

# 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, December 7, 2023 10:45 AM

or Upon Adjournment of Previous Meeting

Chair: Natasha Lowell Vice Chair: Dean C. Colson

**Members:** Cesar L. Alvarez, Noël C. Barengo, Yaffa Popack, Marc D. Sarnoff, Alexander P. Sutton, Roger Tovar – *Athletics liaison* 

# **AGENDA**

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 Nomination Elizabeth M. Bejar

AP2. Proposed Amendment to Regulation FIU-412 Undergraduate Elizabeth M. Bejar Admissions

4. **Discussion Items** (No Action Required)

4.1 Alternative Admissions Elizabeth M. Bejar

4.2 Student Government Updates Alexander P. Sutton

4.3 Faculty Senate Updates Noël C. Barengo

5. Academic Affairs Regular Reports (For Information Only)

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

Boa	The Florida International University Board of Trustees		
Age	ademic Policy and Student Affairs Committee enda		
December 7, 2023 Page 2			
6.	New Business (If Any)	Natasha Lowell	
7.	Concluding Remarks and Adjournment	Natasha Lowell	

The next Academic Policy and Student Affairs Committee Meeting is scheduled for February 29, 2024

#### Agenda 1. Call to Order and Chair's Remarks Natasha Lowell 2. Approval of Minutes Natasha Lowell Agenda Item Page - Minutes 2 Minutes - Academic Policy and Student Affairs Committee Meeting, 3 September 14, 2023 3. Action Items AP1. Tenure as a Condition of Employment Nomination Elizabeth M. Bejar Agenda Item Page - TACOE December 2023 13 TACOE Nominee Overview - December 2023 14 Saurabh Aggarwal Bio 15 Saurabh Aggarwal CV 17 AP2. Proposed Amendment to Regulation FIU-412 **Undergraduate Admissions** Elizabeth M. Bejar Agenda Item Page - FIU-412 Undergraduate Admissions 39 FIU-412 Undergraduate Admissions 40 4. Discussion Items (No Action Required) 4.1 Alternative Admissions Elizabeth M. Bejar 4.2 Student Government Updates Alexander P. Sutton 4.3 Faculty Senate Updates Noel C. Barengo

5. Academic Affairs Regular Reports (For Information Only)

Academic Affairs Regular Reports

7. Concluding Remarks and Adjournment

6. New Business (If Any)

Natasha Lowell

Natasha Lowell

Meeting Book - 12-07-2023 - FIU Board of Trustees Academic Policy and Student Affairs Committee Meetin

Page 1 of 51

44





December 7, 2023

Subject: Approval of Minutes of Meeting held on September 14, 2023

#### **Proposed Committee Action:**

Approval of Minutes of the Academic Policy and Student Affairs Committee meeting held on September 14, 2023.

#### **Background Information:**

Committee members will review and approve the minutes of the Academic Policy and Student Affairs Committee meeting held on September 14, 2023.

**Supporting Documentation:** Minutes: Academic Policy and Student Affairs Committee

Meeting, September 14, 2023

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





# Academic Policy and Student Affairs Committee September 14, 2023 FIU, Modesto A. Maidique Campus, Tamiami Hall, Multipurpose Room

#### **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 Vice Chair Dean C. Colson on Thursday, September 14, 2023, at 10:54 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 Dean C. Colson, *Committee Vice Chair*; Cesar L. Alvarez; Noël C. Barengo; Chanel T. Rowe (*Zoom*); Marc D. Sarnoff; Alexander P. Sutton; and Roger Tovar, *Board Chair and Athletics Liaison*.

Trustee Natasha Lowell was excused.

The following Board members were also in attendance: Board Vice Chair Carlos A. Duart, and Trustees Alan Gonzalez, Francis A. Hondal, and Gene Prescott.

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

Committee Vice Chair Colson introduced and welcomed Faculty Senate Chair and faculty Trustee Noël C. Barengo.

Provost and Executive Vice President Elizabeth M. Bejar commented on the appointment of Nancy Kirkpatrick as Dean of University Libraries. Provost Bejar added that Dean Kirkpatrick was chosen following a national search launched in February that brought forward dozens of candidates, three of whom were invited for on-campus interviews and open forums as finalists. Provost Bejar thanked Dr. Jennier Fu for serving as Interim Dean since July 2022. Committee Vice Chair Colson approved Provost Bejar's request to defer the remainder of her comments until later in the meeting in order to allow time for the student presenter to arrive.

#### 2. Approval of Minutes

Committee Vice Chair Colson asked if there were any additions or corrections to the minutes of the Academic Policy and Student Affairs Committee meeting held on June 15, 2023. Hearing none, a motion was made and unanimously passed to approve the minutes of the Academic Policy and Student Affairs Committee meeting held on June 15, 2023.

#### 3. Action Items

# AP1. Proposed Amendments to Regulation FIU-105 Sexual Harassment (Title IX) and Sexual Misconduct

Provost Bejar presented the proposed amendments to Regulation FIU-105 Sexual Harassment (Title IX) and Sexual Misconduct for Committee review. She referred to the amended regulation, which was provided to the Trustees. She indicated that the regulation was being modified to update the list of Deputy Title IX Coordinators, add FIU's central reporting page, remove the Presidential Review Process, and remove language from the 2020 Title IX Regulations that was vacated by a federal court and deemed unenforceable by the United States Department of Education and replaced with compliant language, as well as correction of grammatical errors.

General Counsel Castillo commented on the compliant language. He stated that Section XII of Regulation FIU-105, entitled Hearings, includes a proposed insert, which was modeled after the adoption of language by another State University System institution with the inclusion of additional language. He added that such language includes a requirement that the hearing body must put in writing the reasons for relying on an out-of-hearing statement where the witness is not subject to cross examination and that a party's uncorroborated statement, not subject to cross examination, cannot be the sole basis for the finding of responsibility.

Trustee Marc D. Sarnoff referred to Judge Amy Coney Barrett's opinion in the case Doe v. Purdue University and shared his concerns regarding solely basing a finding of responsibility on an uncross-examined allegation. He commended and supported the proposed language. Trustee Chanel T. Rowe commended the proposed revisions to Regulation FIU-105.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the proposed amendments to Regulation FIU-105 Sexual Harassment (Title IX) and Sexual Misconduct, 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 or as a result of the regulation-making process.

#### 1. Call to Order and Chair's Remarks (Continued...)

Upon arrival of the student presenter, Provost Bejar commented on welcoming approximately 5,200 freshmen across summer and fall and introduced the Committee to freshman Luca Martinez, a nature and wildlife conservation photographer and videographer who at 17 years old has introduced the beauty of a rarely experienced Everglades to over 150M viewers worldwide. She noted that Luca's photos and videos of the Everglades are showcased in the River of Grass exhibit created for the UNESCO (United Nations Educational, Scientific and Cultural Organization) World Heritage Collection on the Google Arts and Culture platform. Provost Bejar added that Luca is also currently filming in the Everglades for the National Geographic series on national parks. She mentioned that Luca believes storytelling is key to raising awareness about conservation and inspiring action. She remarked that Luca presents on the wonders of the wetlands, is a contributing writer to *Oceanographic Magazine*, and has been featured in dozens of media stories. Provost Bejar indicated that Luca is the recipient of the Provost's Achievement Award and is the first Provost's Undergraduate in Environmental Resilience Fellow. She added that this fellowship will allow Luca to serve as a

student leader whose charge will be to engage students across all disciplines to become involved in environmental resilience through FIU's Environmental Resilience Campaign. She indicated that said campaign is a bold initiative with an unparalleled vision for student body participation and is expected to launch this academic year and will focus on the challenges and solutions surrounding environmental resilience and aims to engage and motivate students from across all disciplines to address some of the most pressing environmental challenges. Luca presented videos highlighting his underwater videos and photography of the Everglades. He shared his experiences working in the Everglades and discussed his passion and motivation for preserving the wetlands.

Committee Vice Chair Colson referred to the issue of *Aventura Magazine* where Luca was featured on the cover.

#### AP2. Tenure Nomination

Committee Vice Chair Colson indicated that University's administration conducts a thorough review of faculty candidates who are in their 6th year on their track towards tenure. He added that to be considered for tenure, faculty must meet the scholarly requirements and have been recommended for tenure after the comprehensive tenure review process was conducted by their respective department, chair, College Review Committee, dean, the Provost, and the President. Provost Bejar presented the tenure nomination for Committee review. She referred to the Board materials outlining the 6th year tenure review process, which includes rigorous assessment of the faculty member's dossier across multiple levels within and outside of FIU. She pointed out that to be considered for tenure, the faculty member is expected to demonstrate a significant record of scholarship and contribute at the highest level in the areas of research and/or creative activities, teaching, and service to FIU and their profession. She stated that Dr. Armin Mehrabi is being recommended for tenure. She commented on Dr. Mehrabi's research and scholarly work.

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 the tenure nomination as specified in the Board materials.

#### AP3. Tenure as a Condition of Employment Nominations

Committee Vice Chair Colson pointed out that Tenure as a Condition of Employment (TACOE) is proposed for four candidates and that to be considered for TACOE, newly hired faculty must qualify for tenure at FIU based on their caliber of work and/or tenure status at their previous institutions. Provost Bejar presented the TACOE nominations for Committee review. She noted that TACOE is reserved for individuals who have achieved highly prestigious academic careers prior to their becoming FIU faculty. She indicated that TACOE candidates either have received, or are eligible for, tenure at their previous institution. She explained that at the time of hire, the faculty candidate understands the expectation that the tenure and rank appointment will be granted upon review of the candidate's materials by the department, the college, the Provost, the President, and Board of Trustees, which is the regular process for tenure and promotion decisions at FIU. She remarked that the FIU department and college have vetted the scholarly qualifications and completed the required expedited tenure review for the candidates.

Provost Bejar commented on the TACOE candidates: David Delaine will be joining the School of Universal, Computing, Construction and Engineering Education (SUCCEED) in the College of Engineering and Computing as an associate professor; Anil Misra will be joining the Department of Civil and Environmental Engineering in the College of Engineering and Computing as a professor; Indranil SenGupta has joined the Department of Mathematics and Statistics in the School of Integrated Sciences and Humanity as a professor; and Natalia Trujillo will be joining the Department of Global Health in the Robert Stempel School of Public Health and Social Work as an associate professor.

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 four candidates for Tenure as a Condition of Employment as specified in the Board materials.

#### AP4. 2023 Florida Equity Report

Emmanuele Bowles, Assistant Vice Provost, Diversity, Equity, and Inclusion, presented the 2023 Florida Equity Report for Committee review. She explained that the report reviews the academic year beginning July 1, 2021 to June 30, 2022. She commented on the new format for the 2023 report. She remarked on increases in first-time-in-college (FTIC) student enrollment, research doctorate degrees awarded to Black and Hispanic students, and student employment. She noted a 7.6% decrease in the number of transfer students. Assistant Vice Provost Bowles stated that the percentage of aid distribution for Black and/or African American students, identified last year as an area for improvement, was unchanged. She added that the Office of Scholarship continues to partner with the Office of Admissions to recruit more students in economically disadvantaged districts and neighborhoods.

Assistant Vice Provost Bowles explained that of the 12 required reporting elements for the athletics program, FIU is equitable in 10 of the 12 categories. She commented on the 5.6% difference in the men to women participation rates that do not meet the proportionality. She also remarked on the significant differences between men's baseball and women's softball facilities. Assistant Vice Provost Bowles stated that, as improvement plans, Athletics will continue the student interest surveys, monitor enrollment rates and targeted caps, and continue to make improvements to the softball facilities and other priority areas. She pointed out that a difference of 1.9% favors women between the participation rate and financial assistance awarded. She added that the non-discriminatory reason for the significant number of higher-cost international and out-of-state women student-athletes vs. males with more in-state tuition could explain the 0.9% above the allowable 1%.

Assistant Vice Provost Bowles commented on achieving five (5) underutilization placement goals from the prior year and slight increases in the number of veterans hired during the reporting periods. She noted 10 underutilization goals for faculty positions and 16 placement goals for the administrative staff job groups per the affirmative action plan identified this year. Assistant Vice Provost Bowles stated that, as improvement plans, best practices for hiring will be provided, the continuation of mentoring and affinity groups will help with the retention of underrepresented faculty and administrative positions, and all University vacancies will be posted on at least two (2) diverse job boards.

Committee Vice Chair Colson shared his concerns regarding the differences between men's baseball and women's softball facilities.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the Florida Equity Report for the 2023 reporting year.

AP5. Textbook and Instructional Materials Affordability and Transparency Annual Report Heather Russell, Vice Provost for Faculty Leadership and Success, presented the 2022-23 Textbook and Instructional Materials Affordability and Transparency annual report for Committee review. She indicated that the University met the legislative posting requirement threshold, which mandates that 95% of adopted course and instructional materials on record by the legal deadline of 45 days prior to the first day of class for each semester and reported any late adoption activity and/or modifications that occurred after said deadline. Vice Provost Russell stated that, in fall 2022, the University met the 95% threshold and exceeded it in spring 2023 with 97% timely adoptions.

Vice Provost Russell pointed out that effective July 2022, all public Florida universities and colleges were required to post textbook adoptions publicly in an easily accessible and searchable database and also include syllabi for university core curriculum courses. She noted that all of FIU's required and recommended textbooks and instructional materials may be viewed, searched, and downloaded by the public using the University's Textbook and Instructional Materials (TIM) search engine.

Vice Provost Russell commented on the Panther Book Pack Program. She noted that in partnership with Barnes & Noble, students are offered an inclusive program to cost-effectively rent required textbooks and instructional materials for a cost of \$20 flat rate per undergraduate credit. She stated that said innovative initiative has resulted in an estimated \$6.1M of savings for University students. Vice Provost Russell commented on other textbook affordability initiatives, including Affordability Counts, an initiative spearheaded by FIU Online in partnership with the FIU Libraries, and the Center for the Advancement of Teaching.

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

#### AP6. Proposed Regulation FIU-2508 Post-Tenure Faculty Review

Provost Bejar presented the proposed Regulation FIU-2508 Post-Tenure Faculty Review for Committee review. She indicated that the Regulation substantially follows the Florida Board of Governors (BOG) Regulation 10.003 and includes sections outlining the purpose, timing and eligibility, review requirements, process requirements, and monitoring and reporting. She pointed out that BOG Regulation 10.003 became effective on March 29, 2023 and requires that each board of trustees adopt policies and/or regulation requiring each tenured state university faculty member to undergo a comprehensive post-tenure review to accomplish the following: ensuring high standards of quality and productivity among the tenured faculty in the State University System of Florida; determine whether a faculty member is meeting the responsibilities and expectations

associated with the assigned duties in research, teaching, and service, including compliance with state laws, BOG regulations, and university regulations and policies; create the ability to recognize and honor exceptional achievement and provide an incentive for retention as appropriate; and to refocus academic and professional efforts and take appropriate employment action if and when appropriate.

Provost Bejar stated that the purpose of FIU-2508 is to comply with BOG Regulation 10.003 and Florida Statutes Section 1001.706(6)(b). She mentioned that, if approved, FIU-2508 will replace the sustained performance review policy of tenure faculty and outlines the process by which each tenured faculty member will undergo a comprehensive post-tenure review. She provided an overview of post tenure review procedures, which include: review of a faculty member's dossier of accomplishments, the last four fully completed and the fifth year in progress performance reviews and the faculty member's disciplinary file during the review period; performance ratings will take into account the faculty member's assigned duties in research, teaching, and service and will be measured using approved rubrics which specify quantifiable university, college, and departmental criteria; and faculty will be rated on a four-point evaluation scale with respect to performance expectations, 1. exceeds, 2. meets, 3. does not meet, and 4. unsatisfactory. Provost Bejar remarked on eligibility, which include all tenured faculty except tenured faculty in administrative roles, such as department chairs or center directors who supervise other faculty. She added that faculty in administrative roles will undergo post-tenure review in the fifth year after returning to a full-time faculty appointment. She noted that faculty who are eligible but have an approved leave of absence during the review period may request a post-tenure review clock adjustment. She mentioned that such adjustments would not ordinarily be approved beyond one (1) year.

Provost Bejar explained that BOG regulation stipulates that each tenured faculty member has a comprehensive post-tenure review of five (5) years of performance, beginning in the fifth year. She indicated that twenty percent (20%) of tenured faculty will be evaluated in addition to faculty who were tenured, promoted or appointed with tenure in 2019. She noted that the process repeats each year for five years until all remaining tenured faculty have gone through the process, after which every tenured faculty will have a set review date. She explained that the cohorts, beginning with those selected in 2023-2024, will be selected randomly except for the final cohort. Provost Bejar commented that review will begin November 2023 through May 2024 and includes chair and dean recommendations for rating performance, concluding with the Provost's final rating to be communicated by June 1, 2024. She indicated that the Regulation requires that the Provost report annually to the Board of Trustees and President on the outcomes of the post-tenure review process and that the Chief Audit Executive will audit and report on this year's process by July 1, 2024, after which the Chief Audit Executive will report to the Board of Trustees triennially.

Provost Bejar indicated that faculty members who receive a final performance rating of "exceeds expectations" or "meets expectations" will be eligible for appropriate recognition and/or compensation. She added that faculty members who receive a final performance rating of "does not meet expectations," will be placed on a performance improvement plan (PIP), which must be approved by the Provost. She noted that failure to meet the requirements of a PIP by the established deadline shall result in a notice of termination. Provost Bejar pointed out that faculty members who receive a final performance rating of "unsatisfactory," shall be given a notice of termination. Provost Bejar explained that final decisions regarding post-tenure review may be appealed using the Neutral,

Internal Resolution of Policy Disputes (NIRD process) as set forth in the FIU Board of Trustees-United Faculty of Florida (UFF) Collective Bargaining Agreement.

Provost Bejar commented on working collaboratively, as an administrative team, with the Faculty Senate and FIU chapter of the UFF on the implementation of procedures related to FIU-2508. Trustee Noël C. Barengo commented that University administrators drafted a regulation to align with current law and invited faculty input, in the spirit of shared governance. He added that over the past four weeks many faculty members, including union leaders and leaders of the Faculty Senate have engaged in a healthy, constructive, and open conversation to modify the language of the post-tenure faculty review regulation to protect the institution of tenure and faculty within the confines of the law. He added that faculty are very pleased to see that their feedback resulted in major modifications in the proposed regulation. Trustee Barengo thanked the administration, Provost Bejar, Dr. Russell, and their teams, for this excellent example of shared governance in action. He conveyed his hope that FIU continues to set an example for institutions across the state as to what can be achieved when there is collaboration toward common goals.

On behalf of FIU faculty, Trustee Barengo reiterated that the language in the BOG regulation is of grave concern to faculty, threatening academic freedom and the idea of tenure. He added that, whether intended or not, the practical result of BOG Regulation 10.003 is that many faculty are in fear of losing their jobs simply for having different opinions. He remarked on the importance of continuing to work together in the implementation of said regulation to help assure faculty that these will not be the results at FIU. Trustee Barengo commented that, over the past few weeks, faculty leaders and FIU's administration have started to work closely together to come to an agreement on a set of procedures which balances the interests and needs of all parties, with an eye toward continuing to support the hard work of faculty that has propelled FIU in the rankings these past few years. He stated that he was pleased to report that, so far, the conversations have gone well, and he would like to retain his stance that the procedures must honor the Collective Bargaining Agreement. Trustee Barengo added that the faculty union also reiterates its position that nothing in this regulation undermines faculty's rights to collective bargaining, the Board of Trustees obligations under the Collective Bargaining Agreement, or the union's right to bargain any evaluation process, criteria, or standards in the future. He mentioned that the union continues to be encouraged by the administration's and Board of Trustees good faith engagement in this process, as well as the collaborative progress which has been made in the past year on a number of issues that are important to faculty members, including salaries, workforce housing, dependent care, as well as academic freedom and integrity. He stated that the past weeks have been very positive and encouraging, knowing that the voices of the faculty are heard.

In response to Committee Vice Chair Colson, Provost Bejar commented that, while the matter is still under review and discussion, some form of monetary compensation is anticipated for faculty members with a final performance rating of "exceeds expectations" or "meets expectations". Trustee Chanel T. Rowe inquired as to a faculty member that experienced challenges with student complaints, whether substantiated or investigated or not. In response to Trustee Rowe, Vice Provost Russell commented that while such challenges may not have risen to the level of inclusion in a faculty member's personnel file, it is the expectation that these complaints will be reflected in the faculty member's annual evaluation. Trustee Alexander P. Sutton remarked that he is pleased to

learn that the administration is collaborating with faculty on the implementation of the post-tenure review process.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the proposed Regulation FIU-2508 Post-Tenure Faculty Review and delegate authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received form the Florida Board of Governors or as a result of the regulation-making process.

#### AP7. Honorary Degree Nomination

Provost Bejar presented the Honorary Degree Nomination for Committee review. She noted that the Chaplin School of Hospitality and Tourism Management has nominated David Grutman for an honorary degree. The Faculty Senate Honorary Degree and Awards Committee recommended the nomination to the Faculty Senate, which approved the nomination on June 13, 2023. She shared excerpts from the nomination letter written by Chaplin School of Hospitality and Tourism Management Dean Michael Cheng.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees endorse David Grutman as a recipient of a doctor of laws *honoris causa* from Florida International University.

# AP8. Florida International University Institutes and Centers Annual Report AP9. Florida International University Institutes and Centers 2023 Evaluations and Evaluation Summary

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. He added that BOG Regulation specifies reporting requirements. He noted that the annual report requires Board of Trustees approval using the template that is provided by the State University System of Florida Chancellor, which includes current center status, last fiscal year financial information, and dates of last evaluations. Sr. VP Gil added that cyclical center reviews must also be approved by the Board of Trustees. He indicated that FIU has 34 centers that are BOG-designated and require in-depth review at least once every seven (7) years. He pointed out that a comprehensive historical evaluation summary must also be provided to the Board of Trustees with certification that the evaluation/review contained all of the required components using the template provided by the Chancellor. Sr. VP Gil highlighted the BOG's cyclical evaluation criteria that is used in the in-depth review process. He commented that nine (9) centers were reviewed in the current year and that all of said centers were recommended for continuation.

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

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend to The Florida International University Board of Trustees approval of Florida International University's Institutes and Centers 2023 Evaluations and Evaluation Summary.

#### AP10. Updated Exclusion Resolution

Committee Vice Chair Colson asked if there were any questions or comments from the Committee members. There were no questions.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees adopt a Resolution that updates the exclusion of the named members of the FIU Board of Trustees from the requirements for a personnel security clearance.

#### 4. Discussion Items

#### 4.1 Student Government Updates

Trustee Sutton commented on FIU's Week of Welcome. He noted an increased number of students attending events. He remarked on Graham University Center renovations. He added that Student Government played a large role in advocating for the completion of said project, which totaled \$3.2M in Activity and Service Fee expenditures. He commented that Student Government is developing multiple initiatives to improve student services and further engage students. Trustee Sutton mentioned that Student Government is working closely with Student Affairs leadership, including Interim Vice President for Student Affairs Charlie Andrews, to develop a task force of students dedicated to audit academic advising services and provide policy recommendations based on their findings. He stated that Student Government has started promoting environmental resiliency on social media through its Sustainability Saturdays series. He highlighted the work of the student newspaper, *PantherNOW*, and referred to the recent article, titled "FIU students deserve better parking." Trustee Sutton remarked on meeting with the Parking and Transportation team and working with them to address the concerns raised in the article. He also commented on Student Government's efforts to engage students at the Biscayne Bay Campus.

#### 4.2 Faculty Senate Updates

Trustee Barengo indicated that, in June, the Faculty Senate passed a resolution supporting the statement from the Modern Languages Department concerning HB 7 type investigations and Title VII violations. He added that at said meeting, the Student Learning and Success Committee provided an update on the Simple Syllabus tool and the status of implementation. Trustee Barengo stated that elections for Steering Committee members were held in September. He commented on meetings to discuss the administrative process and timetable related to the general education review of the University's core curriculum courses. Trustee Barengo pointed out that the Faculty Senate approved, in June, a motion to create a task force related to the past, current, and future role of tenure-track and tenured faculty at FIU and its implication for the future of the University. He indicated that Remy Dou was reelected as the Steering Committee's Governmental Liaison and that Angelique Ortega-Fridman is the Senate's new Parliamentarian/Sergeant-at-Arms. He noted that the Faculty Senate will be implementing office hours and holding monthly faculty get togethers.

## 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 Vice Chair Dean C. Colson adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee on Thursday, September 14, 2023, at 12:16 PM.



December 7, 2023

Subject: Tenure as a Condition of Employment Nomination

#### **Proposed Action:**

Florida International University Board of Trustees approval of one (1) candidate 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 nominee holds tenure at their previous institution and has been selected to receive TACOE based on the caliber of their work.

**Supporting Documentation:** Tenure as a Condition of Employment Nominee

Overview

■ Bio

Curriculum Vitae

Facilitator/Presenter: Elizabeth M. Bejar



# Florida International University

# **Tenure as a Condition of Employment Nominations -December 2023**

Name	College	Department	Proposed Rank
Saurabh Aggarwal	Herbert Wertheim College of Medicine	Cellular Biology & Pharmacology	Associate Professor





Dr. Aggarwal's Brief Bio

#### **Research Activities:**

Dr. Aggarwal is an Associate Professor in the Department of Anesthesiology and Perioperative Medicine at The University of Alabama at Birmingham (UAB). He received his Doctorate of Medicine (MD) with **distinction** and then his PhD from the Medical College of Georgia (MCG) again with **distinction** by a unanimous decision by the members of his dissertation committee. During his doctorate, he received the prestigious American Heart Association predoctoral fellowship for his work on pulmonary hypertension in children with congenital heart diseases. During his postdoctoral training at MCG and then at UAB, he was acknowledged by several travel awards and Excellence in Research awards for his work on pulmonary edema in acute respiratory distress syndrome.

As an Assistant Professor at UAB, he investigated the pathogenesis of toxic gases such as chlorine, bromine, and phosgene in the development of acute and chronic lung injury. He won the K12 award to study the role of cigarette smoking in lung health in people with HIV. He is leading an excellent team of physicians and basic scientists within UAB and Emory to submit an RO1 proposal to determine whether cigarette smoking disproportionately increases the risk of pulmonary hypertension and COPD in HIV. He is currently a PI on a UO1 grant (1U01ES033265-01), which will test the therapeutic potential of AMD3100 (Plerixafor), in mitigating acute and chronic lung injury caused by exposure to inhaled toxic gas, chlorine. He is also a PI on a RO1 grant (RO1 DA049657-01), which will determine mechanisms and therapeutics of chronic widespread pain in HIV.

He has authored over 70 peer-reviewed manuscripts and book chapters in reputed journals like Redox Biology (impact factor 11.8), European Respiratory journal (impact factor 16.67), and JCI Insight (impact factor 8.315). Over the past 15 years, he has won several accolades for his research including the Young Investigator of the Year award from the Society for Redox Biology and Medicine.

#### **Teaching Activities:**

Dr. Aggarwal is actively involved in teaching undergraduate students, graduate students, medical students, postdoctoral fellows, and medical residents. He also serves on graduate committee for a PhD student at UAB. He has mentored 6 undergraduate students in neuroscience program to develop their research projects and participate in regional and national science exhibitions. He has mentored 3 medical students, who have gone on to achieve accolades for their research accomplishments and prestigious residencies. He has also mentored 2 postdoctoral fellows, who have

won prestigious awards and seed funding for their research projects. Dr. Aggarwal is well trained in lung physiology and pathology and delivers lectures on "hypoxia and hypoxemia" to medical students at UAB. As an active member of research commu nity involved in patient-based research, he teaches clinical fellows at UAB how to Evaluate Randomized Controlled Trials. He has shared his expertise to regional, national and international audience in the form of grand rounds, invited speaker at national and international conferences. He has given Anesthesiology Grand Rounds on HIV-associated chronic pain and Pulmonary Grand Rounds on HIV-associated lung co-morbidities at UAB. He was also invited to give a talk on the role of cigarette Smoking in pulmonary endothelial dysfunction in HIV at the 21st International Workshop on Comorbidities & Adverse Drug Reactions in HIV Comorbidities in Basel, Switzerland. He is a reviewer and associate editor for the prestigious Physiological Reviews (impact factor 37.312) and a member of the editorial boards for the American Journal of Physiology, Lung Cell and Molecular Physiology and the Frontiers in Physiology. In total, he is reviewer for 14 journals covering vast areas of research. He was recently chosen as the Star Reviewer by the American Physiological Society.

#### **Service Activities:**

Dr. Aggarwal is an active elected (2022-2024) member of UAB faculty senate and represents UAB's faculty in matters of shared governance. He represents school of medicine at the senate to provide advice to the president and provost in matters of shared governance and inclusive and transparent decision making. He also serves on the faculty senate standing committee on Research, where he is responsible for reviewing matters and recommending policy pertaining to

research and to the environment for research and the dissemination of research knowledge. As a member of the research committee, he works with the Office of the Provost and the Faculty Senate Faculty Development Committee to collect applications, review and recommend UAB Faculty for the Faculty Development Grant Program (FDGP).

Dr. Aggarwal is a member of the Asian American and Pacific Islander Faculty Association (AAPI), which is part of the Office of Diversity and Inclusion. AAPI plays a critical role in the support of diverse faculty from recruitment and mentoring to development and advocacy and fostering an inclusive culture. He serves as a Co-Chair for the membership committee with AAPI, where is involved in the recruitment of new members, tracking the data and ensuring progress of the organization.

Dr. Aggarwal serves on the grant review panel for the Department of Defense (DOD), Medical Research Program and also the NIH grant review panel for Countermeasures Against Chemical Threats (CounterACT) program. He is also a member of the UABs grant review panel for AMC21 Scholar program, which is designed to attract the top graduate student applicants to UAB.

Finally, Dr. Aggarwal has been actively involved in helping medical students prepare for residency interviews. He is also involved in community service by helping the Student Interest Group in Anesthesia build houses for habitat for humanity.

# Revision Date: July 24, 2023 Curriculum Vitae

# Saurabh Aggarwal MD., PhD

Associate Professor, Faculty Senate Member Division of Molecular and Translational Biomedicine Department of Anesthesiology and Perioperative Medicine UAB | University of Alabama at Birmingham

#### **PERSONAL**

Business Address University of Alabama at Birmingham,

901 19th Street South, PBMR, Room 230, Birmingham, AL, 35294

Office Telephone 205-996-7134

Email saurabhaggarwal@uabmc.edu

#### **EDUCATION**

Year	Degree	Institution
02/14-11/14	Postdoctoral fellowship	University of Alabama at Birmingham, AL
08/11-02/14	Postdoctoral fellowship	Medical College of Georgia, Augusta, GA
08/06-08/11	PhD with distinction	Medical College of Georgia, Augusta, GA
06/02	MD with distinction	Odessa State Medical University, Odessa, Ukraine

## **PROFESSIONAL**

#### **ACADEMIC APPOINTMENTS**

Year	Rank/Title	Institution
2022-current	Associate Professor	University of Alabama at Birmingham, AL
2016-2022	Assistant Professor	University of Alabama at Birmingham, AL
2014-2016	Instructor	University of Alabama at Birmingham, AL

## NON-ACADEMIC APPOINTMENTS

Year	Rank/Title	Institution
2021-current	Graduate Faculty Level II	University of Alabama at Birmingham, AL
2016-current	Faculty Member	Pulmonary Injury and Repair center, University of Alabama at Birmingham, AL
2016-current	Faculty Member	Center for Free Radical Biology, University of Alabama at Birmingham, AL

2016-current	Associate Scientist	Center for Clinical and Translational Science (CCTS), University of Alabama at Birmingham, AL
2016-current	Associate Scientist	Center for AIDS Research (CFAR), University of Alabama at Birmingham, AL

# AWARDS/HONORS

Year	Award
2020	Outstanding Research Poster, Research Day January 13th, Department of Anesthesiology and Perioperative Medicine, UAB, US
2018	1st Place winner of the World AIDS Day Poster Competition for Faculty, University of Alabama at Birmingham, Center for AIDS Research (CFAR), US
2017	Star Reviewer, American Physiological Society. Rockville, MD, US
2015	Annual Abstract Scholarship from the "American Thoracic Society, Assembly on Environmental, Occupational and Population Health", New York, NY, US
2014	Young Investigator Award from "The Society for Free Radical Biology and Medicine", Indianapolis, IN, US
2014	Annual Travel Award from "The Center for Free Radical Biology", University of Alabama at Birmingham, Birmingham, AL, US
2012	Annual Seahorse Bioscience Travel Award for the "Keystone Symposia- Pulmonary Vascular Disease and Right Ventricular Dysfunction: Current Concepts and Future Therapies", Monterey, CA, US
2011	Annual Travel Award from the "American Thoracic Society, Assembly on Pulmonary Circulation", New York, NY, US
2010	Award for Excellence in Research, "Medical College of Georgia", Augusta, GA, US
2009	Annual Travel Award from "The Society for Free Radical Biology and Medicine", Indianapolis, IN, US
2008	Award for Excellence in Research, "Medical College of Georgia", Augusta, GA, US

#### RESEARCH ACCOMPLISHMENTS

**Statement:** Huge chasm exists between biomedical researchers and the patients who need their discoveries. My long-term goal is to pursue a career in translational research as a physician-scientist and bridge the gap between bench work and patient care. The focus of my research is to delineate the role of peripheral and resident immune cells in the development of lung pathologies and chronic widespread pain.

#### **ACTIVE GRANTS**

1. RO1 DA049657 (NIDA)

Aggarwal, Saurabh (PI) 07/01/2021-06/30/2026

Chronic Widespread Pain in HIV: Novel Mechanisms and Therapeutics

Role: PI

Brief description: In the current era of anti-retro-viral therapy (ART), human immunodeficiency virus-1 (HIV-1) infected people can have a near-normal life expectancy. However, chronic widespread pain (CWP) in people with HIV-1 (PWH) is associated with a high rate of disability and low quality of life, with prevalence estimates ranging from 25%-85% despite low viral load and adequate CD4 count. This underscores the fact that current pain management strategies are not sufficient to address the burden of pain in HIV. The study hypothesizes that cell-free heme reduces endogenous opioid peptide-dependent analgesia and enhances pain sensitivity in people with HIV.

2. U01ES033265 (NIEHS)

Aggarwal, Saurabh (PI) 08/24/2021-06/30/2024

Identification of AMD3100 (Plerixafor) as a potential lead compound for chlorine toxicity

Role: PI

Brief description: Chlorine (Cl<sub>2</sub>) gas is the most common inhalational irritant in the United States, which results in serious adverse effects including lung injury and death. However, currently there is no specific therapeutic agent(s) approved by FDA, which can be administered immediately post Cl<sub>2</sub>-exposure to minimize lung inflammation and mortality. The study hypothesizes that *stromal-derived-factor-1* (SDF-1)/C-X-C chemokine receptor type 4 (CXCR4) axis is involved in the migration, homing, and survival of leukocytes in lung post exposure to Cl<sub>2</sub> and therefore inhibiting this axis by AMD3 100 would attenuate Cl<sub>2</sub>-induced lung morbidity and mortality.

#### **PREVIOUS GRANTS**

3. K12 Career Development Grant (NHLBI)

Aggarwal, Saurabh (PI)

07-01-2019-06/30/2021

Cigarette Smoking Mediated Nef Translocation Impairs Pulmonary Artery Endothelial Cell Function and Increases the Risk of Pulmonary Arterial Hypertension in HIV

Role: PI

4. U01ES027697, (NIEHS)

Matalon, Sadis (PI)

09/30/16-07/31/21

CIALIS® reverses halogen induced injury to pregnant animals and their off springs

Role: Co-Investigator

#### 5. U01ES026458, (NIEHS)

Matalon, Sadis (PI)

08/15/15-06/30/20

Bromine inhalation induced lung injury: Novel mechanisms and treatment strategies

Role: Co-Investigator

#### 6. R21ES025423, (NIEHS)

Matalon/Agarwal (PI)

09/22/2014 - 08/31/2016

Central Role of Heme Oxygenase in Reversing Bromine Morbidity and Mortality

Role: Co-Investigator

#### 7. Pre-doctoral Fellowship: American Heart Association

Aggarwal, Saurabh (PI)

07/01/2009-06/30/2011

PKG nitration in pulmonary hypertension

Role: PI

#### **GRANTS SUBMITTED AND IN PREPARATION**

1. R21 (PAR-20-253) Submitted: May 30, 2023

Ahmad Lazrak (PI)

04/01/2024-03/31/2026

Involvement of Connexin 43 channel in chlorine induced lung injury.

Role: Co-Investigator

2. Investigator-Initiated Research Award (Chronic Pain Management Research Program) Submission date for preapplication: Aug 21, 2023; Full application: Nov 09, 2023

Aggarwal Saurabh (PI)

04/01/2024-03/31/2028

Carbon monoxide donors for pain management post trauma associated inflammation.

Role: PI

#### 3. UG3/UH3 (PAR-22-209) Submission date: Oct 17, 2023

Aggarwal Saurabh, Mansour Heidi, & Nefzi Adel (PI)

07/01/2024-06/30/2029

Identification of novel AMD3100 analogs as countermeasures for chlorine toxicity

Role: PI

#### 4. RO1 (RFA-DA-23-026) Submission date: Nov 17, 2023

Aggarwal, Saurabh (PI)

07/01/2024-06/30/2027

Temporal Evaluation of Lung Injury Upon Acute Exposure to Inhaled Fentanyl

Role: PI

#### 5. RO1 (NHLBI) Submission date: Feb 5, 2024

Aggarwal, Saurabh & Black SM (PI)

07/01/2024-06/30/2029

Impact of smoking on HIV-related pulmonary artery hypertension

Role: PI

# INVITED PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONFERENCES

Year	Title
2023	CXCR4: A Potential Therapeutic Target for Lung Injury. Invited speaker, April 17, 2023. Herbert Wertheim Lectureship Series, Florida International University, Miami, FL, US.
2022	Identification of AMD3100 (Plerixafor) as a Potential Lead Compound for Chlorine Toxicity", June 21-23, 2022; The 15th Annual CounterACT Network Research Symposium. New Orleans, LA, US
2019	Cigarette Smoking disproportionately impairs nitric oxide signaling in pulmonary endoth elial cells in HIV: Role of viral and host factors. 21st International Workshop on Comorbidities & Adverse Drug Reactions in HIV Comorbidities. Nov 5 <sup>th</sup> , 2019, Basel, Switzerland.

# ORAL PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONFERENCES

Year	Title
2019	Mitochondrial DNA Repair Ameliorates Inhalation Lung Injury. American Thoracic Society, international conference. May 17-22, 2019, Dallas, TX, US
2019	AMPK Activation Improves Survivability after Toxic Gas Exposure. Experimental Biology, April 6-9, 2019, Orlando, FL, US
2015	Central role of Heme oxygenase 1 in reversing Bromine induced morbidity and mortality. New York Academy of Sciences 9th annual Counter Measures against chemical threats (CounterACT) Networks Research Symposium, 2015, New York, NY, US
2011	Sox18 protects the endothelium from shear stress induced barrier disruption. American Thoracic Society, international conference. May 13-18, 2011, Denver, CO, US
2011	Lipopolysaccharide attenuates endothelial barrier function through a pp60 <sup>src</sup> mediated in hibition of dimethylaminohydrolase (DDAH). European Respiratory Society, Annual Congress. September 24-28, 2011, Amsterdam, Netherlands
2010	The rebound pulmonary hypertension associated with the acute withdrawal of inhaled nitric oxide involves the nitration-mediated inhibition of protein kinase G: Protective role of superoxide dismutase. The Society for Free Radical Biology and Medicine's 17 <sup>th</sup> Annual Meeting. November 17-21, 2010, Orlando, FL, US
2009	Identification of tyrosine 247 as the site of PKG, susceptible to peroxynitrite-mediated nitration during the development of pulmonary hypertension. The Society for Free Radical Biology and Medicine's 16 <sup>th</sup> Annual Meeting. November 2009, San Francisco, CA, US
2008	Role of cGMP/PKG signaling in the regulation of endothelial permeability in vitro and in vivo (Follow up). "Pulmonary Vascular Remodeling: Early Determinants in Congenital HeARt Disease (PEDCARD) LeDucq Foundation Transatlantic Net Work. November 13 <sup>th</sup> , 2008, Georgia Health Sciences University, Augusta, GA, US
2007	BNP/cGMP signaling and endothelial permeability in vitro and in vivo. Pulmonary Vascular Remodeling: Early Determinants in Congenital HeARt Disease (PEDCARD) LeDucq Foundation Transatlantic Net Work. November 26 <sup>th</sup> , 2007, Munich, Germany.

#### PUBLICATIONA IN PEER-REVIEWED JOURNALS (Trainees are indicated by \*)

- 1. Juan Xavier Masjoan Juncos, Tanima Chatterjee\*, Lilly B Underwood\*, Ginette Bordcoch, Terry L Lewis, **Aggarwal S**. Cardiac Injury Post Fentanyl Inhalation. Archives of Toxicology. Submitted
- 2. Anastasiia Gryshyna,\* Tanima Chatterjee,\* Jennifer DeBerry, **Aggarwal S**. Assessment of Pain-Related Behaviors in HIV-1 Transgenic Rats as a Model of HIV-Associated Chronic Pain. Molecular Pain. July 2023; Under Review
- 3. Chatterjee T,\* Lewis TL, Arora I\*, Gryshyna AE\*, Underwood L\*, Masjoan Juncos JX, **Aggarwal S**. Sex-Based Disparities in Leukocyte Migration and Activation in Response to Inhalation Lung Injury: Role of SDF-1/CXCR4 Signaling. Cells. 2023 Jun 26;12(13). doi: 10.3390/cells12131719. PubMed PMID: 37443753; PubMed Central PMCID: PMC10340292.
- 4. Chatterjee T\*, Arora I\*, Underwood LB\*, Lewis TL, Masjoan Juncos JX, Heath SL, Goodin BR, **Aggarwal** S. Heme-Induced Macrophage Phenotype Switching and Impaired Endogenous Opioid Homeostasis Correlate with Chronic Widespread Pain in HIV. Cells. 2023 Jun 6;12(12). doi: 10.3390/cells12121565. PubMed PMID: 37371035; PubMed Central PMCID: PMC10297192.
- 5. Chatterjee T\*, Arora I\*, Underwood L\*, Gryshyna A\*, Lewis TL, Masjoan Juncos JX, Goodin BR, Heath S, Aggarwal S. High Heme and Low Heme Oxygenase-1 Are Associated with Mast Cell Activation/Degranulation in HIV-Induced Chronic Widespread Pain. Antioxidants (Basel). 2023 Jun 3;12(6). doi: 10.3390/antiox12061213. PubMed PMID: 37371943; PubMed Central PMCID: PMC10295513.
- Staitieh BS, Malik S, Auld SC, Wigger GW, Fan X, Roth AT, Chatterjee T\*, Arora I\*, Raju SV, Heath S, Aggrawal S. <u>HIV Increases the Risk of Cigarette Smoke-Induced Emphysema Through MMP-9</u>. J Acquir Immune Defic Syndr. 2023 Mar 1;92(3):263-270. doi: 10.1097/QAI.000000000003125. Epub 2022 Nov 4. PubMed PMID: 36331810; PubMed Central PMCID: PMC9911107.
- 7. Zemskov EA, Gross CM, **Aggarwal S**, Zemskova MA, Wu X, Gu C, Wang T, Tang H, Black SM. NF-κB-dependent repression of Sox 18 transcription factor requires the epigenetic regulators histone deacetylases 1 and 2 in acute lung injury. Front Physiol. 2022;13:947537. doi: 10.3389/fphys.2022.947537. eCollection 2022. PubMed PMID: 35991176; PubMed Central PMCID: PMC9386230.
- 8. Ahmad I, Molyvdas A, Jian MY, Zhou T, Traylor AM, Cui H, Liu G, Song W, Agarwal A, Jilling T, **Aggarwal S**, Matalon S. AICAR decreases acute lung injury by phosphorylating AMPK and upregulating heme oxygenase-1. Eur Respir J. 2021 Dec;58(6). doi: 10.1183/13993003.03694-2020. Print 2021 Dec. PubMed PMID: 34049949; PubMed Central PMCID: PMC9144003.
- 9. Addis DR, **Aggarwal S**, Lazrak A, Jilling T, Matalon S. <u>Halogen-Induced Chemical Injury to the Mammalian Cardiopulmonary Systems.</u> Physiology (Bethesda). 2021 Sep 1;36(5):272-291. doi: 10.1152/physiol.00004.2021. Review. PubMed PMID: 34431415; PubMed Central PMCID: PMC8807065.
- 10. Alishlash AS, Sapkota M, Ahmad I, Maclin K, Ahmed NA, Molyvdas A, Doran S, Albert CJ, Aggarwal S, Ford DA, Ambalavanan N, Jilling T, Matalon S. <u>Chlorine inhalation induces acute chest syndrome in humanized sickle cell mouse model and ameliorated by postexposure hemopexin.</u> Redox Biol. 2021 Aug;44:102009. doi: 10.1016/j.redox.2021.102009. Epub 2021 May 17. PubMed PMID: 34044323; PubMed Central PMCID: PMC8167148.
- 11. Zemskov EA, Wu X, **Aggarwal S**, Yegambaram M, Gross C, Lu Q, Wang H, Tang H, Wang T, Black SM. Nitration of protein kinase G-Iα modulates cyclic nucleotide crosstalk via phosphodiesterase 3A:

  Implications for acute lung injury. J Biol Chem. 2021 Aug;297(2):100946. doi: 10.1016/j.jbc.2021.100946. Epub 2021 Jul 10. PubMed PMID: 34252457; PubMed Central PMCID: PMC8342797.
- 12. Cho DY, Zhang S, Lazrak A, Skinner D, Thompson HM, Grayson J, Guroji P, **Aggarwal S**, Bebok Z, Rowe SM, Matalon S, Sorscher EJ, Woodworth BA. <u>LPS decreases CFTR open probability and mucociliary transport</u> through generation of reactive oxygen species. Redox Biol. 2021 Jul;43:101998. doi:

- 10.1016/j.redox.2021.101998. Epub 2021 Apr 30. PubMed PMID: 33971543; PubMed Central PMCID: PMC8129928.
- 13. Wang T, Yegambaram M, Gross C, Sun X, Lu Q, Wang H, Wu X, Kangath A, Tang H, **Aggarwal S**, Black SM. RAC1 nitration at Y(32) IS involved in the endothelial barrier disruption associated with lipopolysaccharide-mediated acute lung injury. Redox Biol. 2021 Jan;38:101794. doi: 10.1016/j.redox.2020.101794. Epub 2020 Nov 13. PubMed PMID: 33248422; PubMed Central PMCID: PMC7664366.
- Lazrak A, Song W, Zhou T, Aggarwal S, Jilling T, Garantziotis S, Matalon S. <u>Hyaluronan and halogen-induced airway hyperresponsiveness and lung injury</u>. Ann N Y Acad Sci. 2020 Nov;1479(1):29-43. doi: 10.1111/nyas.14415. Epub 2020 Jun 23. Review. PubMed PMID: 32578230; PubMed Central PMCID: PMC7680259.
- 15. **Aggarwal S**, Lazrak A, Ahmad I, Yu Z, Bryant A, Mobley JA, Ford DA, Matalon S. <u>Reactive species generated by heme impair alveolar epithelial sodium channel function in acute respiratory distress syndrome</u>. Redox Biol. 2020 Sep;36:101592. doi: 10.1016/j.redox.2020.101592. Epub 2020 Jun 1. PubMed PMID: 32506040; PubMed Central PMCID: PMC7276446.
- 16. **Aggarwal S**, DeBerry JJ, Ahmad I, Lynn P, Dewitte C, Malik S, Merlin JS, Goodin BR, Heath SL, Matalon S. Heme attenuates beta-endorphin levels in leukocytes of HIV positive individuals with chronic widespread pain. Redox Biol. 2020 Sep;36:101684. doi: 10.1016/j.redox.2020.101684. Epub 2020 Aug 13. PubMed PMID: 32828015; PubMed Central PMCID: PMC7451624.
- 17. Addis DR, **Aggarwal S**, Doran SF, Jian MY, Ahmad I, Kojima K, Ford DA, Matalon S, Mobley JA. <u>Vascular permeability disruption explored in the proteomes of mouse lungs and human microvascular cells following acute bromine exposure.</u> Am J Physiol Lung Cell Mol Physiol. 2020 Aug 1;319(2):L337-L359. doi: 10.1152/ajplung.00196.2020. Epub 2020 Jun 24. PubMed PMID: 32579402; PubMed Central PMCID: PMC7473936.
- 18. Addis DR, Lambert JA, Ren C, Doran S, **Aggarwal S**, Jilling T, Matalon S. <u>Vascular Endothelial Growth Factor-121 Administration Mitigates Halogen Inhalation-Induced Pulmonary Injury and Fetal Growth Restriction in Pregnant Mice. J Am Heart Assoc. 2020 Feb 4;9(3):e013238. doi: 10.1161/JAHA.119.013238. Epub 2020 Feb 3. PubMed PMID: 32009528; PubMed Central PMCID: PMC7033856.</u>
- 19. Addis DR, DeBerry JJ, **Aggarwal S**. <u>Chronic Pain in HIV.</u> Mol Pain. 2020 Jan-Dec;16:1744806920927276. doi: 10.1177/1744806920927276. Review. PubMed PMID: 32450765; PubMed Central PMCID: PMC7252379.
- Aggarwal S, Jilling T, Doran S, Ahmad I, Eagen JE, Gu S, Gillespie M, Albert CJ, Ford D, Oh JY, Patel RP, Matalon S. <u>Phosgene inhalation causes hemolysis and acute lung injury</u>. Toxicol Lett. 2019 Sep 15;312:204-213. doi: 10.1016/j.toxlet.2019.04.019. Epub 2019 Apr 30. PubMed PMID: 31047999; PubMed Central PMCID: PMC6653688.
- Aggarwal S, Ahmad I, Lam A\*, Carlisle MA\*, Li C, Wells JM, Raju SV, Athar M, Rowe SM, Dransfield MT, Matalon S. Heme scavenging reduces pulmonary endoplasmic reticulum stress, fibrosis, and emphysema. JCI Insight. 2018 Nov 2;3(21). doi: 10.1172/jci.insight.120694. PubMed PMID: 30385726; PubMed Central PMCID: PMC6238745.
- 22. **Aggarwal S**, DeBerry J. <u>Can a Vitamin a Day Keep Tuberculosis Away?</u> Am J Respir Cell Mol Biol. 2018 Nov;59(5):523-524. doi: 10.1165/rcmb.2018-0198ED. PubMed PMID: 30095993.
- 23. Zhou T, Yu Z, Jian MY, Ahmad I, Trempus C, Wagener BM, Pittet JF, **Aggarwal S**, Garantziotis S, Song W, Matalon S. <u>Instillation of hyaluronan reverses acid instillation injury to the mammalian blood gas barrier.</u> Am J Physiol Lung Cell Mol Physiol. 2018 May 1;314(5):L808-L821. doi: 10.1152/ajplung.00510.2017. Epub 2018 Jan 25. PubMed PMID: 29368549; PubMed Central PMCID: PMC6008127.

- 24. Gross CM, Kellner M, Wang T, Lu Q, Sun X, Zemskov EA, Noonepalle S, Kangath A, Kumar S, Gonzalez-Garay M, Desai AA, **Aggarwal S**, Gorshkov B, Klinger C, Verin AD, Catravas JD, Jacobson JR, Yuan JX, Rafikov R, Garcia JGN, Black SM. <u>LPS-induced Acute Lung Injury Involves NF-κB-mediated Downregulation of SOX18</u>. Am J Respir Cell Mol Biol. 2018 May;58(5):614-624. doi: 10.1165/rcmb.2016-0390OC. PubMed PMID: 29115856; PubMed Central PMCID: PMC5946326.
- 25. Jilling T, Ren C, Yee A, Aggarwal S, Halloran B, Ambalavanan N, Matalon S. Exposure of neonatal mice to bromine impairs their alveolar development and lung function. Am J Physiol Lung Cell Mol Physiol. 2018 Jan 1;314(1):L137-L143. doi: 10.1152/ajplung.00315.2017. Epub 2017 Sep 14. PubMed PMID: 28912380; PubMed Central PMCID: PMC5866428.
- 26. Lambert JA, Carlisle MA\*, Lam A\*, Aggarwal S, Doran S, Ren C, Bradley WE, Dell'Italia L, Ambalavanan N, Ford DA, Patel RP, Jilling T, Matalon S. Mechanisms and Treatment of Halogen Inhalation-Induced Pulmonary and Systemic Injuries in Pregnant Mice. Hypertension. 2017 Aug;70(2):390-400. doi: 10.1161/HYPERTENSIONAHA.117.09466. Epub 2017 Jun 12. PubMed PMID: 28607126; PubMed Central PMCID: PMC5518712.
- 27. Lam A\*, Prabhu R, Gross CM, Riesenberg LA, Singh V, **Aggarwal S**. Role of apoptosis and autophagy in tuberculosis. Am J Physiol Lung Cell Mol Physiol. 2017 Aug 1;313(2):L218-L229. doi: 10.1152/ajplung.00162.2017. Epub 2017 May 11. Review. PubMed PMID: 28495854; PubMed Central PMCID: PMC5582934.
- 28. Kumar S, Sun X, Noonepalle SK, Lu Q, Zemskov E, Wang T, **Aggarwal S**, Gross C, Sharma S, Desai AA, Hou Y, Dasarathy S, Qu N, Reddy V, Lee SG, Cherian-Shaw M, Yuan JX, Catravas JD, Rafikov R, Garcia JGN, Black SM. <u>Hyper-activation of pp60(Src) limits nitric oxide signaling by increasing asymmetric dimethylarginine levels during acute lung injury.</u> Free Radic Biol Med. 2017 Jan;102:217-228. doi: 10.1016/j.freeradbiomed.2016.11.008. Epub 2016 Nov 9. PubMed PMID: 27838434; PubMed Central PMCID: PMC5449193.
- 29. **Aggarwal S**, Mannam P, Zhang J. <u>Differential regulation of autophagy and mitophagy in pulmonary diseases</u>. Am J Physiol Lung Cell Mol Physiol. 2016 Aug 1;311(2):L433-52. doi: 10.1152/ajplung.00128.2016. Epub 2016 Jul 8. Review. PubMed PMID: 27402690; PubMed Central PMCID: PMC5504426.
- 30. Carlisle M\*, Lam A\*, Svendsen ER, **Aggarwal S**, Matalon S. Chlorine-induced cardiopulmonary in jury. Ann N Y Acad Sci. 2016 Jun;1374(1):159-67. doi: 10.1111/nyas.13091. Epub 2016 Jun 15. Review. PubMed PMID: 27303906; PubMed Central PMCID: PMC4940235.
- 31. Lam A\*, Vetal N, Matalon S, **Aggarwal S**. Role of heme in bromine-induced lung injury. Ann N Y Acad Sci. 2016 Jun;1374(1):105-10. doi: 10.1111/nyas.13086. Epub 2016 May 31. Review. PubMed PMID: 27244263; PubMed Central PMCID: PMC4940273.
- 32. Rafikova O, Rafikov R, Kangath A, Qu N, **Aggarwal S**, Sharma S, Desai J, Fields T, Ludewig B, Yuan JX, Jonigk D, Black SM. Redox regulation of epidermal growth factor receptor signaling during the development of pulmonary hypertension. Free Radic Biol Med. 2016 Jun;95:96-111. doi: 10.1016/j.freeradbiomed.2016.02.029. Epub 2016 Feb 27. PubMed PMID: 26928584; PubMed Central PMCID: PMC5929487.
- 33. **Aggarwal S**, Lam A\*, Bolisetty S, Carlisle MA\*, Traylor A, Agarwal A, Matalon S. <u>Heme Attenuation Ameliorates Irritant Gas Inhalation-Induced Acute Lung Injury.</u> Antioxid Redox Signal. 2016 Jan 10;24(2):99-112. doi: 10.1089/ars.2015.6347. Epub 2015 Dec 14. PubMed PMID: 26376667; PubMed Central PMCID: PMC4742996.
- 34. Jurkuvenaite A, Benavides GA, Komarova S, Doran SF, Johnson M, **Aggarwal S**, Zhang J, Darley-Usmar VM, Matalon S. <u>Upregulation of autophagy decreases chlorine-induced mitochondrial injury and lung inflammation</u>. Free Radic Biol Med. 2015 Aug;85:83-94. doi: 10.1016/j.freeradbiomed.2015.03.039. Epub 2015 Apr 13. PubMed PMID: 25881550; PubMed Central PMCID: PMC4508227

- 35. Londino JD, Lazrak A, Noah JW, **Aggarwal S**, Bali V, Woodworth BA, Bebok Z, Matalon S. <u>Influenza virus M2 targets cystic fibrosis transmembrane conductance regulator for lysosomal degradation during viral infection.</u> FASEB J. 2015 Jul;29(7):2712-25. doi: 10.1096/fj.14-268755. Epub 2015 Mar 20. PubMed PMID: 25795456; PubMed Central PMCID: PMC4478808.
- 36. Lazrak A, Creighton J, Yu Z, Komarova S, Doran SF, **Aggarwal S**, Emala CW Sr, Stober VP, Trempus CS, Garantziotis S, Matalon S. <u>Hyaluronan mediates airway hyperresponsiveness in oxidative lung injury.</u> Am J Physiol Lung Cell Mol Physiol. 2015 May 1;308(9):L891-903. doi: 10.1152/ajplung.00377.2014. Epub 2015 Mar 6. PubMed PMID: 25747964; PubMed Central PMCID: PMC4421785.
- 37. Gross CM, Rafikov R, Kumar S, **Aggarwal S**, Ham PB 3rd, Meadows ML, Cherian-Shaw M, Kangath A, Sridhar S, Lucas R, Black SM. Endothelial nitric oxide synthase deficient mice are protected from lipopolysaccharide induced acute lung injury. PLoS One. 2015;10(3):e0119918. doi: 10.1371/journal.pone.0119918. eCollection 2015. PubMed PMID: 25786132; PubMed Central PMCID: PMC4364989.
- 38. Gross CM, **Aggarwal S**, Kumar S, Tian J, Kasa A, Bogatcheva N, Datar SA, Verin AD, Fineman JR, Black SM. Sox 18 preserves the pulmonary endothelial barrier under conditions of increased shear stress. J Cell Physiol. 2014 Nov;229(11):1802-16. doi: 10.1002/jcp.24633. PubMed PMID: 24677020; PubMed Central PMCID: PMC4117725.
- 39. Chen F, Kumar S, Yu Y, **Aggarwal S**, Gross C, Wang Y, Chakraborty T, Verin AD, Catravas JD, Lucas R, Black SM, Fulton DJ. PKC-dependent phosphorylation of eNOS at T495 regulates eNOS coupling and endothelial barrier function in response to G+ -toxins. PLoS One. 2014;9(7):e99823. doi: 10.1371/journal.pone.0099823. eCollection 2014. PubMed PMID: 25020117; PubMed Central PMCID: PMC4096401.
- 40. Sun X, Kumar S, Sharma S, **Aggarwal S**, Lu Q, Gross C, Rafikova O, Lee SG, Dasarathy S, Hou Y, Meadows ML, Han W, Su Y, Fineman JR, Black SM. <u>Endothelin-1 induces a glycolytic switch in pulmonary arterial endothelial cells via the mitochondrial translocation of endothelial nitric oxide synthase.</u> Am J Respir Cell Mol Biol. 2014 Jun;50(6):1084-95. doi: 10.1165/rcmb.2013-0187OC. PubMed PMID: 24392990; PubMed Central PMCID: PMC4068912.
- 41. **Aggarwal S**, Gross CM, Rafikov R, Kumar S, Fineman JR, Ludewig B, Jonigk D, Black SM. <u>Nitration of tyrosine 247 inhibits protein kinase G-1α activity by attenuating cyclic guanosine monophosphate binding.</u> J Biol Chem. 2014 Mar 14;289(11):7948-61. doi: 10.1074/jbc.M113.534313. Epub 2014 Jan 27. PubMed PMID: 24469460; PubMed Central PMCID: PMC3953305.
- 42. **Aggarwal S**, Gross CM, Kumar S, Dimitropoulou C, Sharma S, Gorshkov BA, Sridhar S, Lu Q, Bogatcheva NV, Jezierska-Drutel AJ, Lucas R, Verin AD, Catravas JD, Black SM. <u>Dimethylarginine dimethylaminohydrolase II overexpression attenuates LPS-mediated lung leak in acute lung injury</u>. Am J Respir Cell Mol Biol. 2014 Mar;50(3):614-25. doi: 10.1165/rcmb.2013-0193OC. PubMed PMID: 24134589; PubMed Central PMCID: PMC4068933.
- 43. Rafikov R, Dimitropoulou C, Aggarwal S, Kangath A, Gross C, Pardo D, Sharma S, Jezierska-Drutel A, Patel V, Snead C, Lucas R, Verin A, Fulton D, Catravas JD, Black SM. <u>Lipopolysaccharide-induced lung injury involves the nitration-mediated activation of RhoA.</u> J Biol Chem. 2014 Feb 21;289(8):4710-22. doi: 10.1074/jbc.M114.547596. Epub 2014 Jan 7. PubMed PMID: 24398689; PubMed Central PMCID: PMC3931033.
- 44. Rafikov R, Kumar S, **Aggarwal S**, Hou Y, Kangath A, Pardo D, Fineman JR, Black SM. Endothelin-1 stimulates catalase activity through the PKCδ-mediated phosphorylation of serine 167. Free Radic Biol Med. 2014 Feb;67:255-64. doi: 10.1016/j.freeradbiomed.2013.10.814. Epub 2013 Nov 6. PubMed PMID: 24211614; PubMed Central PMCID: PMC3945115.
- 45. Rafikov R, Kumar S, **Aggarwal S**, Pardo D, Fonseca FV, Ransom J, Rafikova O, Chen Q, Springer ML, Black SM. Protein engineering to develop a redox insensitive endothelial nitric oxide synthase. Redox

- Biol. 2014;2:156-64. doi: 10.1016/j.redox.2013.12.015. Epub 2014 Jan 14. PubMed PMID: 25460726; PubMed Central PMCID: PMC4297941.
- 46. **Aggarwal S**, Gross CM, Sharma S, Fineman JR, Black SM. <u>Reactive oxygen species in pulmonary vascular remodeling</u>. Compr Physiol. 2013 Jul;3(3):1011-34. doi: 10.1002/cphy.c120024. Review. PubMed PMID: 23897679; PubMed Central PMCID: PMC3907081.
- 47. Sun X, Sharma S, Fratz S, Kumar S, Rafikov R, **Aggarwal S**, Rafikova O, Lu Q, Burns T, Dasarathy S, Wright J, Schreiber C, Radman M, Fineman JR, Black SM. <u>Disruption of endothelial cell mitochondrial bioenergetics in lambs with increased pulmonary blood flow.</u> Antioxid Redox Signal. 2013 May 10;18(14):1739-52. doi: 10.1089/ars.2012.4806. Epub 2013 Mar 14. PubMed PMID: 23244702; PubMed Central PMCID: PMC3619212.
- 48. Sharma S, Barton J, Rafikov R, **Aggarwal S**, Kuo HC, Oishi PE, Datar SA, Fineman JR, Black SM. Chronic inhibition of PPAR-γ signaling induces endothelial dysfunction in the juvenile lamb. Pulm Pharmacol Ther. 2013 Apr;26(2):271-80. doi: 10.1016/j.pupt.2012.12.004. Epub 2012 Dec 17. PubMed PMID: 23257346; PubMed Central PMCID: PMC3872991.
- 49. Rafikova O, Rafikov R, Kumar S, Sharma S, **Aggarwal S**, Schneider F, Jonigk D, Black SM, Tofovic SP. Bosentan inhibits oxidative and nitrosative stress and rescues occlusive pulmonary hypertension. Free Radic Biol Med. 2013 Mar;56:28-43. doi: 10.1016/j.freeradbiomed.2012.09.013. Epub 2012 Nov 29. PubMed PMID: 23200808; PubMed Central PMCID: PMC3749888.
- 50. Rafikov R, Rafikova O, **Aggarwal S**, Gross C, Sun X, Desai J, Fulton D, Black SM. <u>Asymmetric dimethylarginine induces endothelial nitric-oxide synthase mitochondrial redistribution through the nitration-mediated activation of Akt1. J Biol Chem. 2013 Mar 1;288(9):6212-26. doi: 10.1074/jbc.M112.423269. Epub 2012 Dec 19. PubMed PMID: 23255608; PubMed Central PMCID: PMC3585057.</u>
- 51. Kumar S, Oishi PE, Rafikov R, **Aggarwal S**, Hou Y, Datar SA, Sharma S, Azakie A, Fineman JR, Black SM. Tezosentan increases nitric oxide signaling via enhanced hydrogen peroxide generation in lamb s with surgically induced acute increases in pulmonary blood flow. J Cell Biochem. 2013 Feb;114(2):435-447. doi: 10.1002/jcb.24383. PubMed PMID: 22961736; PubMed Central PMCID: PMC3906673.
- 52. Oishi PE, Sharma S, Datar SA, Kumar S, **Aggarwal S**, Lu Q, Raff G, Azakie A, Hsu JH, Sajti E, Fratz S, Black SM, Fineman JR. <u>Rosiglitazone preserves pulmonary vascular function in lambs with increased pulmonary blood flow.</u> Pediatr Res. 2013 Jan;73(1):54-61. doi: 10.1038/pr.2012.149. Epub 2012 Nov 5. PubMed PMID: 23128423; PubMed Central PMCID: PMC3977665.
- 53. Sharma S, Sun X, **Aggarwal S**, Rafikov R, Dasarathy S, Kumar S, Black SM. Role of carnitine acetyl transferase in regulation of nitric oxide signaling in pulmonary arterial endothelial cells. Int J Mol Sci. 2012 Dec 21;14(1):255-72. doi: 10.3390/ijms14010255. PubMed PMID: 23344032; PubMed Central PMCID: PMC3565262.
- 54. Lu Q, Wainwright MS, Harris VA, **Aggarwal S**, Hou Y, Rau T, Poulsen DJ, Black SM. Increased NADPH oxidase-derived superoxide is involved in the neuronal cell death induced by hypoxia-ischemia in neonatal hippocampal slice cultures. Free Radic Biol Med. 2012 Sep 1;53(5):1139-51. doi: 10.1016/j.freeradbiomed.2012.06.012. Epub 2012 Jun 19. PubMed PMID: 22728269; PubMed Central PMCID: PMC3527086.
- 55. **Aggarwal S**, Dimitropoulou C, Lu Q, Black SM, Sharma S. <u>Glutathione supplementation attenuates lipopolysaccharide-induced mitochondrial dysfunction and apoptosis in a mouse model of acute lung <u>injury</u>. Front Physiol. 2012;3:161. doi: 10.3389/fphys.2012.00161. eCollection 2012. PubMed PMID: 22654772; PubMed Central PMCID: PMC3361071.</u>
- 56. **Aggarwal S**, Gross CM, Kumar S, Datar S, Oishi P, Kalkan G, Schreiber C, Fratz S, Fineman JR, Black SM. <u>Attenuated vasodilatation in lambs with endogenous and exogenous activation of cGMP signaling: role of protein kinase G nitration.</u> J Cell Physiol. 2011 Dec;226(12):3104-13. doi: 10.1002/jcp.22692. PubMed PMID: 21351102; PubMed Central PMCID: PMC3527072.

- 57. **Aggarwal S**, Rafikov R, Gross CM, Kumar S, Pardo D, Black SM. <u>Purification and functional analysis of protein kinase G-1α using a bacterial expression system</u>. Protein Expr Purif. 2011 Oct;79(2):271-6. doi: 10.1016/j.pep.2011.05.001. Epub 2011 May 13. PubMed PMID: 21600289; PubMed Central PMCID: PMC3872989.
- 58. **Aggarwal S**, Gross C, Fineman JR, Black SM. Oxidative stress and the development of endothelial dysfunction in congenital heart disease with increased pulmonary blood flow: lessons from the neonatal lamb. Trends Cardiovasc Med. 2010 Oct;20(7):238-46. doi: 10.1016/j.tcm.2011.11.010. Review. PubMed PMID: 22293025; PubMed Central PMCID: PMC3527074.
- 59. Xiong C, Yang G, Kumar S, **Aggarwal S**, Leustik M, Snead C, Hamacher J, Fischer B, Umapathy NS, Hossain H, Wendel A, Catravas JD, Verin AD, Fulton D, Black SM, Chakraborty T, Lucas R. The lectin-like domain of TNF protects from listeriolysin-induced hyperpermeability in human pulmonary microvascular endothelial cells a crucial role for protein kinase C-alpha inhibition. Vascul Pharmacol. 2010 May-Jun;52(5-6):207-13. doi: 10.1016/j.vph.2009.12.010. Epub 2010 Jan 13. PubMed PMID: 20074664; PubMed Central PMCID: PMC3678561.
- 60. Sharma S, Smith A, Kumar S, Aggarwal S, Rehmani I, Snead C, Harmon C, Fineman J, Fulton D, Catravas JD, Black SM. Mechanisms of nitric oxide synthase uncoupling in endotoxin-induced acute lung injury: role of asymmetric dimethylarginine. Vascul Pharmacol. 2010 May-Jun;52(5-6):182-90. doi: 10.1016/j.vph.2009.11.010. Epub 2009 Dec 3. PubMed PMID: 19962451; PubMed Central PMCID: PMC2879579.
- 61. Tian J, Smith A, Nechtman J, Podolsky R, **Aggarwal S**, Snead C, Kumar S, Elgaish M, Oishi P, Göerlach A, Fratz S, Hess J, Catravas JD, Verin AD, Fineman JR, She JX, Black SM. <u>Effect of PPARgamma inhibition on pulmonary endothelial cell gene expression: gene profiling in pulmonary hypertension.</u> Physiol Genomics. 2009 Dec 30;40(1):48-60. doi: 10.1152/physiolgenomics.00094.2009. Epub 2009 Oct 13. PubMed PMID: 19825830; PubMed Central PMCID: PMC2807211.
- 62. Kumar S, Sun X, Sharma S, **Aggarwal S**, Ravi K, Fineman JR, Black SM. <u>GTP cyclohydrolase I expression is regulated by nitric oxide: role of cyclic AMP.</u> Am J Physiol Lung Cell Mol Physiol. 2009 Aug;297(2):L309-17. doi: 10.1152/ajplung.90538.2008. Epub 2009 May 15. PubMed PMID: 19447893; PubMed Central PMCID: PMC2742798.

#### MANUSCRIPTS IN PREPARATION (Trainees ate indicated by \*)

- 63. Tanima Chatterjee\*, Simran Malik, & Saurabh Aggarwal. Smoking increases the risk of pulmonary hypertension in HIV.
- 64. Tanima Chatterjee\*, Simran Malik, & **Saurabh Aggarwal**. SDF-1/CXCR4 signaling mediated pain in sickle cell disease.
- 65. Tanima Chatterjee\*, Lilly Underwood, Juan Xavier Masjoan Juncos, & **Saurabh Aggarwal**. Hema scavenging mitigates cold allodynia in HIV-1Tg rats.
- 66. Tanima Chatterjee,\* Lilly Underwood, Juan Xavier Masjoan Juncos, Itika Arora\*, & **Saurabh Aggarwal**. TLR4 mediates heme-induced endogenous opioid disbalance and hypersensitivity.
- 67. Tanima Chatterjee\*, Christine Gross, & Saurabh Aggarwal. Role of macrophage polarization in the development of ARDS.
- 68. Lilly Underwood\*, Tanima Chatterjee\*, Juan Xavier Masjoan Juncos, Terry L. Lewis, & Saurabh Aggarwal. Lamivudine and Tenofovir impair endogenous opioid homeostasis in macrophages.
- 69. Tanima Chatterjee\*, Lilly Underwood\*, Juan Xavier Masjoan Juncos, Terry L. Lewis, & **Saurabh Aggarwal**. AMD3100 ameliorates chlorine induced lung injury.

- 70. Tanima Chatterjee\*, Lilly Underwood\*, Juan Xavier Masjoan Juncos, Athar Mohammad Jessy Deshane, & Saurabh Aggarwal. Temporal Evaluation of Lung Injury Upon Acute Exposure to Inhaled Fentanyl.
- 71. Itika Arora\*, Tanima Chatterjee\*, Simran Malik, James Mobley, Burel Goodin, Sonya Heath & **Saurabh Aggarwal**. Quantitative proteomics analysis reveals differentially expressed proteins across HIV patients with and/or without chronic pain.
- 72. Itika Arora\*, Tanima Chatterjee\*, Sanjana Chada\*, Lilly Underwood\*, Terry L. Lewis, & **Saurabh Aggarwal**. Analysis of gut microbiome post chlorine gas.
- 73. Itika Arora\*, Tanima Chatterjee\*, Sanjana Chada\*, Lilly Underwood\*, & **Saurabh Aggarwal**. Analysis of gut microbiome in hemeoxygenase-1 knockout mice.
- 74. Itika Arora\*, Tanima Chatterjee\*, Lilly Underwood\*, Terry L. Lewis, Juan Xavier Masjoan Juncos, & Saurabh Aggarwal. Metabolic profiling post chlorine gas exposure: Potential diagnostic biomarker candidates for lung injury.
- 75. Juan Xavier Masjoan Juncos, Tanima Chatterjee\*, Lilly B Underwood\*, Ginette Bordcoch, Terry L Lewis, **Saurabh Aggarwal**. Acute Cardiac Injury Post Chlorine Gas Exposure.
- 76. Juan Xavier Masjoan Juncos, Tanima Chatterjee\*, Lilly B Underwood\*, Ginette Bordcoch, Terry L Lewis, **Saurabh Aggarwal**. Progressive Myofibrillar Degeneration Post Chlorine Gas Exposure.
- 77. Juan Xavier Masjoan Juncos, Tanima Chatterjee\*, Lilly B Underwood\*, Ginette Bordcoch, Terry L Lewis, Saurabh Aggarwal. Kidney Injury Post Chlorine Gas Exposure.

#### **BOOK CHAPTERS (Trainees are indicated by \*)**

- 1. Lam A\*, Vital N, Matalon S, and **Saurabh Aggarwal.** Countermeasures against Chemical Threats. Special issue. Laskin JD, editor. New York, USA; Annals of the New York Academy of Sciences; Chapter 10, Role of Heme in Bromine-Induced Lung Injury; p105-110; 209p. Vol.1374.
- 2. Carlisle M\*, Lam A\*, Svendsen ER, **Saurabh Aggarwal**, and Matalon S. Countermeasures against Chemical Threats. Special issue. Laskin JD, editor. New York, USA; Annals of the New York Academy of Sciences; 2016. Chapter 18, Chlorine-induced cardiopulmonary injury; p.159-167; 209p. Vol.1374.
- 3. **Saurabh Aggarwal**, Gross CM, Porcelli RJ, Black SM. Comparative Biology of the Normal Lung. 2nd ed. Parent RA, editor. Cambridge, USA: Academic Press; 2015. Chapter 14, Pulmonary Hemodynamics; p.205-243.834p.
- 4. Gross CM, Saurabh Aggarwal, Rafikov R, Black SM. Oxidative stress in Applied Basic Research and Clinical Practice: Studies on Pediatric Disorders. Tsukahara H, Kaneko K, editors. New York, USA: Humana Press; 2014. Chapter 27, Oxidative Stress and Pulmonary Vascular Disorders; p.457-480. 494p.
- 5. **Saurabh Aggarwal,** Gross CM, Black SM. Endothelial Dysfunction: Risk Factors, Role in Cardiovascular Diseases and Therapeutic Approaches. Keaton TH, editor. New York, USA: Nova Biomedical; 2014. Chapter 2, Endothelial Dysfunction in Acute Lung Injury; p.27-50. 277p.
- 6. **Saurabh Aggarwal**, Westbrook J, Johnson ME. Asperger's Disorder. Rausch JL, Johnson ME, Casanova MF, editors. Boca Raton, USA: CRC press; 2008. Prognosis of Asperger's Disorder; p.327-342.

#### **INTERNET BLOGS**

- 1. **Saurabh Aggarwal**. "Mitochondrial DNA damage and repair: Role in acute lung injury". The AJP-Lung Breather, 2015 April. Blog
- 2. **Saurabh Aggarwal**. 'Furry' convention disrupted as 'intentional' gas incident sends 19 to hospital-chlorine gas exposure. The AJP-Lung Breather, 2014 Dec. Blog

#### ABSTRACTS PRESENTED AS POSTERS AT NATIONAL AND INTERNATIONAL MEETINGS

- 1. **Saurabh Aggarwal**, Lam A\*, Carlisle M\*, Traylor A, Vital N, Agarwal A, and Matalon S (2016). The central role of heme in the propagation of bacterial infection after acute lung injury Poster presented at: American Thoracic Society 2016 international conference; San Francisco, CA, US
- 2. **Saurabh Aggarwal**, Lam A\*, Bolisetty S, Carlisle M, Traylor A, Agarwal A, and Matalon S. (2015). Heme scavenging ameliorates bromine induced lung injury Poster presented at: American Thoracic Society 2015 international conference; Denver, CO, US
- 3. Benavides GA, **Saurabh Aggarwal**, Doran SF, Darley-Usmar VM, and Matalon S. (2015). Mitochondrial bioenergetics dysfunction and chlorine toxicity Poster presented at: 9th annual Counter Measures against chemical threats (CounterACT) Networks Research Symposium, New York Academy of Sciences; New York, NY, US
- 4. **Saurabh Aggarwal**, Lam A\*, Bolisetty S, Carlisle MA, Traylor A, Agarwal A, and Matalon S. (2014). Heme scavenging attenuates bromine induced lung injury Poster presented at: Society for Redox Biology and Medicine's 21st Annual Meeting; Seattle, WA, US
- 5. Black SM, Gross CM, **Saurabh Aggarwal**, Rafikov R, Catravas JD, Meadows ML, Shaw M, and Kumar S. (2014). Stimulation of pp60src activity limits nitric oxide signaling through increases in asymmetric dimethylarginine Poster presented at: European Respiratory Society, Annual Congress; Munich, DEU
- 6. **Saurabh Aggarwal**, Rafikov R, Gross CM, Kumar S, and Black SM. (2012). The nitration-mediated inhibition of PKG-1 alpha is involved in the switch from a contractile to a synthetic phenotype in pulmonary vascular smooth muscle cells Poster presented at: Keystone symposium: Pulmonary vascular diseases and right ventricular dysfunction: Current concepts and future therapies; Monterey, CA, US
- 7. Gross CM, Rafikov R, **Saurabh Aggarwal**, Hou Y, and Black SM. (2011). Nitration mediated inhibition of Rac-1 alpha is involved in the endothelial barrier dysfunction induced by lipopolysaccaharide Poster presented at: European Respiratory Society, Annual Congress; Amsterdam, NLD
- 8. Gross CM, Saurabh Aggarwal, Kumar S, Meadows ML, Shaw M, Gorshkov BA, Verin AD, and Black SM. (2014). The over-expression of Sox18 attenuates the development of acute lung injury Poster presented at: American Thoracic Society 2014 international conference; San Diego, CA, US
- 9. Gross CM, Saurabh Aggarwal, Kumar S, Meadows ML, Shaw M, Gorshkov BA, Verin AD, and Black SM. (2014). The over-expression of Sox18 attenuates the development of acute lung injury Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US
- 10. Gross CM, **Saurabh Aggarwal**, Kumar S, Shaw M, and Black SM. (2014). The epigenetic regulation of Sox 18 by LPS disrupts the endothelial barrier in acute lung injury Poster presented at: American Thoracic Society 2014 international conference; San Diego, CA, US
- 11. Gross CM, **Saurabh Aggarwal**, Kumar S, Snead C, Catravas JD, and Black SM. (2012). Sox18 and the regulation of endothelial barrier function in acute lung injury. Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US

- 12. Gross CM, **Saurabh Aggarwal**, Kumar S, Snead C, Catravas JD, and Black SM. (2012). SOX 18 and the regulation of endothelial barrier function in acute lung injury Poster presented at: American Thoracic Society 2012 international conference; San Francisco, CA.
- 13. **Saurabh Aggarwal**, Gross CM, Smith A, and Black SM. (2011). Nitration-mediated inhibition of Protein Kinase G is involved in the endothelial barrier disruptive effects of lipopolysaccharide Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US
- 14. Gross CM, Saurabh Aggarwal, Kumar S, Snead C, Rafikov R, Catravas JD, and Black SM. (2011). Nitration mediated inhibition of PKG-1 alpha is involved in the barrier disruptive effects of lipopolysaccaharide Poster presented at: American Thoracic Society 2011 international conference; Denver, CO, US
- 15. Gross CM, Saurabh Aggarwal, Tian J, Datar S, Fineman JR, and Black SM. (2011). Sox18 protects the endothelium from shear stress induced barrier disruption Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US
- 16. Kumar S, **Saurabh Aggarwal**, Gross CM, Kou Y, Rafikov R, Sharma S, Dasarathy S, Reddy V, and Black SM. (2013). pp60Src limits nitric oxide signaling through increases in asymmetric dimethylarginine Poster presented at: Society for Redox Biology and Medicine's 20th Annual Meeting; San Antonio, TX, US
- 17. Rafikov R, Saurabh Aggarwal, Gross CM, Hou Y, Snead C, Catravas JD, Fulton D, and Black SM. (2011). Post-translational regulation of RhoA and Rac1 Poster presented at: The Society for Free Radical Biology and Medicine's 18th Annual Meeting; Atlanta, GA, US
- 18. Rafikov R, **Saurabh Aggarwal**, Gross CM, Kumar S, Hou Y, Snead C, Jezierska A, Verin AD, Fulton D, Catravas JD, and Black SM. (2010). Nitration mediated activation of RhoA: Its role in LPS-induced endothelial barrier dysfunction Poster presented at: Society for Redox Biology and Medicine's 17th Annual Meeting; Orlando, FL, US
- 19. Rafikov R, Saurabh Aggarwal, Rafikova O, Sun X, Gross CM, Hou Y, and Black SM. (2012). Asymmetric dimethylarginine (ADMA) mediated activation of Akt1 signaling in endothelial cells". Poster presented at: American Thoracic Society 2012 international conference; San Francisco, CA, US
- 20. Rafikov R, Saurabh Aggarwal, Rafikova O, Sun X, Gross CM, and Black SM. (2011). Nitration mediated activation of Akt involved in endothelial nitric oxide synthase (eNOS) mitochondria translocation Poster presented at: Society for Redox Biology and Medicine's 18th Annual Meeting; Atlanta, GA, US
- 21. Rafikov R, Sud N, **Saurabh Aggarwal**, Kumar S, Hou Y, Snead C, Catravas JD, and Black SM. (2010). LPS-induced hyper-permeability of human lung microvascular endothelial cells (HLMVEC) involves the nitration-mediated activation of RhoA Poster presented at: American Thoracic Society 2010 international conference; New Orleans, LA, US
- 22. Rafikov R, Sun X, Rafikova O, **Saurabh Aggarwal**, Gross C, Hou Y, and Black SM. (2014). Role of carboxylterminal modulator protein in the nitration mediated activation of AKT1 Poster presented at: Society for Redox Biology and Medicine's 21st Annual Meeting; Seattle, WA, US
- 23. Rafikova O, Rafikov R, **Saurabh Aggarwal**, Desai JJ, Sharma S, Jonigk D, and Black SM. (2011). Role of epidermal growth factor receptor autophosphorylation in pulmonary hypertension development Poster presented at: Society for Redox Biology and Medicine's 18th Annual Meeting; Atlanta, GA, US
- 24. Rafikova O, Rafikov R, **Saurabh Aggarwal**, Jonigk D, and Black SM. (2012). Ligand-independent EGFR activation in the development of pulmonary hypertension Poster presented at: American Thoracic Society 2012 international conference; San Francisco, CA, US
- 25. Rafikova O, Sud N, Kumar S, **Saurabh Aggarwal**, Rafikov R, and Black SM. (2010). Ligand independent upregulation of EGFR signaling is responsible for eNOS dysfunction in pulmonary hypertension Poster presented at: Society for Redox Biology and Medicine's 17th Annual Meeting; Orlando, FL, US
- 26. Rafikova O, rafikov R, Kumar S, Sharma S, Saurabh Aggarwal, Schneider F, Jonigk D, and Black SM. (2011). The anti-proliferative effect of Bosentan in occlusive pulmonary hypertension involves a reduction in

- both oxidative and nitrosative stress Poster presented at: Society for Redox Biology and Medicine's 18th Annual Meeting; Atlanta, GA, US
- 27. **Saurabh Aggarwal**, Fonseca F, Rafikov R, and Black SM. (2009). Generation of a theoretical homology model of cGMP-protein kinase G to predict tyrosine nitration events Poster presented at: Medical College of Georgia, Graduate Research-day; Augusta, GA, US
- 28. **Saurabh Aggarwal**, Gross CM, and Black SM. (2010). Attenuated cGMP dependent vasodilation in lambs with pulmonary hypertension: Role of PKG-1 alpha nitration Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US
- 29. **Saurabh Aggarwal**, Kumar S, Tian J, Smith A, and Black SM. (2010). LPS mediated endothelial barrier disruption: Role of Hydrogen peroxide Poster presented at: American Thoracic Society 2010 international conference; New Orleans, LA, US
- 30. **Saurabh Aggarwal**, Smith A, Fineman JR, and Black SM. (2008). BNP/cGMP signaling and endothelial permeability in vitro and in vivo. Poster presented at: Medical College of Georgia, Graduate Research Day; Augusta, GA, US
- 31. **Saurabh Aggarwal**, Smith A, Fineman RJ, and Black SM. (2008). BNP/cGMP signaling and endothelial permeability in vitro and in vivo". Poster presented at: Pediatric Academic Society Conference; Honolulu, HI, US
- 32. Sharma S, Kumar S, **Saurabh Aggarwal**, Sud N, Hou Y, Snead C, Fulton D, Catravas JD, and Black SM. (2010). LPS decreases dimethylarginine dimethylamonohydrolase (DDAH) activity through the activation of pp60src Poster presented at: American Thoracic Society 2010 international conference; New Orleans, LA, US

# TEACHING ACCOMPLISHMENTS

# **LECTURE SERIES**

Year	Title
2016-current (Monthly)	Hypoxia and Hypoxemia. University of Alabama at Birmingham, Birmingham, AL
2021-current (Yearly)	Evaluating Randomized Controlled Trials, Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

# **GRAND ROUNDS**

Year	Title
2020	Heme Impairs Endogenous Opioid Production in Leukocytes of HIV Patients with Chronic Widespread Pain. Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL
2019	HIV Associated Lung Diseases. Pulmonary Grand Rounds. Division of Pulmonary, Allergy, and Critical Care Medicine, Department of Medicine, University of Alabama at Birmingham, Birmingham, AL
2019	Chronic Pain in HIV. Anesthesiology Grand Rounds. Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL
2019	Role of Heme in HIV-Associated Comorbidities. Anesthesiology Grand Rounds. Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL

# **SEMINARS**

Year	Title
2020	The role of SARS-CoV-2 Spike Protein in Impairing Bactericidal Function of Macrophages. Departmental Seminar, August 4, 2020. Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL
2020	The role of SARS-CoV-2 Spike Protein in Impairing Bactericidal Function of Macrophages. Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, AL
2008	Role of cGMP/PKG signaling in the regulation of endothelial permeability in vitro and in vivo (Follow up). "Pulmonary Vascular Remodeling: Early Determinants in Congenital HeARt Disease (PEDCARD) LeDucq Foundation Transatlantic Net Work. Medical College of Georgia, Augusta, GA, US

## **MENTORING EXPERIENCE**

# **CAREER MENTOR**

Trainee	Year	Role
Abhrajit Ganguly, MD, Assistant Professor of Pediatrics, Section of Neonatal-Perinatal Medicine, Center for Pregnancy and Newborn Research, University of Oklahoma Health Sciences Center.	2021- current	Society For redox Biology and Medicine (SFRBM) mentorship program
Mohammed Siddiqui, MD, Instructor, University of Alabama at Birmingham, AL	2021- current	K12 Scholar Mentorship program
Jenni M Wise, PhD, RN, Assistant Professor, University of Alabama at Birmingham, AL	2021- current	K12 Scholar Mentorship program
Soumya Niranjan, PhD, Assistant Professor, University of Alabama at Birmingham, AL	2021- current	K12 Scholar Mentorship program

# POSTDOCTORAL FELLOWS

Trainee	Year	Role
Tanima	2021-2023	Mentor, Department of Anesthesiology and Perioperative Medicine, UAB, AL
Chatterjee		Awards-2021 CFAR World AIDS Day Research Competition, 3 <sup>rd</sup> Place Winner, <b>\$1,500 toward research funding and a \$75 personal prize</b> . (Title: "Role of macrophage endothelial crosstalk in HIV associated pulmonary arterial hypertension"), UAB, AL
Itika Arora	2022-2023	Mentor, Department of Anesthesiology and Perioperative Medicine, UAB, AL
		Awards- 2022 Research award for the 16 <sup>th</sup> Annual CounterACT Network Research Symposium, New Orleans, LA, US <b>\$1,500 toward travel to the meeting</b> . ( <i>Title: "Lung Metabolomic Profiling Post Chlorine Gas Exposure"</i> )

# **GRADUATE STUDENTS**

Trainee	Year	Role
Saurav Gupta	2022-current	Graduate student committee member, Graduate Biomedical Sciences PhD Program, UAB, AL
Anastasiia 2021 Gryshyna		Research Mentor to graduate student, Behavioral Neuroscience Ph.D. Program, UAB, AL
		Awards- 2021 CFAR World AIDS Day Research Competition, 2 <sup>nd</sup> Place Winner, <b>\$2,000 toward research funding and a \$125 personal prize</b> . ( <i>Title: "Role of Mast Cells in HIV-associated Chronic Widespread Pain"</i> ), UAB, AL

# **UNDERGRADUATE STUDENTS**

Trainee	Year	Role		
Lilly B Underwood	2022- current	Mentor, Neuroscience Undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Mohammed Anas Ghalib	2022	Mentor, Neuroscience Undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Humza A Khan	2021	Mentor, Neuroscience Undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Truong Carolyn	2021	Mentor, Neuroscience Undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Natalie K Black	2021	Mentor, Neuroscience Undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Henry J Paiste	2016-2018	Mentor, Neuroscience undergraduate program, University Honors College, University of Alabama at Birmingham, AL		
Torrie Brantley	2021	Mentor, Minority Health & Health Disparities Research Center (MHRC's) Research in Aging through Mentorship and Practice - Undergraduate Program (RAMP-UP)		
Steven Gu	Gu 2018-2019 Mentor, Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, AL			
Nilam Vital	2015-2017	Mentor, Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, AL		

# **HIGH SCHOOL STUDENTS**

Trainee	Year	Role
Sanjana Chada	2022	UAB-Center for Community Outreach Development (CORD) Summer Science Institute III intern. National Junior Science & Humanities Symposium. "Changes in Gut Microbiome Correlate with Lung Morbidity and Mortality Post-Toxic Gas Exposure".
		Applicant: Alabama Science Scholar and Gorgas Scholarship Competition, Alabama Junior Academy of Science

# **MEDICAL STUDENTS**

Trainee	Year	Role	
Adam Lam 2014-		Research Mentor, University of Alabama at Birmingham, AL	
	2017	Awards-2016 Annual Abstract Scholarship from the "American Thoracic Society, Assembly on Environmental, Occupational and Population Health", New York, NY	
Matthew A	2014-	Research Mentor, University of Alabama at Birmingham, AL, US	
Carlisle	2017	Awards-2016 Annual Abstract Scholarship from the "American Thoracic Society,	

## ABSTRACTS PRESENTED BY TRAINEES AT MEETINGS (Trainees are indicated by \*)

- 1. Chatterjee T\*, Arora I\*, Lilly Underwood\*, and **Saurabh Aggarwal** (2022). Identification of AMD3100 (Plerixafor) as a Potential Lead Compound for Chlorine Toxicity", June 21-23, 2022; The 15th Annual CounterACT Network Research Symposium. New Orleans, LA, US
- 2. Arora I\*, Chatterjee T\*, Lilly Underwood\*, and **Saurabh Aggarwal** (2022). Lung Metabolomic Profiling Post Chlorine Gas Exposure, June 21-23, 2022; The 15th Annual CounterACT Network Research Symposium. New Orleans, LA, US
- 3. Anastasiia Gryshyna\* and **Saurabh Aggarwal** (2021). Role of Mast Cells in HIV-associated Chronic Widespread Pain. CFAR World AIDS Day Research Competition, UAB, AL
- 4. Chatterjee T\*, Arora I\*, Lilly Underwood\*, and **Saurabh Aggarwal** (2021). Role of macrophage endothelial crosstalk in HIV associated pulmonary arterial hypertension. CFAR World AIDS Day Research Competition, UAB, AL
- 5. Lam A\*, **Saurabh Aggarwal**, Carlisle M\*, Vital N\*, Agarwal A, and Matalon S (2016). Development of pulmonary fibrosis following bromine inhalation injury Poster presented at: American Thoracic Society 2016 international conference; San Francisco, CA, US
- Carlisle M\*, Lambert J, Lam A\*, Saurabh Aggarwal, Jilling T, Dell'italia L, and Matalon S (2016). Tadalafil
  ameliorates halogen inhalation injury during pregnancy Poster presented at: American Thoracic Society 2016
  international conference; San Francisco, CA, US
- 7. Carlisle M\*, Lam A\*, **Saurabh Aggarwal**, Jilling T, and Matalon S. (2015). Pregnant mice exposed to Bromine are susceptible to preeclampsia and increased maternal mortality Poster presented at: American Thoracic Society 2015 international conference; Denver, CO, US
- 8. Lam A\*, **Saurabh Aggarwal**, Carlisle M\*, Agarwal A, and Matalon S. (2015). Heme dependent mitochondrial stress and apoptosis are hallmarks of bromine toxicity Poster presented at: American Thoracic Society 2015 international conference; Denver, CO, US

## **Teaching Philosophy**

I have been extremely fortunate to have been trained by prominent scientists and educators in their respective fields, who have made an indelible impact in my career. Therefore, I believe it is my obligation to pass on the knowledge and training that I received to the next generation of scientists and physicians. I am actively involved in teaching and training future scholars at all levels of their career including, high school, undergraduate, graduate, postdoctoral, and medical students. I am also a career advisor to junior faculty through various local and national programs. I have found the role of a pedagogue and a research mentor as one of the most rewarding and satisfying aspect of my research career.

My overall teaching style is to promote imbibing of didactic concepts and the application of knowledge. Therefore, my lectures invariably include clinical and research vignettes, which helps mentees to quickly apply complex theories to solve clinical and research problems. My goal is to encourage critical thinking in trainees which will enable them to be successful physicians and scientists and advance science through their innovations and problem-solving capabilities.

As full-time research faculty, it is paramount that my trainees understand the importance of project/experiment planning, execution and deadlines. I lead by example and encourage my mentees to embody the same qualities. I conduct weekly meetings to help the mentees stay on track with their projects. These meeting also give them an opportunity to interact, express new ideas and problem solve. Few of the areas that I emphasis for learning and self-improvement is raw data analysis, scientific writing, and oral presentations. These can help student scientist develop a strong foundation and excel in their career. Additionally, I am constantly looking for ways for my trainees to get engaged in their careers at an early stage by participating in regional and national meetings. I encourage and support them in writing applications for travel awards and grants for project funding, preparing them systematically for writing larger grants in the future and pursuing independent research.

## **SERVICE ACCOMPLISHMENTS**

## **EDITORIAL BOARDS**

Year Journal

2021-current Physiological Reviews

2015-current American Journal of Physiology, Lung Cell and Molecular Physiology

2017-current Frontiers in Physiology

## **REVIEWER FOR JOURNALS**

Year Journal

2022-current Molecular Pain

2021-current Pulmonary Pharmacology and Therapeutics

2020-current Redox Biology

2020-current Journal of Hazardous Materials

2020-current Immunology Letters

2020-current Mitochondrion

2019-current Toxicology Letters

2019-current Experimental Biology and Medicine

2019-current Nitric Oxide

2018-current Frontiers in immunology

2017-current Virulence 2017-current Oncotarget

2016-current American Journal of Respiratory Cell and Molecular Biology

2015-current PLoS ONE

## **GRANT REVIEW COMMITTEE**

Year	Grant Panel
2023	PRMRP DIS-RH-1 peer review panel (Department of Defense)
2023	Faculty Development Grant Program (UAB)
2022	CDMRP PRMRP RH-1 peer review panel (Department of Defense)
2022	Countermeasures Against Chemical Threats (CounterACT) Program- Lung Toxicity (NIEHS)
2022	REINVENT Program (UAB)

2021 AMC21 1RO1 (UAB)

2017 PRMRP DIS-RH-1 peer review panel (Department of Defense)

## **SOCIETY MEMBERSHIPS**

Year Society

2019-current European AIDS Clinical Society
2011-current European Respiratory Society
2011-current American Thoracic Society

2009-current Society for Redox Biology and Medicine

2009-current American Heart Association

## **INSTITUTIONAL COMMITTEES**

Year Title

2022-current Elected Member of Faculty Senate, School of Medicine, University of Alabama at

Birmingham, Birmingham, AL

2022-current Faculty Senate Standing Research Committee, University of Alabama at Birmingham,

Birmingham, AL

2021-current Member of UAB Asian American Pacific Islander (AAPI) Faculty Association

2021-current Chair of the committee which recruits new members and tracks the data to make sure

the AAPI s making progress

## **COMMUNITY SERVICE**

Year Role

2016-current Participate in UAB's Student Interest Group in Anesthesia, which build houses for

Habitat for Humanity

2016-current Assist UAB medical students to prepare for residency interview.

2021-current Judge for the Undergraduate Research Expo Summer, UAB



December 7, 2023

Subject: Proposed Amendment to Regulation FIU-412 Undergraduate Admissions

## **Proposed Action:**

Florida International University Board of Trustees approval of the revisions to Regulation FIU-412 Undergraduate Admissions to conform to Florida Board of Governors (BOG) Regulation 6.005, and delegation of authority to the University President to approve any subsequent non-material amendments based on comments to the Regulation received from the BOG.

## **Background Information:**

This revised regulation details Florida International University's (FIU) undergraduate admission requirements for First Time in College (FTIC) students and includes changes because of the Florida Board of Governors (BOG) Regulation 6.005. The revised FIU-412 regulation allows for the use of the Classic Learning Test (CLT) scores from Classic Learning Initiatives LLC for the standardized test scores and adds a new section for Admission of High School Students with an Associate of Arts (A.A.) Degree. This new section explains that high school students participating in dual enrollment and other acceleration programs, who are on track to earn an A.A. degree from a member of the Florida College System (FCS) or State University System (SUS) institution, may be considered as either a first-time in college (FTIC) freshman or as a potential A.A. transfer student.

Additional small editorial corrections are included in the revised FIU-412 regulation as well.

BOG Regulation 6.005 provides in part: "(1) High school students participating in dual enrollment and other acceleration programs who are on track to earn an associate in arts (A.A.) degree from a Florida College System (FCS) or State University System (SUS) institution and who do not meet the requirements of Board of Governors Regulation 6.004 may be considered for admission as either a first-time-in-college (FTIC) freshman or as a potential A.A. transfer student. ... (5) Admission is contingent upon completing all additional requirements for admission as required by each university to which the student applies. ... (b) Students who would benefit from the A.A. admissions option have the choice to submit SAT, ACT, and/or CLT test scores."

**Supporting Documentation:** Regulation FIU-412 Undergraduate Admissions

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-412

**REGULATION TITLE**: Undergraduate Admissions

SUMMARY: This revised regulation details Florida International University's (FIU) undergraduate admission requirements for First Time in College (FTIC) students and includes changes because of the Florida Board of Governors (BOG) Regulation 6.005. The revised FIU-412 regulation allows the use of the Classic Learning Test (CLT) scores from Classic Learning Initiatives LLC for the standardized test scores and adds a new section for Admission of High School Students with an Associate of Arts Degree. This new section explains that high school students participating in dual enrollment and other acceleration programs, who are on track to earn an associate in arts (A.A.) degree from a member of the Florida College System (FCS) or State University System (SUS) institution, may be considered as either a first-time in college (FTIC) freshman or as a potential A.A. transfer student.

Additional small editorial corrections are included in the revised FIU-412 regulation as well.

**TEXT OF REGULATION**: The full text of the Proposed Amendment to Regulation can be viewed below and on the website of The Florida International University Board of Trustees, <a href="http://regulations.fiu.edu">http://regulations.fiu.edu</a>. If you would like a copy, please contact Eli Deville, Departmental Administrator, Office of the General Counsel, <a href="http://eeuglations.fiu.edu">devillee@fiu.edu</a>, 305.348.2103.

**AUTHORITY**: Board of Governors Regulations 6.001, 6.002, 6.004, 6.005, and 6.008.

## NAME OF PERSON INITIATING PROPOSED REGULATION:

Dr. Elizabeth Bejar, Provost, Executive Vice President and Chief Operating Officer.

ANY PERSON SEEKING TO COMMENT ON THE PROPOSED AMENDMENT TO 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, Florida International University, Office of the General Counsel, 11200 SW 8<sup>th</sup> Street, PC 511, Miami, FL 33199, Email: <a href="deville@fiu.edu">deville@@fiu.edu</a> Phone: 305.348.2103 | Fax: 305.348.3272.

**DATE OF PUBLICATION**: November 2, 2023

#### THE FULL TEXT OF THE REGULATION IS PROVIDED BELOW:

## **FIU-412 Undergraduate Admissions**

- 1. First Time in College (FTIC) Undergraduate Admissions
  - a. FTIC students are defined as a student who has earned a high school diploma and has earned fewer than twelve (12) semester hours of transferable college credit since receiving a standard high school diploma or its equivalent.
  - b. FTIC students must submit SAT scores from the College Board-or, ACT scores from ACT, Inc., or Classic Learning Test (CLT) scores from Classic Learning Initiatives LLC. for consideration.
  - c. Admission of new undergraduate students is selective within the curricular, space, and fiscal limitations of FIU. The selection process includes the review of credentials such as grades and grade trends, test scores, pattern and rigor of courses completed, class rank, educational objectives, past conduct, school recommendations, personal recommendations, and personal records. Eligibility for admission does not guarantee admission to the requested degree program. Preference for admission is given to those applicants whose credentials indicate the greatest potential for academic success.
  - d. FTIC students with a disability are eligible for reasonable substitution or modification of any admission requirement as outlined in FIU Policy 300.014 entitled Substitution or Modification Accommodations for Students with Disabilities.
  - e. FIU's Strategic Five-Year Enrollment Plan influence'sinfluences admission priorities and goals for the upcoming three years including the numbers of new students by admission category, academic quality indices and diversity for freshman, transfer, master's, doctoral, and professional students. Annually, the previous 2 years' goals, targets and enrollment are reviewed, and revisions are made as needed. For entering FTIC students, pre-collegiate precollegiate or collegiate factors that predict success of new students in undergraduate programs factors include, but are not limited to, additional coursework beyond the minimum state requirements in Math, Science and/or Foreign Language; Advanced Placement, International Baccalaureate, AICE and/or dual enrollment coursework. These success factors are reviewed biannually and are subject to change based on continuing research.

## 2. Admission of High School Students with Associate of Arts Degree

- a. In accordance with Florida Board of Governors Regulation 6.005, high school students participating in dual enrollment and other acceleration programs, who are on track to earn an associate in arts (A.A.) degree from a member of the Florida College System (FCS) or State University System (SUS) institution, may be considered as either a first-time in college (FTIC) freshman or as a potential A.A. transfer student.
  - i. Admission is contingent upon completing all additional requirements for admission.
  - ii. Students opting in for this pathway must meet high school graduation requirements and be receiving their A.A. degree prior to enrollment at FIU.
  - iii. Applicants who would benefit can opt not to submit their SAT, ACT or

## CLT scores.

iv. Applicants selecting this option may not be admitted into a selective admission major or program.

## 3. Undergraduate Transfer **Students Admissions**

- a. For the purposes of this regulation, undergraduate transfer students are defined as students who have earned twelve or more semester hours of transferable college credit since receiving a standard high school diploma or its equivalent.
- b. FIU requires undergraduate transfer applicants to submit or authorize transmission of a complete official academic transcript from each postsecondary institution attended.
- c. Degree-seeking applicants with fewer than 30 transferrable semester hours must meet the same requirements as FTIC applicants.
- d. Undergraduate transfer applicants with 30 or more transferable semester hours must meet the following minimum requirements:
  - i. Be in good standing and eligible to return to the last postsecondary postsecondary institution attended as a degree-seeking student, and

<del>ii.</del>i.

iii. Have a grade point average of at least 2.00 on a 4.00 system on all collegelevel academic courses attempted and,

<del>iv.</del>ii.

- w.iii. Must have successfully completed at least one college-level English and one college-level math class with a grade of C or higher. Pass/Fail grades do not equate to a C or better.
- e. Applicants who receive an Associate in Arts (AA)A.A.) degree from a public Florida state college or university will be considered for admission without restriction, except for published university specialized admissions (formerly limited-access) programs or programs with prerequisites which that were not met.
- f.—Transfer students with a disability are eligible for <u>a</u> reasonable substitution or modification of any admission requirement as outlined in FIU Policy 300.014 entitled Substitution or Modification Accommodations for Students with

g.f. Disabilities.

## 4. Alternative Admissions

- a. Undergraduate applicants—FTIC and transfer students—who do not meet the applicable FIU admissions requirements may be admitted through an alternative admissions process.
- b. Students with a disability reviewed in the Alternative Admissions process are eligible for reasonable substitution or modification of any admission requirement as outlined in FIU Policy 300.014 entitled Substitution or Modification Accommodations for Students with Disabilities.
- c. The FIU Admission Petition and Appeals Committee conducts an assessment of the evidence provided by the applicant and the academic unit to determine the individual's potential to succeed at the University. In addition to reviewing the applicant's GPA and test scores, the Committee may take into consideration factors such as: improvement in high school record, family educational

- background, socioeconomic status, graduation from an underperforming high school, graduation from an International Baccalaureate program, geographic location, military service, and special talents or abilities.
- d. The Board of Trustees delegates to the Provost the authority to establish the total number of FTIC students admissible annually through the alternative admission process. The rates of retention, academic success, and graduation rates of students admitted to FIU through an alternative admissions process must be annually reviewed and presented to the Board of Trustees.

Specific Authority: Board of Governor Regulations 6.001, 6.002, 6.004, 6.005, 6.008 History– New 1-5-2023. Amended .



## **ACADEMIC AFFAIRS REGULAR REPORTS**

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



## I. ACADEMIC AND STUDENT AFFAIRS

## 1. A roaring F1RST NIGHT welcomes 7,000 Panthers to FIU Stadium

Following a productive first day of class on August 21st, more than 7,000 Panthers, including students, faculty, staff and alumni, headed to the FIU Football Stadium to enjoy FIU's newest Week of Welcome tradition: F1RST NIGHT. A rousing call to action from Head Coach Mike MacIntyre encouraged students to head to FIU's home football games this season, followed by a step routine showcase by teams from FIU's fraternities and sororities, the annual gathering of the Greeks for a photo op on the field, and an augmented reality fireworks display viewed using smartphones. In just two years, F1RST NIGHT has become students' best opportunity to explore the variety of ways to get involved in campus life, highlighting dozens of student organizations, service-learning opportunities, and departments across the university that are dedicated to student success.

## 2. At annual career and internship fairs, potential employers reach 2,600 students

More than 2,600 students made meaningful, face-to-face connections with potential future employers at FIU's annual internship and career fairs, hosted in September by the Career and Talent Development department. The fairs brought employers from a diverse range of industries together with the university's eager, workforce-ready talent to discuss career opportunities in the companies' targeted areas of interest or need. More than 120 employers spanning the public, private and nonprofit sectors participated in the three events this year, including Google, JPMorgan Chase, MITRE, Lockheed Martin, Peace Corps, City Year, Florida Department of Transportation, and many more.

# 3. Educating students about dangers and repercussions of hazing during National Hazing Prevention Week

The last week of September marked National Hazing Prevention Week. In recognition, FIU Student Health & Wellness partnered with the Office of Fraternity and Sorority Life to host a variety of programming aimed at empowering students to identify and report incidents of hazing. A highlight of the week was a keynote address by Jason Meriwether, Ph.D., a leading expert in hazing prevention and risk management, which was attended by hundreds of students in-person and online. Meriwether hosts workshops all over the country to help college-aged students understand the serious implications of this type of violence and empower them with risk management skills that help prevent dangerous situations. At FIU, students have multiple avenues to report hazing, including filing a complaint with the Office of Student Conduct and Academic Integrity or making an anonymous report online via report.fiu.edu. Student Health & Wellness, which oversees Student Conduct & Academic Integrity, is committed to educating students about hazing prevention. They have partnered with departments across the university to raise awareness about what hazing looks like and how to prevent it. For example, the university's website, antihazing.fiu.edu, educates the public about relevant Florida laws and university regulations. Additionally, all students are encouraged to complete Hazing Prevention 101, FIU's free, online module explaining the policies and procedures in place at FIU to safeguard against hazing activities.

#### II. ENROLLMENT MANAGEMENT AND SERVICES

## 1. University Admissions

Fall recruitment season has started with University Admissions' staff attending both in-person and virtual events domestically and abroad. University Admissions is reinforcing recruitment relationships with constituents in Puerto Rico, South America, and the Caribbean, as well as across the U.S. in Florida,



Georgia, Virginia, Maryland, New York, Illinois, New Jersey, and Pennsylvania. Staff have also attended the McNair Postbaccalaureate Achievement Program events in Texas, Missouri, and Florida to educate prospective graduate students about the benefits of an FIU education.

University Admissions hosted the Florida Board of Governors State University System Fall Counselor Workshop on August 29. Nearly 300 school counselors and college counselors came to FIU to meet with the deans and directors of the 12 state universities. They heard presentations, received materials, and learned more about each school. FIU showcased both the Honors College and Golden Scholars at the event.

On September 13, University Admissions hosted a virtual graduate fair where prospective graduate students from around the world were able to join sessions about different programs and learn about how to submit applications to graduate school and how to fund their post-baccalaureate education.

Showcase FIU for prospective students was held on October 14, with Attendance of 435 students and guests. Attendees had the opportunity to apply to FIU, attend sessions related to financing their education, and tour campus.

FTIC applications are ahead by 50% over 2023 and transfer applications are ahead by 3% over 2023.

#### 2. Transfer and Transition Services

The Florida Consortium of Metropolitan Research Universities, in partnership with FIU (TTS), UCF, and USF co-hosted the 6th annual Transfer Success Summit on November 6th at USF's Tampa Campus. The summit serves as an opportunity for transfer-focused conversation around timely transfer topics such as innovative technologies, enrollment trends, student belonging, financial and mental wellness, and engagement. This statewide annual gathering, unique in the nation, continues to help inform our work as we continuously improve what we do with a data-informed lens, while serving as exemplars of transfer innovation and success for other institutions and systems.

#### 3. Financial Aid

#### **Disbursement**

As of October 16, 2023, \$498 million in aid was disbursed to 45,145 students, for the 2022-23 year. The decrease represents the expiration of HEERF Student Emergency Grant funds, which were expended by the end of the 2022 fiscal year.

#### Aid Year 2023 vs Aid Year 2022

Students Awarded and Sums of Disbursed by Aid Year and Student Level-Type

	20	022-2023	2021-2022		
Student Level	Count of Sum of Sum ID Disbursed		Count of ID	Sum of Sum Disbursed	
CNED	88	\$543,446.00	122	\$773,988.01	
GRAD	6281	\$133,111,569.08	7509	\$148,199,992.40	
LAW	473	\$15,797,125.17	536	17,709699.53	
MED	443	\$27,582,903.50	473	\$27,326,813.61	
UGRD	34873	\$320,547,366.64	39,026	\$357,236,738.2	



Grand Total 42158 \$497,582,410.39 47,666 \$551,247,231.70

#### **Cohort Default Rate**

FIU's 3-Year Cohort Default is 0% for the 2020 cohort. This reflects the repayment pause during the pandemic. The Financial Aid Office is currently engaging with former FIU borrowers to educate them about the end of the payment pause and ease them into the repayment phase of their student loans.

## 4. Office of Scholarships

## **Emergency Aid**

Over the past year, the Emergency Aid Team has managed 2,391 emergency aid applications and 4,259 salesforce cases for a total 6,650 student interactions. We have seen an increase in financial challenges that our students experience, oftentimes due to the rising cost of education and the higher cost of living. The Covid pandemic further exacerbated this. After federal relief funds were expended in June 2022, we continued to receive many applications for emergency aid (an average of about 75 a week). The Office of Scholarships continues to streamline the process by improving how applications are reviewed on the back end. Keywords that indicate emergencies, such as homelessness, are routinely searched for so those applications can be addressed as quickly as possible.

## **III. FACULTY SENATE**

During June and October, the Faculty Senate and the Steering Committee of the Faculty Senate met four times.

#### June

- FS Chair of the Nominating Committee, Krishnan Dandapani presented two candidates and described the process for Chair Nominations. The two nominees were, Noël Barengo and Nathan Dodge
- The Honorary Degree & Awards Committee recommended Dr. David Grutman and to Dr. Marie McDemmond (posthumously) to the President's Office for Honorary Degrees
- The Student Learning and Success Committee presented Simple Syllabus tools and the status of implementation of such tools to the faculty senate. The tools are required to be compliant with Florida Statute requests, to be effective Fall 2023.

#### Motions approved:

**Motion #22/23:43:** The Faculty Senate **approves** the recommendation of the Honorary Degrees and Awards Committee that an Honorary Degree be granted to <u>David Grutman</u>

**Motion #22/23:44:** The Faculty Senate **approves** the recommendation of the Honorary Degrees and Awards Committee that an Honorary Degree be granted to Marie McDemmond

**Motion #22/23:45:** The Faculty Senate **approves** the following Global Learning Designation for the following courses:

- CTS 1500 Emerging Topics in Digital Life
- OCB 3034 Marine Biology and Oceanography

**Motion #22/23:46:** The Faculty Senate **approves** to <u>remove</u> the Global Learning Designation for the following course: HIS 4404 Urban Society

Motion #22/23:47: The Faculty Senate approves Curriculum Bulletin 6

**Motion #22/23:48:** The Faculty Senate **approves** the <u>University Curriculum Calendar for AY 2023-</u>2024

**Motion #22/23:49:** The Faculty Senate **approves** the <u>Modern Languages Department statement</u>, concerning HB-7-Type Investigations and Title VII Violations



#### September

- Noël Barengo was elected as Faculty Senate Chair for the AY 2023/2024
- Angelique Ortega-Fridman was approved as Parliamentarian/Seargeant-at-Arms for the AY 2023/2024
- Remy Dou was approved as Governmental Liaison for the AY 2023/2024
- The academic units, colleges and library held their annual Caucus to elect the representatives for the Faculty Senate Nomination and Steering Committee.
- Faculty Senate is working in collaboration with UFF-FIU and FIU administration in reviewing Post-Tenure Review regulation.
- Governmental Liaison Remy Dou was appointed as chair of the ad-hoc Committee on Governmental Relations

## Motions approved:

**Motion #23/24:01**: The Faculty Senate approves the appointment of **Sneh Gulati** as Vice Chair of the Faculty Senate

**Motion #23/24:02:** The Faculty Senate approves the Ad Hoc Governmental Relations Committee proposal **Link to document**: Ad Hoc Governmental Relations proposal

#### October

- General Education Review project: Faculty were selected to work in six subcommittees to identify group 2 courses of the Core Curriculum that require modification to adhere to the newly adopted standards.
- Task Force on the past, current, and future role of tenure track and tenured faculty at FIU and its implications for the future of the University and the American Economy: Dr. Wen-Shiu Julia Chou, Dr. Kirsten E. Wood and Dr. Nathaniel Cadle were appointed to that task force.
- Priyanka Alluri, Marc Weinstein, Hassan Zahedi, and Walter Zang were appointed to a Task Force on Faculty Perception of Administrators Survey led by FIU Administration.
- Amy Paul-Ward was appointed as the new chair of the Undergraduate Grievance Committee.
- Feedback was provided to Provost Bejar and the General Counsel regarding the proposed BOG Regulation 9.016, Prohibited Expenditures.
- Motion approved:

**Motion #23/24:03**: The Faculty Senate approves the appointment of **Nathan Dodge** as Parliamentarian/Sergeant-at-Arms of the Faculty Senate

#### Other

The Faculty Senate shares with the University administration the duty to protect academic freedom and effective shared governance.

## IV. INFORMATION TECHNOLOGY REPORT

#### 1. Cybersecurity Update

This year marked the 20<sup>th</sup> anniversary of the National Security Awareness Campaign. During the month of October, the division helped spread awareness and emphasized the importance of adopting cybersecurity best-practices and online safety behaviors. We also participated in the first ever statewide cyber bowl challenge with other Florida universities that tested the cyber hygiene of FIU students, faculty, and staff. In addition to hosting trainings and sharing information, the division revamped its



annual Cybersecurity Awareness Training course. This yearly training starts every October and gives faculty and staff the necessary tools to keep their data secure while also protecting University resources.

## 2. New FIU Alumni Email Policy

As part of the division's continued efforts to safeguard the university's resources and that of its users, FIU will no longer be providing lifetime email accounts to alumni. The decision to sunset lifetime email accounts was based on two primary factors: (1) a decrease in overall FIU email usage by the alumni community and (2) the strengthening of FIU's cybersecurity posture. In addition, alumni accounts that show inactivity for a period of six months will be closed as inactive accounts pose a security issue since they are not being properly protected. The change in policy is in line with the best practices of numerous public universities and is becoming a standard across higher education.

## 3. FIU EdIT Conference 2023

The Division of IT hosted its fourth annual FIU EdIT Conference on October 30, 2023, at the Modesto A. Maidique Campus. This full-day conference showcased innovative tools and technologies that are transforming the educational landscape. This year's keynote, Daphne Koller, is a computer scientist, author, educator, and entrepreneur. She is the CEO and Founder of insitro, a company using machine learning to transform drug delivery for patients in need and is the co-founder of Coursera, and Chief Computing Officer of Calico, an Alphabet company in the healthcare industry. Past years' conferences have brought together FIU faculty, staff, and leading subject matter experts from across the country to demonstrate and collaborate on new, existing, and upcoming technologies in education.

## V. RESEARCH AND ECONOMIC DEVELOPMENT / UNIVERSITY GRADUATE SCHOOL

#### 1. External Grant Awards' Performance

During the first quarter of fiscal year (FY) 2023-2024, the value of awards received increased by 18%—from \$77.8M to \$92.1M. The College of Arts, Sciences & Education had a 35% increase when compared with the same period last FY, with large increases in Biology (43%), Chemistry (120%), Earth & Environment (261%), and Psychology (25%). The College of Engineering and Computing had an overall increase of 29%, with increases in the departments of Electrical and Computer Engineering (32%), Knight Foundation School (169%), and Mechanical and Materials Engineering (199%). Notable for Mechanical and Materials Engineering is a \$7.99M award from the Army Research Laboratory for the "Center for Integrated Renewable Energy and Energy Storage." The value of awards received among centers and institutes had an overall increase of 16% (from \$36.6M to \$42.5M). Most notable is the Institute of Environment (IoE) reflecting an 85% increase—from \$16.2M to \$30.1M. Noteworthy for IoE are a \$9.4M award from the National Institute of Standards and Technology (NIST) for a project called "Robotics and Autonomous Systems Laboratory for Coastal Conservation and Restoration" and a \$9.7M award from NOAA for a project called "Coastal Subsurface Monitoring." During this first quarter, federal sources accounted for 95% of funds received (27% increase), state/local governments accounted for 3% (58% decrease) and private/other sources accounted for 2% (23% decrease).

## 2. Innovation, Partnerships and Economic Development

StartUP FIU is currently working with 16 faculty at various stages of research commercialization. During the quarter, StartUP FIU supported Dr. Jessica Ramella who received an NSF I-Corps grant totaling \$50,000. This is the 23<sup>rd</sup> I-Corps grant awarded through support from StartUP FIU. During the quarter, StartUP FIU submitted a total of \$7.85 million in research grant proposals to NSF, Department of Commerce and Department of Education. The Faculty Research Innovation Series was offered once, and 11 faculty and other researchers attended. We secured an additional \$220,000 to launch the 2nd



Cohort of the GSK Innovation Challenge in partnership with GlaxoSmithKline Pharmaceuticals. One hundred seventy eight (178) students applied and 35 undergraduate students from diverse majors were selected to participate in the 12-week program. StartUP FIU also organized two (2) events with Nucleate Florida (biotech entrepreneurship) and Google (digital marketing), in which 75 students participated in total. Startup FIU has hosted 6 sessions of "Student Idea Circle," our latest learning community designed by students for students and 48 students participated in total. One hundred thirty seven (137) students participated in 12 sessions of the voluntary Hacker Nation learning community during the guarter. StartUP FIU Local facilitated three programs, one sponsored by Bank of America, and one was jointly sponsored by Bank of America and Verizon. Ninety-eight (98) small businesses participated in total. Over 280 small businesses participated in a total of 10 workshops provided to South Florida's community of small businesses. This quarter's workshops were provided online and in-person leveraging multiple partnerships such as SBA Navigators, SBDC @FIU, SFAA, Homestead CRA, and the City of Lauderdale Hill. During the first quarter of FY 2023-2024, 12 patents were awarded, 2 license options were executed, researchers submitted 17 disclosures and we submitted 13 US patent applications. Mr. Pedro Hernández, senior director of intellectual property and technology transfer, is part of an NSF iCorp team acting as the business mentor. The team is currently in a regional program and will be starting the national iCorp program in February 2024.

## 3. University Graduate School (UGS)

Through the end of the first quarter of FY 2023-2024, UGS had received 2,977 applications for doctoral programs, a 5% increase over the same time last year. Applications for master's programs decreased slightly (-1.4%) from last year with a total of 11,480 applicants. Applications for Specialist programs increased by 18% with a total of 76. Overall new enrollment of graduate students is 2,801 (-5.5%), consisting of 355 doctoral candidates (-10.8 %), 2,429 master's students (-4.8 %), and 17 graduate students in specialist programs (21.4 %). The programs with the greatest decrease in enrollment included the engineering master's (-60; -16%) and doctoral (-23; -29 %) programs. The doctoral and master's programs in International and Public Affairs experienced decreases of 36% and 22%, respectively. Increases in graduate students were observed in the College of Arts and Sciences master's programs (+35; +9%) and the doctoral program of Public Health (+14; +107%). A total of 115 research PhDs graduated in Summer 2023. Two Graduate Program Director (GPD) workshops were held: one in August 2023 as a Fall Orientation and another in September 2023 focused on Academic Misconduct and Research Integrity. Over 50 individuals attended each workshop. Individual GPD trainings were also held.

UGS continues to provide the Graduate Orientation experience to incoming Graduate Students and hosted two different hybrid sessions. In August, UGS rolled out Beyond Graduate School and Beyond Professoriate online platforms to all graduate students. Beyond Graduate School helps master's students make the most of their investment and build their careers through video lessons, to writing application materials, to interviewing and negotiating for the next career step. Beyond Professoriate platform provides postdocs and doctoral students with tools to explore career options and learn job search strategies. Through two programs of study (Academic Careers and Professional Careers), students can make informed decisions about their career path and learn successful job search strategies from other PhDs. In September 2023, UGS launched its annual NSF Graduate Research Fellowship Writing Group for graduate students applying to fellowship. Over the course of 6 weeks, through weekly 90-minute meetings facilitated by UGS staff, the applicants receive answers to their application guestions, receive one on one coaching and receive feedback on their applications. UGS announced a new Faculty Fellow, Dr. Bryan Dewsbury, who is conducting programming in Fall 2023 and Spring 2024 on mentoring for both graduate students and faculty. The first mentorship workshop was held September 2023 for faculty and focused on Individual Development Plans and Mentor-Mentee Compacts. UGS provided 40 housing scholarships for graduate students housed on campus and



partnered with the apartment complexes across SW 8<sup>th</sup> Street, who provided free housing for 20 doctoral students for the academic year. UGS staff and graduate students attended the Florida A&M University Graduate Feeder's Scholar Conference in Tallahassee and the Bouchet Fall Forum at Howard University. From May 1 to September 30, 2023, electronic dissertations were downloaded 108,511 times from Digital Commons by readers located all over the world indicating the broad impact of our doctoral students.

