7 manuscripts per year

2015-2017 ~ 4 manuscripts per year

2011-2015 ~ 1 manuscript per year

Redox Biology; Free Radical Biology and Medicine; Journal of Neurochemistry; Archives in Biochemistry and Biophysics; Proceedings of the National Academy of Sciences; International Journal of Neurology and Neurotherapy; Essays in Biochemistry; Frontiers in Pharmacology; Biochimie; Free Radical Research; Cell Death Discovery

2.5. Professional Memberships

2018-Present Member, Cancer Biology Research Program, Knight Cancer Institute, Oregon Health & Science University (OHSU)

2015-Present American Society for Biochemistry and Molecular Biology (ASBMB)

2014-Present Cell Stress Society International (CSSI)

2008-Present Society for Redox Biology and Medicine (SfRBM)

2009-2013 Society for Neuroscience (SfN)

3. Service to the Public – Professionally related

N/A

4. Service to the Public (non-professionally related) (optional)

N/A

5. Media and Public Relations

- 2022 Paper published in Redox Biology was highlighted in IMPACT magazine (College of Science, OSU) and picked up by multiple science news sites ush as EurekAlert.org, ScienceDaily.com, KTVL.com.
<https://science.oregonstate.edu/impact/2022/02/oregon-state-researchers-identify-potential-new-means-of-slowing-neurodegenerative>
- 2021 Work presented at the ASBMB annual conference was highlighted in ASBMB today.
<https://www.asbmb.org/asbmb-today/science/043021/targeting-nitrated-proteins-could-lead-to-new-glio>
- 2021 FASEB Hispanic Heritage Month / Faces of FASEB.
<https://www.faseb.org/diversity-equity-and-inclusion/blending-traditions>
- 2019 Paper published in the Journal of Biological Chemistry was picked up by multiple science news sites.
 EurekAlert! AAAS <https://www.eurekalert.org/news-releases/548579>
- 2015 Paper published in the Journal of Biological Chemistry was picked up by multiple science news sites.
 Science Daily <https://www.sciencedaily.com/releases/2015/08/150807092403.htm>

E. AWARDS

Honors

- July 2022-present **The Hartmann Faculty Scholar**
 Department of Biochemistry and Biophysics, OSU

National and International Awards

- 2014 Travel Award from Seahorse Bioscience to attend the Society for Redox Biology and Medicine (SfRBM) Annual Meeting. Seattle, WA
- 2011 Travel Award. SfRBM Annual Meeting. Atlanta, GA
- 2009 Travel Award. SfRBM Annual Meeting. San Francisco, CA
- 2005 Young Investigator Award. SfRBM IV Meeting of the South American Group. Águas de Lindóia, Brazil
- 2001 Florencio Fiorini Annual Award “Avances en Neumonología” for the work “Classic and non-classic pathways of antigen presentation and cytotoxicity in tuberculosis patients” Authors: De la Barrera S, Alemán M, Beigier-Bompadre M, Franco MC, Abbate E, Isturiz MA, Sasiain MC. Buenos Aires, Argentina

Fellowships

- 2008-2009 Goldsmith postdoctoral fellowship. Burke Neurological Institute, Weill Medical College of Cornell University, NY

- 2004-2008 National Council of Scientific and Technical Investigation Doctoral fellowship. Buenos Aires, Argentina
- 2003-2004 National Agency for Scientific and Technological Promotion Doctoral fellowship. Buenos Aires, Argentina
- 2001-2002 Rodolfo H. Aztiria Graduate fellowship. National Academy of Medicine, Buenos Aires, Argentina

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SSN: ***-**-****

Nationality: USA

eRA commons ID: Kyung.Kim

Education

B.S. Biochemistry, Yonsei University, Korea, 1988
M.S. Organic Chemistry, Pohang University of Science & Technology, Korea. 1991
Ph.D. Biochemistry/Organic Chemistry, Ohio State University. 1997
Postdoctoral Research Associate, Yale University, New Haven, CT, 1998-2002

Professional Experience

Mar-Oct 1988	Military Service (Korean Army)
1989-1990	Teaching/Research Assistant, Pohang University of Science & Technology
1991-1992	Research Scientist (Organic Synthesis Lab), Korea Institute of Science & Technology (KIST), Seoul, Korea
1992-1997	Teaching/Research Assistant, Ohio State University, Columbus, OH
1998-2002	Postdoctoral Research Associate, Yale University, New Haven, CT
2002-2008	Assistant Professor, University of Kentucky
2008-present	Associate Professor, Pharmaceutical Sciences, University of Kentucky
2019-present	President, Arisu Therapeutics Inc, Lexington, KY, USA

Professional Fellowships, Awards, and Honors

1984-1987	Yonsei University, Full Tuition Fellowship
1997	Ohio State University, Graduate Student Alumni Research Award (GSARA)
2007	Junior Faculty Research Excellence Award (Pharmaceutical Science Dept, UK)
2011	Selected as one of Emerging Investigators by Mol. BioSyst. (Royal Society of Chemistry)

Grant Review Panels

2008 – present	Netherlands Organisation for Scientific Research (NWO): Division for Chemical Sciences, Netherlands (Feb 2008, 2012, 2016)
2011 - 2017	NIH Peer Review Committee: ZRG1 BMCT-C(09) Study Section, ad hoc reviewer (at least once a year until 2017)
2011 - present	NIH Peer Review Committee: Drug Discovery & Molecular Pharmacology, ad hoc reviewer (at least once a year until 2016)
2016 – 2017	Candidate Reviewer for the Lister Institute Research Prizes, UK
2019	Reviewer for Flanders Innovation & Entrepreneurship, Belgie (Feb-Mar)
2018 - present	NIH Peer Review Committee: F09B Study Section (Mar 5-6, June 25-26, 2018)

Publications

Peer-reviewed research articles

1. DH Kim, **KB Kim**, Design of a Novel Type of Zinc-Containing Protease Inhibitor, *J. Am. Chem. Soc.*, 113, 3200-3202 (1991)
2. DH Kim, YS Shin, **KB Kim**, The Structural Feature of S1' Subsite of Carboxypeptidase A, *Med. Chem. Lett.*, 1, 317-322 (1991)
3. DH Kim, **KB Kim**, The Function of S1' Subsite Pocket of Carboxypeptidase A, *Bioorg. Med. Chem. Lett.*, 1, 323-326 (1991)
4. DH Kim, YM Kim, Z-H Li, **KB Kim**, SY Choi, M Yun, S Kim, A New Type of Carboxypeptidase A Inhibitor, *Pure & Applied Chemistry*, 6, 721-728 (1994)
5. **KB Kim**, EJ Behrman, A New Synthesis of Sucrose-6'-Phosphate, *Carbohydrate Research*, 270, 71-75 (1995)
6. **KB Kim**, EJ Behrman, Conversion of Nucleosides to Cyclic Dinucleoside Dipyrophosphates, *Nucleosides & Nucleotides*, 16, 81-85 (1997)
7. **KB Kim**, EJ Behrman, A New Synthesis of Symmetrical P1, P2-Dinucleoside-5'-Pyrophosphates, *Nucleosides & Nucleotides*, 18, 51-54 (1999)
8. **KB Kim**, EC Behrman, EJ Behrman, On the Conformation of UDPG, A Sugar Nucleotide, *Nucleosides & Nucleotides*, 18, 1055-1056 (1999)

9. Ny Sin, **KB Kim**, M Elofsson, L Meng, H Auth, BHB Kwok, CM Crews, Total Synthesis of the Potent Proteasome Inhibitor Epoxomicin: A Useful Tool for Understanding Proteasome Biology, *Bioorg. Med. Chem. Lett.*, 9, 2283-2288 (1999)
10. **KB Kim**, J Myung, N Sin, CM Crews, Proteasome Inhibition by the Natural Product Epoxomicin and Dihydroeponefmycin: Insights into Specificity and Potency, *Bioorg. Med. Chem. Lett.*, 9, 3335-3340 (1999)
11. **KB Kim**, EC Behrman, CE Cottrell, EJ Behrman, On the Conformation of UDP-Glc, A Sugar Nucleotide, *J. C. S. Perkin Trans 2*, 4, 677-682 (2000)
12. M Groll, **KB Kim**, N Kairies, R Huber, CM Crews, Crystal Structure of Epoxomicin:20S Proteasome Reveals Molecular Basis for Selectivity of α' , β' -Epoxyketone Proteasome Inhibitors, *J. Am. Chem. Soc.*, 122, 1237-1238 (2000)
13. K Schwarz, R de Giuli, G Schmidtke, S Kostka, M van den Broek, **KB Kim**, M Messerle, UH. Koszinowski, CM Crews, R Kraft, M Groettrup, The Selective Proteasome Inhibitors Lactacystin and Epoxomicin can be used to either Up- or Downregulate Antigen Presentation at Nontoxic Doses, *J. Immunol.*, 164(12), 6147-6157 (2000)
14. J Myung*, **KB Kim** *, K Lindsten, NP. Dantuma, CM. Crews, Lack of Proteasome Active Site Allosterism as Revealed by Subunit Specific Inhibitors, *Molecular Cell*, 7, 411-420 (2001)
15. Myung, **KB Kim**, CM. Crews, The Ubiquitin-Proteasome Pathway and Proteasome Inhibitors, *Med. Res. Rev.*, 21, 245-273 (2001)
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83. S Kwon, **KB Kim**, Y Yoon & W Lee, Pharmacokinetic aspects of the clinically used proteasome inhibitor drugs and efforts toward the novel nanoparticulate delivery systems, *J Pharm Investigation*, 51, 483-502 (2021). DOI: <https://doi.org/10.1007/s40005-021-00532-0>
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86. S Fukuda, A Varshney, B Fowler, K Ambati, T Yasuma, J Liang, A Pandey, J Magagnoli, L Pandya, T Cummings, S Hirahara, R Yasuma, R Makin, M Wang, K Baker, K Marion, X Huang, E Baghdasaryan, M Ambati, V Ambati, J Sun, S Wang, D Banerjee, V Bonilha, G Tolstonog, G Schumann, I Sciamanna, C Spadafora, J Erwin, A Paquola, J Herdy, Y Ogura, H Terasaki, T Oshika, S Darwish, R Singh, **KB Kim**, E Magner, X Liu, J Liu, J Hardin, C Bennett, S Feldman, J Aguirre, D Hinton, S Sadda, N Kerur, K Parang, F Gage, B Werner, S Sutton, B Gelfand, J Ambati, Alu complementary DNA is enriched in atrophic macular degeneration and triggers retinal pigmented epithelium toxicity via cytosolic innate immunity, *Science Advances*, 7(40), eabj3658 (2021). PMID: PMC8480932
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Research Grants

Ongoing

NIH R01 AG073122 (Kim, PI)

08/01/2021 - 04/30/2026

Immunoproteasome inhibitors for the treatment of Alzheimer's disease

The goal is to develop macrocyclic peptide epoxyketone-based drugs to alleviate cognitive deficits in Alzheimer's disease (AD) patients independently of amyloid deposits and tau polymerization.

Arisu Therapeutics (Kim, PI)

11/01/2019 - 10/31/2022

Development of dual inhibitors targeting the immunoproteasome.

The goal is to develop novel immunoproteasome-selective inhibitors for inflammatory disorders.

NIH R01 AI139141-A1 (Kim, co-I)

12/01/2018 - 11/30/2023

Targeting human plasma cells to overcome humoral responses in transplantation

This research aims to establish the basis for therapeutic inhibition of the ubiquitin-proteasomes and autophagy to eliminate HLA antibody-producing plasma cells (PC) for improving transplant outcomes.

PI: Driscoll (University Hospitals at Cleveland)

Completed Research Support

NIH R01 CA188354, Kim (PI)

07/07/2014 - 05/31/2020

Non-peptide proteasome inhibitors as a novel anticancer agent

The goal is to develop next-generation proteasome inhibitors which are effective in treating patients with multiple myeloma (MM) refractory to existing proteasome-targeting drugs as well as patients with solid cancers

NIH R01 CA128903, Kim (PI)

05/01/2010 - 04/30/2016

Title: Chemical probes of immunoproteasome function in cancer

The goal is to validate the immunoproteasome as a pharmacological target of UK-101 and investigate the functions of the immunoproteasome in cancer.

NIH R01EY016782-01A2 (Kim, co-I)

08/01/2007 - 07/31/2012

Molecular Targets of Corneal Anti-angiogenesis

The goal is to understand molecular mechanisms of anti-angiogenic natural products withaferin A.

PI: Mohan (50%)

NIH RO1 ES014849-01 (Kim, co-I, 10%)

08/15/2006 - 07/31/2011

NIEHS (Kim, co-I, 10%)

AHR-PROTAC, a novel aryl hydrocarbon receptor antagonist.

The goal is to develop a novel class of pure AHR antagonists using the Protac approach.

PI: Swanson (20%)

DOD PCRP (co-I: Kim, 5%)

03/01/2008 - 02/28/2011

Idea Development Award

New proteolysis inducing heterobifunctional molecules (PROTACs)

The goal of this project is to develop novel PROTACs for prostate cancer treatment.

PI: Francis T.F. Tsai (Baylor College of Medicine)

NIH R01CA131059 (Kim: co-I, 6.25%)

01/01/2008 - 12/31/2011

Novel Modular Vascular Patterning Assay for HTS

The goal is to develop an innovative drug discovery platform that will facilitate testing hundreds of thousands of drug candidates for angiogenesis-related diseases. In addition, through the successful implementation of innovative technology advancements in 3D assay development, we hope to deliver a novel high content high throughput screening platform for drug discovery.

PI: Mohan (30%)

NIH R15 CA156601 (co-PI: Kim, 10%)

12/01/2010 - 11/30/2013

Targeting the immunoproteasome as a novel colorectal cancer therapy

The goal is to determine the expression and genetic polymorphisms of LMP2, a major catalytic subunit of the immunoproteasome, and their influence on cellular sensitivity to UK-101, an LMP2-specific inhibitor in colon cancer.

PI: Lee (15%)

Contribution to Science (From NIH biosketch)

- 1. Development of carfilzomib (Kyprolis®) for treating patients with multiple myeloma.** I am one of the contributing inventors to the initial development of carfilzomib (Kyprolis®) at Yale University. Following the FDA approval of bortezomib (Velcade®) in 2003, the 2012 FDA approval of carfilzomib firmly validated the proteasome as an effective anticancer target. The successful development of carfilzomib allowed us to fulfill one of the mandates of federally-supported research to show our research's societal benefit.
 - a. CM Crews, M Eloffson, U Splittgerber, N Sin, KB Kim, Enzyme inhibition, US Patent No. 7,476,650 (2009)
 - b. KB Kim, CM Crews, From Epoxomicin to Carfilzomib: Chemistry, Biology, and Medical Outcomes, Natural Product Reports, 30, 600-604 (2013). PMID: PMC3815659
 - c. KC Carmony, W Lee and KB Kim, High-Resolution Snapshots of Proteasome Inhibitors In Action Revise Inhibition Paradigms and Inspire Next-Generation Inhibitor Design, ChemBioChem, 17, 2115-2117 (2016). PMID: PMC5192039
- 2. Development of PROTACs (PROteolysis TARgeting Chimeras):** a protein-clearing technology. The temporal and spatial control of protein functions is vital in investigating complex biological processes in vitro and in vivo. However, while manipulating protein expression levels at the DNA or RNA levels has provided a powerful tool to study protein function, their applications are somewhat limited by the lack of temporal and spatial control. A targeted protein degradation strategy employing small molecules called PROTACs has been developed to overcome this.

I was involved in the initial design and development of PROTAC technology, which recruits targeted proteins to the ubiquitin-proteasome pathway for degradation while working at Yale University (Crews Lab). Since then, I have served as the primary investigator, a co-investigator, or a lead author in several PROTAC studies funded by NIH. PROTAC molecules developed by several start-ups are currently on clinical trials for clinical development.

- a. KM Sakamoto, KB Kim, A Kumagai, F Mercurio, CM Crews, RJ Deshaies, Protacs: Chimeric Molecules that Target Proteins to the SCF Complex for Ubiquitination and Degradation, *Proc. Natl. Acad. Sci. USA*, 98, 8554-8559 (2001). PMID: PMC37474
 - b. H Lee, D Puppala, E-Y Choi, H Swanson, KB Kim, Targeted Degradation of Aryl Hydrocarbon Receptor via the PROTAC Approach: A Useful Chemical Genetic Tool, *ChemBioChem*, 8, 2058-2062 (2007). PMID: 17907127
 - c. K Cyrus, M Wehenkel, E-Y Choi, H Swanson, KB Kim, Two-headed PROTAC: An effective new tool for targeted protein degradation, *ChemBioChem*, 11, 1531-1534 (2010). PMID: PMC3852688
3. **Development of chemical probes for proteasome biology:** While the proteasome has been widely known as a critical player in the ubiquitin-mediated protein degradation process, the functional understanding of individual catalytic subunits in cancer settings is limited due to the lack of appropriate molecular probes. To meet this challenge, we have pioneered the development of immunoproteasome catalytic subunit LMP2(β 1i)-specific inhibitor (dubbed as UK101). We have also developed multiple subunit-selective chemical probes that can inhibit the activity, cross-link two subunits, or label catalytically active subunits fluorescently. These probes have enhanced our understanding of proteasomes' previously untapped roles and will continue to provide excellent tools to unravel new proteasome functions. I served as the primary investigator or co-investigator in these studies.
- a. KC Carmony, D-M Lee, Y Wu, KB Kim, Fluorescent Chemical Probes of the Immunoproteasome, *Cell Biochemistry and Biophysics*, 67, 91-101 (2013). PMID: PMC3758798
 - b. N Kerur, Y Kim, D Banerjee, S Fukuda, D Fu, A Varshney, R Yasuma, BJ Fowler, A Bastos-Carvalho, T Yasuma, Y Hirano, V Serbulea, Y Kajiwara, K Ambati, KB Kim, DR Hinton, N Leitinger, JC Cambier, JD Buxbaum, MC Kenney, SM Jazwinski, AP West, KA Fitzgerald, BD Gelfand, J Ambati, cGAS drives non-canonical NLRP3 inflammasome in age-related macular degeneration, *Nature Medicine*, 24, 50-61 (2018). PMID: PMC5760363
 - d. MJ Lee, Z Miller, J Park, D Bhattarai, W Lee & KB Kim, "H727 cells are intrinsically resistant to the proteasome inhibitor carfilzomib, yet remain dependent on the proteasome for their survival and growth", *Scientific Reports*, 9(1):4089 (2019). PMID: PMC6411724
4. **Development of immunoproteasome inhibitors for the treatment of neurodegenerative diseases:** In recent years, we showed for the first time that inhibition of the immunoproteasome (iP), which is upregulated in reactive glial cells near amyloid- β (A β) deposits in the brains of patients with Alzheimer's disease (AD), leads to improved cognitive function in an AD mouse model of A β amyloidosis (Tg2576) via suppression of microglia-mediated inflammation, independent of A β accumulation. The goal of our current research efforts funded by NIH/NIA (R01 AG073122) is to develop iP inhibitor-based first-in-class AD drugs. In addition, to accelerate the AD drug development process, I founded a start-up (Arisu Therapeutics, Lexington, KY) in 2019.
- a. IJ Yeo, MJ Lee, A Baek, Z Miller, D Bhattarai, YM Baek, HJ Jeong, YK Kim, DE Kim, JT Hong & KB Kim, A dual inhibitor of the proteasome catalytic subunits LMP2 and Y attenuates disease progression in mouse models of Alzheimer's disease, *Scientific Reports*, 9, 18393 (2019). PMID: PMC6895163
 - b. D Bhattarai, MJ Lee, A Baek, IJ Yeo, Z Miller, YM Baek, S Lee, DE Kim, JT Hong & KB Kim, LMP2 inhibitors as a potential treatment for Alzheimer's disease, *J. Med. Chem.*, 63, 3763-3783 (2020). PMID: 32189500
 - c. MJ Lee, D Bhattarai, H Jang, A Baek, IJ Yeo, Seongsoo Lee, Z Miller, Sukyeong Lee, JT Hong, D-E Kim, W Lee & KB Kim, Macrocyclic immunoproteasome inhibitors as a potential therapy for Alzheimer's disease, *J. Med. Chem.*, 64, 10934-10950 (2021). PMID: 34309393

Patents

1. Patent No. US 6,831,099 (2004), Enzyme inhibition. Craig Crews, Mikael Elofsson, Ute Splittgerber, Ny Sin and **Kyung Bo Kim**
2. Patent No. US 7,476,650 (2009), Enzyme inhibition. Craig Crews, Mikael Elofsson, Ute Splittgerber and **Kyung Bo Kim**
3. Patent No. US 7,642,369 (2009), Epoxyketone-based immunoproteasome inhibitors, Abby Ho and **Kyung Bo Kim**
4. Patent No. US 8,735,178 (2014), Withanolides, probes and binding targets and methods of use thereof, Paola Bargagna-Mohan, **Kyung Bo Kim** and Royce Mohan
5. Patent No. US 9,493,439 (2016): Proteasome Inhibitors, **Kyung Bo Kim**, Zachary Miller, Do-Min Lee, Chang-Guo Zhan, Woojin Lee, Dong-Eun Kim

6. Patent No. US 9,566,341 (2017): Compounds including Cox inhibitor moiety and enhanced delivery of active drugs using same, Audra Stinchcomb, **Kyung Bo Kim**, Ragotham Reddy Pinninti, Priyanka Ghosh, and Kalpana Paudel
7. Patent No. US 9,586,946 (2017): Selective immunoproteasome inhibitors with non-peptide scaffolds, Chang-Guo Zhan, **Kyung Bo Kim**, Vinod Kasam, Na-Ra Lee
8. Patent filed (No. Appl. US2019/045350, August 2019): Proteasome inhibitors, **Kyung Bo Kim** (PCT International Application No. PCT/US2019/045350 (February 2020))

Invited Seminars

1. Ohio State University, Department of Biochemistry (May 2002)
2. University of Kentucky, Graduate Center for Nutritional Sciences (Sep 2003)
3. Pohang University of Science & Technology, Department of Chemistry (Sep 2004)
4. Ohio State University, College of Pharmacy, Department of Medicinal Chemistry (May 2004)
5. Society of Toxicology, Use of Chemical Genetics in Functional Genomics, Continuing Education Courses (Baltimore, March 2004)
6. University of Kentucky, Department of Molecular and Biomedical Pharmacology, (Sep 2004)
7. Kentucky Lung Cancer Research Program Symposium (May 2005)
8. Korean Bioscientist Association of Central Kentucky, Novel Chemical Knock-out Strategies, (Sep 2006)
9. Proteolix, South San Francisco (May 3-4, 2007), "A Chemical Genetic Approach: A Useful Tool for Understanding Proteasome Biology"
10. Medical College of Wisconsin, Milwaukee, WI (Oct 2-3, 2007), Department of Biochemistry, "Chemical Genetic Approaches to Ubiquitin-Proteasome Biology"
11. Korean Association of Pharmaceutical Scientists, Seoul, Korea, Oct 27, 2008
12. Chungbuk National University, Cheong-Joo, Korea, College of Pharmacy, Oct 28, 2008
13. Sung Kyun Kwan University, Su-won, Korea, College of Pharmacy, Oct 31, 2008
14. UK Drug & Experimental Therapeutic seminar, Nov. 18, 2009
15. Keimyung University, Taegu, Korea, May 13, 2010
16. University of North Carolina at Chapel Hill, Dept of Medicinal Chemistry, Nov 2, 2010
17. University of Kentucky, Cancer Signaling, MCC, Mar 8, 2012
18. University of Kentucky, Experimental Therapeutics, MCC, Mar 13, 2012
19. University of Maryland, Baltimore, College of Pharmacy, June 18, 2012
20. Ubiquitin Drug Discovery & Diagnostics 2012, Invited speaker (distinguished faculty), Philadelphia, July 23-25, 2012
21. University of Texas-Dallas, Department of Chemistry, Mar 8, 2013
22. University of Illinois-Chicago, Department of Chemistry, Oct 8, 2013
23. New Frontiers in Systems and Convergence Biotechnology, BK21 plus Division of Bioscience & Biotechnology, Konkuk University, Korea, May 30, 2014, "From epoxomicin to carfilzomib and beyond: chemistry, biology, and medical outcomes."
24. Sung Kyun Kwan University, College of Pharmacy, Suwon, Korea, May 29, 2014, "From epoxomicin to carfilzomib and beyond: chemistry, biology, and medical outcomes."
25. American Chemical Society, 248th National meeting & Exposition, San Francisco, Aug 10-14, 2014, "PROTACS: Two heads are better than one."
26. Korea Food and Drug Administration, Osong, Korea, May 19, 2016, "From Epoxomicin to Carfilzomib (Kyprolis): Development of New Anticancer Drug and Medical Outcomes"
27. University of Kentucky, Experimental Therapeutics, MCC, Sep 28, 2016
28. 47th Annual meeting of Korean Society of Pharmaceutical Sciences and Technology (KSPST), New Horizons in Pharmaceutical Science and Technology, Nov 30-Dec 1, 2017, "Developing Next-Generation Proteasome Inhibitors for Multiple Myeloma and Neurodegenerative Diseases: Biopharmaceutical Considerations."
29. Gacheon University, College of Pharmacy, Incheon, Korea, Dec 4, 2017, "Developing Next-Generation Proteasome Inhibitors for Multiple Myeloma and Neurodegenerative Diseases"
30. Wright State University, April 18, 2018, Next-generation proteasome inhibitors for multiple myeloma and neurodegenerative diseases.
31. Sanders Brown Center on Aging, Sep. 10, 2018, "The immunoproteasome as a therapeutic target for neurodegenerative diseases."
32. Seoul National University College of Medicine, June 30, 2021, "Proteasome-targeted approach for neurodegenerative diseases."

Conferences

1. Agustin Rodriguez-Gonzalez, **Kyung Bo Kim**, Craig M. Crews, Raymond J. Deshaies, Kathleen M. Sakamoto; Development of PROTacs to target the estrogen receptor for ubiquitination and degradation in breast cancer cells. Abstract Number #2423, 97th AACR Annual Meeting April 1-5, 2006, Washington, DC
2. Gordon Research Conference (Poster presentation), Targeted Degradation of Aryl Hydrocarbon Receptor (AHR) by PROTAC **Kyung Bo Kim**, Protease and protease inhibitors (July 2-7, 2006, Colby College)
3. 30th ACS National Medicinal Chemistry Symposium (Abstract #65, Poster presentation, Seattle, WA, June 25-29, 2006) Abby Ho, Royce Mohan, and **Kyung Bo Kim**
4. 30th ACS Medicinal Chemistry Symposium (Abstract# 65 Poster presentation, Seattle, WA, June 25-29, 2006) Kedra Cyrus, Yang-eon Kim, and **Kyung Bo Kim**
5. 232th ACS National meeting (Abstract # 205, Poster presentation, San Francisco, CA, Sep. 10-14, 2006) Abby Ho, Royce Mohan, and **Kyung Bo Kim**
6. 232th ACS National meeting (Abstract # 65, Poster presentation, San Francisco, CA, Sep 10-14, 2006) Kedra Cyrus, Yang-eon Kim, and **Kyung Bo Kim**
7. 233th ACS National meeting (Abstract # 168, Poster presentation, Chicago, IL, Mar 25-29, 2007) Hyosung Lee; Dinesh Puppala; Hollie Swanson and **Kyung-Bo Kim**, Title: Targeted Degradation of Aryl Hydrocarbon Receptor (AHR) by PROTAC: A Potential Approach to Chemoprevention
8. 39th Central Regional Meeting (Poster #253, Covington, KY, May 20-23, 2007), **Kyung-Bo Kim**, Title: A chemical genetics approach to modulate degradation of estrogen receptors and inhibit their function in breast cancer cells.
9. 39th Central Regional Meeting (Poster #252, Covington, KY, May 20-23, 2007), Hyosung Lee, Dinesh Puppala, Eun-Young Choi, Hollie Swanson, and **Kyung-Bo Kim**, Title: Targeted degradation of aryl hydrocarbon receptor via the PROTAC approach: A chemical genetic tool for AHR biology.
10. 39th Central Regional Meeting (Poster #369, Covington, KY, May 20-23, 2007), Abby Ho, Royce Mohan, and **Kyung-Bo Kim**, Title: Synthesis of the immunoproteasome catalytic subunit LMP2-specific modulators.
11. AACR 2009 – American Association of Cancer Researchers Annual Meeting, *April 18-22, 2009*, Denver, Colorado. Title (Poster): Effects of the chemical genetic inhibition of LMP2 in prostate cancer cells. (#4535) Marie Wehenkel and **Kyung Bo Kim**.
12. AACR 2010 – American Association of Cancer Researchers Annual Meeting, *April 17-21, 2010* in Washington, DC, Poster Presentation: Target validation of the LMP2 inhibitor, UK-101. (Abstract # 10-A-1408-AACR) Marie Wehenkel* and **Kyung Bo Kim**
13. Poster Presentation: Targeted inhibition of the immunoproteasome subunit LMP2 using UK-101 induces apoptotic cell death in colorectal cancer. (Abstract # 10-A-4181-AACR) Eun Ryoung Jang*, Marie Wehenkel, Kyunghwa Kim, Eun Y. Lee, **Kyung-Bo Kim**, and Woojin Lee
14. M Wehenkel and **KB Kim**, Target validation of the LMP2 inhibitor, UK-101, PPDUP 2010 – Proteomics of Protein Degradation and the Ubiquitin Pathways, June 6-8, 2010 in Vancouver, British Columbia, Canada (Abstract # 79)
15. K Cornish, S Mangold, M Wehenkel, JE Kim, A Ho, and **KB Kim**, Effect of the Chemical Genetic Inhibition of LMP2 on Nuclear Factor(kappa)B (NF-kB) Activation, PPDUP 2010 – Proteomics of Protein Degradation and the Ubiquitin Pathways, June 6-8, 2010 in Vancouver, British Columbia, Canada (Abstract # 44)
16. M Wehenkel and **KB Kim**, Target validation of the LMP2 inhibitor, UK-101, Cancer Research Day 2010 - April 14, University of Kentucky (Abstract # 57), **Awarded 1st Place in the Basic Science, Graduate Student Category**
17. ER Jang, M Wehenkel, K Kim, EY Lee, **KB Kim**, and W Lee, Targeted inhibition of the immunoproteasome subunit LMP2 using UK-101 induces apoptotic cell death in colorectal cancer, Cancer Research Day 2010 - April 14, University of Kentucky (Abstract #6)
18. KC Carmony, S Mangold, M Wehenkel, JE Kim, YK Ho, and **KB Kim**, Poster Presentation: Revisiting the role of LMP2 in the Nuclear Factor (kappa)B (NF- κ B) activation pathway, Cancer Research Day 2010 –April 14, University of Kentucky (Abstract # 81)
19. LK Sharma, NR Lee, KC Carmony, J Mark, and **KB Kim**, "Development of Activity-Based Fluorescent Probes Targeting the Immunoproteasome." 242nd National ACS Meeting and Exposition, Denver, CO, Division of Medicinal Chemistry, poster #17099, (Aug 28 – Sep 1, 2011).
20. LK Sharma, NR Lee, J Mark, and **KB Kim**, "Brightening The Immunoproteasome in Living Cells: Development of Activity-Based Fluorescent Probes Targeting LMP7 and LMP2". Pharmaceutics Graduate Student Research Meeting (PGSRM) 2011, School of Pharmacy, University of Wisconsin-Madison, oral presentation, (June 23-25, 2011).
21. NR Lee, KC Carmony, Y Wu, Z Miller, and **KB Kim**, Development of an immunoproteasome fluorescent substrate: A functional proteomics tool, AACR (Chicago, Mar 30-Apr. 4, 2012)
22. KC Carmony, LK Sharma & **KB Kim**, Development of a novel cross-linking strategy to identify intermediate proteasomes. (Abstract # 2231), AACR (Washington DC, Apr. 6-10, 2013)

23. ZC Miller, DL Lee, NR Lee, K Kim, W Lee & KB Kim, The development of non-covalent non-peptide inhibitors of the proteasome: exploring a series of proteasome-inhibiting pyrazoles (Abstract # 1021), AACR (Washington DC, Apr. 6-10, 2013)
24. KC Carmony & KB Kim, Development of a novel cross-linking strategy to identify distinct proteasome subtypes, Poster Presentation: Target validation of the LMP2 inhibitor, UK-101. (Abstract # 3236), AACR (Chicago, Mar 30-Apr. 4, 2014)
25. Z Miller & KB Kim, The Development of a Series of β 1i-Selective Peptide Epoxyketone Inhibitors Capable of Potentiating Carfilzomib Cytotoxicity in Human Myeloma Cell Lines. (Abstract # 7871), AACR (Chicago, Mar 30-Apr. 4, 2014)
26. Zachary Miller, Domin Lee, Na-Ra Lee, Lin Ao, Chang-Guo Zhan, Woon Lee, Dong-Eun Kim, Kyung-Bo Kim., Development of non-peptide pyrazole-based proteasome inhibitors as anticancer agents (Abstract # 179), American Chemical Society (248th National meeting & Exposition, San Francisco, Aug 10-14)
27. MinJae Lee and Kyung Bo Kim, Proteasome as a target to treat multiple myeloma with acquired resistance to bortezomib and carfilzomib, AACR (New Orleans, Apr 16-20, 2016)
28. MinJae Lee, Deepak Bhattarai and Kyung Bo Kim, Proteasome as a target to treat multiple myeloma with acquired resistance to bortezomib and carfilzomib (Experimental Biology 2017 at Chicago, USA, at April 22-26)
29. MJ Lee, IJ Yeo, A Baek, Z Miller, D Bhattarai, YM Baek, HJ Jeong, JY, W Lee, YK Kim, DE Kim, JT Hong, and KB Kim, A selective inhibitor of the proteasome subunits LMP2 and Y attenuates disease progression in mouse models of Alzheimer's disease (Abstract #P4-680), AAIC, (Los Angeles, July 14-18, 2019)

Supervision of Graduate Students, Post-doctoral Fellows, and Visiting Scientists

Graduate students (major advisor)

Dong Zhang, Pharmaceutical Sciences, 2001-2004
 Abby Ho, Graduate student (Pharmaceutical Sciences), 2003-2008, Ph.D.
 Kedra Cyrus, Graduate student (Pharmaceutical Sciences), 2003-2009, Ph.D.
 Hyosung Lee, Graduate student (Pharmaceutical Sciences), 2005-2010, Ph.D.
 Marie Wehenkel, Graduate student (Pharmaceutical Sciences), 2006-2011, Ph.D.
 Lalit Kumar, Graduate student (Chemistry), 2010-2012, Ph.D.
 Ji-Eun Park, MS., Graduate Student (Pharmaceutical Sciences), 2013-2015, M.S.
 Changwe Park, Graduate Student (Pharmaceutical Sciences), 2014-2016. M.S.
 Kim Carmony, Graduate Student (Pharmaceutical Sciences), 2010-2016, Ph.D.
 Lin Ao, Graduate Student (Pharmaceutical Sciences), 2011-2016, Ph.D.
 Zach Miller, Graduate Student (Pharmaceutical Sciences), 2011-2018, Ph.D.
 MinJae Lee, Graduate Student (Pharmaceutical Sciences), 2014-2019, Ph.D.

Graduate Student Awards

1. Kedra Cyrus, Medicinal Chemistry Division Travel Award, ACS, Seattle, \$900 (June 2006)
2. Abby Ho, Medicinal Chemistry Division Travel Award, ACS, Seattle, \$900 (June 2006)
3. Abby Ho, Schering Plough Travel Award, ACS, San Francisco, CA, \$2,000 (Sep 2006)
4. Abby Ho, UK Dissertation award for the academic year 2007-2008, \$16,000
5. Marie Wehenkel, Graduate School Academic Year Fellowship (2009), Kentucky Opportunity Fellowship (2009-2010), AFPE Pre-doctoral Fellowship (2009-2010), Selected as a Walmart scholar (and one of 6 AFPE presidential awardees) (2009)
6. Marie Wehenkel, UK Presidential Fellowship (2010-2011), AFPE Pre-doctoral Fellowship (2010-2011), Markey Cancer Research Day poster (1st prize, April 14, 2010)
7. Kimberly Carmony, AFPE Pre-doctoral Fellowship (2013-2014)
8. Zachary Miller, Graduate School Academic Year Fellowship (2014-2015, 2015-2016)
9. Lin Ao, UK Dissertation award for the academic year 2007-2008, \$20,000, AFPE Pre-doctoral Fellowship (2014-2015, 2015-2016)

Visiting Professor

Jin-Tae Hong, Ph.D. Associate Professor, College of Pharmacy, Chungbuk National University, Korea, July 2007 –2008

Postdoctoral Fellow

Sun-Hee Baek, Ph.D., 2002 - 2006
 Ying Wu, Ph.D., 2010 - 2013
 Qingquan Zhao, Ph.D., Oct 2014 - 2016
 Kim Carmony, Ph.D., May 2016 - Dec 2016
 Zach Miller, Ph.D., April 2018 - 2019
 Min Jae Lee, Ph.D. July 2019 - June 2020

Deepak Bhattarai, Ph.D., April 2016 - May 2020
Ji Eun Park, Ph.D., Nov. 2021 – present
Chhabi Lal Chaudhary., Mar 2022 - present

Lab Technician

Yun-Seong Jeong, M.S., 2003
Hyosung Lee, M.S., 2003-2005
Hyung-Jun Han, M.S. 2008-2009
Ji-Eun Kim, M.S. 2009-2010
Do-Min Lee, M.S. 2010-2013
Min Jae Lee, 2013-2014
Yujin Jang, 2014-2016

Current Positions of Former Mentees

Abby Ho (Ph.D.): Staff Scientist, Virology, Armed Forces Research Institute of Medical Sciences, Washington DC
Marie Wehenkel (Ph.D.): Staff Scientist (Immunology Dept) at St. Jude Children's Research Hospital
Ying Wu (Postdoc): Staff Scientist, UK Tobacco Research & Development Center, UK, KY
Lalit Sharma (Ph.D.): Scientist, Nurix. Inc, San Francisco, CA
Hyosung Lee (Ph.D.): Chair & Professor, Dept. of Pharmaceutical Sciences & Engineering, Seowon University, Korea
Kim Carmony (Ph.D.): Senior Medical Writer at MedErgy HealthGroup, Philadelphia, PA
Min Jae Lee (Ph.D.): Postdoctoral Associate at Yale University (Hochstrasser lab), New Haven CT

THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
February 23, 2023

Subject: Proposed Regulation FIU-2507 Examinations and Assessments

Proposed Committee Action:

Recommend that the Florida International University Board of Trustees approve the proposed Regulation FIU-2507 Examinations and Assessments and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the Florida Board of Governors.

Background Information:

The purpose of this new regulation is to document that Florida International University (FIU)'s examinations and assessments are confidential and/or exempt from disclosure under section 119.07(1), Florida Statutes, and section 24(a), Article I, Florida Constitution, as provided in section 1008.23, Florida Statutes (Sunshine Law).

This new regulation references FIU's processes related to the access, maintenance and destruction of examination and assessment instruments and related developmental materials and workpapers for all University academic units, testing centers, technology services, and online curriculum management systems.

FIU specifically defines examinations and assessments as any "instrument" that contributes to the final grade of an academic course, or required for program admission, placement, certification, or graduation.

Florida Board of Governors (BOG) Regulation 3.005(1), Examinations and Assessments, provides, "All examination and assessment instruments, including developmental materials and workpapers directly related thereto, that are prepared, prescribed or administered by a university are exempt from disclosure under section 119.07(1), Florida Statutes, and section 24(a), Article I, Florida Constitution, as provided in section 1008.23, Florida Statutes."

BOG Regulation 3.005(2) provides "Access, maintenance and destruction of examination and assessment instruments and related developmental materials and workpapers shall be governed by university regulation..."

Supporting Documentation: Regulation FIU-2507 Examinations and Assessments

Facilitator/Presenter: Elizabeth M. Bejar

**THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES
FLORIDA BOARD OF GOVERNORS**

NOTICE OF PROPOSED REGULATION

REGULATION NO.: FIU-2507

REGULATION TITLE: Examinations and Assessments

SUMMARY: The purpose of this new regulation is to document that Florida International University(FIU)'s examinations and assessments are confidential and/or exempt from disclosure under section 119.07(1), Florida Statutes, and section 24(a), Article I, Florida Constitution, as provided in section 1008.23, Florida Statutes (Sunshine Law).

This new regulation references FIU's processes related to the access, maintenance and destruction of examination and assessment instruments and related developmental materials and workpapers for all University academic units, testing centers, technology services, and online curriculum management systems.

FIU specifically defines examinations and assessments as any "instrument" that contributes to the final grade of an academic course, or required for program admission, placement, certification, or graduation.

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, <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, devillee@fiu.edu, 305.348.2103.

AUTHORITY: Board of Governors Regulation 3.005.

NAME OF PERSON INITIATING PROPOSED REGULATION:

Dr. Elizabeth Bejar, Interim Provost, Executive Vice President and Chief Operating Officer, and Senior Vice President, Division of Academic and 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.

THE CONTACT PERSON REGARDING THIS REGULATION IS:

Eli Deville, Departmental Administrator, Office of the General Counsel,
Florida International University, 11200 SW 8th Street, PC 511, Miami, FL 33199
Email: devillee@fiu.edu | Phone: 305.348.2103 | Fax: 305.348.3272

DATE OF PUBLICATION: January 23, 2023

THE FULL TEXT OF THE REGULATION IS PROVIDED BELOW:

FIU-2507 Examinations and Assessments

1. All examination and assessment instruments, including developmental materials, answer keys and workpapers directly related thereto, that are prepared, prescribed or administered by Florida International University are confidential and/or exempt from disclosure under section 119.07(1), Florida Statutes, and section 24(a), Article I, Florida Constitution, as provided in section 1008.23, Florida Statutes (Florida Board of Governors Regulation 3.005).
2. Definitions:
 - a. An examination or assessment instrument is any item that contributes to the final grade of an academic course, or required for program admission, placement, certification, or graduation.
 - i. Examination and assessment instruments refer only to the actual instrument and not student examination responses. When an instrument is completed by a student, it becomes an education record and is covered in Regulation 108 Access to Student Education Records.
3. This regulation governs the access, maintenance and destruction of examination and assessment instruments and related developmental materials and workpapers for all University academic units, testing centers, technology services, and online curriculum management systems.
 - a. The University protects the security and confidentiality of examination and assessment instruments from unauthorized access or disclosure through the utilization of secure identity authentication systems.
 - b. The University's Division of Information Technology maintains the security of such instruments through the encrypted electronic learning management systems (LMS) via access controls provided to the university community. Academic Units/Faculty who store printed instruments must utilize secure locked storage.
 - c. The University requires third-party contractors responsible for administering or proctoring examinations or assessments instruments to comply with this regulation. Agreements with such third-party contractors shall include terms specifying FIU's requirements for security standards, contractor's confidentiality obligations, destruction of the instruments, etc.
 - d. The University adheres to the minimum requirements of the General Records Schedule for Universities for the destruction of obsolete examination and assessment instruments and related materials, which may be amended from time to time.
 - e. The academic unit, office or faculty, in general, will not grant access to, or authorize disclosure of, examination and assessment instruments to faculty, staff and students outside of the regular examination or testing; this does not preclude internal requests however, access may be authorized on a case-by-case basis or established department procedures, and or pursuant to UFF-BOT Collective Bargaining Agreement.

Authority: Section 7(d), art. IX, Fla. Const.; Section 1008.23, Florida Statutes. BOG Regulation 3.005. History: New

THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
February 23, 2023

Subject: Proposed Amendment to Regulation FIU-1305 Students in Military Service

Proposed Committee Action:

Recommend that the Florida International University Board of Trustees approve the revisions to Regulation FIU-1305 Students in Military Service and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the Florida Board of Governors.

Background Information:

In accordance with revisions to Board of Governors' Regulation 6.013 Military Veterans and Active Duty Students, proposed changes to this regulation include changing the title to Military Veterans and Active Duty Students, include details concerning enrollment and registration options for students called into active military service, inclusion of a description of how veterans' military training, courses, and occupations may be evaluated to earn undergraduate college credit, and references the location of publicly available information regarding the process for awarding such credit and any associated appeal.

Florida Board of Governors Regulation 6.013, Military Veterans and Active Duty, addresses changes in section 1004.096, Florida Statutes from the 2020 legislative session, implements the Policy Regarding the Evaluation and Awarding of Postsecondary Credit for Prior Military Training, Courses, and Occupations, and guides the new statewide review process that will result in the equivalency list, while adding additional expectations for relevant institutional policies and procedures.

Supporting Documentation: Regulation FIU-1305 Students in Military Service

Facilitator/Presenter: Elizabeth M. Bejar

**THE FLORIDA INTERNATIONAL UNIVERSITY BOARD OF TRUSTEES
FLORIDA BOARD OF GOVERNORS**

NOTICE OF PROPOSED AMENDMENT TO REGULATION

REGULATION NO.: FIU-1305

REGULATION TITLE: Students in Military Service

SUMMARY: In accordance with revisions to Board of Governors' Regulation 6.013 Military Veterans and Active Duty Students, proposed changes to this regulation include changing the title to Military Veterans and Active Duty Students, include details concerning enrollment and registration options for students called into active military service, inclusion of a description of how veterans' military training, courses, and occupations may be evaluated to earn undergraduate college credit, and references the location of publicly available information regarding the process for awarding such credit and any associated appeal.

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, <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, devillee@fiu.edu, 305.348.2103.

AUTHORITY: Board of Governors Regulation 6.013.

NAME OF PERSON INITIATING PROPOSED REGULATION:

Dr. Elizabeth Bejar, Interim Provost, Executive Vice President and Chief Operating Officer, and Senior Vice President, Division of Academic and 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.

THE CONTACT PERSON REGARDING THIS REGULATION IS:

Eli Deville, Departmental Administrator, Office of the General Counsel,
Florida International University, 11200 SW 8th Street, PC 511, Miami, FL 33199
Email: devillee@fiu.edu | Phone: 305.348.2103 | Fax: 305.348.3272

DATE OF PUBLICATION: January 23, 2023

THE FULL TEXT OF THE REGULATION IS PROVIDED BELOW:

FIU-1305 Students in Military Service Military Veterans and Active Duty Students

1. Student Withdrawal from Courses Due to Military Service.

- a. ~~(1) General.~~ A student who, while enrolled at ~~the Florida International University;~~ (FIU), is called to or enlists in, active military service, excluding any regularly scheduled weekend and annual training duty, shall not incur academic or financial penalties as a result of performing military service.
- b. ~~(2) A~~ For purposes of this regulation, “active military service” means active duty with any branch of the United States Armed Forces, including veterans recalled to active duty; National Guard and Air National Guard members called to active duty; or other military reserve unit as provided in Florida Statute, and as verified by official orders or appropriate military certification.
- c. In accordance with Board of Governors’ Regulation 7.002 Tuition and Fee Assessment, Collection, Accounting, and Remittance, a student described in subsection (1).a. shall have the option of completing the following options: request removal of course(s) in which and grade(s), or replacement of grade with a DR/W grade due to military service and any associated academic/financial implications; or after discussion with the faculty member(s), receive an incomplete grade if eligible per FIU Policy #380.0449 Incomplete Grades (IN) for Graduate and Undergraduate Students.
 - i. If requesting removal of course(s) and grade(s), if applicable, the student was enrolled in at the time of being called into active service at a later date without penalty, or withdrawing from the course(s) with will be provided a full refund of all tuition and fees paid. If the student chooses to withdraw and receive a grade of DR/W, the student's academic record shall reflect that the withdrawal was due to active military service.

~~(3) For purposes of this rule, “active military service” means active duty with any branch of the United States Army, Air Force, Navy, Marine Corps, Coast Guard, National Guard of the State of Florida, or other service as provided in Florida Statutes, as verified by official orders or appropriate military certification.~~

2. Priority Course Registration for Active Military, Veterans, and Spouse/Dependents

- a. FIU provides priority course registration every term for active duty military, veterans, and for the spouse or dependent children of a veteran to whom the GI Bill education benefits have been transferred.

3. Undergraduate College Credit for Military Training, Courses, and Occupations

- a. FIU Policy #340.350 Credits used to Accelerate Undergraduate Time-to-Degree enables students to earn appropriate undergraduate academic college credit for college-level training and education acquired in the military.
- b. The process for awarding college credit for military experience or associated appeals is published on the Transfer and Transition Services website and in the University Undergraduate Catalog.

Specific Authority: Board of Governors’ Resolution dated January 7, 2003. —History—New 5-8-03, Formerly 6C8-3.0081, -Amended 9-12-08-; Renumbered BOG Regulation 6.013 Amended

THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee

February 23, 2023

Subject: New Program Proposal: Bachelor of Science in Sport and Exercise Science

Proposed Committee Action:

Recommend to the Florida International University Board of Trustees approval of the Bachelor of Science in Sport and Exercise Science (CIP 31.0505) new program proposal.

Background Information:

The Department of Teaching and Learning in the College of Arts, Sciences, and Education is proposing a new Bachelor of Science (BS) degree in Sport and Exercise Science under STEM CIP code 31.0505. The proposed degree comprises 120 credit hours and will provide a rigorous undergraduate education with an emphasis on anatomy, physiology, human movement, and applications to exercise and sport. The curriculum includes instruction in exercise physiology, kinesiology, motor development, mental performance, exercise testing and programming, the prevention and care of athletic injuries, and field and clinical work.

The proposed degree will replace the existing BS degree in Physical Education (which currently offers a track in Sports and Fitness Studies).

Baccalaureate-level training in exercise science (via the proposed BS in Sport and Exercise Science) offers opportunities for graduates' immediate employment as exercise physiologists in hospitals, health care clinics, health and wellness facilities, sport performance and fitness facilities, private practice, and government agencies. Undergraduate programs in exercise science also prepare students for advanced study in exercise science, kinesiology, athletic training, physical therapy, sports medicine, and various areas within health care.

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 sections (3) and (5) of Florida Board of Governors Regulation 8.011 – *Authorization of New Academic Degree Programs and Other Curricular Offerings*.

Supporting Documentation: Bachelor of Science in Sport and Exercise Science (CIP 31.0505) New Program Proposal Executive Summary

Facilitator/Presenter: Elizabeth M. Bejar

Proposed Bachelor of Science in Sport and Exercise Science (CIP: 31.0505)
Department of Teaching and Learning
College of Arts, Sciences, and Education
Florida International University

EXECUTIVE SUMMARY

The Department of Teaching and Learning in the College of Arts, Sciences, and Education is proposing a new Bachelor of Science (BS) degree in Sport and Exercise Science under STEM CIP code 31.0505. The proposed degree will provide a rigorous undergraduate education with an emphasis on anatomy, physiology, human movement, and applications to exercise and sport. The degree comprises 120 credit hours; it does not include additional majors or tracks. The curriculum includes instruction in exercise physiology, kinesiology, motor development, mental performance, exercise testing and programming, the prevention and care of athletic injuries, and field and clinical work. A capstone experience will improve students' readiness for employment, and students will have the opportunity to refine skills and augment knowledge under the supervision of industry professionals.

The proposed degree will replace the existing BS degree in Physical Education (which currently offers a track in Sports and Fitness Studies). The proposed BS in Sport and Exercise Science responds to shifts in the discipline of movement sciences (e.g., in the areas of sports, strength and conditioning, personal fitness, and wellness and health care). Dynamic advances in scientific research concerning human functioning systems and the efficiency of human movement—as well as changes in the conceptual frameworks that guide professionals in the field—have resulted in significant changes in the field of sport and exercise science. The proposed degree responds to these changes.

Additionally, the proposed degree supports FIU's *Next Horizon 2025 Strategic Plan* by providing access to and production of bachelor's degrees in the strategic area of exercise science and kinesiology (CIP code 31.0505). The curriculum of the proposed degree aligns "career needs to ensure employment readiness, post-graduation success, and workforce and industry advancement" [Next Horizon 2025, p. 15], ultimately supporting achievement of FIU's strategic goal to amplify learner success. The BS in Sport and Exercise Science program will pursue accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) Committee on Accreditation for the Exercise Sciences (CoAES). Beginning in 2027, those who seek to take the American College of Sports Medicine Certified Exercise Physiologists Examination must have graduated from an accredited program. The proposed BS in Sport and Exercise Science curriculum is designed to meet these accreditation requirements, and students graduating in 2027 will be eligible to take the examination.

Baccalaureate-level training in exercise science (via the proposed BS in Sport and Exercise Science) offers opportunities for graduates' immediate employment as exercise physiologists in hospitals, health care clinics, health and wellness facilities, sport performance and fitness facilities, private practice, and government agencies. Demand for exercise physiologists continues to grow locally and nationally. The U.S. Bureau of Labor Statistics (BLS) has identified the Miami, Fort Lauderdale, and West Palm Beach area as one of the nation's top

ten metropolitan areas with the highest employment level in exercise physiologists. BLS information additionally notes that the “demand for these workers may rise as healthcare providers emphasize exercise and preventive care to help patients recover from cardiovascular and pulmonary diseases and improve their overall health” [BLS]. The Florida Department of Economic Opportunity projects a 17.6% rise in employment of exercise physiologists in Florida from 2021 to 2029, faster than the average for all occupations. Nationally, the BLS projects a 13.1% rise in employment of exercise physiologists from 2020 to 2030, faster than the average for all occupations. The BLS projects approximately 1,500 openings for exercise physiologists each year over the next decade.

Undergraduate programs in exercise science also prepare students for advanced study in exercise science, kinesiology, athletic training, physical therapy, sports medicine, and various areas within health care.

Implementation Timeframe	HC	FTE	E&G Cost per FTE	E&G Funds	Contract & Grants Funds	Auxiliary/Philanthropy Funds	Total Cost
Year 1	20	16.6	\$3286	\$54,549			\$54,549
Year 2	47	39.2					
Year 3	91	76					
Year 4	106	89.4					
Year 5	125	106	\$3911	\$414,528			\$414,528

ACADEMIC AFFAIRS REGULAR REPORTS

- I. Academic and Student Affairs**
- II. Enrollment Management and Services**
- III. Information Technology**
- IV. Research and Economic Development / University Graduate School**

I. ACADEMIC AND STUDENT AFFAIRS

1. Florida Department of Education's Postsecondary Student Success Program

FIU received \$975,000 from the Florida Department of Education's Postsecondary Student Success Program. The purpose of this grant program is to address college completion. FIU will use these funds to develop outreach initiatives for students that have stopped out, and to increase the availability of coaching services to students that receive completion grants.

2. Best Online Bachelor's Programs for Veterans

U.S. News & World Report ranked FIU No. 35 among its "Best Online Bachelor's Programs for Veterans". This brings FIU to a total of five (5) national distinctions earned in 2022 for its commitment to supporting veterans and military-affiliated students as they pursue a college degree. Additionally, *Military Friendly* ranked FIU among its Top 10 colleges and universities; *U.S. Veterans Magazine* ranked FIU among its "Best of the Best" list; Colleges of Distinction recognized FIU among its top institutions for Military Support (with one of only five universities in Florida on its list); and *Military Times* ranked FIU No. 36 among its "Best for Vets" public and private universities.

3. MLK Commemorative Celebration

Throughout January, FIU honored the life and legacy of Rev. Dr. Martin Luther King Jr. with a series of educational and service-oriented events—including a commemorative breakfast featuring keynote speaker, Ilyasah Shabazz, daughter of Malcolm X, and an award-winning author, educator, and producer. Other events included a youth forum and peace walk at the Biscayne Bay Campus geared toward local high schoolers; a contingent of FIU Panthers walking in the MLK Parade in Liberty City; a collaborative exhibition at the Patricia and Phillip Frost Art Museum, *An Elegy to Rosewood*, which highlighted the efforts of The Real Rosewood Foundation to preserve the history of the 1923 Rosewood Massacre; and more. These multidisciplinary events encouraged students and community members to carry forward the legacy of Dr. King while educating them on an important period of America history.

II. ENROLLMENT MANAGEMENT AND SERVICES

1. University Admissions

Under the leadership of Jody Glassman, Assistant Vice President of Enrollment and University Admissions, University Admissions has completed the reintegration of International Admissions with University Admissions. We continue to transition processes and projects to Transfer and Transition Services and Admissions Operations; however, the staffing piece has been completed.

Dates are scheduled for all spring yield and recruitment events. The Hispanic Scholars Fund will be hosting their event at FIU on February 4th and Admitted Student Day will take place on March 18th at BBC, and April 1st at MMC.

A Graduate School and Information Fair was hosted in-person at FIU on January 30th, and we anticipate more than 400 participants from around the state. The program will include information sessions, exposure to specific programs at FIU, and sessions about financial aid and paying for graduate school.

2. Transfer and Transition Services and Connect for Success

The fifth annual Transfer Success Summit was held at FIU MMC, which coincided with National Transfer Week (October 17-21, 2022). In partnership with the Florida Consortium of Metropolitan Research Universities, FIU welcomed more than 150 transfer professionals from across the State for presentations, panels, and opportunities to network and share best practices. Moreover, as part of our celebration of transfer students, we hosted a series of workshops and attended various fairs and events at partner colleges.

In December 2022, Transfer and Transition Services hired a new International Transfer Specialist to lead the international course equivalency process as well as support undergraduate partnerships with international institutions. The position is part of a reorganization strategy in Enrollment Management and Services to offer students more timely course evaluations and to engage in more proactive credit articulation work.

As part of our process improvement plan, we upgraded Course Credit. The update improves the process by which transcripts in Peoplesoft are posted on the student record, which then feeds the Panther Degree Audit and FIU transcript. Among other factors, the upgrade ensures accuracy, including the recognition of duplicate courses, which until now, required time-consuming manual detection and correction.

Our course equivalency and transfer credit processing teams are finalizing course reviews and equivalencies for spring 2023 transfer admits. As of January 17, 2023, the transfer credit equivalency team reviewed 2,736 courses. Both teams also worked on a special project that resulted in proactively articulating 2,203 rules. To date, FIU has 90,285 domestic and 7,322 international articulated rules in PantherSoft. Domestic rules are available to students via our website, which signals transparency in credit acceptability and supports a more seamless transition.

Connect4Success

On October 27, 2022, FIU Connect4Success offered its annual Kickoff at Miami Dade College West Campus. The C4S Kickoff served as the opening event at their recently constructed event space, West Park. Students attended a resource fair with various departments from MDC and FIU, concurrent sessions on advising and the student experience, and they also picked up their FIU One Card. Ninety (90) new Connect4Success students attended the event.

Two (2) new grant-funded Bridge Advisor positions have been approved as part of the College Knight Foundation School of Computing and Information Sciences' partnership with Breakthrough Tech to increase diversity and gender equity in computing. Both lines will be partly housed at Miami Dade College.

3. Financial Aid

Disbursement

For the Fall 2022 semester, the Office of Financial Aid delivered \$200 Million in aid – this is \$12 million less than this point in time during the Fall 2021 semester. This reflects that we completely spent the Federal Education Stabilization Funds (HEERF I, II, III) for Emergency Grants for students in the 2021-2022 Academic year.

Student Borrowing Trends

FIU Undergraduate students continue their downward trend in student borrowing. The following table provides details concerning FIU student borrowing and national trends.

Academic Year	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Percent of FIU Undergraduates who Graduated and borrowed any student loans	48.00%	49.58%	47.22%	45.26%	44.89%	41.27%	40.75%
Cumulative FIU Undergraduate Principal Borrowed	\$18,918.00	\$19,915.00	\$20,022.00	\$19,923.47	\$19,705.00	\$18,064.00	\$18,054
Percent of All US Undergraduates who Graduated and borrowed any student loans	68%	66%	65%	66%	62%	*Not yet available	*Not yet available
Cumulative US Undergraduate Principal Borrowed	\$30,100	\$28,350.00	\$28,650.00	\$29,200	\$28,950.00	*Not yet available	*Not yet available

*The National Center for Education Statistics annual National Postsecondary Student Aid Study was delayed by the pandemic. Once it is released, updated national student debt data will be available.

4. Office of Scholarships

Merit Scholarships

This year we received over 1,200 applications for our merit awards. We started our new year by awarding scholarships to 6,182 prospective students totaling \$8.2 million. During the spring term we will continue to work with the Office of Admissions to encourage their enrollment at FIU. To accomplish this, we will send information material, host these students at on-campus events, and provide answers to any questions or concerns.

5. University Registrar

Implementation of the Florida Public Postsecondary Institutions General Education Digital Badges

In 2021 the Florida Legislature amended Section 1007.25 of Florida Statutes, to create the General Education Digital Badge Series. This required all Florida public postsecondary institutions to award students a nationally recognized digital badge upon completion of general education core courses that demonstrate career readiness, beginning with students who initially enter a postsecondary institution in fall 2022 for the 2022-2023 academic year.

These digital badges mirror the state-wide General Education Core requirement areas. Beginning in fall 2022, we implemented the first digital badge in "Fundamentals of Written Communication." This badge was automatically awarded to students who successfully completed ENC 1101 with a grade of "C" or better or completed a course with an "ENC" prefix for which ENC 1101 was a prerequisite. By earning

this badge, students are able to document their communication skills – including effective reading, writing, listening, and nonverbal communication skills. This badge conveys to future employers that students were introduced to vital communication skills that are valued in the workplace.

Working in conjunction with IT and the Office of Micro-Credentials, we set up the process to automatically award the badges, notify students, and report them to the BOG. Additionally, we updated our SIS system and the FASTER/SPEEDE (EDI) transcripts to reflect the award of the digital badge. Corresponding changes were also made to the university catalog and web pages, identifying general education core courses that are linked to earning this digital credential.

As of January 11, 2023, we have awarded 2,810 students this new Florida Public Postsecondary Institution General Education Digital Badge in Fundamentals of Written Communication. Students received an email and message board communication congratulating them on receiving the badge and instructions on how to claim and share their accomplishment. It is expected that additional badges will be created, with a second badge in place for fall 2023.

Information on this digital badge/credential is found in the [Office of Micro-Credentials, Florida Public Postsecondary Institutions General Education Digital Badges webpage](#).

III. INFORMATION TECHNOLOGY REPORT

1. Security Strategy Update

The Division of IT continues to enhance the enterprise-wide security strategy to keep up with the ever-evolving cybersecurity challenges threatening today's higher education landscape. As part of our continued efforts to safeguard the university's resources, the division is in the planning and design phase of implementing immutable backups. Immutable backups are back up files that cannot be altered. One of the biggest threats facing organizations in all industries is ransomware attacks. A ransomware attack is a type of malware that encrypts a user's or organization's files and renders them inaccessible until the user or organization meets the demands of the attackers. Typically, this demand is a ransom payment for a decryption key. Conventional backups may not be the most effective at restoring data because the backup may also have been affected by the attack. Immutable backups help ensure the data recovered is always clean.

2. Network Update

The division recently completed an upgrade of its identity services engine (ISE) environment. ISE is a security policy solution that provides secure network access to users and devices. The platform allows technology administrators to manage endpoint, user, and device access to the University's network resources and enhances infrastructure security. Additionally, the division recently transitioned the phone lines to a new carrier at the Biscayne Bay Campus, Brickell, I-75, Miami Beach Urban Studios, the Wolfsonian and the Jewish Museum. This change will provide the University with a more cost-effective solution. The phone lines at the Modesto Maidique Campus will be transitioned during the spring 2023 semester.

3. Enterprise-Wide Cloud Strategy Update

Following the migration of all of FIU's PeopleSoft applications to the Oracle Cloud Infrastructure (OCI) in the fall of 2021, the division continues to leverage this cloud technology to house other enterprise-wide applications. The division recently completed the migration of the Business Intelligence and

Analytics application and will soon complete the migration of the ImageNow applications. This strategic move to the cloud allows for greater scalability, higher service availability, while protecting FIU services from natural disasters, and giving FIU broader access to emerging technologies. This cloud infrastructure relies on a multi-location redundancy within the US which augments our disaster recovery capabilities, reduces our dependency on our on-premises systems, and diminishes the University's risk during hurricane season.

IV. RESEARCH AND ECONOMIC DEVELOPMENT / UNIVERSITY GRADUATE SCHOOL

1. External Grant Awards' Performance

During the period between July and December 2022, the value of awards received was 52% higher than what was received during the same period last fiscal year (\$150.3M vs. \$99.2M). Among colleges, notable increases include: the Robert Stempel College of Public Health and Social Work (95% from \$8.5M to \$16.7M); the College of Arts, Sciences and Education (74% from \$35.7M to \$62M); and the College of Engineering and Computing (55% from \$28.4m to \$44M). Centers and Institutes also experienced noteworthy increases of 98% from \$35.7M to \$70.9M. Among them are the STEM Institute (520% from \$0.56M to \$3.5M); Jack D. Gordon Institute (264% from \$2.4M to \$8.7M); Community-Based Research Institute (148% from \$1.7M to \$4.3M); Applied Research Center (124% from \$2.4M to \$5.3M); Extreme Events Institute/International Hurricane Research Center (74% from \$4.5M to \$7.3M); Institute of Environment (72% from \$13.58M to \$23.3M); and the Center for Children and Families (47% from \$4.76M to \$7M). The distribution among funding sources changed from last fiscal year—federal sources from 80% to 72%; state/local governments from 12% to 13%; and private sources from 7% to 15%.

2. Innovation, Partnerships and Economic Development

StartUP FIU is working with 19 faculty members at various stages of research commercialization. Staff assisted faculty with grants, resulting in the receipt of an NSF I-Corps grant for \$50,000 and another for \$150,000 from the National Endowment for the Humanities. In preparation for the Hult Prize competition in March 2023, StartUP FIU organized six (6) meetups. At this time, 65 students will be participating in the global pitch competition, and 14 students are advancing to the next phase after completing an additional Venture Studio. StartUP FIU is finalizing a contract for a \$250,000 grant from GSK (Glaxo Smith Kline) for a student challenge in health disparities and a \$20,000 grant from Miami-Dade County Public Schools to support entrepreneurship education to high school students.

StartUP FIU Local has provided a variety of online and in-person programming, community events and partnerships designed to better support South Florida's entrepreneurs this quarter. In total, staff supported 30 local entrepreneurs through the incubator, 40 through the accelerator, and over 1,200 in workshops. Second quarter accomplishments include graduating 22 businesses from the team's fifth Incubator cohort, held August 10th to October 19th. Additionally, a Marketing Accelerator was launched to support 33 companies to assist them in developing robust and innovative marketing strategies for their online and in-person commercial spaces. This Accelerator took place October 11th to November 3rd. StartUP FIU Local has also been working with FIU's Business Services Department and Chartwells to mentor and assist two small businesses as they move into their first commercial space on campus. The team celebrated the grand opening of "Yall Foods" at the FIU Engineering Campus and "Cabana" at the Graham Center Food Court at the MMC campus on November 4th. During the second quarter (September through December) of fiscal year (FY) 22-23, technology transfer staff received 29 disclosures, filed 25 patent applications, received 27 patents, and executed six (6) license agreements.

3. University Graduate School (UGS)

Application numbers for Academic Year (AY) 22-23 were: 2,876 doctoral students (a 4% decrease compared to AY20-21), and 13,163 masters students (a 15% increase compared to last year). Admission numbers for AY22-23 were: 762 doctoral students (a 13% decrease compared to AY21-22), and 6,131 masters students (a 2% decrease compared to last year). New enrollment numbers for AY22-23 were: 480 doctoral students (a 17.5% decrease compared to AY21-22), and 3,461 masters students (a 5.5% decrease compared to last year). To monitor the relevance of our doctoral students' dissertations, we have started to monitor the number of downloads in Digital Commons. From September 1st through December 31 of 2022, 91,290 electronic dissertations were downloaded from all over the world. UGS continues to focus its professional development activities in two primary areas: writing and career preparation, with most workshops being in-person or in hybrid formats.

In September, UGS launched the first round of the Graduate Writing Fellows program and selected three (3) fellows from different doctoral programs. The UGS Writing Fellows program supports and trains advanced doctoral students who commit two (2) semesters to serve as graduate writing facilitators in their programs. The selected fellows are receiving specialized training from the FIU Writing Across Curriculum (WAC) program on how to facilitate a writing group, identify different genres of writing in their specific discipline, and coach students around writing conventions in the discipline. This role allows students to gain experience in leading a group, strengthening their own writing and self-editing skills, and adding to their professional skill toolkit. Dr. Melissa McCartney delivered two (2) workshops during the fall on research communications, transferable skills, and CVs). Another workshop—Proposal Writing for Doctoral Students in Social Sciences and Humanities—was presented by Dr. Besiki Kutateladze.

To further support graduate students' wellbeing and creating a sense of belonging, UGS, is piloting a collaboration with University Housing to provide subsidized housing. UGS placed 17 students in housing for the Fall 2022 and Spring 2023 terms and will expand the numbers for the next academic year. UGS has also started to offer informal sessions where graduate students can engage with UGS staff and discuss their experiences and concerns. To this end, UGS hosted a breakfast that was attended by 81 doctoral students and will be hosting monthly breakfasts so graduate students can interact with UGS and each other on a more regular basis.