



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

Zoom Meeting

Public access via <http://webcast.fiu.edu/>

**Thursday, December 3, 2020
9:15 AM**

or

Upon Adjournment of Previous Meeting

Chair: Natasha Lowell

Vice Chair: Donna J. Hrinak

Members: Cesar L. Alvarez, Jose J. Armas – *Health Affairs liaison*, Dean C. Colson, Joerg Reinhold,
Marc D. Sarnoff, Roger Tovar – *Athletics liaison*, Alexandra Valdes

AGENDA

- | | |
|---|--------------------|
| 1. Call to Order and Chair's Remarks | Natasha Lowell |
| 2. Approval of Minutes | Natasha Lowell |
| 3. Action Item | |
| AP1. Tenure as a Condition of Employment Nominations | Kenneth G. Furton |
| 4. Information and Discussion Items | |
| 4.1 Academic Affairs Regular Reports | |
| ▪ Academic and Career Success | Valerie Johnsen |
| ▪ Engagement | Saif Y. Ishoof |
| ▪ Enrollment Management and Services | Kevin B. Coughlin |
| ▪ Information Technology | Robert Grillo |
| ▪ Research and Economic Development/ University Graduate School | Andres G. Gil |
| ▪ Academic and Student Affairs | Elizabeth M. Bejar |
| 5. Student Government Updates | Alexandra Valdes |

- | | |
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| 6. Faculty Senate Updates | Joerg Reinhold |
| 7. New Business <i>(If Any)</i> | Natasha Lowell |
| 8. Concluding Remarks and Adjournment | Natasha Lowell |

FIU Board of Trustees Academic Policy and Student Affairs Committee Meeting

Time: December 03, 2020 9:15 AM - 9:45 AM EST

Location: Zoom

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THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
December 3, 2020

Subject: Approval of Minutes of Meetings held on August 12, 2020 and September 9, 2020

Proposed Committee Action:

Approval of Minutes of the Academic Policy and Student Affairs Committee meetings held on August 12, 2020 and September 9, 2020 via Zoom.

Background Information:

Committee members will review and approve the minutes of the Academic Policy and Student Affairs Committee meetings held on August 12, 2020 and September 9, 2020 via Zoom.

Supporting Documentation:	Minutes: Academic Policy and Student Affairs Committee Meetings, August 12, 2020 and September 9, 2020
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Facilitator/Presenter:	Natasha Lowell, <i>Academic Policy and Student Affairs Committee Chair</i>
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**FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
ACADEMIC POLICY AND STUDENT AFFAIRS COMMITTEE
MINUTES
AUGUST 12, 2020**

1. Call to Order and Chair's Remarks

The Florida International University Board of Trustees' Academic Policy and Student Affairs Committee meeting was called to order by Committee Chair Natasha Lowell on August 12, 2020 at 10:01 a.m. via Zoom.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Trustees Natasha Lowell, *Chair*; Donna J. Hrinak, *Vice Chair*; Cesar L. Alvarez (*joined after roll call*); Jose J. Armas, *Health Affairs Liaison*; Board Chair Dean C. Colson; Joerg Reinhold; Marc D. Sarnoff (*joined after roll call*); Board Vice Chair Roger Tovar, *Athletics Liaison*; and Alexandra Valdes.

Trustees Leonard Boord, Gerald C. Grant, Jr., and Claudia Puig, and University President Mark B. Rosenberg were also in attendance.

Committee Chair Lowell welcomed Trustees and University administrators participating via the virtual environment and explained that the University community and general public were accessing the meeting via the FIU webcast.

Provost and Executive Vice President Kenneth G. Furton announced that the University is on track to exceed its goal relating to the four-year graduation rate, adding that this is the fourth consecutive academic year with over a five percent year-over-year increase. He explained that as one of the five R-1 Carnegie Research universities in the state, FIU achieved an 11% year-over-year increase in research expenditures, the highest increase in research expenditures amongst all five R-1 institutions.

2. Action Items

AP1. Honorary Degree Nomination

Provost Furton presented the Honorary Degree Nomination for Committee review, commenting that the request for an Honorary Degree is for Mr. Hashim Al Abri, an Honors College student currently double majoring in International Business and Management at FIU. Provost Furton remarked on Mr. Al Abri's achievements, namely, that he conducted novel research about the psychological hardships endured by Third Culture Kids, that he raised funds for FIU's Relay for Life, and single handedly organized a charity event to raise funds for a fellow FIU peer who is also

battling cancer. Provost Furton explained that last year, Mr. Al Abri was diagnosed with cancer and that this is his third time battling this disease, adding that in July he relapsed, and his treatment has now ended. Provost Furton stated that during his chemotherapy treatment, Mr. Al Abri continued his studies maintaining a 3.97 GPA and that as of mid-July, Mr. Al Abri had completed 88 of the 120 credits required for his major. Provost Furton explained that Mr. Al Abri's last wish is to graduate from FIU. Provost Furton indicated that the Faculty Senate's Honorary Degree and Awards Committee unanimously recommended the approval of the Honorary Bachelor of Business Administration degree for Mr. Al Abri.

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 Hashim Al Abri as a recipient of an Honorary Bachelor of Business Administration from Florida International University.

AP2. Approval of Amendments to Regulation FIU-105 Sexual Misconduct (Title IX)

General Counsel Castillo explained that the amendments to Regulation FIU-105 Sexual Misconduct (Title IX) include the renaming to Regulation FIU-105 Sexual Harassment (Title IX) and Sexual Misconduct. He pointed out that the Department of Education issued regulations on Title IX of the Education Amendments of 1972 and mandated that institutions of higher education, such as FIU, adopt these changes, no later than August 14, 2020. He commented that, consistent with the process being employed by other State University System (SUS) institutions and by the Florida Board of Governors (BOG) with respect to its own Title IX regulation, FIU is relying on the BOG's Emergency Regulation Procedures to bring this action before the Board of Trustees. He remarked that, if approved, the revised Regulation will be in effect for 90 days, adding that before the expiration of that 90-day period, the matter will be presented to the Board of Trustees in accordance with the BOG's non-emergency regulation procedures.

General Counsel Castillo acknowledged the work of various departments, namely, Academic Affairs, Employee and Labor Relations, the Office of Inclusion, Diversity, Equity, and Access, the Office of the General Counsel, Student Conduct and Academic Integrity, and the Victim Empowerment Program. He presented the proposed amendments to Regulation FIU-105 Sexual Misconduct (Title IX) for Committee review, referring Trustees to the executive summary contained within the agenda materials. He explained that one change relates to jurisdiction, adding that the Department of Education makes clear that sexual harassment only applies to conduct in an educational program in the United States and that said conduct is required to be severe, pervasive, and objectively offensive and that sexual misconduct applies to any conduct of a sexual nature, regardless of location. He described another change pertaining to the scope of the revised regulation, commenting that this will now equally apply to students, employees, and third parties and will also now utilize the same investigative and adjudication process. General Counsel Castillo highlighted another area of change relating to the role of advisors, complainants, and respondents, noting that said parties were always permitted to have advisors throughout the entire process, but now during the hearings only advisors are permitted to question, and cross examine witnesses. He added that if either party does not have an advisor for witness questioning, the University is required to provide one.

In response to Committee Chair Lowell's inquiry, General Counsel Castillo explained that the University has been working on developing procedures for implementing the revisions in the form of procedures and turned it over for details to Ms. Shirlyon McWhorter, Director and Title IX Coordinator, Inclusion, Diversity, Equity and Access. Ms. McWhorter explained that a committee was formed in order to address the revisions to the University's Title IX Regulation and described several matters that the committee has addressed. She commented on the requirement that there is one Title IX process for faculty, staff, and students and that the live hearings will be new to the University's faculty and staff. She indicated that parties must be physically or virtually present enabling participants to see and hear each other and that the Assistant Dean of Students will coordinate and arrange the University live hearings for matters where the respondent is a student and that the Director of Employee and Labor Relations will do the same for matters where the respondent is a faculty or staff member. She pointed out that the hearings will be conducted by a hearing officer and a hearing body who are responsible for issuing the written determination of responsibility upon the conclusion of the hearing. She remarked that trained University officials involving faculty and staff matters and students involving student matters will constitute a hearing body, which will be chaired by a hearing officer. She stated that Professor of Law Phyllis Kotey will serve as a University hearing officer and that this will ensure a consistent process for the FIU community.

In response to Trustee Marc D. Sarnoff's inquiries and comments regarding the substantive changes to the Regulation, General Counsel Castillo explained that the University began working with the BOG, as part of this process, shortly after the Department of Education announced the changes and that utilizing the Emergency Regulation Procedure allows for the continued review of the proposed revisions during the 90-day period. Committee Chair Lowell urged Trustee Sarnoff to address any remaining concerns with the Office of the General Counsel during the 90-day review process.

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 the approval of the amendment of Regulation FIU-105 Sexual Misconduct (Title IX), including the renaming to Regulation FIU-105 Sexual Harassment (Title IX) and Sexual Misconduct.

AP3. Proposed Amendments to Regulation FIU-2501 Student Conduct and Honor Code

Senior Vice President for Academic and Student Affairs Elizabeth M. Bejar presented the proposed amendments to Regulation FIU-2501 Student Conduct and Honor Code for Committee review. She explained that it is recommended that all matters related to gender-based misconduct, including violations prohibited by Title IX and FIU, be encompassed under Regulation 105. She referred Trustees to the executive summary contained within the agenda materials and commented that additional changes for the Board's consideration were opportunistically prompted by the release of the Title IX regulations. She noted that the editorial revisions included rearranging portions of the Code to ensure that related information was included in the same or most relevant area of the Code, removing and consolidating redundant information, and working to promote readability of the regulation. She described the other changes, including expanding the amnesty provisions under the Code, expanding the interim measures under the Code and adding the specific process of petitioning for review of an interim suspension, changing the restrictions related to probation under to Code to better align with the educational and developmental aims of the document, adding, and in some

instances incorporating existing language from the Code, the following as distinct violations under the Code: assisting, failure to comply, harassment, and social host liability, and revising the length of the notation of suspension on a respondent's academic transcript.

In response to Trustee Donna J. Hrinak, Sr. VP Bejar explained that, while not anticipated, revisions to Regulation FIU-105 after the 90-day period may likely require subsequent changes to FIU-2501. In response to inquiries from Trustee Sarnoff, Sr. VP Bejar confirmed that some of the proposed changes to the Student Conduct and Honor Code are not mandated by the Department of Education and Assistant Dean of Students Michelle R. Horvath referred to changes relating to interim measures, providing general examples, given the high thresholds needed in order to temporarily suspend an individual. Associate General Counsel Iris A. Elijah pointed out that while certain changes to the Code are a result of the revisions to FIU-105, other changes, outside of sexual harassment or sexual misconduct, do not have to be implemented by the same time period.

A motion was made and unanimously passed that the FIU Board of Trustees Academic Policy and Student Affairs Committee recommend that the Florida International University Board of Trustees approve the revisions to Regulation FIU-2501 Student Conduct and Honor Code, 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 (BOG) or as a result of the regulation-making process.

3. New Business

No new business was raised.

4. Concluding Remarks and Adjournment

With no other business, Committee Chair Natasha Lowell adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee on Wednesday, August 12, 2020 at 10:42 a.m.

There were no Trustee requests.



**FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
ACADEMIC POLICY AND STUDENT AFFAIRS COMMITTEE
MINUTES
SEPTEMBER 9, 2020**

1. Call to Order and Chair's Remarks

The Florida International University Board of Trustees' Academic Policy and Student Affairs Committee meeting was called to order by Committee Chair Natasha Lowell on Wednesday, September 9, 2020 at 9:51 AM via Zoom.

General Counsel Carlos B. Castillo conducted roll call of the Academic Policy and Student Affairs Committee members and verified a quorum. Present were Trustees Natasha Lowell, *Chair*; Cesar L. Alvarez; Jose J. Armas, *Health Affairs Liaison*; Dean C. Colson, *Board Chair*; Joerg Reinhold; Marc D. Sarnoff; Roger Tovar, *Board Vice Chair and Athletics Liaison*; and Alexandra Valdes.

Committee Vice Chair Donna J. Hrinak was excused.

Trustees Leonard Boord, Gerald C. Grant, Jr., Gene Prescott, and Claudia Puig, and University President Mark B. Rosenberg were also in attendance.

Committee Chair Lowell welcomed Trustees and University administrators participating via the virtual environment and explained that the University community and general public were accessing the meeting via the FIU webcast.

2. Approval of Minutes

Committee Chair Lowell asked that the Committee approve the Minutes of the meeting held on June 16, 2020. Trustee Joerg Reinhold requested that the Minutes of the June 16, 2020 Meeting of the Academic Policy and Student Affairs Committee be amended to reflect that "...the Faculty Senate has, among other items, *discussed proposed* changes to the Tenure and Promotion manual..." and that "He described one new such *program...*" (*Faculty Senate Update*).

A motion was made and unanimously passed to approve the minutes of the Academic Policy and Student Affairs Committee meeting held on June 16, 2020 as amended by Trustee Reinhold.

3. Action Items

AP1. Tenure as a Condition of Employment Nominations

Provost and Executive Vice President Kenneth G. Furton presented the Tenure as a Condition of Employment (TACOE) nominations for Committee review, noting that TACOE is reserved for individuals who are under recruitment by FIU and have achieved highly prestigious academic careers at other institutions. He explained that the TACOE candidates have either already achieved tenure or are eligible for tenure at comparable institutions at the time of hire, adding that TACOE candidates understand that they will be hired with tenure pending a review by the department, the College, the Provost, the President, and finally, the Board of Trustees. Provost Furton briefly commented on each of the TACOE candidates.

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 the approval of six (6) candidates for Tenure as a Condition of Employment.

AP2. Legislative Budget Requests

Provost Furton presented the Legislative Budget requests for Committee review. He commented on the \$4.99M request pertaining to the Strengthening Minority Achievement and Results through Teaching (SMART) Pipeline, adding that the objective of the request is to transform and re-engineer FIU STEM programs and courses to optimize the retention, graduation rate marketability, and career creation and placement. Provost Furton remarked on the \$15.15M request relating to the Program of Distinction in Environmental Resilience, indicating that FIU was designated as a university of distinction in environmental resilience by the Florida Board of Governors. He explained that the program is aligned with utilizing FIU's interdisciplinary core competence in addressing 21st Century environmental challenges and that the program's mission is to address environmental challenges by creating data-driven solutions and educating the work force of tomorrow in strategic areas of focus.

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 2021-2022 Legislative Budget Requests as specified in the Board materials.

AP3. Textbook and Instructional Materials Affordability Annual Report

Senior Vice President for Academic and Student Affairs Elizabeth M. Bejar presented the Textbook and Instructional Materials Affordability Annual Report for Committee review. She explained that effective July 1, 2016, Florida House Bill 7019, Education Access and Affordability, requires the Florida Board of Governors and the State Board of Education to annually identify strategies to promote college affordability. She indicated that 349 sections throughout 91 fall and spring courses did not require the purchase of textbooks or course materials, adding that this benefitted over 26,000 undergraduate students enrolled in those courses. Sr. VP Bejar indicated that while faculty and staff diligently submitted textbook and course material adoptions 45 days or earlier before the semester for over 14,400 course sections across fall and spring last academic year, there were 786 core sections that did not meet the deadline due to the merging of sections or other last-minute scheduling or assignment changes.

Sr. VP Bejar remarked that a 95% threshold was achieved in fall 2019 and that in spring 2020, the 94.2% adoption rate did not meet the goal of 95%. She pointed out that FIU has consulted with Florida Board of Governors staff and that the University is collaborating with Barnes & Noble College to develop, and put into place effective the spring semester, a customized system that would work to ensure that any adoption after the deadline has an approved exception that is properly documented upon submission. She mentioned that FIU Online spearheaded a state-wide initiative that generated \$1.9M in savings for more than 13,000 students and that FIU libraries provided access to 4.6M items in electronic format.

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 Annual Report.

4. Information and Discussion Items

4.1 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.

5. Faculty Senate Updates

Trustee Reinhold, Faculty Senate Chair, commented that since the Board's Full Board Meeting on June 16, 2020, the Faculty Senate passed a resolution on racial, social, and community justice and also submitted a proposal for inclusion by the University's Equity Action Initiative. He remarked on the Faculty Senate's September 8, 2020 meeting, noting that Vice Provost for Population Health and Well-Being Yolangel Hernandez-Suarez, MD, reported on the role of the COVID Response Team. He indicated that upon the conclusion of the Senate meeting, representatives to the Steering and Nominating Committees were elected. Trustee Reinhold pointed out that the Steering Committee meets the week before every Senate meeting and sets the agenda for Senate meetings. He mentioned that the Senate's next meeting is scheduled for September 29, 2020 and that some of the items that the Senate will resume work on are finalizing changes to the Tenure and Promotion Manual, 10-year review of the Faculty Senate Constitution, and interfacing and supporting the strategic plan working groups.

6. Student Government Updates

Trustee Alexandra Valdes, President of the Student Government Council at the Modesto A. Maidique Campus, commented on fundraising efforts to raise awareness for the on-campus food pantry, on the start of a platform that focuses on student conversations, and on the launch of a mentorship program in collaboration with the Alumni Association. She indicated that for the first time ever, student organizations and councils are recruiting 100% virtually. In terms of physical presence on campus, she remarked on actively engaging with students relating to the remainder of the fall semester and the start of the spring semester.

7. New Business

No new business was raised.

8. Concluding Remarks and Adjournment

With no other business, Committee Chair Natasha Lowell adjourned the meeting of the Florida International University Board of Trustees Academic Policy and Student Affairs Committee on Wednesday, September 9, 2020 at 10:16 AM.

There were no Trustee requests.

THE FLORIDA INTERNATIONAL UNIVERSITY
BOARD OF TRUSTEES
Academic Policy and Student Affairs Committee
December 3, 2020

Subject: Tenure as a Condition of Employment Nominations

Proposed Committee Action:

Recommend to the Florida International University Board of Trustees the approval of four (4) candidates for Tenure as a Condition of Employment (TACOE).

Background Information:

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

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

Supporting Documentation:	TACOE Nominee Overview
	TACOE Nominee Bios
	TACOE Nominee Curriculum Vitas

Facilitator/Presenter:	Kenneth G. Furton
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Florida International University
Tenure as a Condition of Employment Nominations - December 2020

Name	College	Department	Proposed Rank
Maruthi Sridhar Balaji Bhaskar	College of Arts, Sciences & Education	Earth and Environment	Associate Professor
Mark Butler	College of Arts, Sciences & Education	Biological Sciences	Professor
Carlos Martin Chang	College of Engineering and Computing	Civil and Environmental Engineering	Associate Professor
Aaron M. Kuntz	College of Arts, Sciences & Education	Counseling, Recreation and School Psychology	Professor

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Maruthi Sridhar Balaji Bhaskar
Department of Earth and Environment
College of Arts, Sciences & Education

Dr. Balaji Bhaskar came to FIU from the Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston. His research interests are focused on coastal hazards, environmental management and natural resources, using GIS, remote sensing, environmental analytical techniques, and spatio-temporal analysis of complex natural resources. He has applied GIS/RS and other spatial modeling techniques to a wide variety of environmental and public health problems, including algal blooms, biosolid applications in agriculture, evapotranspiration losses by invasive plant species, mercury contamination in Tennessee, and urban flooding and toxicity. He served as a Fulbright Research Scholar during 2018-2019 in Uganda. Dr. Balaji Bhaskar has an impressive publication record, with approximately 25 peer-reviewed papers, 12 as primary author. He holds five patents in the broad area of environmental sensing technology, with one pending (he is the primary patent holder on four of them). He has a strong collaboration with private industry specialized in remote sensing technology. He has mentored several graduate and undergraduate students. Dr. Balaji Bhaskar received his PhD in Forest Resources from Mississippi State University in 2004.

Dr. Balaji Bhaskar has an impressive grant record, with funding from NSF, NASA, DOE and USDA during the last 8 years. He is currently the PI on two NSF grants (one NSF-TIP and another NSF-EIR-GSS) and Co-PI on another NSF grant, totaling about \$2 million. **One of these grants for which he is a PI is worth half a million dollar and is a research grant that Dr. Bhaskar might be able to bring with him.** He also mentions the possibility of bringing some high-cost field instruments along with him. Prior to the current active grants, he had obtained grants from DOE, NASA, and USDA.

EAE faculty noticed Dr. Balaji Bhaskar's grantsmanship, his sustained engagement of minority students in STEM internship with federal agencies like DOE (e.g., taking groups of minority students to DOE Oak Ridge National Lab three years in a row for summer internship with NSF funding), graduate student mentoring, and his prior experience teaching a variety of courses in GIS/RS, environmental sciences, and ecology that match well with the needs of our program. The EAE Faculty thought Dr. Balaji the best fit for our department while Director and staff of the FIU Extreme Event Institute representatives also found him acceptable.

Mark Butler
Department of Biological Sciences
College of Arts, Sciences & Education

Dr. Mark Butler came to FIU from Old Dominion University where he received tenure in 1994 and was promoted to full Professor in 2000. Dr. Butler received his PhD in Biological Sciences at Florida State University in 1988.

Research: Evidence of Dr. Butler's research productivity in terms of published papers and grants can be discerned from his CV. He published over 100 peer-reviewed papers and another 50 or so book chapters and other articles. Over the past five years he has published an average of 5 peer-reviewed papers per year. He has garnered continuous funding for his research over the past three decades from several agencies, chiefly: NSF, NOAA, Florida Sea Grant, and the EPA. I am currently the lead-PI on five grants totaling over \$500K.

Teaching: Interacting with students is often the highpoint of his day. Helping students navigate their own path is rewarding, so his door is always open to them. He has mentored many doctoral students in the Biology department at ODU and his graduate students are like family. At ODU, he taught courses in marine ecology, biostatistics, field marine biology, and scientific diving. At ODU, he created the Marine Biology Program in the Department of Biological Sciences along with ancillary programs and courses to support it, including: the ODU AAUS Academic Diving Program, the Marine Biology Student Association, and two off-campus tropical marine biology courses: a study abroad course that he teaches in Belize and a semester-long study away program in the Florida Keys.

Carlos Martin Chang
Department of Civil and Environmental Engineering
College of Engineering and Computing

Carlos M. Chang, Ph.D., P.E., comes to FIU from the Department of Civil Engineering at the University of Texas at El Paso (UTEP). Prior to joining UTEP in 2008, he worked as an Associate Researcher at the Texas A&M Transportation Institute (TTI), and as an external consultant for the Inter-American Development Bank (IDB) and international engineering companies.

Dr. Chang's main research interests are in the field of asset management with emphasis on sustainable "smart" infrastructure management for better quality of life. His research work involves the development of advanced decision-making models, methodologies, and tools to apply multi-decision criteria, statistical analysis, simulation processes, optimization techniques, and risk analysis methods to assess infrastructure performance under different scenarios. Among his research sponsors are the National Highway Cooperative Research Program (NCHRP), Metropolitan Transportation Commission in California (MTC), the Texas Department of Transportation (TxDOT), the El Paso Metropolitan Planning Organization (MPO), and the City of El Paso. His research work is documented in more than 100 publications including papers in peer-reviewed national and international journals, conference proceedings, books, and technical reports.

Dr. Chang participates on various Transportation Research Board committees and expert task groups. He is the Research Coordinator of the TRB Pavement Management Systems Committee (AFD10) and member of the Pavement Preservation Committee (AHD18); Chair of the ASCE Infrastructure Systems Committee, Vice President of the International Society for Maintenance and Rehabilitation of Transport Infrastructures (isMARTI) in the United States; and member of the Executive Board of the Instituto de la Construcción y Gerencia (ICG) in Perú. He is also the former Chair of the International Road Federation (IRF) Asset Management Task Force, U.S. Delegate of the Ibero-Latin-American Asphalt Congress (CILA), and Chair of the Committee for the Implementation of Mechanistic-Empirical Pavement Design (CIDMEP), and visiting professor at EAFIT University in Colombia, Ricardo Palma University and University of Piura in Perú.

At UTEP, Dr. Chang serves as the faculty advisor of the Chi Epsilon, the Texas Society of Professional Engineers (TSPE), the Transportation Leadership Council (TLC) student chapters; and the International Road Federation (IRF) Fellowship program. He is the Director of two study abroad programs: (1) "Global and Regional Sustainability Engineering" in partnership with the University of Piura (UDEP) in Perú; and "Developing Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions" with the Universidad Nacional de Rosario in Argentina. Dr. Chang also participated in the implementation of the Transatlantic Dual Master's Degree Program in Transportation and Logistic Systems with the participation of the Czech Technical University and University of Zilina. Dr. Chang has also been instrumental in signing a cooperation agreement with the Universidad Nacional de Ingeniería in Peru.

Due to his unique combination of academic and practical experience, Dr. Chang developed the "Engineering in Practice" program that is conceived to extend the students' education beyond the classroom by merging teaching, research, and service. This program has been three-times awarded the "Engineering Award for Connecting Professional Practice and Education" by the National Council of Examiners for Engineering and Surveying (NCEES). Dr. Chang is also a recipient of the TSPE Excellence Award from the Texas Society of Professional Engineering for promoting professional practice through education.

Aaron M. Kuntz
Department of Counseling, Recreation and School Psychology
College of Arts, Sciences & Education

Dr. Kuntz came to FIU as a Professor from the University of Alabama. He received his PhD in Educational Policy, Research and Administration from the University of Massachusetts in 2007.

Teaching

Dr. Kuntz taught graduate courses in qualitative inquiry and foundations of education courses at the University of Alabama. While he appears to have taught primarily graduate level courses, he also taught an undergraduate level honors seminar. We do not have access to course evaluations or student comments. However, he was the recipient of the *McCrary Faculty Excellence Award, Distinguished Teaching*, College of Education, University of Alabama, in 2016. It appears Dr. Kuntz was committed to mentoring students through the dissertation process as evidenced by his vast service on doctoral committees. At the University of Alabama, he was chair of 14 committees, and served as a member on 75 additional doctoral dissertation committees. He continues to serve on 10 doctoral committees. Dr. Kuntz was also a member of 3 thesis committees.

Research

Dr. Kuntz's research has focused on ways of producing knowledge based on theoretical deliberations of critical theory, relational materialism, and poststructuralism that have emerged in social theory over the past fifty years. Dr. Kuntz is a prolific writer and his publications appear in diverse high quality peer reviewed journals as *Qualitative Inquiry*, *Cultural Studies*, *Critical Methodologies*, *The Journal of Higher Education*, *The Review of Higher Education*, *the International Journal of Qualitative Studies in Education*, *Educational Studies*. He also has numerous book chapters. His co-authored book projects include *Qualitative Inquiry for Equity in Higher Education: Methodological Implications, Negotiations, and Responsibilities* (Jossey-Bass Publishers) and *Citizenship Education: Global Perspectives, Local Practices* (Routledge Press). Dr. Kuntz received the 2020 AERA QR SIG Outstanding Book Award. He was also awarded the President's Faculty Research Award for Social & Behavioral Science at the University of Alabama in 2017. Some of Dr. Kuntz's research projects have been supported by the National Science Foundation.

Service

Dr. Kuntz has provided exemplary service to his university, profession, and community. In terms of University service, he served as Department Head in Educational Studies at the University of Alabama from 2014 to 2020. In regard to his profession, he served as Guest Editor for three special journal issues, *Qualitative Inquiry*, Summer 2020, *Critical Questions in Education*, Spring 2017, and *Critical Questions in Education*, Fall 2016. He served on the Editorial Board of these five journals: *ACCESS: Contemporary Issues in Education*, *Philosophy & Theory in Higher Education*, *The Journal of Culture and Education*, *Bloomsbury Research Methods for Education*, and *Review of Higher Education*. He also served as an invited reviewer for 10 peer-reviewed journals. From 2014-2015, he served as the President of the Southeast Philosophy of Education Society. Dr. Kuntz was also involved in serving his community and was a co-recipient of the Community Engagement Award, Center for Community Based Partnerships, University of Alabama, 2011 and co-recipient of the Excellence in Community Engagement Award for Scholarship, Center for Community Based Partnerships, University of Alabama, 2010.

MARUTHI SRIDHAR B. BHASKAR

Department of Environmental and Interdisciplinary Sciences, Texas Southern University,
303C New Science Center | 3100 Cleburne Street | Houston, Texas 77004
Tel: (713)-313-1388, Fax: (713)-313-1853, Email: bhaskarm@tsu.edu

EDUCATION

Aug 2004

Ph.D. (Forest Resources)

Mississippi State University, Mississippi State, MS.

Dissertation Title: *Monitoring spectral reflectance and internal structure of plants during phytoremediation processes of selected heavy metals.*

Oct 2000

MSc (Soil Science & Agricultural Chemistry)

Acharya N.G. Ranga Agricultural University, Hyderabad, India.

Thesis Title: *Characterization and classification of soils of karimnagar district for land use planning using GIS techniques.*

Sep 1997

BSc (Agriculture)

Acharya N.G. Ranga Agricultural University, Hyderabad, India.

PROFESSIONAL EXPERIENCE:

Sept 2017 to Present

Associate Professor, Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

Sept 2018 to June 2019

Fulbright Scholar -Sub-Saharan Africa, Department of Geomatics and Land Management, Makerere University, Kampala, Uganda.

Sept 2011 to Aug 2017

Assistant Professor, Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

Sept 2014 to Present

Director, Environmental Toxicology Program, Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

June 2013 to Aug 2016

Visiting Summer Faculty, Oak Ridge National Lab (ORNL), Oak Ridge, TN.

July 2009 to Sept 2011

Research Scientist, Department of Geology, Bowling Green State University, Bowling Green, OH.

July 2004 to June 2009

Postdoctoral faculty, Department of Geology, Bowling Green State University, Bowling Green, OH.

Research accomplishments:

- Monitoring the land use and land cover changes and environmental contamination trends in the urban watersheds of Houston-Galveston Region.

- Mapping and monitoring the water quality of the Galveston Bay, Texas and Lake Victoria in East Africa.
- Quantify and monitor the landscape level changes on the mercury concentrations at watershed scale.
- Develop geospatial database to map mercury concentration in soil, sediment, water and fish in Tennessee watersheds.
- Quantify the physical and chemical changes of soils in the Lake Erie drainage basin as a result of sewage sludge, dairy and poultry manure applications.
- Monitoring the chemical concentrations in soils and plants through traditional chemical analysis and to map the areas of high chemical concentrations using the satellite imagery.
- Mapping and measuring the algal blooms and other water quality parameters in Lake Erie through traditional analytical methods and also through remote sensing and GIS techniques.
- Mapping the distribution and effects of the Salt cedar (*Tamarix ramosissima*) an invasive plant species along the riparian areas of the Lower Colorado region.

Jan 2001 to July 2004

Graduate Research Associate, Diagnostic Instrumentation and Analysis Laboratory, Mississippi State University, MS.

Research accomplishments:

- Conducted green house studies using mustard, barley and fern plants for phytoremediation and restoration of the toxic metal contaminated soils.
- Application of remote sensing and spectral reflectance to monitor the heavy metal stress in plants
- Analyzed the As, Cd, Cr, Cs, Sr and Zn accumulation in soils and plants through traditional chemical analysis and microscopy.

July 1999 to Oct 2000

Seed Production Officer, Monsanto, India.

Responsibilities:

- To provide leadership for corn and soybean seed production.
- Supervise, evaluate and develop technical ability of field assistants.
- Manage the production research in green house and field environments, conducting the field trials for method and result demonstrations.

Sep 1997 to July 1999

Graduate Research Associate, College of Agriculture, Rajendranagar, Hyderabad, India.

RESEARCH EXPERTISE

- Agricultural and Environmental monitoring using Remote Sensing and GIS.
- Land Use and Land Cover change, Global Environmental change detection.
- Imaging Spectrometer and Hyperspectral data acquisition and analysis.
- Monitoring the effects of Heavy metal and Nutrient Pollution on Soil, Plant and Atmosphere.
- Soil Contamination, Remediation and Restoration.

TEACHING EXPERIENCE

Courses taught at Department of Environmental and Interdisciplinary Sciences, Texas Southern University, Houston, TX.

***Courses Developed**

- *GEOL 141: Introduction to Earth-** Undergraduate level
- ES 704: Aquatic Resources and Pollution** - Graduate level
- *ES 703: Environmental Science-** Graduate level
- *ES 718: Remote Sensing and Image Interpretation** - Graduate level
- *ES 720: GIS (Geographic Information Systems) for Environmental science** - Graduate level
- *ES 730: Introduction to Remote Sensing and Image Processing** - Graduate level
- *ES 919: Environmental Remote Sensing** - Graduate level
- *ES 906: Environmental Geology** - Graduate level
- *ES 903: General Ecology-** Graduate level

Courses taught at Department of Geology, Bowling Green State University, Bowling Green, OH.

GEOL 680: Biological Remote Sensing-Graduate level

GEOL 440/540: Geological Remote Sensing-Undergraduate/Graduate level

Teaching load and level by year at Texas Southern University

2011 Fall

GEOL 141: Introduction to Earth (4 credit)- Undergraduate level (87 Students; Without Teaching Assistant)

2012 Spring

GEOL 141: Introduction to Earth (4 credit)- Section 1- Undergraduate level (100 Students; Without Teaching Assistant)

GEOL 141: Introduction to Earth (4 credit)- Section 2- Undergraduate level (109 Students; Without Teaching Assistant)

ES 906: Environmental Geology (3 credit)- Graduate level (18 Students)

2012 Summer I

GEOL 141: Introduction to Earth (4 credit)- Section 1- Undergraduate level (31 Students; Without Teaching Assistant)

2012 Summer II

GEOL 141: Introduction to Earth (4 credit)- Section 2- Undergraduate level (51 Students; Without Teaching Assistant)

2012 Fall

GEOL 141: Introduction to Earth (4 credit)- Section 1- Undergraduate level (108 Students)

GEOL 141: Introduction to Earth (4 credit)- Section 2- Undergraduate level (107 Students)

GEOL 141: Introduction to Earth (4 credit)- Section 3- Undergraduate level (100 Students)

2013 Spring

GEOL 141: Introduction to Earth (4 credit)- Section 1- Undergraduate level (104 Students)

ES 919: Special Topics- Environmental Remote Sensing (3 credit) - Graduate level (13 Students)

2013 Fall

GEOL 141: Introduction to Earth (4 credit)- Section 1- Undergraduate level (110 Students)

GEOL 141: Introduction to Earth (4 credit)- Section 2- Undergraduate level (110 Students)

GEOL 141: Introduction to Earth (4 credit)- Section 3- Undergraduate level (98 Students)

2014 Spring

GEOL 141: Introduction to Earth (4 credit)- Week End Section 1- Undergraduate level (43 Students)

ES 906: Environmental Geology (3 credit)- Graduate level (30 Students)

ES 704: Aquatic Resources and Pollution - Graduate level – For Three Months (17 Students)

2014 Fall

GEOL 141: Introduction to Earth (3 credit)- Section 2- Undergraduate level (117 Students)

GEOL 141: Introduction to Earth (3 credit)- Section 3- Undergraduate level (121 Students)

ES 703: Environmental Science (3 credit) - Graduate level (13 Students)

ES 718: Special Topics- Remote Sensing and Image Interpretation (3 credit) - Graduate level (6 Students)

ES 925: Research and Dissertation (variable credit) - Graduate level (2 Students)

2015 Spring

ES 903: General Ecology (3 credit)- Graduate level (19 Students)

ES 724: Research Problems (variable credit) - Graduate level (2 Students)

ES 925: Research and Dissertation (variable credit) - Graduate level (3 Students)

2015 Fall

ES 724: Research Problems (variable credit) - Graduate level (2 Students)

ES 925: Research and Dissertation (variable credit) - Graduate level (2 Students)

2016 Spring

ES 906: Environmental Geology (3 credit)- Graduate level (29 Students)

ES 920: Special Topics – Spectral Reflectance and Remote Sensing (3 credit)- Graduate level (7 Students)

ES 724: Research Problems (variable credit) - Graduate level (4 Students)

ES 925: Research and Dissertation (variable credit) - Graduate level (3 Students)

2016 Fall

ES 703: Environmental Science (3 credit)- Graduate level (19 Students)

ES 724: Research Problems (variable credit) - Graduate level (2 Students)

ES 925: Research and Dissertation (variable credit) - Graduate level (2 Students)

2017 Spring

ES720: Geographical Information Systems for Environmental Sciences (3 credit) - Graduate level (15 Students)

ES 724: Research Problems (variable credit) - Graduate level (1 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

2017 Fall

ES730: Introduction to Remote Sensing and Image Interpretation (3 credit) - Graduate level (8 Students)

ES 903: General Ecology (3 credit)- Graduate level (14 Students)

ES 724: Research Problems (variable credit) - Graduate level (1 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

2018 Spring

ES 906: Environmental Geology (3 credit)- Graduate level (30 Students)

ES 724: Research Problems (variable credit) - Graduate level (1 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

2018 Fall

ES 724: Research Problems (variable credit) - Graduate level (1 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

2019 Spring

ES 724: Research Problems (variable credit) - Graduate level (1 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

2019 Fall

ES 724: Research Problems (variable credit) - Graduate level (2 Student)

ES 925: Research and Dissertation (variable credit) - Graduate level (1 Student)

ES 903: General Ecology (3 credit)- Graduate level (6 Students)

ES730: Introduction to Remote Sensing and Image Interpretation (3 credit) - Graduate level (5 Students)

Teaching load as Fulbright Scholar at Makerere University, Kampala, Uganda.

2018 Fall (called as 2018-19 Semester I)

GLM 8103: Image Processing for Remote Sensing (3 credit) - Graduate level (14 Students)

LSG 3103: Mapping from Satellite Imagery (4 credit) - Undergraduate level (47 Students)

2019 Spring (called as 2018-19 Semester II)

LSG 1205: Geo Hazards and Environmental Studies (3 credit) - Undergraduate level (34 Students)

PATENTS

1. **Maruthi Sridhar BB, Vincent RK.** 2019. Methods and apparatus for determining evapotranspiration from multispectral reflected light. (In Review)
2. **Maruthi Sridhar BB, Vincent RK.** 2014. Method and system for detecting phosphorus in soil from reflected light. US Patent No. 8,655,601.
3. **Maruthi Sridhar BB, Vincent RK.** 2013. Method and system for detecting copper in soil from reflected light. US Patent No. 8,426,211.
4. **Maruthi Sridhar BB, Vincent RK.** 2013. Method and system for detecting sulfur in soil from reflected light. US Patent No. 8,367,420.
5. Vincent RK, **Maruthi Sridhar BB.** 2011. Methods and apparatus for detecting organic materials and objects from multispectral reflected light. US Patent No. 0024,632 / US Patent No. 8,030,615 / US Patent No. 8,058,617.
6. Vincent RK, **Maruthi Sridhar BB.** 2010. Methods and apparatus for detecting organic materials and objects from multispectral reflected light. US Patent No. 7,767,966.

RESEARCH GRANTS FUNDED

1. **Maruthi Sridhar BB. (PI).** Excellence in Research: Analyzing the impact of landscape changes on the watershed dynamics of a flood-prone urban region. 2018-2022, \$500,000, NSF-EIR-GSS. (Funded - NSF Grant).
2. **Maruthi Sridhar BB. (Co-PI).** Characterization, dynamics and biological impact of indoor airborne dust exposure. 2018-2021, \$999,786, NSF-RISE. (Funded - NSF Grant).
3. **Maruthi Sridhar BB. (PI).** Infusion of Geospatial Informatics to Enhance an Undergraduate Biological Science Program. 2016-2020, \$399,999, NSF-TIP. (Funded - NSF Grant).
4. **Maruthi Sridhar BB. (PI).** Impact of landscape and environmental changes on the water quality of Galveston Bay, TX. 2016-2017, \$20,000, Texas Space Grant, NASA Space Grant Consortium. (Funded).
5. **Maruthi Sridhar BB. (PI).** Spatial and temporal modeling of mercury fate and dynamics in East Tennessee watersheds. 2014-2018, \$39,996, Supplemental Grant, NSF-HBCU-UP. (Funded - NSF Grant).
6. **Maruthi Sridhar BB. (PI).** Spatial and temporal modeling of mercury fate and dynamics in East Tennessee watersheds. 2014-2018, \$199,999, NSF-HBCU-UP. (Funded - NSF Grant).
7. **Maruthi Sridhar BB. (PI).** Landscape level patterns of mercury contamination and bioaccumulation in East Fork Poplar Creek (EFPC) watershed, 2014-2015, \$ 15,000. (Funded - DOE Grant)
8. **Maruthi Sridhar BB. (PI).** Use of a geospatial database and model to map mercury distribution and transport in the East Fork Poplar Creek watershed, Oak Ridge, Tennessee, 2013-2014, \$ 15,000. (Funded - DOE Grant)
9. **Maruthi Sridhar BB. (PI).** Monitoring agricultural sewage sludge, 2012-2013, \$10,860. (Funded – USDA subcontract through University of Toledo) Sub Award No. 10390057-TSU

10. Vincent RK, **Maruthi Sridhar BB**. Calibration and validation of remote sensing data for the Lower Colorado River Region, 2007-2011, \$56,000. (Funded – USBR subcontract through Central State University)
11. Vincent RK, **Maruthi Sridhar BB**. Monitoring agricultural sewage sludge, 2010- 2013, \$468,000. (Funded – USDA subcontract through University of Toledo)
12. Vincent RK, **Maruthi Sridhar BB**. Monitoring agricultural sewage sludge, 2009- 2012, \$101,765. (Funded – USDA subcontract through University of Toledo)

SKILLS

Instrumental:

Soil and Plant Chemical Analysis: Inductively coupled plasma Optical Emission Spectroscopy (ICP-OES), Microwave Digestion, Atomic Absorption Spectroscopy (AAS), Calorimetry.

Microscopy: Scanning Electron Microscope (SEM), Transmission Electron Microscope (TEM), Light Microscope (LM), Environmental Scanning Electron Microscope (ESEM) EDS-X-ray, Microtome.

Remote Sensing: ASD Spectroradiometer (350-2500 nm), FTIR Spectroradiometer (2-16 μm)

Computer:

Geospatial Packages: ER Mapper, ERDAS, ENVI, Arc GIS.

Statistical Packages: SAS, Minitab, SPSS

PROFESSIONAL HONORS: FELLOWSHIPS AND AWARDS

Fellowships

- | | |
|------|--|
| 2014 | <i>Department of Energy (DOE) Visiting Faculty Fellowship for Oak Ridge National Lab, Oak Ridge, TN.</i> |
| 2013 | <i>Department of Energy (DOE) Visiting Faculty Fellowship for Oak Ridge National Lab, Oak Ridge, TN.</i> |

Awards

- | | |
|------|---|
| 2018 | <i>Fulbright Scholar Award.</i> Awarded Fulbright Core US scholar award to conduct research and teaching in Kampala, Uganda. |
| 2018 | <i>Award of Honor.</i> Awarded first place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2018. |
| 2016 | <i>Award of Honor.</i> Awarded second place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2016. |
| 2015 | <i>Distinguished Research and Scholarly Activity Award.</i> Awarded for Outstanding Research and Scholarly Accomplishments in College of Science, Engineering and Technology (COSET) at Texas Southern University (TSU), Houston, TX. |
| 2015 | <i>Award of Appreciation.</i> Awarded for being the Keynote Speaker at the TSU Research Week- 2015, March 31- April 2, Houston, TX. |
| 2014 | <i>Award of Special Recognition.</i> Awarded for the poster presentation in 14 th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX. |

- 2012 *Award of Honor*. Awarded third place in faculty oral presentation by the Office of Research, Texas Southern University in Research Week, 2012.
- 2004 *American Association of Scientists of Indian Origin Graduate student recognition Award*. Awarded for outstanding academic and research performance in Environmental and Soil Science.
- 2004 *Mississippi State University Office of Research's Graduate Student Research Award*. Awarded for Research Excellence.
- 2004 *Mississippi State University Office of Graduate Studies Graduate Student Recognition Award*. Awarded for Outstanding academic and research performance.
- 2003 *Society of Wood Science and Technology Best Student Poster Award*. Awarded First place in 46th annual meeting of Society of Wood Science and Technology at Bellevue, WA.
- 2003 *Battelle Best Graduate Student Research Paper Award*. Awarded First Place in The 7th International Symposium of In Situ and On-site Bioremediation, Orlando, FL.
- 2003 *Mississippi State University Graduate Student Travel Support Grant*. Awarded to attend Soil Society of America Annual Meetings, Denver, CO. November 2-6, 2003. \$ 500
- 2003 *Battelle Research Institute Graduate Student Travel Support Grant*. Awarded to attend The 7th International Symposium of In Situ and On-site Bioremediation, Orlando, FL. June 2-5, 2003. \$ 2000
- 2001-2004 *Mississippi State University Graduate Research Assistantship*.
- 1997-2000 *A.N.G.R. Agricultural University, India, Graduate Research Assistantship*.

PUBLICATIONS AND PRESENTATIONS

Publication Summary

Published (105): Book Chapters (4), Refereed Journal Articles (28), Conference Abstracts (73).

BOOK CHAPTERS

1. **Maruthi Sridhar BB**, Han FX, Su Y. 2017. Effects of Heavy Metal Accumulation on Plant Internal Structure and Physiological Adaptation. In *Phytoremediation of Environmental Pollutants*, Ram Chandra (Ed)., ISBN: 9781138062603, CRC-Press, Taylor and Francis group, NY.
2. **Maruthi Sridhar BB**, Han FX, Vincent RK. 2014. Remote sensing of nutrient concentrations of soils and crops in biosolid amended soils. In *Applied Manure and Nutrient Chemistry for Sustainable Agriculture and Environment*, He Z and Zhang H. (Eds.), ISBN: 9789401788076, Springer Press, NY.
3. Nagler P, **Maruthi Sridhar BB**, Olsson AD, Glenn E. 2011. Hyperspectral remote sensing tools for quantifying plant litter and invasive species in arid ecosystems. In *Hyperspectral Remote Sensing of Vegetation*, Thenkabail, P.S., J.G. Lyon, A. Huete. (Eds.), ISBN: 9781439845370, CRC-Press, Taylor and Francis group, NY.
4. **Maruthi Sridhar BB**, Vincent RK. 2010. Mapping and estimation of chemical concentrations in surface soils using LANDSAT TM satellite imagery. In *Satellite Communications*,

Nazzareno Diodato (Ed.), ISBN: 978-953-307-135-0, Sciyo, Available from: <http://www.intechopen.com/articles/show/title/mapping-and-estimation-of-chemical-concentrations-in-surface-soils-using-landsat-tm-satellite-imager>.

REFEREED JOURNAL PUBLICATIONS

*Graduate Student

1. **Maruthi Sridhar BB**, Gidudu A. 2019. Effect of Landscape Changes on the Water Quality of Murchison Bay (In Preparation)
2. **Maruthi Sridhar BB**, Gidudu A. 2019. Integrated Problem-Based Remote Sensing Learning to Improve Undergraduate Research: A Case Study in sub-Saharan Africa. Journal of Geoscience Education (In Review)
3. **Maruthi Sridhar Balaji Bhaskar**, Rosenzweig J, Shishodia S. 2018. Investigating Sexually Transmitted Disease (STD) ecologies using Geographic Information Systems (GIS). Teaching Issues and Experiments in Ecology, 13 (6): 1-55. http://tiee.esa.org/vol/v13/issues/data_sets/bhaskar/abstract.html
4. Rosenzweig J, **Maruthi Sridhar B Bhaskar**, Shishodia S. 2018. The impact of using Geographic Information Systems Technology on student's understanding of epidemiology. American Biology Teacher 80 (3): 191-197.
5. *Bhandari S, **Maruthi Sridhar BB**, Wilson BL. 2017. Effect of land cover changes on the sediment and water quality characteristics of Brays Bayou watershed. Water Air & Soil Pollution 228 (9): 336-350. <https://doi.org/10.1007/s11270-017-3538-7>.
6. **Maruthi Sridhar BB**, Witter JD, Wu C, Spongberg AL, Vincent RK. 2014. Effect of biosolid amendments on the metal and nutrient uptake and spectral characteristics of five vegetable plants. Water Air & Soil Pollution 225: 1-14.
7. Wu C, Spongberg AL, Witter JD, **Maruthi Sridhar BB**. 2012. Transfer of wastewater associated pharmaceuticals and personal care products to crop plants from biosolids treated soil. Ecotoxicology and Environmental Safety 85: 104-109.
8. **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL, Su Y. 2011. Effect of phytoaccumulation of arsenic and chromium on structural and ultrastructural changes of brake fern (*Pteris vittata*). Brazilian Journal of Plant Physiology 23 (4): 285-293.
9. Tangestani MH, Jaffari L, Vincent RK, **Maruthi Sridhar BB**. 2011. Spectral characterization and ASTER-based lithological mapping of an ophiolite complex: A case study from Neyriz ophiolite, SW Iran. Remote Sensing of Environment 115: 2243-2254.
10. **Maruthi Sridhar BB**, Vincent RK, Roberts SJ, Czajkowski K. 2011. Remote sensing of soybean stress as an indicator of chemical concentration of biosolid amended surface soils. International Journal of Applied Earth Observation and Geoinformation 13: 676-681.
11. **Maruthi Sridhar BB**, Vincent RK, Clapham WB, Osterberg J, Neale CMU, Watts DR, Sritharan SI. 2010. Mapping saltcedar (*Tamarix ramosissima*) and other riparian and agricultural vegetation in the Lower Colorado River region using multi spectral LandsatTM imagery. GeoCarto International 25 (8): 649-662.

12. **Maruthi Sridhar BB**, Vincent RK. 2009. Mapping and estimation of phosphorus and copper concentrations in fly ash spill area using LANDSAT TM Images. *Photogrammetric Engineering and Remote Sensing* 75 (9): 1030-1033.
13. **Maruthi Sridhar BB**, Vincent RK, Witter JD, Spongberg AJ. 2009. Mapping the total phosphorus concentration of surface soils using LANDSAT TM data. *Science of the Total Environment* 47: 2894-2899.
14. Su Y, Han FX, **Maruthi Sridhar BB**, Monts DL. 2008. Phytoextraction and accumulation of mercury in three plant species : Indian mustard (*Brassica juncea*), Beard grass (*Polypogon monspeliensis*), Chinese brake ferns (*Pteris vittata*). *International Journal of Phytoremediation* 10: 547-560.
15. **Maruthi Sridhar BB**, Chapin TL, Vincent RK, Axe MJ, Frizado JP. 2008. Identifying the effects of different construction practices on the spectral characteristics of concrete. *Cement and Concrete Research* 38: 538-542.
16. **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL, Su Y. 2007. Effects of Zn and Cd accumulation on structural and physiological characteristics of barley plants. *Brazilian Journal of Plant Physiology* 19 (1): 15-22.
17. **Maruthi Sridhar BB**, Vincent RK. 2007. In situ spectral reflectance measurements of a *Microcystis* bloom in Klamath Lake, Oregon. *Journal of Great Lakes Research* 33: 279-284.
18. Su Y, **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL. 2007. Effect of bioaccumulation of Cs and Sr natural nuclides and impact on foliar structure and plant spectral reflectance of Indian mustard (*Brassica juncea*). *Water Air & Soil Pollution* 180: 65-74.
19. **Maruthi Sridhar BB**, Han FX, Monts DL, Diehl SV, Su Y. 2007. Spectral reflectance and leaf internal structure changes of barley plants due to phytoextraction of zinc and cadmium. *International Journal of Remote Sensing* 28 (5): 1041-1054.
20. **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL, Su Y. 2007. Monitoring the effects of Arsenic- and Chromium- accumulation in Chinese brake fern (*Pteris vittata*) using microscopy and near infrared spectral reflectance. *International Journal of Remote Sensing* 28 (5): 1055-1067.
21. Han FX, Patterson WD, Xia Y, **Maruthi Sridhar BB**, Su Y. 2006. Rapid determination of mercury in plant and soil samples using inductively coupled plasma atomic emission spectroscopy, a comparative study. *Water Air & Soil Pollution* 170: 161-171.
22. **Maruthi Sridhar BB**, Diehl SV, Han FX, Monts DL, Su Y. 2005. Changes in plant anatomy due to uptake and accumulation of Zn and Cd in Indian mustard (*Brassica juncea*). *Environmental and Experimental Botany* 54: 131-141.
23. Su Y, Han FX, **Maruthi Sridhar BB**, Monts DL. 2005. Phytotoxicity and phyto accumulation of trivalent and hexavalent chromium in Brake fern. *Environmental Toxicology and Chemistry* 24 (8): 2019-2026.
24. Han FX, Su Y, **Maruthi Sridhar BB**, Monts DL. 2004. Distribution and bioavailability of trivalent and hexavalent chromium in contaminated soil. *Plant and Soil* 265:243-252.
25. Han FX, **Maruthi Sridhar BB**, Monts DL, Su Y. 2004. Phytoavailability and toxicity of trivalent and hexavalent chromium to *Brassica juncea* L. *Czern. New Phytologist* 162: 489-499.

PUBLISHED CONFERENCE PROCEEDINGS

1. **Maruthi Sridhar BB**. 2017. Impact of land use on Hurricane Harvey flooding in Houston-Galveston region. SENRA (Section on Environmental and Natural Resources Administration) News Letter, 12: 3-6.
2. Su Y, **Maruthi Sridhar BB**, Han FX, Monts DL, Diehl SV. 2008. Effect of bioaccumulation of Cs and Sr natural isotopes on foliar structure and plant spectral reflectance of Indian mustard (*Brassica juncea*). Proceedings of the Waste Management Symposium, Phoenix, AZ.
3. Monts DL, Su Y, Han FX, **Maruthi Sridhar BB**, Waggoner CA, Plodinec MJ. 2005. Investigation of the efficiency of mercury uptake by selected plant species. Proceedings of the 10th International Conference on Environmental Remediation and Radioactive Waste Management, Glasgow, Scotland.
4. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes in plants during phytoremediation of Cr and As contaminated soils. Proceedings of Southeastern Microscopic Society Conference, Columbia, SC.
5. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Monitoring the internal structure of barley plants subjected to metal phytoremediation. Proceedings of the 7th International Symposium on In situ and on-site bioremediation, Battelle, 2003, Orlando, FL.
6. Su Y, **Maruthi Sridhar BB**, Monts DL. 2002. Monitoring the process of phytoremediation of Zn and Cd by barley (*Hordeum vulgare*) using visible and near-infrared diffuse reflectance spectrometry. Proceedings of the 9th Biennial International Conference on Nuclear and Hazardous Waste Management, Spectrum, 2002, Reno, NV.

PUBLISHED CONFERENCE ABSTRACTS AND PRESENTATIONS

*Graduate Student; # Undergraduate Student

1. #Mack L, **Maruthi Sridhar BB**. 2019. Assessing the cytotoxicity of the soil and water samples from Buffalo Bayou on human gut cells. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
2. #Johnson T, Johnson J, Bukinmi-Omidiran T, **Maruthi Sridhar BB**. 2019. Monitoring pre- and post-Harvey nutrient and metal concentrations in Greens Bayou. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
3. *Bukinmi-Omidiran T, **Maruthi Sridhar BB**. 2019. Impact of Hurricane Harvey on soil and water characteristics of Buffalo and Brays Bayou watersheds. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
4. *Ali H, Rosenzweig J, **Maruthi Sridhar BB**. 2019. Biological and chemical characterization of the Tigris River. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
5. #Sey E, Rosenzweig J, **Maruthi Sridhar BB**. 2019. Analyzing water quality characteristics of Hunting Bayou and microbial content in Brays Bayou of Harris County, Texas. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.

6. *Keita D, Shishodia S, **Maruthi Sridhar BB**. 2019. Cytotoxicity analysis of pre- and post-Hurricane Harvey soil samples collected from greater Houston bayous. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
7. *Abdullah-Smoot D, Shishodia S, **Maruthi Sridhar BB**. 2019. Cytotoxic effects of Harris County watersheds on HT29 colon cells. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 21-23, Washington, DC.
8. **Maruthi Sridhar BB**. 2018. Monitoring and mapping the soil and water quality dynamics of urban watersheds. Research for Sustainable Development and Improving the Livelihood of the Society, Fifth Annual International Research Symposium, May 25-26, Debre Berhan University, Debre Birhan, Ethiopia. (Invited Talk)
9. **Maruthi Sridhar BB**. 2018. Monitoring and mapping the soil and water quality dynamics of urban watersheds in Texas. Bayou Colloquium at University of Houston - Clear Lake, March 19, Clear Lake, Houston, TX. (Invited Talk)
10. **Maruthi Sridhar BB**. 2018. Monitoring and mapping the Hurricane Harvey flooding in Houston, Texas. TSU Research Week, March 26-30, Houston, TX.
11. #Johnson J, **Maruthi Sridhar BB**, Keita D. 2018. Monitoring and mapping the nutrient and metal concentrations in the Green bayou watershed, TX. TSU Research Week, March 26-30, Houston, TX.
12. #Rodriguez A, Galvin S, Keita D, **Maruthi Sridhar BB**, Rosenzweig R. 2018. Evaluation of the soil and water quality of Halls bayou and its cytotoxic effects on human and ecological health. TSU Research Week, March 26-30, Houston, TX.
13. #Johnson J, **Maruthi Sridhar BB**, Keita D. 2018. Monitoring and mapping the nutrient and metal concentrations in the Green bayou watershed, TX. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.
14. #Walker N, **Maruthi Sridhar BB**, Keita D. 2018. Spatial distribution of metals and nutrients along Buffalo bayou, TX. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.
15. #Rodriguez A, Galvin S, Keita D, **Maruthi Sridhar BB**, Rosenzweig R. 2018. Evaluation of the soil and water quality of Halls bayou and its cytotoxic effects on human and ecological health. Emerging Researchers National (ERN) Conference in STEM, American Association for the Advancement of Science (AAAS), February 22-24, Washington, DC.
16. **Maruthi Sridhar BB**. 2017. Monitoring and mapping the Hurricane Harvey flooding in Houston, Texas. AGU Fall Meetings, December 11-15, New Orleans, LA.
17. **Maruthi Sridhar BB**, Rosenzweig J, Shishodia S. 2017. Infusion of climate change and geospatial science concepts into environmental and biological science curriculum. AGU Fall Meetings, December 11-15, New Orleans, LA.

18. **Maruthi Sridhar BB.** 2017. Impact of Hurricane Harvey flooding in Texas using geospatial informatics. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
19. #Rodriguez A, Galvin S, Rosenzweig R, **Maruthi Sridhar BB.** 2017. Halls Bayou Water Quality Evaluation for cytotoxic effects. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
20. #Johnson J, **Maruthi Sridhar BB.** 2017. Mapping Spatial and Temporal Variations in the Nutrient Content of Greens Bayou, TX. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
21. #Walker N, **Maruthi Sridhar BB.** 2017. Analysis of Water Quality Characteristics of Buffalo Bayou, TX. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
22. *Howlider H, **Maruthi Sridhar BB.** 2017. Spatial Distribution of Heavy Metals in Floodplain Soils of Brays Bayou Watershed. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
23. *Akinsanya A, **Maruthi Sridhar BB.** 2017. Mapping and Monitoring the long-term water quality characteristics in Galveston Bay, Texas. South Western Business Administration Teaching Conference (SWBATC), October 26-27, Houston, TX.
24. **Maruthi Sridhar BB.** 2017. Environmental vulnerability and adaptation to global climate change. Climate change and water quality. Forum on Struggle Against Climate Change: Realities and Social Actions, CUMIPAZ-2017 (Peace Integration Summit -2017), October 16-21, Panama City, Panama. (Invited Talk).
25. **Maruthi Sridhar BB.** 2017. Climate change and water quality. Forum on Struggle Against Climate Change: Realities and Social Actions, Organized by Global Embassy for Activists for Peace at Rice University, March 7, Houston, TX. (Invited Talk)
26. *Sharmila Bhandari, **Maruthi Sridhar BB,** Bobby Wilson. 2017. Impact of landscape changes on environmental and water quality characteristics of the Brays Bayou watershed, Texas Academy of Sciences, 120th Annual Meetings, March 3-5, Belton, TX.
27. **Maruthi Sridhar BB,** Segun Adelanke, Shruti Lakkaraju. 2017. Spatial and seasonal patterns of metal contamination at watershed scale. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), March 1-2, Washington, DC.
28. **Maruthi Sridhar BB.** 2017. Spatial and temporal variations in pigment and nutrient concentrations in Galveston Bay. AAAS Annual Meetings, February 16-19, Boston, MA.
29. *Wei B, **Maruthi Sridhar BB.** 2016. Spatial and temporal variation of heavy metal in Houston ship channel. TSU Research Week, March 29 -31, Houston, TX.
30. *Bhandari S, **Maruthi Sridhar BB.** 2016. Impact of landscape changes on the environmental quality of Brays and Sims Bayou watershed, TX. TSU Research Week, March 29 -31, Houston, TX.
31. *Lakkaraju S, **Maruthi Sridhar BB.** 2016. Water quality and land cover change analysis in East Tennessee watersheds. TSU Research Week, March 29 -31, Houston, TX.

32. *Howliger H, **Maruthi Sridhar BB**. 2016. Monitoring the soil and sediment mercury contamination in East Fork Poplar Creek (EFPC). TSU Research Week, March 29 -31, Houston, TX.
33. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2016. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). TSU Research Week, March 29 -31, Houston, TX.
34. #Torres A, Maruthi Sridhar BB. 2016. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 25-27, Washington, DC.
35. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2016. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 24-25, Washington, DC.
36. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2015. Modeling mercury flow dynamics and bioaccumulation along East Fork Poplar Creek (EFPC). Society of Environmental Toxicology and Chemistry (SETAC) North America 36th Annual Meetings, November 1-5, Salt Lake City, UT.
37. #Torres A, Maruthi Sridhar BB. 2015. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. Gulf Coast Undergraduate Research Symposium (GCURS), Rice University, Houston, TX, October 17, 2015.
38. #Johnson R, Maruthi Sridhar BB. 2015. Historical trends of mercury contamination and bioaccumulation in Hinds Creek and White Oak Creek, Tennessee. Undergraduate Research Symposium, Oak Ridge National Lab (ORNL), Oak Ridge, TN, July 29, 2015.
39. #Torres A, **Maruthi Sridhar BB**. 2015. Bioaccumulation of Environmental Contaminates in Bear Creek, Tennessee. Gulf Coast Undergraduate Research Undergraduate Research Symposium, Oak Ridge National Lab (ORNL), Oak Ridge, TN, July 29, 2015
40. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2015. Mercury contamination and bioaccumulation in East Tennessee watersheds. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015 (Invited Talk).
41. **Maruthi Sridhar BB**. 2015. Landscape level patterns of mercury contamination and bioaccumulation in East Fork Poplar Creek (EFPC) watershed. TSU Research Week, March 31 – April 2, Houston, TX.
42. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2015. Geospatial models to map mercury dynamics at watershed scale. NSF- HBCU-UP/CREST PI/PD Meeting, American Association for the Advancement of Science (AAAS), Feb 18-19, Washington, DC.
43. *Howliger HR, **Maruthi Sridhar BB**. 2015. Analyzing the mercury contamination in soil and sediments of East Fork Poplar Creek (EFPC) in Tennessee. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.
44. *Segun A, **Maruthi Sridhar BB**. 2015. Effects of landscape factors on mercury and methyl mercury contamination and bioaccumulation in Redbreast Sunfish (*Lepomis auritus*) in East Fork Poplar Creek (EFPC) watershed, Tennessee. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.

45. *Lakkaraju S, **Maruthi Sridhar BB**. 2015. Geospatial and statistical analysis of methyl mercury (MeHg) and polychlorinated biphenyl (PCB) distribution in East Tennessee watersheds. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.
46. *Saah G, **Maruthi Sridhar BB**. 2015. Analysis of urban sprawl and its effect on urban environmental characteristics using spectral reflectance and Landsat data in Harris County, Texas. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.
47. *Esmaeili M, **Maruthi Sridhar BB**. 2015. Land use and land cover change in Galveston County, Texas. TSU Research Week, Texas Southern University, Houston, TX, March 31- April 2, 2015.
48. *Alhassan F, **Maruthi Sridhar BB**. 2014. Land cover change analysis of the Buffalo San Jacinto watershed region in Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
49. *Eltayeb HA, **Maruthi Sridhar BB**. 2014. Land use and land cover changes in the North Galveston Bay watershed region in Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
50. *Esmaeli M, **Maruthi Sridhar BB**. 2014. Landsat 5 imagery of urban development in Galveston Island, Texas 1986-2011, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
51. *Heydari S, **Maruthi Sridhar BB**. 2014. Analysis of temporal land cover changes in East Galveston watershed region of Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
52. *Mosley J, **Maruthi Sridhar BB**. 2014. Land cover change in Greater Lubbock area, Lubbock County, Texas, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
53. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2014. Geospatial database to map mercury concentration in East Fork Poplar Creek (EFPC) watershed. 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
54. *Saah G, **Maruthi Sridhar BB**. 2014. Analysis of urban sprawl and its effect on urban environmental characteristics using spectral reflectance and Landsat data, 14th Annual Houston Area GIS Day Conference, November 19-21, Houston, TX.
55. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2013. Geospatial database to map mercury concentration in East Fork Poplar Creek (EFPC) watershed. Society of Environmental Toxicology and Chemistry (SETAC) North America 34th Annual Meetings, November 17-21, Nashville, TN.
56. **Maruthi Sridhar BB**, Peterson M, Bevelhimer M. 2013. Geospatial database to map mercury concentration in East Fork Poplar Creek Watershed (EFPC) watershed. ORAU Faculty Poster Session, August 6, Oak Ridge National Lab (ORNL), Oak Ridge, TN.
57. **Maruthi Sridhar BB**, Vincent RK. 2012. Remote sensing of soybean stress as an indicator of chemical concentration of biosolid amended surface soils. SSSA annual meetings, October 21-24, Cincinnati, OH.

58. **Maruthi Sridhar BB**, Vincent RK, Wicks J. 2011. Remote sensing for monitoring water quality. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.
59. **Maruthi Sridhar BB**, Vincent RK. 2011. Application of remote sensing to map the soil chemical characteristics. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.
60. Vincent RK, Sanderson L, **Maruthi Sridhar BB**. 2011. Landsat TM monitoring of total phosphorous in lakes as related to cyanobacterial blooms. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.
61. Sanderson L, Vincent RK, **Maruthi Sridhar BB**. 2011. Use of Landsat TM phycocyanin algorithm to show possibility of similar world view 2 algorithm. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, November 14-17, Herndon, VA.
62. **Maruthi Sridhar BB**, Vincent RK. 2010. Remote sensing of evapotranspiration using Landsat TM data. Remote Sensing and Hydrology 2010 Symposium September 27-30, Jackson Hole, WY.
63. **Maruthi Sridhar BB**, Vincent RK. 2010. Remote sensing of evapotranspiration using Landsat TM data. Second State of the Art Conference on Remote Sensing of Evapotranspiration, August 16-18, Desert Research Institute, Las Vegas, NV.
64. **Maruthi Sridhar BB**, Vincent RK. 2010. Mapping Saltcedar (*Tamarix ramosissima*) and other riparian and agricultural vegetation in the lower Colorado River region using multi spectral LANDSAT TM imagery. Second State of the Art Conference on Remote Sensing of Evapotranspiration, August 16-18, Desert Research Institute, Las Vegas, NV.
65. **Maruthi Sridhar BB**, Vincent RK. 2010. Mapping and estimation of phosphorus and copper concentrations in fly ash spill area using LANDSAT TM data. TVA-Kingston Fly ash release environmental research symposium, March 11-12, Harriman, TN.
66. **Maruthi Sridhar BB**, Vincent RK. 2009. Mapping the chemical concentrations of soils using LANDSAT TM data. SSSA annual meetings, November 1-5, Pittsburg, PA.
67. **Maruthi Sridhar BB**, Vincent RK, Sritharan SI, Watts DR, Osterberg J. 2009. Mapping the invasive Tamarix plant species using LANDSAT data. Ecological Society of America (ESA) Conference, August 2-7, Albuquerque, NM.
68. **Maruthi Sridhar BB**, Vincent RK. 2009. Spectral reflectance measurements of a Microcystis bloom. International Association for Great Lakes Research's 52nd Annual Conference, May 18-22, Toledo, OH.
69. **Maruthi Sridhar BB**, Vincent RK, Clapham P, Eckhardt D, Neale C, Osterberg J, Watts DR, Sritharan SI. 2008. Mapping the invasive salt cedar plant species (*Tamarix ramosissima*) using spectral reflectance and remote sensing. American Society of Photogrammetry and Remote Sensing (ASPRS) Conference, April 28-May 2, Portland, OR.
70. **Maruthi Sridhar BB**, Vincent RK. 2006. Monitoring the application of sewage sludge to agricultural fields using spectral reflectance and remote Sensing. 18th World Congress of Soil Science, July 9-15, 2006, Philadelphia, PA

71. **Maruthi Sridhar BB**, Vincent RK. 2005. Monitoring the application of sewage sludge to agricultural fields using spectral reflectance and remote sensing. 4th Annual BGSU Research Conference, November 3-4, Bowling Green, OH.
72. Seudkamp MD, **Maruthi Sridhar BB**, Vincent RK, Michaels HJ. 2005. Spectral detection of stress in maize (*Zea mays*) sown on sludge-amended soil. 4th Annual BGSU Research Conference, November 3-4, Bowling Green, OH.
73. Han FX, Diehl SV, Monts DL, Su Y. 2004. Effect of high soil concentrations of mercury on growth, physiology and internal structure of plants. SSSA annual meetings, November 1-4, Seattle, WA.
74. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2004. Remote monitoring of structural and physiological changes in fern (*Pteris vittata*) plants during phytoremediation of Cr and As contaminated soils. 2nd Graduate Student Symposium, Mississippi State University, Mississippi State, MS.
75. **Maruthi Sridhar BB**, Han FX, Diehl SV, Monts DL, Su Y. 2004. Discrimination of chromium phytotoxicity to plants using hyperspectral reflectance. SSSA annual meetings, November 1-4, Seattle, WA.
76. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Changes in anatomical characters of plants subjected to heavy metal contamination. SSSA annual meetings, November 2-6, Denver, CO
77. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes of fern (*Pteris vittata*) during phytoremediation of Cr and As contaminated soils. 57th Annual Conference of Forest Products Society, Seattle, WA.
78. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Monitoring the internal structure of barley plants subjected to metal phytoremediation. 7th International symposium on insitu and onsite bioremediation, Orlando, FL.
79. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Phytoremediation of Cr and As contaminated soils using brake fern plants. Southern States Environmental Conference, September 23-25, Biloxi, MS
80. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL. 2003. Structural and ultrastructural changes in plants subjected to metal phytoremediation. 7th International symposium on insitu and onsite bioremediation, Orlando, FL.
81. **Maruthi Sridhar BB**, Diehl SV, Su Y, Monts DL, Han FX. 2003. Monitoring structural changes in plants during phytoremediation of Cr and As contaminated soils. Proceedings of Southeastern Microscopic Society Conference, Columbia, SC.
82. **Maruthi Sridhar BB**, Su Y, Monts DL, Diehl SV. 2002. Monitoring leaf reflectance and internal structure of barley during phytoremediation of heavy metals. SSSA annual meetings, Indianapolis, IN.
83. Su Y, **Maruthi Sridhar BB**, Monts DL. 2002. Monitoring the process of phytoremediation of metal contaminated soil by Near IR Reflectance spectroscopy, ACS Meeting, Orlando, FL.
84. Su Y, **Maruthi Sridhar BB**, Monts DL. 2002. Monitoring the process of phytoremediation of zinc by barley (*Hordeum vulgare*) using visible and near infrared diffuse reflectance

spectrometry. The 9th Biennial International conference on nuclear and hazardous waste management, Reno, NV.

85. Su Y, **Maruthi Sridhar BB**, Han FX, Monts DL, Diehl SV. 2002. Monitoring the impact of heavy metals on plant reflectance and internal leaf structure during phytoremediation process. USEPA – Spectral remote sensing of vegetation Conference, Las Vegas, NV.

MENTOR AND ADVISOR - NSF FUNDED SUMMER INTERNSHIP UNDERGRADUATE STUDENTS

1. Torye Smith (BS Biology- Junior; Summer 2019) – NSF-TI Grant
2. Ebony Wiltz (BS Chemistry-Junior; Summer 2019) – NSF-TI Grant
3. Alexander Cruz (BS Transportation-Sophomore; Summer 2019) – NSF-TI Grant
4. Esther Sey (BS Biology- Senior; Summer 2019) – NSF-TI Grant
5. Nikole Hernandez (BS Chemistry-Junior; Summer 2018) – NSF-TI Grant
6. Esther Sey (BS Biology- Junior; Summer 2018) – NSF-TI Grant
7. Leanna Mack (BS Biology- Junior; Summer & Fall 2018) – NSF-TI Grant
8. Thaddeaus Johnson (BS Chemistry-Sophomore; Summer 2018) – NSF-TI Grant
9. Adriana Rodriguez (BS Biology- Senior; Spring & Summer 2018) – NSF-TI Grant
10. Malikiya Roberson (BS Transportation-Sophomore; Summer 2017) – NSF-TI Grant
11. Naomi Walker (BS Civil Engineering-Junior; Summer & Fall 2017) – NSF-TI Grant
12. Jericho Johnson (BS Chemistry-Junior; Summer & Fall 2017) – NSF-TI Grant
13. Ibrahim Adeyemi (BS Biology- Junior; Summer 2017) – NSF-TI Grant
14. Adriana Rodriguez (BS Biology- Junior; Summer 2017) – NSF-TI Grant
15. Chioma Anugwam (BS Biology- Sophomore; Summer 2016) – NSF-RIA Grant
16. Nancy Osazuwa (BS Biology- Sophomore; Summer 2016) – NSF-RIA Grant
17. Reginald Johnson (BS Biology- Junior; Summer 2015) - NSF-RIA Grant
18. Alex Torres (BS Chemistry-Senior; Summer 2015) - NSF-RIA Grant

GRADUATE STUDENTS ADVISED

PhD: Major Advisor (4); Committee member (5)

MS: Major Advisor (5); Committee member (10)

∞Major Advisor

Students Graduated

1. ∞Adesope Akinsanya (MS Environmental Toxicology, Fall 2017). *Thesis Title: “Mapping and monitoring the long-term water quality characteristics in Galveston Bay, Texas”*
2. ∞Habibur Howlader (MS Environmental Toxicology, Fall 2017). *Thesis Title: “Changes in flood plain soil characteristics of Brays and Sims bayou watershed in Texas”*
3. ∞Segun Adelanke (MS Environmental Toxicology, Fall 2016). *Thesis Title: “Geospatial evaluation of landscape factors on the mercury and methyl mercury availability in East Fork Poplar Creek Watershed in Tennessee”*

4. ∞Sharmila Bhandari (PhD Environmental Toxicology, Fall 2016). Dissertation Title: *“Impact of landscape changes on the environmental quality of Brays and Sims Bayou Watershed, TX”*
5. ∞Shruti Lakkaraju (MS Environmental Toxicology, Fall 2016). Thesis Title: *“Impact of Environmental and Land cover changes on the water quality characteristics of East Tennessee Watersheds”*
6. ∞Gilbert Saah, (PhD Environmental Toxicology, Fall 2016). Dissertation Title: *“Analysis of urban sprawl and its effect on environmental characteristics using spectral reflectance and Landsat data in Harris County, Texas”*
7. ∞Bo Wei (PhD Environmental Toxicology, Expected Fall 2016). Dissertation Title: *“Geospatial characterization of environmental pollution and its impact on human health in the Houston Ship Channel Region”*
8. ∞Fabrice Fankem Fandom (MS Environmental Toxicology, Fall 2013). Thesis Title: *“Environmental exposures and impact of asthma on pregnancy”*
9. ∞Njekeh Franklin Caspa, (PhD Environmental Toxicology, Spring 2013). Dissertation Title: *“The Impact of environmental stressors on maternal and infant health outcomes”*

Current Students

- ∞Adeola Mosuro, (MS Environmental Toxicology, Expected Spring 2020).
- ∞Titilope Bukunmi-Omidiran, (PhD Environmental Toxicology, Expected Fall 2020).

Committee Member

1. Sedidheh Heydari, (PhD Environmental Toxicology, Fall 2019). Dissertation Title: *“Involvement of PPAR γ in alteration of mechanisms of autophagy pathway in Acrolein toxicity”*
2. Amoge Uwalaka, (MS Environmental Toxicology, Spring 2018). Thesis Title: *“Analysis of pond water for heavy metal and pesticide contamination in Harris County, Texas”*
3. Felica Davis, (MS Environmental Toxicology, Spring 2018). Thesis Title: *“Spatial temporal patterns of polycyclic aromatic hydrocarbons contamination in the Houston Ship Channel’s Sediment”*
4. Theresa Jibunor (PhD Environmental Toxicology, Fall 2017). Dissertation Title: *“Bombax cieba: A potential source for biodiesel production”*
5. Durelle Jacob, (PhD Environmental Toxicology, Fall 2017). Dissertation Title: *“Animal fat residue and cooking oils: The transesterification and purification of a potential source for biodiesel production”*
6. Matthew Fiala, (PhD Environmental Toxicology, Spring 2017). Dissertation Title: *“Development of transport model for heavy metals from non-exhaust traffic emissions”*
7. Kimyattia Smith, (MS Environmental Toxicology, Spring 2017). Thesis Title: *“Evaluation of local environmental isolates and their response to dust”*
8. Obinna Nlemedim, (MS Environmental Toxicology, Spring 2017). Thesis Title: *“Organic chemical compounds in different brands of different smoke”*

9. Christabel Ebuzoeme (MS Environmental Toxicology, Fall 2016). *Thesis Title: "The photochemical effects of LED lights on various cooking oils"*
10. Qing Li, (PhD Environmental Toxicology, Fall 2016). *Dissertation Title: "Impacts of weaving segment design on environment and public health"*
11. Olufunmilayo A. Owopetu (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Caenorhabditis elegans as a model organism for studying the toxic effects of Bromacil"*
12. Parise Henry (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Caenorhabditis elegans as a model for fatty acid biomarkers of exposure to an arsenic herbicide"*
13. David Ijoni-Animadu (MS Environmental Toxicology, Spring 2016). *Thesis Title: "Investigation of natural antioxidant products from extract of Fenugreek seed"*
14. Djene Keita (MS Environmental Toxicology, Spring 2015). *Thesis Title: "Fate and transport of triclosan in upper bayou, Houston, Texas"*
15. Sandeel Ahmed (MS Biology, Spring 2015). *Thesis Title: "The role of ribonucleases in various Yersinia stress responses"*
16. Gloria Okome, (PhD Environmental Toxicology, Fall 2013). *Dissertation Title: "Models of fate and transport of pollutants in surface waters"*
17. Chakravarthy Koricherla (MS Chemistry, Fall 2013). *Thesis Title: "Synthesis and characterization of ruthenium complex containing hypoxanthine as equatorial ligand"*
18. Chioma Ihemadu (MS Environmental Toxicology, Fall 2013). *Thesis Title: "Analysis of persistent organic compounds and trace metals in urine samples of young adults"*

SERVICE TO THE PROFESSION AND COMMUNITY

INDEPENDENT REVIEWER OF INTERNATIONAL JOURNALS

International Journal of Remote Sensing
 Water Air and Soil Pollution
 Soil Sediment and Contamination
 Soil Science Society of America Journal
 Journal of Hazardous Materials
 Naturwissenschaften
 Journal of Asian Earth Sciences
 International Journal of Health Geographics
 GeoCarto International
 Agronomy Journal
 Science of Total Environment
 Environmental Pollution

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Soil Science Society of America
 Crop Science Society of America
 American Society of Agronomy
 American Society of Photogrammetry and Remote Sensing
 American Geophysical Union
 American Association for the Advancement of Science

SERVICE TO THE UNIVERSITY

2014- Present	<i>Director of Environmental Toxicology Program, Department of Environmental and Interdisciplinary Sciences (EIS), Texas Southern University, Houston, TX.</i>
2012- 2018	<i>Member of the General Education Committee, representing Department of EIS for Geology (GEOL 141) Course at University Level.</i>
2012- Present	<i>Member of the Fellowship Committee, representing Department of EIS at College (COSET) Level.</i>
2015- 2018	<i>Member of the Grievance Committee (Faculty, Students), representing Department of EIS at College (COSET) Level.</i>
2015- 2017 & 2019-Present	<i>Member of the Suspension and Readmission Committee, representing Department of EIS at College (COSET) Level.</i>
2012- 2015	<i>Member of the Assessment Committee, representing Department of EIS at University Level.</i>

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Curriculum Vitae

Mark Butler

Professor & Eminent Scholar
 Department of Biological Sciences
 Old Dominion University
 Norfolk, Virginia 23529-0266



Education

Ph.D. Biological Science, 1988 - Florida State University, Tallahassee, FL
 M.S. Zoology, 1983 - Ohio State University, Columbus, OH
 B.A. Biology, 1980 cum laude - Wittenberg University, Springfield, OH

Employment

2010	Eminent Scholar, Department of Biological Sciences, Old Dominion University
2000	Professor, Department of Biological Sciences, Old Dominion University
1994	Associate Professor, Department of Biological Sciences, Old Dominion University
1989	Assistant Professor, Department of Biological Sciences, Old Dominion University
1988-1989	Guyer Postdoctoral Fellow, Center for Limnology and Department of Zoology, University of Wisconsin Visiting Professor in Oceanography, Department of Geology and Oceanography, University of Wisconsin
1988	Postdoctoral Research Associate, Department of Biological Science, Florida State University

Adjunct Faculty Appointments

2007-2010	University of Florida, Dept. Fisheries & Aquatic Sciences
1998-2002	Old Dominion University, Dept. of Ocean, Earth & Atmospheric Sciences
1999-2005	Florida State University, Dept. of Biological Sciences

Administrative Positions

2015-2019	Director, Marine Biology Concentration Program, Department of Biological Sciences, Old Dominion University
2002-2004	Assistant Chairman, Department of Biological Sciences, Old Dominion University
1996-2000	Graduate Program Director, Department of Biological Sciences, Old Dominion University

Publications

My students, co-principal investigators and I have published over 150 scientific articles and book chapters. Those publications are listed below separately under peer-reviewed journal articles, book chapters, and other articles. (Note: student authors are indicated in *italics*.)

Peer-Reviewed Journal Articles:

103. Griffiths, S.M, R. E. Antwis, L. Lenzi, A. Lucaci, D.C. Behringer, **M.J. Butler IV** and R. F. Preziosi. (in press) Host genetics and geography influence microbiome composition in the sponge *Ircinia campana*. *Journal of Animal Ecology*.
102. Small, H.J., Huchin-Mian, J.P., Reece, K.S., **Butler, IV M.J.**, and J.D. Shields. (in press). Prevalence of the parasitic dinoflagellate *Hematodinium perezii* in larval and juvenile blue crabs, *Callinectes sapidus*, from the coastal bays of Virginia. *Diseases of Aquatic Organisms*
101. *Valentine, M.V.* and **M.J. Butler IV** (2019). Sponges structure water column characteristics in a shallow, tropical coastal ecosystem. *Marine Ecology Progress Series* 608: 133–147
100. *Gnanalingam, G.*, **M.J. Butler IV**, T.R. Matthews, E. Hutchinson, and R. Kilada. (2018) Directly ageing the Caribbean spiny lobster, *Panulirus argus* with validated band counts from gastric mill ossicles. *ICES Journal of Marine Science* (zdoi:10.1093/icesjms/fsy177)
99. *Gnanalingam, G.G.* and **M.J. Butler IV** (2018). Parental effects and reproductive senescence in Caribbean spiny lobster. *Bulletin of Marine Science* 94(3):675–698.
98. Kough, A, C.B. Paris, and **M.J. Butler IV**. (2018) The Spatial Context of "Winning" in MPA Network Design: Location Matters. *Conservation Letters* 11:e12455.
<https://doi.org/10.1111/conl.12455>
97. **Butler, M.J. IV**, J. B. Weisz, and *J. Butler*. 2018. The effects of water quality on back-reef sponge survival and distribution in the Florida Keys, Florida (USA). *Journal of Experimental Marine Biology and Ecology* 503:92-99
96. *Gittens, L.G.* and **M. J. Butler IV**. 2018. The Effect of Casitas on *Panulirus argus* Mortality, Growth, and Susceptibility to Disease in The Bahamas. *Bulletin of Marine Science* 94(3):995–1016.

95. **Gnanalingam, G.G. and M.J. Butler IV.** 2018. Examining the relationship between size and prey preference in the Caribbean Spiny Lobster, *Panulirus argus*. *Journal of Crustacean Biology* 38(2), 245–249, 2018. doi:10.1093/jcbiol/rux122
94. **Gnanalingam, G.G. and M.J. Butler IV.** 2018. Application of a non-invasive technique for estimating clutch size in Caribbean spiny lobster. *Journal of Crustacean Biology* 38(1), 124–127, 2018. doi:10.1093/jcbiol/rux093
93. **Butler, M.J. IV.** 2017. Collecting and processing lobsters. *Journal of Crustacean Biology* 37 (3): 340–346; DOI:10.1093/jcbiol/rux021
92. **Butler, M.J. IV** and *T. W. Dolan III.* 2017. Potential impacts of Everglades restoration on lobster and hard-bottom communities in the Florida Keys, FL (USA). *Estuaries and Coasts*: 40(6): 1523-1539; DOI: 10.1007/s12237-017-0256-8
91. **Gutzler, B. and M.J. Butler IV.** 2017. Comparison of methods for determining nutritional condition in decapod crustaceans. *Journal of Shellfish Research* 36: 175-179
90. **Butler, J., M.J. Butler IV,** and *H. Gaff.* 2017. Snap, crackle, and pop: acoustic-based model estimation of snapping shrimp populations in healthy and degraded hard-bottom habitats. *Ecological Indicators* 77: 377-385.
89. **Butler, M.J. IV,** *D.C. Behringer,* and *M. M. Valentine.* 2017. Commercial sponge fishery impacts on the population dynamics of sponges in the Florida Keys, FL (USA). *Fisheries Research* 190: 113-121.
88. **Truelove, N.K., A.S. Kough, R. F. Preziosi, D. Behringer Jr, S. J. Box, C. Paris, and M. Butler IV.** 2017. Biophysical connectivity explains population genetic structure in a highly dispersive marine species. *Coral Reefs* 36:233–244.
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86. **Truelove N.K., D.C. Behringer Jr, M.J. Butler IV,** and *R.F. Preziosi.* 2016. Isolation and characterization of eight polymorphic microsatellites for the spotted spiny lobster, *Panulirus guttatus*. *PeerJ* 4:e1467 <https://doi.org/10.7717/peerj.1467>
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28. Behringer, D., **M. Butler**, and J. Shields. 2001. The first viral disease reported in lobster. *The Lobster Newsletter* 14: 1 - 3
27. **Butler, M.J. IV**. 2000. An ecological model for the Florida Spiny Lobster, pp. 85-90 in *US/Canadian Lobster Summit III – Lobster Stock Assessment: towards greater understanding, collaboration, and improvement*. P.M. Farrey, M.L. Mooney-Seus, and H.C. Tausig (eds.), New England Aquarium Publ., Boston, MA. 153p.
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25. MacDiarmid, A.B., **M.J. Butler**, and R. Stewart. 1998. Is big always better? The effect of mate size on female fecundity in spiny lobsters. *Seafood New Zealand* 6 (6): 53-54
24. **Butler, M.J.** and A.B. MacDiarmid. 1998. Sperm limitation in exploited populations of spiny lobsters. *Bulletin of the Ecological Society of America* 79 (3)
23. **Butler, M.J.**, W.F. Herrnkind, J.H. Hunt, and J.F. Field. 1996 Factors limiting spiny lobster distribution and abundance in Florida Bay: a preliminary report. *Proceedings of the Gulf and Caribbean Fisheries Institute* Vol. 44: 594.
22. MacDiarmid, A.M., **M.J. Butler**, and R. Stewart. 1995. Spiny lobster sex: is bigger always better? *The Lobster Newsletter* 8: 9
21. Herrnkind, W.F. and **M.J. Butler**. 1994. Impact of sponge-shelter loss on juvenile spiny lobster, *Panulirus argus*, in Florida Bay: an update. *The Lobster Newsletter* 7:2-3
20. Herrnkind, W.F., **M.J. Butler IV**, and D. Forcucci. 1994 The duration of the inshore postlarval stage of the spiny lobster *Panulirus argus*: implications to recruitment. *Proceedings of the Gulf and Caribbean Fisheries Institute* Vol. 43: 647
19. **Butler, M.J.**, W.F. Herrnkind, and J.H. Hunt. 1994. Sponge mass mortality and Hurricane Andrew: catastrophe for juvenile spiny lobsters in south Florida? *Bulletin of Marine Science* 54: 1073
18. Field, J.F. and **M.J. Butler IV**. 1994. The influence of temperature, salinity, and larval transport on the distribution of juvenile spiny lobsters, *Panulirus argus*, in Florida Bay. *Bulletin of Marine Science* 54: 1074
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15. **Butler, M.J., IV** and W.F. Herrnkind. 1990. Does settlement or juvenile habitat availability regulate juvenile spiny lobster abundance? *Bulletin of the Ecological Society of America* 71: 110.
14. **Butler, M.J., IV** and W.F. Herrnkind. 1989. Spiny lobster recruitment in South Florida. *The Lobster Newsletter* 2:6.
13. **Butler, M.J., IV**. 1989. Fish predation or macroinvertebrate colonization: which structures lake-bottom communities? *Bulletin North American Benthological Society* 6: 99.
12. **Butler, M.J., IV**. 1988. Community responses to variation in predation: field experiments with bluegill sunfish and lentic macroinvertebrates. *Bulletin of the North American Benthological Society* 5: 84.

11. **Butler, M.J., IV**. 1988. Variable predation and prey community dynamics: sunfish - macroinvertebrate interactions. *Bulletin of the Ecological Society of America* 69: 89.
10. **Butler, M.J., IV**. 1987. Effects of variation in predation and prey recruitment on prey community structure: field experiments with bluegill sunfish and macroinvertebrate prey in a North Florida lake. *Bulletin of the Ecological Society of America* 68: 274-275.
9. **Butler, M.J., IV**. 1986. Effects of temporal and spatial variation in fish predation and invertebrate recruitment on freshwater littoral zone communities. *Bulletin of the Ecological Society of America* 67: 35.
8. **Butler, M.J., IV**. 1986. The rusty crayfish: tyrant or prude? *Natural History* 95:4.
7. **Butler, M.J., IV** and W.F. Herrnkind. 1985. Habitat selection and predation in juvenile spiny lobsters: the importance of the red algae *Laurencia*. *Bulletin of the Ecological Society of America* 66: 149.
6. Tankersley, R.A., W.F. Herrnkind, and **M.J. Butler**. 1985. Factors influencing habitat selection of young juvenile spiny lobsters, *Panulirus argus*. *American Zoologist* 25: 122.
5. **Butler, M.J., IV**. 1985. On the nature of NABS: a comment. *Bulletin of the North American Benthological Society* 2: 63-66.
4. **Butler, M.J., IV**. 1984. Character displacement in crayfish: a case of rapid, non-competitive evolution? *Bulletin of the Ecological Society of America* 65: 74.
3. **Butler, M.J., IV** and R.A. Stein. 1982. Interspecific displacement of crayfish: an analysis of the competitive mechanisms. *Bulletin of the Ecological Society of America* 63: 113.
2. Cotner, J. and **M.J. Butler**. 1981. Community structure, drift, and upstream migration of the crustaceans *Synurella dentata* Hubricht and *Lirceus fontinalis* Raf. in a temperate spring. *Ohio Journal of Science* 81: 101.
1. **Butler, M.J., IV**. 1980. A study of the chemical and physical parameters of a temperate hardwater spring in John Bryan State Park, Green County, Ohio. *Ohio Journal of Science* 80: 93.

Articles Currently In Review:

Gnanalingam, G., H. Gaff, and M.J. Butler IV (in review) Expanding the footprint of protected areas: combining harvest slot limits and no-take marine protected areas to rebuild and conserve spawning stocks. *Conservation Biology*.

Manuscripts in Preparation: (draft manuscripts in final stages of preparation)

Butler, M.J. IV, E. Anderson, N. Evans, G. Gnanalingam, S. Hagedorn, and A. Perez. The Restoration of Marine Habitats: A Review (target journal: *Restoration Ecology*)

Valentine, M. and M.J. Butler IV. Functional poverty in sponge communities diminishes the quality of tropical waters. (target journal: *Nature*)

Spadaro, A.J. and M.J. Butler IV. Can a cryptic, herbivorous crab restore degraded Caribbean coral reefs? (target journal: *Nature*)

M.J. Butler IV, D.C. Behriner, J. Schratwieser. Social attraction of lobsters to a predatory black hole: a natural ecological trap (target journal: *Ecological Letters*)

Professional Presentations

I have been author or co-author on over 250 presentations at scientific conferences. Those presentations are broken down below into invited presentations, first authored presentations, and co-authored presentations. (Note: student authors are in *italics*.)

Invited Presentations at Conferences:

37. **Butler, M.J. IV.** May 2018. A homage to H.H. Hobbs III: the inspiration for four decades of research on decapods. International Crustacean Congress, Washington, D.C.
36. **Butler, M.J. IV,** *G. Gnanalingam,* A. Kough, and C. Paris. March 2018. An ecological foundation for the rational management of the fishery for Caribbean Spiny Lobster (*Panulirus argus*). National Shellfish Conference, Seattle, WA.
35. **Butler, M.J. IV,** *G. Gnanalingam,* T. Matthews, E. Hutchinson, and R. Kilada. March 2018. Finally, a technique to age decapods: progress with the Caribbean Spiny Lobster, *Panulirus argus*, and its management implications. National Shellfish Conference, Seattle, WA.
34. **Butler, M.J. IV,** *J. Butler,* and *M. Valentine.* 2017. The role of biocomplexity in the restoration of tropical hard-bottom sponge communities and their ecosystem services, 38th US Coral Reef Task Force Meeting, Ft. Lauderdale, FL
33. **Butler, M.J. IV.** 2016. The Aylesworth Foundation: 30 Years of Supporting Marine Science, Southeastern Commercial Fisheries Association, Key Largo, FL. *Expenses paid.*
32. **Butler, M.J. IV.** 2011. Bugs Beneath the Fabric: Direct and Indirect Consequences of Marine Diseases. 8th Mote International Symposium: Species interactions in marine communities: the invisible fabric of nature, Sarasota, FL. *Expenses paid.*
31. **Butler, M.J. IV.** 2011. Plenary Speaker: Marine Diseases: Ecologically Relevant and Consequential to Lobsters. 9th International Conference and Workshop on Lobsters. Bergen, Norway. *Expenses paid.*
30. **Butler, M. J. IV,** DC Behringer, TW Dolan, JD Shields, and J Moss. 2011. Behavior influences viral disease dynamics in Caribbean spiny lobster. American Society of Limnology and Oceanography, San Juan, Puerto Rico.
29. **Butler, Mark J. IV.** 2010. Marine diseases: an emerging ecological force. Plenary speaker, New England Lobster Disease Workshop, Kingston, Rhode Island. *Expenses paid.*
28. **Butler, Mark J. IV.** 2009. Multiplicative effects of Exploitation on Caribbean Spiny Lobster, The Crustacean Society Annual Conference, Tokyo, Japan. *Expenses paid.*
27. **Butler, Mark J. IV,** R. Cowen, and C. Paris. 2008. Coral Reef Targeted Research Lobster Connectivity project update: managing in and outside the MPA box. Coral Reef Connectivity Workshop, Ft. Lauderdale, FL. *Expenses paid.*
26. **Butler, Mark,** Donald Behringer, Tom Matthews and John Hunt. 2008. Bloom impacts on hard-bottom communities. Algal Bloom Workshop: Re-evaluation of management needs in Florida Bay. Homestead, FL. *Expenses paid.*
25. **Butler, Mark.** 2007. Behavioral influences on the ecology of lobsters. 8th International Lobster Conference, Prince Edward Island, Canada
24. **Butler, Mark.** 2007. Marine larval connectivity at its extreme: the case for spiny lobsters. Workshop: Connectivity and Population Resilience – Sustaining Coral Reefs During the Coming Century, Townsville, Australia. *Expenses paid.*

23. **Butler, Mark**, Robert Cowen, Hirokazu Matsuda, Jason Goldstein, and Claire Paris. 2006. Connectivity in Caribbean Spiny Lobster: the tail of the dispersal kernel? Gulf and Caribbean Fisheries Institute Meeting, Connectivity in the Caribbean Symposium, Belize City, Belize.
22. **Butler, Mark J. IV**, B. Danilowicz, K. Lindeman, P. Sale, and R. Steneck. 2006. A recruitment monitoring program for spiny lobster in Mesoamerica. Connectivity of Mesoamerican Reefs Symposium, Miami, Florida. *Expenses paid*.
21. **Butler, Mark J. IV**, R. Cowen, J. Goldstein, H. Matsuda, and C. Paris. 2006. Why we need connectivity information for lobster in Mesoamerica. Connectivity of Mesoamerican Reefs Symposium, Miami, Florida. *Expenses paid*.
20. **Butler, Mark J. IV**, Donald Behringer, and A. Kathryn Kauffman. 2005. Hard-bottom community ecology in the Florida Keys with an Emphasis on Sponges. Florida Bay Science Conference, Duck Key, FL.
19. **Butler, Mark J. IV**. 2005. Keynote Presentation: Recent advances in research on the behavior and ecology of spiny lobster. Rhode Island Sea Grant Symposium on Lobsters. Providence, RI. *Expenses paid*.
18. **Butler, Mark J. IV**, MacDiarmid A.B, Robertson D.R. 2005. Investigations of sperm limitation in spiny lobster in Florida (USA). Part I: exploited vs. unexploited species. Symposium: Human effects on Decapod Mating Systems, International Crustacean Congress. Glasgow, Scotland.
17. **Butler, Mark J. IV**, Dolan T., Goodrich, M. 2005. Investigations of sperm limitation in spiny lobster in Florida (USA). Part II: a spatially-explicit individual-based model. Symposium: Human effects on Decapod Mating Systems, International Crustacean Congress. Glasgow, Scotland.
16. **Butler, Mark J. IV**, Shields J.D., Behringer D.C., Ratzlaff R. 2005. A Pathogenic Viral Disease in Spiny Lobster: Disease Dynamics, Transmission, and Ecological Relevancy Symposium: Diseases in Crustacea, International Crustacean Congress. Glasgow, Scotland.
15. **Butler, Mark J. IV**. 2004. Keynote Presentation: Benthic Fisheries Ecology in a Changing Environment: Unraveling Process to Achieve Prediction. Australian Society for Fish Biology, Adelaide, Australia. *Expenses paid*.
14. **Butler, Mark J. IV**. 2004. Symposium Plenary Presentation: The Ecological Consequences of Catching the Big Ones. Australian Society for Fish Biology, Adelaide, Australia. *Expenses paid*.
13. **Butler, Mark J. IV**. 2004. Status of spiny lobster and sponge research in the Florida Keys. Florida Keys National Marine Sanctuary "Connectivity" Conference, Key West, FL. *Expenses paid*.
12. **Butler, Mark J. IV** and T.W. Dolan. 2003. From individuals to ecosystems using spatially-explicit individual-based modeling. American Society of Limnology & Oceanography, Salt Lake City, UT.
11. **Butler, Mark J. IV**. 2001. Life history, individual variability, and environmental structure: incorporating ecological process into spiny lobster population models. European Decapod Fisheries Assessment and Management Meeting, La Coruna, Spain. *Expenses paid*.
10. **Butler, Mark J. IV**, Alison B. MacDiarmid, et al. 2000. Sperm depletion and fertilization success of Caribbean spiny lobster in marine reserves and fished areas. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
9. **Butler, M.J. IV**. 1999. Salinity changes and model predictions: will spiny lobster tolerate our environmental monkey-business? Florida Bay Conference, Key Largo, FL.
8. **Butler, M.J. IV**. 1999. Keynote Presentation: Ecological models in the Florida Spiny Lobster Fishery. U.S./Canadian Lobster Summit III, Rockport, ME. *Expenses paid*.

7. **Butler, M.J. IV.** 1999. Recruitment of Caribbean spiny lobster in Florida I., Australian Rock Lobster Workshop, Hobart, Tasmania. *Expenses paid.*
6. **Butler, M.J. IV.** 1999. Recruitment of Caribbean spiny lobster in Florida II., Australian Rock Lobster Workshop, Adelaide, South Australia. *Expenses paid.*
5. **Butler, M.J.** 1998. Modeling higher trophic levels in Florida Bay: predictions from a spatially-explicit, individual-based model for spiny lobsters. Florida Bay Science Conference, Miami, FL.
4. **Butler, M.J.** and W.F. Herrnkind. 1997. Nursery habitat structure impacts the recruitment of Caribbean spiny lobsters: predictions from a spatially-explicit individual-based model. International Lobster Conference, Queenstown, New Zealand. *Expenses paid.*
3. **Butler, M.J. IV** and W.F. Herrnkind. 1995. Factors affecting the distribution and survival of juvenile Caribbean spiny lobsters in macroalgae. Nemuro Conference on Oceans and Fisheries 1995: Spiny and Clawed Lobsters, Nemuro, Hokkaido, JAPAN. *Expenses paid.*
2. **Butler, M.J.,** W.F. Herrnkind, and J.H. Hunt. 1994. Spiny lobster recruitment in a changing south Florida ecosystem. Coastal Wetland Ecology & Management Symposium, Key Largo, FL. *Expenses paid.*
1. **Butler, M.J.,** W.F. Herrnkind, J.H. Hunt, and J.M. Field. 1993. Recruitment of spiny lobsters in Florida: lessons from the Caribbean spiny lobster, *Panulirus argus*. International Lobster Conference, Sanriku, Japan. *Expenses paid.*

First Authored Contributed Presentations:

64. Butler, M. J. 2019. The restoration of marine habitats: a review. 48th Benthic Ecology Meeting, St. Johns, Newfoundland, Canada.
63. Butler, M.J. IV, *Gaya Gnanalingam*, Thomas R Matthews, and Emily Hutchinson. 2018. Directly Ageing the Caribbean Spiny Lobster, *Panulirus argus*. Gulf and Caribbean Fisheries Institute Meeting, San Andres, Columbia.
62. Butler, M.J. IV. 2017. Climate-associated population change and resilience in Caribbean Spiny Lobster. 11th International Lobster Conference and Workshop, Portland, Maine
61. Butler, M.J. IV. 2017. Believe me, climate change is a *#@% hoax: lessons from an immigrant lobster. 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina.
60. Butler, M. J., *Butler, J.* and *M. Valentine*. 2016. The role of biocomplexity in the restoration of tropical hard-bottom sponge communities and their ecosystem services. 45th Benthic Ecology Meeting, Portland, Maine.
59. Butler, M. and D. Behringer. 2015. Ecological Traps for Juvenile Caribbean Spiny Lobsters. 44th Benthic Ecology Meeting, Quebec, Canada
58. Butler, M.J. IV, A.B. MacDiarmid, and *G. Gnanalingam*. 2014. The effect of size on spermatophore production and fertilization success in the Caribbean spiny lobster, *Panulirus argus*. 10th International Lobster Conference and Workshop, Cancun, Mexico.
57. Butler, M.J. IV, A.B. MacDiarmid, and R. Bertelsen. 2014. Mate Choice, Mate Competition, and the Contrasting Reproductive Biology of Temperate and Tropical Spiny Lobsters. 10th International Lobster Conference and Workshop, Cancun, Mexico.
56. Butler, M.J. IV and D. Behringer. 2014. Natural Ecological Traps in Caribbean Spiny Lobster Nurseries. 10th International Lobster Conference and Workshop, Cancun, Mexico.
55. Butler, M.J. IV, *A. Kough*, and C. Paris. 2014. Caribbean Spiny Lobster Larval Connectivity: the "Holy Grail" for Management of an Iconic Species. 10th International Lobster Conference and Workshop, Cancun, Mexico.

54. Butler, M., A. Kough, D. Behringer, and C. Paris. 2013. "Marine disease connectivity and its potential management", 42nd Benthic Ecology Meeting, Savannah, GA.
53. Butler, Mark, A. Kough, C. Paris. 2012. Caribbean-wide Patterns of Spiny Lobster Larval Connectivity: the "Holy Grail" for International Fishery Management of an Iconic Species. Benthic Ecology Meeting, Norfolk, VA.
52. Butler, Mark J. IV, D.C. Behringer, T.W. Dolan, J.D. Shields, and J. Moss. 2011. Behavior influences viral disease dynamics in Caribbean spiny lobster. Benthic Ecology Meeting, Mobile, AL.
51. Butler, Mark, D. Behringer, J. Shields, C. Paris, J. Moss and R. Cowen. 2010. Connectivity, Environmental Degradation, and Behavioral Influences on Disease in Lobster. Florida Keys Ecosystem Conference, Duck Key, FL.
50. Butler, Mark, D. Behringer, J. Anderson, A. Baeza, J. Butler, M. Dickson, A. Spadero, C. Stall, N. Truelove, E. Yudelman, and T. Ziegler. 2010. Sponge Community Restoration Research in the Everglades and the Florida Keys National Marine Sanctuary. Florida Keys Ecosystem Conference, Duck Key, FL.
49. Butler, M.J. IV, A.M. Mojica, E. Sosa-Cordero, M. Millet, P. Sanchez-Navarro, M. A. M. Cuevas, J. Posada, B. Rodriguez, M. Prada, A. Oviedo, M. Arronne, N. Bach, N. Jimenez, M. C. G. Rivas, T. Matthews, and D. Behringer. 2009. Comparison of Lobster Postlarval Recruitment Patterns in the Caribbean: a CRTR Project. Gulf and Caribbean Fisheries Institute, Cumanas, Venezuela.
48. Butler IV, M.J., C. Paris, R. Cowen, H. Matsuda, and J. Goldstein. 2009. Behavior and Oceanographic Environments Constrain Caribbean Spiny Lobster Dispersal. Gulf and Caribbean Fisheries Institute, Cumanas, Venezuela.
47. Butler IV, M.J. and D.C. Behringer, Jr. 2008. Déjà vu all over again: the impact of recent cyanobacteria blooms on hard-bottom communities in Florida Bay and the Florida Keys. Florida Bay and Everglades Ecosystem Conference, Naples, FL.
46. Butler IV M.J., Behringer D.C., Dolan, T.W., Shields J.D., Ratzlaff R. 2008. Dynamics and Ecological Relevancy of a Viral Disease in Caribbean Spiny Lobster. International Coral Reef Symposium, Ft. Lauderdale, FL.
45. Butler, M.J. IV, R. Cowen, C. Paris, H. Matsuda, and J. Goldstein. 2008. Long PLDs, Larval Behavior, and Connectivity in Spiny Lobster. International Coral Reef Symposium, Ft. Lauderdale, FL.
44. Butler, Mark, and Donald Behringer. 2008. Déjà vu all over again: the impact of catastrophic algal blooms on hard-bottom communities in the Florida Keys. Benthic Ecology Meeting, Providence, RI
43. Butler, Mark, Robert Cowen, Hirokazu Matsuda, Jason Goldstein, Claire Paris. 2007. Larval behavior and connectivity in Caribbean Spiny Lobster. 8th International Lobster Conference, Prince Edward Island, Canada
42. Butler, Mark, Robert Cowen, Hirokazu Matsuda, Jason Goldstein, Claire Paris, and Thomas Dolan. 2007. Connectivity in Caribbean Spiny Lobster: the tail of the dispersal kernel? Marine Benthic Ecology Meeting, Atlanta, GA
41. Butler, Mark, Alison MacDiarmid, Thomas Dolan and Michael Goodrich. 2006. Mating behavior, sperm limitation, and fishing: empiricism and modeling of spiny lobsters in Florida and New Zealand. Mote Fisheries Ecology Symposium, Sarasota, FL.
40. Butler, Mark J. IV., Alison MacDiarmid, Thomas Dolan, and Michael Goodrich. 2006. Modeling sperm limitation in spiny lobsters in MPAs & fished areas in Florida and New Zealand. Marine Benthic Ecology Meeting, Quebec, CANADA.

39. Butler, Mark J. IV, Donald Behringer, and Jeffery Shields. 2005. A Pathogenic viral disease infecting juvenile spiny lobster in the Florida Keys. Florida Bay Science Conference, FL.
38. Butler, Mark J. IV. 2005. The ecology of sponges subject to fishing and ecosystem change. Benthic Ecology Meeting, Williamsburg, VA.
37. Butler, M.J. IV, William F. Herrnkind, Donald Behringer, *Denice Robertson*, and John Hunt. 2004. A Region-scale Test of Recruitment Limitation of Spiny Lobster in the Florida Keys. 33rd Annual Benthic Ecology Meeting, Mobile, AL.
36. Butler, M.J., *S. Donahue*, and *T. Dolan*. 2004. Everglades restoration and the consequent effects of altered salinity on nursery habitat structure and spiny lobster recruitment. 7th International Lobster Conference and Workshop, Hobart, Tasmania
35. Butler, M.J., W. F. Herrnkind, D. C. Behringer, D. Robertson, and J. Hunt. 2004. A region-scale test of recruitment Limitation of Spiny Lobster in the Florida Keys. 7th International Lobster Conference and Workshop, Hobart, Tasmania
34. Butler, M.J. and J. H. Hunt. 2003. Regional Assessment of Hard-bottom Communities in the Florida Keys with an Emphasis on Lobster and Sponge Dynamics. Everglades and Florida Bay Joint Science Meeting, Tarpon Springs, FL.
33. Butler, Mark J. IV, *Scott Donahue*, and *Tom Dolan*. 2002. Everglades restoration and the effects of changing salinity on hard-bottom communities in Florida Bay. 31st Annual Benthic Ecology Meeting, Orlando, FL.
32. Butler, Mark J. IV and *Scott Donahue*. 2001. The potential effects of changing salinity on hard-bottom habitat and spiny lobster recruitment in Florida Bay. Florida Bay Conference, Key Largo, FL.
31. Butler, Mark J. IV, Alison MacDiarmid, and *Jamie Heisig*. 2001. Sperm depletion and fertilization success of Caribbean spiny lobster in marine reserves and fished areas. 30th Annual Benthic Ecology Meeting, Durham, NH.
30. Butler, Mark J. IV, *Thomas Dolan*, William Herrnkind, and John Hunt. 2000. Variable postlarval supply and salinity change in the nursery: can Caribbean spiny lobster cope? 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
29. Butler, M.J. and A.B. MacDiarmid. 1999. Sperm limitation in exploited spiny lobster populations and in marine reserves. Gulf and Caribbean Fisheries Institute Meeting, Key West, FL
28. Butler, M.J. IV and A.B. MacDiarmid. 1998. Sperm limitation in exploited populations of spiny lobsters. Ecological Society of America Meeting, Baltimore, MD.
27. Butler, M.J. IV and A.B. MacDiarmid. 1998. Sperm ain't cheap for spiny lobsters! Marine Benthic Ecology Meeting, Melbourne, FL.
26. Butler, M.J. IV, J. H. Hunt, and W.F. Herrnkind. 1997. Recruitment of Caribbean spiny lobster in a dynamic nursery: predictions from a spatially-explicit individual-based model. International Council for the Exploration of the Sea, Baltimore, MD.
25. Butler, M.J. IV, A.B. MacDiarmid, and J.D. Booth. 1997. Ontogenetic changes in aggregation and its adaptive value for New Zealand spiny lobsters. Marine Benthic Ecology Meeting, Portland, ME.
24. Butler, M.J. IV, W.F. Herrnkind, J.H. Hunt, and R. Bertelsen. 1996. Recruitment of Caribbean Spiny Lobsters in a Dynamic Nursery. 1995. Marine Benthic Ecology Meeting, Columbia, SC.
23. Butler, M.J., W.F. Herrnkind, and J.H. Hunt. 1994. Cascading disturbances in an ailing marine ecosystem impact the spiny lobster nursery of south Florida. Ecological Society of America, Knoxville, TN.

22. Butler, M.J., W.F. Herrnkind, and J.H. Hunt. 1993. Spiny lobster research in an ailing marine ecosystem. Marine Benthic Ecology Meeting, Mobile, AL
21. Butler, M.J., W.F. Herrnkind, and J.H. Hunt. 1992. Factors limiting spiny lobster distribution and abundance in Florida Bay: a preliminary report. Gulf and Caribbean Fisheries Institute, Nassau, Bahamas.
20. Butler, M.J. IV and W.F. Herrnkind. 1991. Settlement of spiny lobster postlarvae: patterns and predictability. Marine Benthic Ecology Meeting, Williamsburg, VA
19. Butler, M.J. IV and W.F. Herrnkind. 1990. Studies of spiny lobster recruitment in South Florida: a status report. Blue Crab Recruitment Workshop, Dauphin Island, AL
18. Butler, M.J. IV and W.F. Herrnkind. 1990. Spiny lobster recruitment in South Florida: a status report. Spiny Lobster Workshop, Long Key, FL
17. Butler, M.J. IV and W.F. Herrnkind. 1990. Does settlement or juvenile habitat availability regulate juvenile spiny lobster abundance? Ecological Society of America, Snowbird, UT
16. Butler, M.J. IV and W.F. Herrnkind. 1990. Does settlement or habitat availability regulate Caribbean spiny lobster abundance? Marine Benthic Ecology Meeting, Mobile, AL
15. Butler, M.J. IV and W.F. Herrnkind. 1990. Are artificial "Witham" surface collectors adequate indicators of Caribbean spiny lobster, *Panulirus argus* recruitment? Gulf and Caribbean Fishery Institute, Ocho Rios, Jamaica
14. Butler, M.J. 1989. Fish predation or macroinvertebrate colonization: which structures lake-bottom communities? North American Benthological Society, Guelph, Ontario
13. Butler, M.J. 1988. Community responses to variation in predation: field experiments with bluegill sunfish and lentic macroinvertebrates. North American Benthological Society, Tuscaloosa, AL
12. Butler, M.J. 1988. Variable predation and prey community dynamics: sunfish-macroinvertebrate interactions. Ecological Society of America, Davis, CA
11. Butler, M.J. and W.F. Herrnkind. 1988. Spiny lobster recruitment in south Florida: field experiments and management implications. Gulf and Caribbean Fishery Institute, St. Thomas, USVI
10. Butler, M.J. 1987. Effects of variation in predation and prey recruitment on prey community structure: field experiments with bluegill sunfish and macroinvertebrate prey in a north Florida lake. Ecological Society of America, Columbus, OH
9. Butler, M.J., W.F. Herrnkind, and R.A. Tankersley. 1986. Habitat selection, predation, and emigration in juvenile spiny lobsters. Marine Benthic Ecology Meeting, Boston, MA
8. Butler, M.J. 1986. Effects of temporal and spatial variation in fish predation and prey recruitment on freshwater littoral zone communities. Ecological Society of America - International Congress of Ecology Meeting, Syracuse, NY
7. Butler, M.J. and W.F. Herrnkind. 1985. Habitat selection and predation in juvenile spiny lobsters: the importance of the red algae *Laurencia*. Ecological Society of America, Minneapolis, MN
6. Butler, M.J. and R.A. Stein. 1984. Mechanisms controlling crayfish replacements and rates of replacement in Ohio streams. Ohio Fish and Wildlife Conference, Columbus, OH
5. Butler, M.J. 1984. Character displacement in crayfish: a case of rapid, non-competitive evolution? Ecological Society of America, Ft. Collins, CO
4. Butler, M.J. 1982. Interspecific displacement of crayfish: an analysis of the competitive mechanism. Ecological Society of America, State College, PA

3. Butler, M.J. and R.A. Stein. 1982. Competition among crayfish: mechanisms and distribution effects. American Society of Zoologists Meeting, Louisville, KY
2. Butler, M.J. 1980. A study of the chemical and physical parameters of a temperate hardwater spring in John Bryan State Park, Greene County, Ohio. Ohio Academy of Science, Toledo, OH
1. Butler, M.J. and H.H. Hobbs. 1980. Community structure, drift, and upstream movement in a temperate hardwater spring. American Society of Limnology and Oceanography, Knoxville, TN

Co-authored Presentations: (Note: student authors in *italics*.)

166. Gaya Gnanalingam and Mark J Butler IV. 2019. The importance of keeping the big ones: harvest slot limits and marine protected areas for the management of the Caribbean spiny lobster. New Zealand Marine Sciences Conference, Dunedin, New Zealand
165. *Hagedorn, S., Perez, A.M., and Butler, M. J.* 2019. Estimating change in water quality due to the loss of sponge communities in the Florida Keys. 48th Benthic Ecology Meeting, St. Johns, Newfoundland, Canada
164. *Anderson, E.R. and Butler, M.J.* 2019. Effects of soundscape and distance on fish and invertebrate larval settlement. 48th Benthic Ecology Meeting, St. Johns, Newfoundland, Canada
163. *Spadaro, A.J., and Butler M.J..* 2018. Cascading effects of the herbivorous Caribbean King Crab, *Maguimithrax spinosissimus*, on shallow patch reef communities in the Florida Keys, FL, USA. Coral Restoration Consortium Conference, Key Largo, FL.
162. *Hagedorn, S., Valentine, M., and Butler, M. J.* 2018. Diel Nutrient Cycling by Tropical Sponges. 47th Annual Benthic Ecology Meeting, Corpus Christi, Texas.
161. *Valentine, M. and Butler, M.J.* 2017. Functional redundancy and resource competition among sponges in restored tropical hard-bottom. 38th US Coral Reef Task Force Meeting, Ft. Lauderdale, FL
160. *Spadaro, A.J. and Butler, M.J.* 2017. Cascading effects of the Caribbean King Crab on the community structure of coral patch reefs. 38th US Coral Reef Task Force Meeting, Ft. Lauderdale, FL
159. Behringer, D.B., and **Butler M.J.** 2017. What Toll Does PaV1 Exact from the Caribbean Spiny Lobster Population in Florida? American Fisheries Society, Tampa, FL.
158. *Gnanalingam, G. and M.J. Butler.* 2017. The importance of keeping the big ones: management of Caribbean spiny lobster, *Panulirus argus* to conserve large individuals. 11th International Lobster Conference and Workshop, Portland, ME.
157. Behringer, D.C., **M.J. Butler**, R.G. Muller. 2017. From puerulus to puberty: the stage-based effect of PaV1 on juvenile Caribbean spiny lobsters in Florida. 11th International Lobster Conference and Workshop, Portland, ME.
156. *Gnanalingam, G., M.J. Butler,* and H. Gaff. 2017. Protecting the big Ones: harvest slot limits and marine protected areas for the management of Caribbean spiny lobster. Virginia Modeling & Simulation Capstone Conference, Norfolk, VA.
155. *Valentine, M. and Butler, M.J.* 2017. Functional Redundancy in Tropical Marine Sponge Communities. International Sponge Conference, Dublin, Ireland.

154. *Lamberski, A., Johnson, H., Butler, M. and Behringer, D.* 2017. Does the biocomplexity of restored sponge communities affect the abundance and diversity of new recruits to hard-bottom habitat in the Florida Keys? 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina
153. Kough, A. and **Butler, M.J.** 2017. Confidence in connectivity: promoting indiscriminant harvest in a population sink? 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina.
152. *Gnanalingam G. and Butler M.J.* 2017. The Importance of Keeping the Big Ones: Clutch quality and Reproductive Senescence in Caribbean Spiny Lobster. 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina.
151. *Valentine, M. and Butler, M.J.* 2017. Resource Competition Among Sponges in Shallow Tropical Ecosystems. 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina.
150. *Spadaro, A.J. and Butler, M.J.* 2017. The bigger picture: cascading effects of the Caribbean King Crab on the community structure of coral patch reefs. 46th Benthic Ecology Meeting, Myrtle Beach, South Carolina.
149. *Gnanalingam G. and Butler M.J.* 2016. The Importance of Keeping the Big Ones: Clutch quality and Reproductive Senescence in Caribbean Spiny Lobster. 69th Gulf and Caribbean Fisheries Institute Meeting, Grand Cayman
148. *Spadaro, A., and Butler M.J.* 2016. Cascading effects of the Caribbean King Crab, *Maguimithrax spinosissimus*, on coral patch reef communities in the Florida Keys. 69th Gulf and Caribbean Fisheries Institute Meeting, Grand Cayman
147. *Valentine, M. and Butler, M.J.* 2016. Does the functional diversity of tropical sponge communities matter for water column characteristics? Western Society of Naturalists, Monterey Bay, CA
146. *Valentine, M. and Butler, M.J.* 2016. Does the functional diversity of tropical sponge communities matter for water column characteristics? Ecological Society of America Meeting, Ft. Lauderdale, FL
145. *Gnanalingam G., Butler M.J., Matthews T.R.* 2016. Is the Way to a Lobster's Age Through it's Stomach? A Technique for Directly Ageing the Caribbean Spiny Lobster, *Panulirus argus*. 45th Benthic Ecology Meeting, Portland, Maine.
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- 143 *Butler, J., Butler M.* 2016. Sponge community restoration returns natural soundscapes, but not natural settlement of fish and invertebrate larvae: why the discrepancy? 45th Benthic Ecology Meeting, Portland, Maine.
142. *Valentine, M.M., Butler, M.J.* 2016. Does the functional diversity of tropical sponge communities matter for water column characteristics? 45th Benthic Ecology Meeting, Portland, Maine.
141. Small, H.J., Reece, K.S., Huchin-Mian, J.P., **Butler, M.J.** and Shields, J.D. 2016. Prevalence of *Hematodinium perezii* in larval and juvenile blue crabs, *Callinectes sapidus*, from Virginia. Eastern Fish Health Workshop, Raleigh, NC.
140. *Butler, J. and M. Butler.* 2015. Bring the noise: sound playback increases species diversity on degraded hard-bottom habitat in the Florida Keys. 44th Benthic Ecology Meeting, Quebec, Canada
139. *Spadaro, A. and M. Butler.* 2015. Multiple effects of Caribbean King Crab enhancement on patch reef communities in the Florida Keys. 44th Benthic Ecology Meeting, Quebec, Canada
138. *Vincent, J. and M. Butler.* 2015. The Effect of Sponge Restoration on Fish and Invertebrate Communities in the Florida Keys. 44th Benthic Ecology Meeting, Quebec, Canada

137. Johnson S., C. Collins, N. Dussex, **M. Butler**, C. Hepburn, N. Gemmell, A. MacDiarmid. 2014. Does exploitation affect the mating dynamics of New Zealand spiny rock lobster? Animal Behavior Society Meeting, New York, NY.
136. Kough, A.S., C. B. Paris, **M. J. Butler IV**, D. C. Behringer . 2014. Swimming with sickness: A theoretical model of disease dispersal. 10th International Lobster Conference and Workshop, Cancun, Mexico.
135. Moss, J., D.C. Behringer, J.D. Shields, **M.J. Butler IV**. 2014. Prevalence and genetic diversity of *Panulirus argus* virus I throughout the Caribbean Sea. 10th International Lobster Conference and Workshop, Cancun, Mexico.
134. Gutzler B.C., **M. J. Butler IV**, D. C. Behringer Jr. 2014. Complex effects of casitas on spiny lobsters in the Florida Keys, FL (USA). 10th International Lobster Conference and Workshop, Cancun, Mexico.
133. Behringer, D.C; **Butler, M.J. IV**; Moss, J.; Shields, J.D. 2014. “Outgrowing your pathogen: the curious case of PaV1 in adult Caribbean spiny lobsters”. 43rd Benthic Ecology Meeting, Jacksonville, FL.
132. Spadaro, A.J. and **M.J. Butler, IV**. 2014. “Effects of the herbivorous Caribbean King Crab, *Mithrax spinosissimus*, on coral reef macroalgal communities in the Florida Keys”. 43rd Benthic Ecology Meeting, Jacksonville, FL.
131. *Butler, J.* and **M.J. Butler IV**. 2014. “Sponge community restoration hastens soundscape recovery”. 43rd Benthic Ecology Meeting, Jacksonville, FL.
130. Gutzler, B.C., **M.J. Butler IV**, D.C. Behringer. 2014. “Complex effects of casitas on spiny lobsters in the Florida Keys, FL (USA)”. 43rd Benthic Ecology Meeting, Jacksonville, FL.
129. Spadaro, A.J., J. Miller, J. Butler, and **M.J. Butler**. 2014. “Removal of Macroalgae Enhances Coral Reef Fish Communities”. 43rd Benthic Ecology Meeting, Jacksonville, FL.
128. Miller, J. and **Mark Butler**. 2013. “Evaluating potential den competition between Caribbean spiny lobster and Lionfish”, 42nd Benthic Ecology Meeting, Savannah, GA.
127. Gutzler, B. and **Mark Butler**. 2013 “Casitas as an ecological trap for the spiny lobster *Panulirus argus*? Preliminary results from the Florida Keys, FL (USA)”, 42nd Benthic Ecology Meeting, Savannah, GA.
126. *Butler, J.* and **Mark Butler**. 2013. “Soundscapes differ among seascapes in Florida Bay, Florida (USA)”, 42nd Benthic Ecology Meeting, Savannah, GA.
125. Behringer, D.C., Moss, J., Shields, J.D., and **M.J. Butler IV**. 2013. Disease through the ages: the effects of PaV1 infection on Caribbean spiny lobsters through ontogeny. 2013 UF Marine Biology Symposium. St. Augustine, Florida.
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123. Behringer, D., J. Moss, J.D. Shields, **M. J. Butler IV**. 2012. Disease through the ages (or stages): the effects of PaV1 infection on Caribbean spiny lobsters through ontogeny. Benthic Ecology Meeting, Norfolk, VA.
122. *Butler, J.* and **M. Butler**. 2012. The potential role of sound on fish and invertebrate settlement in hard-bottom communities of the Florida Keys, Florida (USA). Benthic Ecology Meeting, Norfolk, VA.
121. Dolan, T.W., **M.J. Butler IV**, J.D. 2012. The influence of fishing pressure on Hematodinium outbreaks in the American blue crab, a simulation study. Benthic Ecology Meeting, Norfolk, VA

120. Kintzing M. and **M.J. Butler IV**. 2012. Frenemies? *Diadema antillarum* and the Ideal Free Distribution theory. Benthic Ecology Meeting, Norfolk, VA
119. Moss, J., **M.J. Butler IV**, D.C. Behringer, J.D. Shields. 2012. Prevalence and genetic diversity of *Panulirus argus* virus I throughout the Caribbean Sea. Benthic Ecology Meeting, Norfolk, VA
118. Shields J.D., C. Li, K.S. Reece, H. Wang, T.W. Dolan, **M.J. Butler**. 2012. Ecological determinants of Hematodinium epidemics in the American blue crab, *Callinectes sapidus*. American Society of Parasitologists, Richmond, VA.
117. Donald C. Behringer, **Mark J. Butler**, Thomas W. Dolan, Jeffrey D. Shields, and Jessica Moss. 2011. Behavior Influences Viral Disease Dynamics in the Caribbean Spiny Lobster. Society for Invertebrate Pathology, Halifax, Nova Scotia.
116. Kough, A.S., C.B. Paris, and **M. J. Butler IV**. 2011. The role of local retention versus subsidies in the connectivity of Caribbean Spiny Lobster populations. American Fisheries Society, Seattle, WA.
115. Robertson, D.N. and **M.J. Butler IV**. 2011. Female Choice and Sperm Limitation in the Spotted Spiny Lobster, *Panulirus guttatus*. 9th International Conference and Workshop on Lobsters, Bergen, Norway.
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113. Kough, A., C. Paris, and **M.J. Butler IV**. 2011. Larval Connectivity in Caribbean Spiny Lobster Populations and its Role in the Spread of the PaV1 virus. 9th International Conference and Workshop on Lobsters, Bergen, Norway.
112. Dolan, T.W., **M. J. Butler IV**, and J.D. Shields. 2011. Effects of Behavior and Habitat Structure on Disease Dynamics in Caribbean Spiny Lobster. 9th International Conference and Workshop on Lobsters, Bergen, Norway.
111. Behringer, D.C. Jr., **M.J. Butler IV**, and J. D. Shields. 2011. Ecological Effects of *Panulirus argus* Virus 1 (PaV1) on Caribbean Spiny Lobster Condition, Behavior, and Survival. 9th International Conference and Workshop on Lobsters, Bergen, Norway.
110. Behringer, D.C. Jr., J.A. Moss, J. D. Shields and **M.J. Butler IV**. 2011. PaV1 infection in the Florida Spiny Lobster Fishery and its Effects on Trap Function and Disease Transmission. 9th International Conference and Workshop on Lobsters, Bergen, Norway.
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108. Moss, J., D.C. Behringer, **M.J. Butler** and J.D. Shields. 2011. Insight into the molecular diversity of the Caribbean spiny lobster virus, *Panulirus argus* virus 1. National Shellfisheries Association, Prince Edward Island, Canada.
107. Butler, J., **Butler, M.**, D. Behringer, J. Anderson, A. Baeza, J. Butler, M. Dickson, A. Spadero, C. Stall, N. Truelove, E. Yudelman, and T. Ziegler. 2011. Sponge Community Restoration Research in the Everglades and the Florida Keys National Marine Sanctuary. Marine Benthic Ecology Meeting, Mobile, AL.
106. Tiggelaar, J. and **M. Butler**. 2011. Effects of the parasitic dinoflagellate on blue crab movement and mortality. Marine Benthic Ecology Meeting, Mobile, AL.
105. Anderson, J., A. J. Spadaro, A. Baeza, D. C. Behringer, and **M. J. Butler IV**. 2011. Ontogenetic shifts in allocation to defensive structures in the Caribbean spiny lobster, *Panulirus argus*. Marine Benthic Ecology Meeting, Mobile, AL.

104. *Spadaro, A. J., J. Anderson, A. Baeza, D.C. Behringer, and M. J. Butler IV.* 2011. Allometric growth and size at first maturity of the Caribbean King Crab, *Mithrax spinosissimus*, in the middle Florida Keys. Marine Benthic Ecology Meeting, Mobile, AL.
103. Behringer, D.C., J.A. Moss, J.D. Shields, and **M.J. Butler IV.** 2011. PaV1 infection in the Florida spiny lobster fishery and its effect on trap function and disease transmission. Marine Benthic Ecology Meeting, Mobile, AL.
102. *Kintzing, M. and M.J. Butler.* 2010. The tale of the spotted spiny lobster: innocuous crustacean by day, bane of coral reef recovery by night. Florida Keys Ecosystem Conference, Duck Key, FL.
101. Behringer, D.C., J.A. Moss, J.D. Shields, and **M.J. Butler IV.** 2010. PaV1 infection in the Florida Spiny Lobster Fishery and its Effects on Trap Function and Disease Transmission. Gulf and Caribbean Fishery Institute Meeting, San Juan, Puerto Rico.
100. *Kintzing, M. and M.J. Butler.* 2010. The tale of the spotted spiny lobster: innocuous crustacean by day, bane of coral reef recovery by night. Benthic Ecology Meeting, Galveston, TX.
99. Behringer, D.C., **M.J. Butler**, and J. Shields. 2009. A Review of the Lethal Spiny Lobster Virus PaV1 – Ten Years After Its Discovery. Gulf and Caribbean Fisheries Institute, Cumanas, Venezuela.
98. Shields, J.D., K.S. Reece, H. Wang, T.L. Miller, **M.J. Butler.** 2009. EID: Ecological Aspects of Hematodinium infections in the American blue crab. Ecology of Infectious Diseases Annual PI Meeting, Park City, Utah, April.
97. Behringer, D.C., **M.J. Butler IV**, and J.D. Shields. 2009. Epidemiological Status of the Lethal Virus PaV1 and its Effect on Caribbean Spiny Lobster Condition, Olfaction, and Predation Risk. National Shellfish Association, Galveston, TX.
96. Shields, J.D., **M.J. Butler**, and *T.W. Dolan.* 2008. A Conceptual Model For Outbreaks Of Hematodinium In Populations Of The American Blue Crab. Eastern Fish Health Workshop, Atlantic Beach, NC. April
95. Shields, J.D., **M.J. Butler**, and *T.W. Dolan.* 2008. A Conceptual Model For Outbreaks Of Hematodinium In Populations Of The American Blue Crab. Crustacean Society Annual Meeting, Galveston, Tx, June.
94. Shields, J.D., K.S. Reece, H. Wang and **M.J. Butler.** 2008. Ecological determinants of Hematodinium epidemics in the American blue crab: the effect of fishing pressure on a pathogenic disease. Ecology of Infectious Diseases Annual Meeting, Phoenix, May.
93. Shields, J.D., K.S. Reece, H. Wang, and **M.J. Butler.** 2007. EID: Ecological determinants in outbreaks of Hematodinium infections in the American blue crab. Ecology of Infectious Diseases Annual Meeting, Albuquerque, NM, December.
92. Michael J. Durako, M. O. Hall, **M. J. Butler**, and D. C. Behringer. 2008. Benthic Habitats in Florida Bay. Florida Bay and Everglades Ecosystem Conference, Naples, FL.
91. Weisz, J.B. and **M. J. Butler IV.** 2008. Environmental effects on back-reef sponge distribution in the Florida Keys (USA). International Coral Reef Symposium, Ft. Lauderdale, FL.
90. *Kintzing, M. and M.J. Butler IV.* 2008. The ecological significance of the spotted spiny lobster and the long spined sea urchin on patch reef communities in the Florida Keys. International Coral Reef Symposium, Ft. Lauderdale, FL.
89. Behringer, D.C. and **M. J. Butler IV.** 2008. The Effects of Fishing and Harmful Algal Blooms on Sponge Ecology in the Florida Keys USA. International Coral Reef Symposium. Ft. Lauderdale, FL.

88. *Mojica, A. and M. J. Butler IV.* 2008. Effect of the herbivorous West Indian Spider Crab (*Mithrax sppinosissimus*) on patch reef algal communities in the Florida Keys (USA). International Coral Reef Symposium, Ft. Lauderdale, FL.
87. *Goldstein, J., H. Matsuda, M.J. Butler, R. Cowen, C. Paris, and T. Takenouchi.* 2008. Still elusive but now inclusive: development of larval Caribbean spiny lobster (*Panulirus argus*) in culture & implications for modeling marine connectivity. Benthic Ecology Meeting, Providence, RI
86. *Kintzing, M. D. and M.J. Butler.* 2008. Impacts of the spotted spiny lobster *Panulirus guttatus* on the coral reef communities of the Florida Keys. Benthic Ecology Meeting, Providence, RI
85. *Mojica, A.M. and M.J. Butler.* 2008. Effect of the herbivorous West Indian Spider Crab on patch reef algal communities in the Florida Keys (USA), Benthic Ecology Meeting, Providence, RI
84. *Behringer, D.C. and M.J. Butler.* 2008. Chemical detection of disease in Caribbean spiny lobster and the effect of disease avoidance behavior in a shelter limited system. Benthic Ecology Meeting, Providence, RI
83. *Shields, J.D., D.C. Behringer, and Mark Butler.* 2007. Epidemiological studies of *Panulirus argus* Virus I (PaV1) in the Caribbean Spiny Lobster. Crustacean Society Meeting, Coquimbo, Chile, 2007
82. *Shields, J.D., D.C. Behringer, and Mark Butler.* 2007. Epidemiological studies of *Panulirus argus* Virus I (PaV1) in the Caribbean Spiny Lobster. 8th International Lobster Conference, Prince Edward Island, Canada
81. *Li, C., J.D. Shields, R.E. Ratzlaff, M.J. Butler.* 2007 Histopathology and hemolymph chemistry of PaV1 infections in the Caribbean spiny lobster. 8th International Lobster Conference, Charlottetown, PEI, Canada, September.
80. *Garcia-Sanz, Sara, Alex Hearn, Eduardo Espinoza, and Mark Butler.* 2007. Recruitment of red (*Panulirus penicillatus*) and green (*Panulirus gracilis*) spiny lobsters in the Galápagos Islands. 8th International Lobster Conference, Prince Edward Island, Canada
79. *Behringer, Donald, Mark Butler, and William Herrnkind.* 2007. Is seagrass an important nursery habitat for Caribbean spiny lobsters? 8th International Lobster Conference, Prince Edward Island, Canada
78. *Behringer, Donald, Mark Butler, and Jeffery Shields.* 2007. The function of behavior in reducing PaV1 infection risk among Caribbean spiny lobsters and potential modes of transmission. 8th International Lobster Conference, Prince Edward Island, Canada
77. *Kintzing, Meredith and Mark Butler.* 2007. Investigating the role of the spotted spiny lobster (*Panulirus guttatus*) on the coral reef communities of the Florida Keys (USA). 8th International Lobster Conference, Prince Edward Island, Canada
76. *Lear, Jennifer, Mark Butler, and Jason Schratweiser.* 2007. The Impact of Grouper and Octopus Predators on Population Structure, Shelter Use, and Behavior of Juvenile Caribbean Spiny Lobster. 8th International Lobster Conference, Prince Edward Island, Canada
75. *Dolan, Thomas and Mark Butler.* 2007. Modeling the epizootiology of a virulent lobster disease when behavior and perhaps fishery practices matter. 8th International Lobster Conference, Prince Edward Island, Canada
74. *Goldstein, Jason, Hirokazu Matsuda, and Mark Butler.* 2007. Behavior of larval and postlarval Caribbean spiny lobster and implications for connectivity. 8th International Lobster Conference, Prince Edward Island, Canada

73. *Behringer, Don, Mark Butler, Jeff Shields.* 2007. Sex, hot spots, and exposure: advances in understanding the ecology and epidemiology of the lethal Caribbean spiny lobster virus PaV1. Benthic Ecology Meeting, Atlanta, GA.
72. *Lear, Jennifer, Christopher Binkley, and Mark Butler.* 2007. Diversity / stability patterns of near shore hard-bottom communities in the Florida Keys. Benthic Ecology Meeting, Atlanta, GA.
71. Herrnkind, William F, **M. J. Butler IV**, and John H. Hunt. 2006. From Life History Research To A Nursery-wide Test of Recruitment Limitation of Spiny Lobster in the Florida Keys. Mote Fisheries Ecology Symposium, Sarasota, FL.
70. Cowen, Robert, **M. J. Butler IV**, and C. Paris. 2006. Modeling the dispersal of Caribbean Spiny Lobster larvae. Connectivity of Mesoamerican Reefs Symposium, Miami, Florida.
69. *Goldstein, J., H. Matsuda, T. Takenouchi, M. J. Butler IV, R. Cowen, and C. Paris.* 2006. Behavior of larval and postlarval Caribbean Spiny Lobster with implications for pan-Caribbean Connectivity. 7th Larval Biology Meeting, Coos Bay, Oregon.
68. *Behringer, D.C., M.J. Butler IV and Jeffery Shields.* 2006. The pathogenic virus PaV1 in Caribbean spiny lobster: transmission, alternative hosts, and ecological impacts. Marine Benthic Ecology Meeting, Quebec, CANADA
67. *Kauffman, Anne Kathryn, M. J. Butler IV, and Andrew S. Gordon.* 2005. Sponge feeding selectivity across seasons and species in Florida Bay. Florida Bay Science Conference, Duck Key, FL.
66. Shields, J.D., R. Ratzlaff, *D. Behringer, and M.J. Butler.* 2005. Pathology of PaV1 virus in Caribbean spiny lobster, *Panulirus argus*. International Crustacean Congress, Glasgow, Scotland.
65. *Behringer, D.C., M.J. Butler, and J.D. Shields.* 2005. A Pathogenic Viral Disease in Spiny Lobster: Disease Dynamics, Transmission, and Ecological Relevancy. Benthic Ecology Meeting, Williamsburg, VA.
64. *Kauffman, A.K.M, M. J. Butler IV, A.S. Gordon.* 2005. Florida Bay through the osculum: sponge filtration efficiency and selectivity. Benthic Ecology Meeting, Williamsburg, VA.
63. *Behringer, D.C., M.J. Butler IV, J. D. Shields, and R. Ratzlaff.* 2004. A Pathogenic Viral Disease in Spiny Lobster: Disease Dynamics, Transmission, and Ecological Relevancy. Benthic Ecology Meeting, Mobile, AL
62. *Lear, J. A., M. J. Butler IV and J. Schratwieser.* 2004. The impacts of grouper and octopus predators on population structure, shelter use, and behavior of juvenile Caribbean spiny lobster. Benthic Ecology Meeting, Mobile, AL
61. *Dolan, T.W., III. and M. J. Butler IV.* 2004. Humans as vectors in the epizootiology of a highly virulent disease of Caribbean spiny lobster, *Panulirus argus*. Benthic Ecology Meeting, Mobile, AL
60. *Goldstein, J. and M. Butler.* 2004. Postlarval detection of coastal chemical cues and their effect on metamorphosis in Caribbean spiny lobster, *Panulirus argus*. 7th International Lobster Conference and Workshop, Hobart, Tasmania
59. Herrnkind, W., **M. Butler**, and J. Hunt. 2004. Habitat remediation and enhancement: providing shelter for spiny lobster at the critical life stage. 7th International Lobster Conference and Workshop, Hobart, Tasmania
58. *Castaneda, V., E. Serveire-Zaragoza, M. Butler, and S. Hernandez-Vazquez.* 2004. Feeding ecology of juvenile *Panulirus interruptus* off the Pacific coast of Baja California Sur, Mexico. 7th International Lobster Conference and Workshop, Hobart, Tasmania

57. Lear, J. and **M. Butler**. 2004. Strong interactions between juvenile Caribbean spiny lobster, *Panulirus argus*, and Caribbean reef octopus, *Octopus briarius*. 7th International Lobster Conference and Workshop, Hobart, Tasmania
56. Shields, J., D. Behringer, and **M. Butler**. 2004. Pathology of herpes-like viral infections in *Panulirus argus*. 7th International Lobster Conference and Workshop, Hobart, Tasmania
55. Linares A., **M. J. Butler**, and A. S. Gordon. 2004. Impact of sponge filtration on water column bacterial and viral abundance. Biomedical Research Conference for Minority Students, Dallas Texas.
54. Behringer, D.C., **M.J. Butler IV**, J.D. Shields, and R. Ratzlaff. 2004. Behavioral alterations in response to a viral pathogen in the Caribbean spiny lobster. 7th International Lobster Conference and Workshop, Hobart, Tasmania.
53. Behringer, D.C. and **M.J. Butler IV**. 2004. The impact of artificially enhanced density on juvenile *Panulirus argus* in Florida (USA.) 7th International Lobster Conference and Workshop, Hobart, Tasmania
52. Behringer, D.C., **M.J. Butler IV**, and J.D. Shields. 2003. The Pathological and Ecological Effects of a Herpes-like virus in the Caribbean Spiny Lobster, *Panulirus argus*, from Florida. Everglades and Florida Bay Joint Science Meeting, Tarpon Springs, FL
51. Behringer Jr., D.C., **M.J. Butler IV**, J.D. Shields and R. Ratzlaff. 2003. A lethal viral disease infecting juvenile Caribbean spiny lobster in the Florida Keys. Florida Keys Lobster Workshop, Key West, FL.
50. Lear, J.A. and **M. J. Butler IV**. 2003. Interactions between juvenile Caribbean spiny lobster and Caribbean reef octopuses in the Florida Keys. Benthic Ecology Meeting, Mystic, CT.
49. Herrnkind, W.F. and **M. J. Butler IV**. 2003. The Biscayne Bay (FL) spiny lobster nursery habitat ten years after Hurricane Andrew. Benthic Ecology Meeting, Mystic, CT.
48. Goldstein, J.S. and **M. J. Butler IV**. 2003. Orientation, selection, and metamorphosis of Caribbean spiny lobster pueruli in response to odor plumes. Benthic Ecology Meeting, Mystic, CT.
47. Behringer Jr., D.C., **M.J. Butler IV**, and J.D. Shields. 2002. Ecological ramifications of disease in the Caribbean spiny lobster, *Panulirus argus*. National Shellfisheries Association 94th Annual Meeting, Mystic, CT.
46. Behringer, D. C. Jr., **M. J. Butler IV**, and J. D. Shields. 2002. Quarantined! Ecological ramifications of disease in the Caribbean spiny lobster, *Panulirus argus*. 31st Annual Benthic Ecology Meeting, Orlando, FL.
45. Donahue, Scott and **M. J. Butler IV**. 2002. Sponge dynamics in nearshore hard-bottom communities of the Florida Keys. 31st Annual Benthic Ecology Meeting, Orlando, FL.
44. Behringer, D. C. Jr., **M. J. Butler IV**, and Jeffery D. Shields. 2001. Ecological ramifications of disease in the Caribbean spiny lobster, *Panulirus argus*. European Decapod Fisheries Assessment and Management Meeting, La Coruna, Spain.
43. Shields, J.D., D. Behringer, and **M. Butler**. 2001. Preliminary report on a pathogenic virus from the spiny lobster, *Panulirus argus*. 26th Annual Eastern Fish Health Workshop
42. Behringer, D. C. Jr., **M. J. Butler IV**, and Jeffery D. Shields. 2001. Ecological ramifications of disease in the Caribbean spiny lobster, *Panulirus argus*. 30th Annual Benthic Ecology Meeting, Durham, NH.
41. MacDiarmid, A.B., **M. J. Butler IV**, and Rodney D. Bertelsen. 2000. Mate choice and competition in spiny lobsters. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL

40. MacDiarmid, A.B., T. Kendrick, J.S. Heisig, and **M. J. Butler IV**. 2000. Effects of female size on egg and larval size and quality in the spiny lobsters, *Jasus edwardsii* and *Panulirus argus*. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
39. Berger, Dianne K. and **M. J. Butler IV**. 2000. Do octopuses influence den selection by juvenile Caribbean spiny lobster? 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
38. Robertson, Denise and **M. J. Butler IV**. 2000. The target-area hypothesis and the Spotted spiny lobster, *Panulirus guttatus*. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
37. Dolan, Thomas III and **M. J. Butler IV**. 2000. Modeling ontological changes in the social behavior of juvenile Caribbean spiny lobster, *Panulirus argus*. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
36. Schratwieser, Jason and **M. J. Butler IV**. 2000. The impact of resident and transient predators on the population dynamics of juvenile Caribbean spiny lobster. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
35. Behringer, Donald C. Jr and **M. J. Butler, IV**. 2000. The Ecological Impacts of Density and Disease on Wild Juvenile Caribbean Spiny Lobster Populations: A Work in Progress. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
34. Heisig, J.S. and **M. J. Butler IV**. 2000. Male reproductive dynamics in the Caribbean spiny lobster, *Panulirus argus*. 6th International Conference and Workshop on Lobster Biology & Management, Key West, FL
33. Behringer, D.C. Jr., **M.J. Butler IV**, and S.C. Wainright. 1999. Trophic structure in a tropical hard-bottom community: a stable isotope analysis. Florida Bay Conference, Key Largo, FL.
32. Behringer, D.C. Jr., **M.J. Butler IV**, and S.C. Wainright. 1999. Trophic structure in a tropical hard-bottom community: a stable isotope analysis. Marine Benthic Ecology Meeting, Baton Rouge, LA.
31. Mauger, J., A.B. MacDiarmid, and **M. J. Butler**. 1998. Sperm discharge and regeneration in male spiny lobsters, *Jasus edwardsii*. New Zealand Marine Sciences Meeting, Auckland, NZ.
30. Robertson, D.N. and **M.J. Butler IV**. 1998. The effect of isolation on the life history dynamics of the spotted spiny lobster, *Panulirus guttatus*. Marine Benthic Ecology Meeting, Melbourne, FL.
29. Hansen, D. K. and **M. J. Butler IV**. 1998. Do octopuses influence den selection by juvenile Caribbean spiny lobster? Marine Benthic Ecology Meeting, Melbourne, FL.
28. Sharp, W.C., W.A. Lellis, M. Pardee-Woodring, **M.J. Butler**, W.F. Herrnkind, J.H. Hunt, and T.R. Matthews. The use of coded microwire tags for mark-recapture studies of juvenile Caribbean spiny lobster, *Panulirus argus*. Marine Benthic Ecology Meeting, Melbourne, FL.
27. Ramsdell, R. and **M.J. Butler IV**. 1996. The effect of structure on emigration and mortality of Caribbean spiny lobsters, Marine Benthic Ecology Meeting, Columbia, SC.
26. Acosta, C.A. and **M.J. Butler IV**. 1996. Use of mangrove habitat by juvenile Caribbean spiny lobster, Marine Benthic Ecology Meeting, Columbia, SC.
25. MacDiarmid, A.B. and **M. J. Butler**. 1996. Effects of mate size on reproduction in spiny lobsters, Marine Benthic Ecology Meeting, Columbia, SC.
24. Robertson, D. and **M. J. Butler**. 1996. Evaluation of potential indices of nutritional condition of the Caribbean spiny lobster, Marine Benthic Ecology Meeting, Columbia, SC.
23. Acosta, C. and **M.J. Butler IV**. 1995. Effect of wind stress on recruitment of Caribbean spiny lobster postlarvae. Larval Biology Meeting, Ft. Pierce, FL.

22. Herrnkind, W.F., **M.J. Butler IV**, and J.H. Hunt. 1995. Artificial shelters for early juvenile spiny lobsters, *Panulirus argus*: underlying ecological processes and population effects. 1995 American Fisheries Society Meeting
21. MacDiarmid, A., R. Stewart, and **M.J. Butler IV**. 1995. Effects of mate size on reproduction in the red rock lobster, *Jasus edwardsii*. New Zealand Marine Sciences Conference, Wellington, New Zealand.
20. Herrnkind, W.F., **M.J. Butler**, and J.H. Hunt. 1995. Artificial dens for early juvenile spiny lobsters: ecological processes, population effects, and modeling. American Fisheries Society, Orlando, FL.
19. Hunt, J. H., **M. J. Butler**, and W.F. Herrnkind. 1995. Cascading disturbances in Florida Bay. American Fisheries Society, Orlando, FL.
18. Herrnkind, W.F. and **M.J. Butler**. 1995. The Future of juvenile spiny lobster in Florida Bay: evidence from field surveys and modeling. Florida Bay Science Conference, Gainesville, FL.
17. Herrnkind, W.F., **M.J. Butler**, and J.H. Hunt. 1994. Impact of mass sponge mortality on Florida Bay spiny lobsters: there goes the neighborhood. Marine Benthic Ecology Meeting, Msytic, CT.
16. Field, J.F. and **M.J. Butler IV**. 1993. The influence of temperature, salinity, and postlarval transport on the distribution of juvenile spiny lobsters in Florida Bay. Marine Benthic Ecology Meeting, Mobile, AL.
15. Herrnkind, W.F., **M.J. Butler IV**, and J.H. Hunt. 1993. Impact at ground zero: Biscayne Bay spiny lobsters vs. Hurricane Andrew. Marine Benthic Ecology Meeting, Mobile, AL.
14. Field, J.F. and **M.J. Butler IV**. 1992. The influence of temperature, salinity, and larval transport on the distribution of juvenile spiny lobsters, *Panulirus argus*, in Florida Bay. Florida Keys Regional Ecosystem Symposium, Miami, FL.
13. Forcucci, D.F., **M.J. Butler IV**, and J.H. Hunt. 1992. Growth and population dynamics of juvenile spiny lobsters, *Panulirus argus*, in Florida Bay. Florida Keys Regional Ecosystem Symposium, Miami, FL.
12. Herrnkind, W.F., **M.J. Butler**, and J.H. Hunt. 1992. Testing spiny lobster recruitment bottlenecks: a progress report. Marine Benthic Ecology Meeting, Newport, RI
11. Swanson, R.J., M.C. Mahony, **M.J. Butler**, A.A. Acosta, and S. Oehninger. 1992. Semen analysis comparison of fresh versus test yolk buffer-extended (TYB) samples. American Society of Andrology, Bethesda, MD.
10. Herrnkind, W.F., **M.J. Butler IV**, and D. Forcucci. 1990. The duration of the inshore postlarval stage of the spiny lobster *Panulirus argus*: implications to recruitment. Gulf and Caribbean Fishery Institute, Miami, FL
9. Herrnkind, W.F. and **M.J. Butler**. 1990. Spiny lobster recruitment: settlement patterns and support capacity. Marine Benthic Ecology Meeting, Mobile, AL.
8. Cavanaugh, V.J., R.E. Ratzlaff, and **M.J. Butler**. 1990. Evidence of a neurogenic component during IgE-induced inflammation. ASBMB/AAI Annual Meeting, New Orleans, LA.
7. Herrnkind, W.F., **M.J. Butler**, and K.N. Smith. 1989. Spiny lobster postlarval recruits: where do they go and what happens to them? Marine Benthic Ecology Meeting, Solomons, MD.
6. Herrnkind, W.F., **M.J. Butler**, and K.N. Smith. 1989. Predation on juvenile spiny lobsters: who's been eating our lunch? American Fisheries Society Workshop, Live Oak, FL.
5. Herrnkind, W.F. and **M.J. Butler**. 1987. Spiny lobster recruitment: effects of siltation, food, and predators. Marine Benthic Ecology Meeting, Raleigh, NC

4. Herrnkind, W.F. and **M.J. Butler**. 1987. Artificial structures for spiny lobster recruitment: identifying the problems to overcome. International Artificial Reef Conference, Miami, FL.
3. Herrnkind, W.F., **M.J. Butler**, and R.A. Tankersley. 1986. Habitat selection, predation, and emigration in juvenile spiny lobsters. Marine Benthic Ecology Meeting, Boston, MA.
2. Tankersley, R.A., W.F. Herrnkind, and **M.J. Butler**. 1985. Factors influencing habitat selection of young juvenile spiny lobsters, *Panulirus argus*. American Society of Zoologists/Crustacean Society, Baltimore, MD.
1. Cotner, J. and **M.J. Butler**. 1981. Community structure, drift, and upstream migration of the crustaceans *Synurella dentata* Hubricht and *Lirceus fontinalis* Raf. in a temperate spring. Ohio Academy of Science, Kent, OH.

Invited Presentations at Universities, Research Institutions, or Management Agencies:

- 2019 Virginia Institute of Marine Science
- 2018 Smithsonian National Laboratory, Washington, D.C.
- 2017 Scripps Institute of Oceanography, San Diego, CA
John Pennekamp State Park, Key Largo, FL
Keys Marine Laboratory, Long Key, FL
Florida Keys Backcountry Workshop, Tavernier, FL
- 2016 Marine Stewardship Council Lobster Management Workshop, Cancun, Mexico
Virginia Modeling & Simulation Program, Norfolk, VA
- 2015 University of North Carolina-Wilmington, Wilmington, NC
- 2014 Dauphin Island Sea Laboratory, Universities of Alabama Consortium, Mobile, AL
FAO Western Atlantic Fisheries Commission, Panama City, Panama
Caribbean Regional Fisheries Mechanism Secretariat, Roussou, Dominica
Florida Keys National Marine Sanctuary Board, Marathon, FL
Virginia Institute of Marine Science, Wachapreague, VA
- 2013 Goshen College, Goshen, IN
- 2012 University of Auckland, Auckland, New Zealand
Leigh Marine Laboratory, Leigh, New Zealand
University of Victoria, Wellington, New Zealand
University of Otago, Dunedin, New Zealand
East Carolina University, Greenville, NC
Old Dominion University, Norfolk, VA
- 2011 University of Manchester, Manchester, UK
- 2010 North Carolina State, Raleigh, NC
Hillsdale College, Long Key, FL
Virginia Institute of Marine Science Eastern Shore Laboratory
Belize Fisheries Department, Belize City, Belize
- 2009 Virginia Institute of Marine Science, VA
IUCN Threatened Species Workshop on Lobsters, Taipei, Taiwan
- 2008 University of Florida, Gainesville, FL
University of Miami, Miami, FL
- 2007 Goshen College, Goshen, IN
Virginia Institute of Marine Science, VA
Old Dominion University, VA
- 2006 Colby College, Waterville, ME

- Old Dominion University, VA
- 2005 Universidad del Valle de Guatemala, Guatemala
FUNDARY Marine Park, Guatemala
Bay Islands Conservation Association, Utila, Honduras
Wittenberg University, Springfield, OH
- 2004 Tennessee Tech University, Cookeville, TN
- 2001 University of Barcelona, Barcelona, Spain
Centro de Investigaciones Biologicas del Noroeste, Baha Mexico
- 2000 Virginia Institute of Marine Science, Gloucester, VA
- 1999 Ohio State University, Columbus, OH
South Australian Research & Development Institute, Adelaide, SA
Center for Coastal Physical Oceanography, Old Dominion University
- 1998 University of Florida, Gainesville, FL
Florida State University, Tallahassee, FL
- 1997 Colby College, Waterville, ME
University of Maryland-Baltimore, MD
- 1996 University of Rhode Island, RI
- 1995 National Institute of Water and Atmospheric Research, Wellington, New Zealand
- 1994 University of Southampton, England
University of Haifa, Israel
- 1993 Old Dominion University, Norfolk, VA
- 1992 College of William and Mary, Williamsburg, VA
Old Dominion University, Norfolk, VA
- 1991 Old Dominion University, Norfolk, VA
Agency for International Development, Presidents Training Initiative for the
Island Caribbean, Cancun, Mexico
- 1990 Blue Crab Recruitment Workshop, Dauphin Island, AL
- 1989 Virginia Institute of Marine Sciences, Gloucester Pt, VA
- 1988 Los Angeles County Museum of Natural History, Los Angeles, CA
Miami University, Oxford, OH
Florida Atlantic University, Boca Raton, FL
Utah State University, Logan, UT
- 1983 Wittenberg University, Springfield, OH

Grants and Contracts

I have been principal investigator or co-principal investigator on over 60 grants and contracts totaling over \$12M, including over \$500K in current funding.

Active Grants and Contracts:

Butler, M.J. (2018-2020). "Using native, herbivorous crabs to improve coral restoration and recruitment (FL)", National Fish & Wildlife Foundation, \$96K

Butler, M.J. (2018-2020). "Development of a direct-ageing technique for Spiny Lobster for age-based stock assessment: hurricane relief request", NOAA, \$74K

- Butler, M.J.** (2017-2020) "Can herbivorous crabs facilitate coral reef restoration in the Florida Keys, FL? Florida Fish & Wildlife Conservation Commission, Florida's State Wildlife Grant Program \$116K
- Butler, M.J.** (2016 - 2020) "Development of a direct aging technique for Gulf and South Atlantic spiny lobster for age-based stock assessment", NOAA-MARFIN, \$264K
- Butler, M.J.** (2016-2019) "Scaling up Sponge Community Restoration in South Florida: its Efficacy and Ecosystem Implications", EPA/Florida Fish & Wildlife Conservation Commission, \$139K

Completed Grants and Contracts:

- Butler, M.J.** and Behringer, D.C. Jr (co-PIs) (2016 - 2018). "Returning Ecological Function to Hard-bottom Regions in the Florida Keys through Sponge Restoration and its Importance for an Essential Fish Habitat, Florida Sea Grant, \$198K
- Behringer, D.C. Jr. and **M.J. Butler IV**. 2014 – 2016. "Tools for Sustainably Managing the Florida Lobster Fishery Under Threat from Disease and Climate Change", NOAA Saltonstall-Kennedy Program, \$248K
- Butler, M.J.** 2014-2016. Sponge Restoration & Ecosystem Implications of Sponge Biocomplexity in Florida Bay Hard- bottom Communities, Environmental Protection Agency, \$75K
- Butler, M.J.** 2012 -2015. "Assessment of The Effect of "Casitas" on Lobster Biology and Fishery Sustainability in The Bahamas - Phase II", Government of the Bahamas, \$68K
- Butler, M.J.** 2012-2014. Restoration of Shallow Sponge Communities in the Florida Keys: Phase II. NOAA-The Nature Conservancy Community Restoration Grant Program, \$80K
- Behringer, D.C. Jr. and **M. J. Butler IV**. 2011-2014. "Determining the Ecological and Epidemiological Consequences of Casitas in the Florida Spiny Lobster Fishery", Florida Sea Grant, \$194K
- Butler, M.J.** 2014. "Program Development - Pilot Study: Restoration of Florida Keys Shallow Water Sponge Communities & Their Ecological Function", Florida Sea Grant, \$9695
- Butler, M.J. IV**, D. Behringer, R. Cowen, C. Paris, and J. Shields. "Connectivity of Disease in Marine Ecosystems: Multi-scale Dynamics of a Viral Disease Infecting Caribbean Spiny Lobster", 2009-2012, National Science Foundation, \$1.4M
- Butler, M.J.** 2012. "Assessment of The Effect of "Casitas" on Lobster Biology and Fishery Sustainability in The Bahamas - Phase I", Government of the Bahamas, \$21K
- Shields, J.D., **M.J. Butler IV**, K. Reese, and H. Wang. 2007 – 2012. Ecological determinants of *Hematodinium* epidemics in the American Blue Crab. National Science Foundation. \$2.25M
- Johnson, S., **M. Butler**, N. Gemmell, J. Jack, A. MacDiarimid, and R. Smith. 2011-2012. "Unnatural mating: the effect of large male-selective harvesting on mating dynamics and reproductive success in the spiny lobster, *Jasus edwardsii*", National Geographic Society, \$14K
- Butler, M.J. IV**. "Assessment of PaV1 Virus Prevalence in Bahamian Lobster Fishery", 2010, World Wildlife Fund, \$13K
- Behringer, D. and **M. J. Butler**. 2008 – 2010. "The possible effects of the commercial trap fishery on a lethal viral disease (PaV1) in spiny lobster", Florida Sea Grant, \$154K (administered at Univ. Florida)
- Butler, M.J. IV**. 2009 - 2011. "A Proposal for Shallow Hard-bottom Sponge Community Restoration Research in the Everglades National Park", Everglades National Park, \$75K

- Butler, M.J. IV** and D. Behringer. 2009-2011. "Restoration of shallow sponge communities in the Florida Keys: Phase I", NOAA-The Nature Conservancy Community Restoration Grant Program, \$82K
- Butler, M.J. IV**, J. Shields, R. Ratzlaff, and R. Cooper. 2005 – 2008. Disease dynamics in degraded nurseries: a viral disease in spiny lobster. National Science Foundation. \$585K
- Butler, M.J. IV** and R. Cowen. 2005-2008. "Connectivity of lobster populations in Mesoamerica". Global Environment Fund, World Bank. \$125K
- Behringer, D.C., T. Frazer, R. Swett, R. Watkins, and **M.J. Butler**. 2007-2009. "Determining Coral Reef Impacts Associated with Boat Anchoring and User Activity", Florida Fish & Wildlife Conservation Commission, Wildlife Legacy Program, \$105K
- Behringer, D.C. and **M.J. Butler IV**. 2008-2009. Investigating the role of the spotted spiny lobster (*Panulirus guttatus*) in the recovery of the long-spined sea urchin (*Diadema antillarum*) on the coral reefs of the Florida Keys", Save Our Reefs Program, \$14K
- Butler, M.J.** 2006-2008. "Everglades restoration impacts on lobster: simulation modeling". South Florida Water Management District. \$84K
- Butler, M.J.** "Population replenishment and connectivity of reef fishes and lobster". University of Miami. \$86K
- Matthews, T., J. Hunt, and **Butler, M.J. IV**. 2005-2007. Hard-bottom monitoring program for the Florida Keys. Florida Fish & Wildlife Conservation Commission. \$100K
- Butler, M. J. IV** and A. Gordon. 2004 - 2006. "Hard-bottom dynamics in the Florida Keys: monitoring & targeted research", NOAA Coastal Ocean Program, \$109K
- Sale, P., E. Arias, **M. Butler**, B. Danilowicz, K. Lindeman, R. Steneck, and P. Usseglio. 2005-2006. Monitoring recruitment in protected areas in Mesoamerica. National Fish & Wildlife Foundation, Coral Reef Conservation Fund, \$15K
- Butler, M.J. IV**, J. Shields, R. Ratzlaff. 2002 – 2004. "The behavioral and ecological effects of viral disease in Caribbean Spiny Lobster", National Science Foundation, \$270K
- Butler, M.J.** 2004. "Metadata analysis of lobster recruitment in Florida". Florida Fish and Wildlife Conservation Commission, \$22K
- Butler, M.J. IV**. 2001 – 2003. "Regional Assessment of Sponge Dynamics & Sponge Fishery Impacts", NOAA Coastal Ocean Program, \$140K
- Shields, J., **M.J. Butler IV**, and R. Ratzlaff. 2002 – 2003. "Epidemiological studies on spiny lobsters, *Panulirus argus*, infected with a pathogenic herpes-like virus", NOAA/National Marine Fisheries: Saltonstall-Kennedy Program, \$132K
- Butler, M.J. IV**. 2000-2002. "Changing salinity effects on spiny lobster and hard-bottom habitat", National Marine Fisheries Service, \$109K
- Butler, M.J. IV**. 2001 – 2003. "Regional characterization of hard-bottom communities in the Florida Keys National Marine Sanctuary", Florida Fish & Wildlife Conservation Commission, \$68K
- Butler, M.J. IV** and A.B. MacDiarmid. 1998 – 2001. "Marine reserves and spiny lobsters: effects on male size and reproductive success", National Science Foundation, \$277K
- MacDiarmid, A.B. and **M.J. Butler**. 1998 – 2001. "Reproductive and recruitment limitations in exploited red rock lobsters", New Zealand Foundation for Research, Science & Technology, \$358K(NZ)
- Butler, M.J. IV** and W.F. Herrnkind. 2000. "Sixth International Lobster Conference and Workshop", Florida Sea Grant, \$5K

- Butler, M.J. IV** and Susan Barco. 2000. "Teaching Virginia's boaters to respect protected marine species", Virginia Marine Science Museum, \$14K
- Herrnkind, W.F. and **M.J. Butler IV**. 2000 – 2001. "Management of spiny lobsters in south Florida based on postlarval supply and juvenile dynamics", Florida Sea Grant, \$145K
- Herrnkind, W.F. and **M.J. Butler IV**. 1998 - 2000. "Establishing the importance of postlarval supply to recruitment and management of spiny lobsters in the Florida Keys", Florida Sea Grant, \$175K
- Butler, M.J. IV**, J.H. Hunt, W.F. Herrnkind. 1998 - 2000. "Variation in postlarval supply and its consequences for recruitment of spiny lobsters in the Florida Keys", National Undersea Research Program, \$32K
- Butler, M.J.** 1998. "Computer simulation modeling of lobster recruitment", Florida Department of Environmental Protection, \$28K
- Herrnkind, W.F. and **M.J. Butler IV**. 1997. "Measuring and modeling the contribution of seagrass habitat to juvenile spiny lobster recruitment in Florida Bay", Florida Sea Grant, \$74K
- Butler, M.J.** 1995-1997 "Reproduction and recruitment of spiny lobsters: a geographic and taxonomic comparison", National Science Foundation, \$14K
- Herrnkind, W.F. and **M.J. Butler IV**. 1995-1997. "The future of Florida spiny lobster: developing a predictive model and putting artificial shelters to the acid test", Florida Sea Grant, \$161K
- Butler, M. J.** 1996. "Lobster recruitment modeling", Florida Department of Environmental Protection, \$20K
- Butler, M. J.** 1995. "Reproduction and recruitment of spiny lobsters", New Zealand National Institute for Water and Atmospheric Research Visiting Scholar Award, \$10K
- Butler, M.J.** and W.F. Herrnkind. 1994-1995. Florida Department of Environmental Protection, "Nursery habitat structure and spiny lobster stocks: research services and modeling", \$180K
- Butler, M.J.** and C. A. Acosta. 1994-1995. "Recruitment and habitat utilization of Caribbean spiny lobster, *Panulirus argus*, in Belize coastal waters", Smithsonian Museum of Natural History, \$3K
- Butler, M.J.** and W.F. Herrnkind. 1993. "Processes regulating spiny lobster recruitment and the potential for stock enhancement II", Florida Sea Grant, \$17K
- Butler, M.J.** and W.F. Herrnkind. 1993. "Macroalgal abundance and spiny lobster recruitment in south Florida", Florida Department of Environmental Protection, \$20K
- Butler, M.J.** and C.A. Acosta. 1992. "Recruitment and habitat utilization of Caribbean spiny lobster, *Panulirus argus*, in Belize coastal waters ", Smithsonian Museum of Natural History, \$3K
- Butler, M.J.** 1992. "Characterization of spiny lobster postlarval supply and juvenile nurseries in the upper Florida Keys", NOAA Undersea Research Program, \$9K
- Butler, M.J.** and W.F. Herrnkind. 1992. "Emergency response funds: Impacts of Hurricane Andrew on epibenthic community structure in Biscayne Bay", Florida Sea Grant, \$1K
- Butler, M.J.** and W.F. Herrnkind 1991-1993. "Limits to the recruitment of spiny lobster, *Panulirus argus*, in Florida: a field assessment of enhancement techniques", Florida Sea Grant, \$125K
- Butler, M.J.** and C.A. Acosta. 1991. "Recruitment and habitat utilization of Caribbean spiny lobster, *Panulirus argus*, in Belize coastal waters ", Smithsonian Museum of Natural History, \$3K

- Butler, M.J.** 1991. "Protecting Caribbean spiny lobster populations: what constitutes juvenile habitat and can it be enhanced? Old Dominion University Faculty Summer Research Award, \$4K
- Butler, M.J.**, W.F. Herrnkind, and J.H. Hunt. 1991. "The impact of the Florida Keys reef tract on spiny lobster recruitment and population biology: contrasts between *Panulirus argus* and *P. guttatus*? NOAA Undersea Research Program, \$3K
- Herrnkind, W.F. and **M.J. Butler**. 1990. "Life of a Key Lobster", Earthwatch Foundation, \$10K
- Herrnkind, W.F. and **M.J. Butler**. 1989. "Life of a Key lobster", Earthwatch Foundation, \$15K
- Reznick, D. and **M. J. Butler**. 1989-1991. "Life history evolution in Trinidadian guppies (*Poecilia reticulata*)", National Science Foundation, \$276K
- Butler, M.J.** and W.F. Herrnkind 1988-1989. "Florida spiny lobster recruitment: project renewal", Florida Sea Grant, \$39K
- Herrnkind, W.F. and **M. J. Butler**. 1987-1988. "Spiny lobster recruitment in Florida: settlement, mortality, and stock prediction", Florida Sea Grant, \$88K
- Butler, M.** 1985-1987. "Community responses to variable predation: a field experiment with bluegill sunfish and freshwater benthic macroinvertebrates", National Science Foundation Doctoral Dissertation Improvement Grant, \$4K
- Butler, M.** 1984. "Field tests of hypotheses regarding character displacement in crayfish", Sigma Xi Grant-in-Aid of Research, \$380
- Butler, M.** 1981-1983. "Displacement of the crayfish *Orconectes sanborni* by *O. rusticus*: an analysis of the mechanisms", Ohio Department of Natural Resources, \$1500
- Butler, M.** 1981. "Competitive exclusion in two species of crayfish, *Orconectes rusticus* and *O. sanborni*", Sigma Xi Grant-in-Aid of Research, \$200
- Butler, M.** and R. Stein 1981. "Competitive interactions between two species of crayfish?", Ohio State University Grant-in-Aid of Research, \$350

Honors and Awards

- 2011 Virginia Outstanding Faculty Member of the Year, Virginia State Council of Higher Education
Nominee, US Professor of the Year
- 2010 Eminent Scholar, Old Dominion University
Nominee, US Professor of the Year
Finalist: State Council of Higher Education Outstanding Faculty of the Year Award
- 2008 Hirschfield Award for Faculty Excellence in Teaching, Research & Service, College of Sciences, Old Dominion University
Finalist, Doctoral Mentoring Award, Office of Graduate Studies, Old Dominion Univ
- 2005 Award for Outstanding Teaching, Department of Biological Sciences, Old Dominion Univ
- 1995 "Best Paper in Fisheries Science", New Zealand Marine Sciences Conference
- 1991 "Most Inspiring Faculty Award", College of Sciences, Old Dominion University
- 1989 "Best Oral Presentation in Basic Science", North American Benthological Society
- 1988 Guyer Postdoctoral Fellowship, University of Wisconsin
- 1986 Marine Science Graduate Fellowship, Aylesworth Foundation

- 1986 Marine Science Fellowship, International Women's Fishing Association
- 1983 College of Sciences Fellowship, Florida State University
- 1980 Cum Laude, Mortar Board Honorary, Tri-Beta Honorary - Wittenberg University

Graduate Student Supervision

I have been fortunate over the years to have had in my laboratory many fine graduate students, all of whom have found employment within their field of study or went on to further their graduate training elsewhere. Those students now hold academic positions (University of Florida, Tennessee Tech University, University of Northern Kentucky, Loyola University) or important administrative positions at federal, state, and non-governmental organizations throughout the country (e.g., Science Director – NOAA/Florida Keys National Marine Sanctuary; Conservation Director - International Gamefish Association Headquarters; Staff Scientist – National Marine Fisheries Service; Scientist – Battelle National Laboratories). Students who obtained their Masters degree in my laboratory have gone on to pursue doctoral degrees at many institutions such as: MIT-Woods Hole, Florida State University, University of Edinburgh, University of New Hampshire, and University of Missouri. I have also served as an outside committee member or reviewer of doctoral dissertations at both US institutions (e.g., North Carolina State University, Virginia Institute of Marine Science, Florida State University) and universities abroad (e.g., University of Adelaide, Australia; University of Western Australia, Australia; University of the West Indies – Kingston, Jamaica; University of Manchester, England; Victoria University, New Zealand).

Postdoctoral Fellows:

Antonio Baeza (2010-2012)
 Jeremy Wiesz (2005-2008)
 Donald Behringer (2003-2004)
 Emmanuel Ricelet (1999-2000)

Graduate Students:

29. Angelo Spadaro (Ph.D. 2019) Dissertation topic: "Cryptic herbivorous invertebrates restructure the composition of degraded coral reef communities in the Florida Keys, Florida, USA"
28. Samantha Hagedorn (M.S. 2019), "GIS-based estimates of change in water quality due to the loss of sponge communities in the Florida Keys"
27. Marla Valentine (Ph.D. 2019) Dissertation topic: "Sponge community biocomplexity, competition, and functional significance in hard-bottom habitats of the Florida Keys, Florida (USA)"
26. Gayathiri Gnanalingam (Ph.D. 2018) Dissertation topic: "The importance of keeping the big ones: harvest slot limits and marine protected areas for the management of the Caribbean Spiny Lobster"
25. Lester Gittens (Ph.D. 2017) Dissertation Topic: "The effect of casitas on lobster biology and fisheries sustainability in the Bahamas"
24. Jack Butler (Ph.D. 2015), Dissertation topic: "Characterization of soundscapes in shallow water habitats of the Florida Keys (USA) and their influence on the settlement of larval fish and invertebrates"
23. Adam Wood (M.S. 2014), Non-thesis Topic: "Ecology of juvenile *Octopus briarius*"

22. Benjamin Gutzler (M.S. 2014), Thesis Topic: "Effect of casitas on lobster populations in the Florida Keys"
21. John Tiggelaar (M.S. 2012), Thesis topic: "The effect of Hematodinium infection on the ecology of the blue crab, *Callinectes sapidus*"
20. Thomas Dolan (Ph.D., 2011), Dissertation: "Spatially-Explicit Agent-Based Modeling of Ecosystem Change and Epizootiological Impacts on Caribbean Spiny Lobster, *Panulirus argus*"
19. Meredith Kintzing (Ph.D., 2011), Dissertation: "Assessing the ecological significance of interactions between the spotted spiny lobster (*Panulirus guttatus*) and the long spined sea urchin (*Diadema antillarum*) in shaping coral reef communities in the Florida Keys.
18. Angela Mojica (M.S. 2009), Thesis: "Effect of the herbivorous channel clinging crab (*Mithrax spinosissimus*) on patch reef algal communities in the Florida Keys, Florida USA"
17. Scott Donahue (M.S. 2007), Thesis: "Influences of the Loggerhead sponge (*Speciospongia vesparium*) and the Vase sponge (*Ircinia campana*) on nearshore hard-bottom community development in the Florida Keys".
16. Jason Goldstein (M.S. 2006), Thesis: "Behavioral enhancement of onshore transport by postlarval Caribbean spiny lobster, *Panulirus argus*".
15. Holly Fernbach (M.S. 2004), Thesis: "Social continuity of migratory bottlenose dolphin off Cape Henry, VA"
14. Jennifer Lear (M.S. 2004), Thesis: "Strong interactions between juvenile Caribbean spiny lobster (*Panulirus argus*) and Caribbean reef octopus (*Octopus briareus*) in the Florida Keys, FL"
13. Roxanne Carter (M.S.), Non-thesis: "GIS analysis of Florida Keys hard-bottom communities"
12. Gretchen Bath-Martin (Ph.D. 2003), Dissertation: "Experimental investigation of elemental incorporation in the otoliths of larval and juvenile fish: implications for use as environmental recorders".
11. Donald Behringer (Ph.D. 2003), Dissertation: "The ecological ramifications of disease and density on the Caribbean spiny lobster, *Panulirus argus*"
10. Jamie Heisig (M.S. 2003), Thesis: "Biochemical and histological analysis of sperm longevity and spermatophore structure in spiny lobsters"
9. Denice Robertson (Ph.D. 2001), Dissertation: "The target-area hypothesis: the impact of patch reef size on population structure, mating, and reproductive success of the spotted spiny lobster, *Panulirus guttatus*"
8. Tom Dolan (M.S., 2000), Non-thesis: "Modeling ontological changes in the social behavior of juvenile Caribbean spiny lobster, *Panulirus argus*"
7. Jason Schratwieser (M.S. 1999), Thesis: "The impact of resident and transient predators on the population dynamics of juvenile Caribbean spiny lobster in Florida"
6. Dianne Hansen (M.S. 1998), Non-thesis: "The effect of octopus predators on habitat choice by spiny lobsters"
5. Charles Acosta (Ph.D., 1997), Dissertation: "Ecology of postlarval Caribbean spiny lobsters, *Panulirus argus*"
4. Cheryl Frew (M.S., 1994), Thesis: "The role of colonization, predation, and season in determining macroinvertebrate community structure in a temperate lake"
3. Georgi Hyde (M.S., 1993), Non-Thesis: "An evaluation of field techniques for use in studies of post-algal phase juvenile spiny lobsters, *Panulirus argus*"
2. Jennifer Field (M.S., 1993), Thesis: "The influence of temperature, salinity, and postlarval transport on the distribution of juvenile spiny lobsters, *Panulirus argus*, in Florida Bay"

1. Hayden Mattingly (M.S., 1991), Thesis: "A laboratory study of predation on the Trinidadian guppy, *Poecilia reticulata*, by two natural piscine predators: effects of predator size, prey size, and habitat complexity"

Current Graduate Students:

Emily Anderson (Ph.D.), Dissertation Topic: "Island biogeography of underwater soundscapes"

Amy Perez (M.S.), "Changes in shallow, hard-bottom sponge communities in the Florida Keys over the last two decades"

Nick Evans (M.S.), Thesis (begins fall 2019)

Samantha Glover (M.S.), Thesis (begins fall 2019)

Undergraduate Research Assistants & Interns

Throughout my career I have engaged and employed undergraduate students as research assistants and interns to work in my laboratory with my graduate students and I. Typically, there are 2 - 6 undergraduate student research assistants or interns working with us each year. Most have been ODU students, but for the last several years I have also accepted two students per year from a small, liberal arts college as part of a marine science partnership that I formed with Goshen College (Goshen, IN).

Courses Taught

Department of Biological Sciences, Old Dominion University:

Current Courses:

Biometry (Biol 602); 4 credits; spring semester

Marine Ecology (Biol 415W/515); 5 credits; fall semester

Scientific Diving & Research (Biol 407/507); 5 credits; Maymester course every other summer

Field Studies in Marine Biology (Biol 444); 5 credits; study abroad course every other summer

Ecological Sciences Seminar (Biol 708/808)

A graduate seminar course that rotates among faculty. I have taught the course on the following topics: marine restoration, ecological grantsmanship, marine connectivity, statistical ecology, historical ecology, null models in ecology.

Previous Courses:

Limnology (Biol 417/517)

Experimental Marine Ecology (Biol 444/544)

Marine Biology (Biol 232)

Department of Geology and Oceanography, University of Wisconsin:

Oceanography (Geol 105)

Professional Service

Scientific Meeting Activities:

- 2019 Chair, Organizing Committee, 51st Benthic Ecology Meeting (2022), Miami, FL
Workshop Co-organizer (2019) "Direct Aging of Lobsters", Gulf & Caribbean Fisheries Institute Conference, Dominican Republic
International Advisory Committee, 12th International Lobster Conference and Workshop (2020), Perth, Western Australia
- 2016-2017 International Advisory Committee, 11th International Lobster Conference and Workshop, Portland, Maine
Chair, Student Travel Award Committee, International Lobster Conference and Workshop
Session Chair, 11th International Conference & Workshop on Lobster Biology, Portland, Maine
Workshop co-organizer: Lobster Workshop for Public & Fishers, Marathon, FL
Workshop co-organizer: Sponge restoration Workshop for Public, Marathon, FL
- 1990-2019 Session Chair, Benthic Ecology Meeting
- 2014 Session Chair, 10th International Lobster Conference and Workshop, Cancun, Mexico
Organizer, Florida Keys Sponge Ecology & Restoration Workshop, Marathon, FL
- 2013-2014 International Advisory Board, 10th International Lobster Conference, Mexico
- 2012 Chair, Organizing Committee, 41st Annual Benthic Ecology Meeting, Norfolk, VA
- 2010, 2013 Organizer, Florida Keys Lobster Fishermen Workshop
- 2009 IUCN Threatened Species Workshop Chair - Lobsters, Taiwan
- 2004-2009 International Workshop Instructor: Monitoring recruitment on coral reefs, Coral Reef Targeted Research Program: Akumal, Mexico; Turneffe Cay, Belize; Miami, FL, Roatan, Honduras; Ft. Lauderdale, FL.
- 2007 Symposium organizer and Chair: "Lobster Behavior", 8th International Lobster Conference, Prince Edward Island, Canada
- 2005 Symposium organizer and Co-Chair: "Effect of Human Exploitation on Crustacean Mating Systems", 6th International Crustacean Congress, Glasgow, Scotland
Session Chair, Benthic Ecology Meeting, Williamsburg, VA
- 2004 Session Chair, 7th International Lobster Conference, Hobart, Tasmania
- 2003 Session Chair, European Decapod Fisheries Assessment and Management Meeting, La Coruna, Spain.
- 2000 Chair, Organizing Committee, 6th International Lobster Conference, Key West, FL
- 1997 Symposium organizer and Chair: "Benthic ecology of lobsters", 5th International Lobster Conference, Queenstown, New Zealand
- 1993 Session Chair, 4th International Lobster Conference, Sanriku, Japan
- 1992 Symposium organizer and co-chair: "Recruitment dynamics in marine fisheries: integrating basic and applied ecology", Ecological Society of America Meeting, Honolulu, Hawaii
- 1990 Co-Chairman - Program Committee, Marine Benthic Ecology Meeting, Williamsburg, VA

- 1990 Local Site Selection Committee, Association of Southeastern Biologists Meeting, Virginia Beach, VA
- 1987 Symposium organizer and chair: International Congress of Ecology - Ecological Society of America Meeting, Syracuse, NY

Other Professional Activities:

- 2017-2019 Executive Board, Benthic Ecology Society
- 2017-2018 Associate Editor, *Bulletin of Marine Science*
Scientific advisor & on-location recon leader for BBC film (Bimini, Bahamas)
Hurricane Irma Disaster Relief Volunteer
- 2012-2017 Advisory Board, Goshen College Marine Biology Program
- 2011-2013 Executive Board, Benthic Ecology Society
- 2012 President, Benthic Ecology Society
Visiting Scientist, Sea & Learn Program, Saba, Netherlands Antilles
Guest Editor, *Diseases of Aquatic Organisms*
- 2011 VA State Council of Higher Education Faculty Award Review Committee
- 2009 – 2013 Wetlands Board Member, City of Suffolk, VA
- 1998-2012 Panelist, The National Science Foundation
- 1996 - 2008 Editor, *The Lobster Newsletter* (international newsletter)
- 1999 – 2004 Editorial Staff, *Marine Ecology Progress Series*
- 1999 Blue Crab Scientific Task Force, Appointed by VA Secretary of Natural Resources
- 1995- 2003 Scientific Advisory Board, Gulf of Mexico Fishery Management Council
- 1995-1998 Panelist, The National Undersea Research Program
- 1993-1995 Secretary, Aquatic Ecology Section of the Ecological Society of America
- 1991-1995 Board of Directors, Gulf and Caribbean Fisheries Institute
- 1989-1992 Senior Editor, *Proceedings of the Gulf and Caribbean Fisheries Institute*

In addition to the responsibilities listed above, I regularly review manuscripts for journals such as: *Ecology/Ecological Monographs*, *Marine Ecology Progress Series*, *Marine Biology*, *American Midland Naturalist*, *Journal of Experimental Marine Biology and Ecology*, *Bulletin of Marine Science*, *Journal of Crustacean Research*, *Transactions of the American Fisheries Society*, and *Fisheries*. I also regularly review proposals for: The National Science Foundation, Sea Grant, The National Marine Fisheries Service, and various NOAA programs.

Significant Departmental Service Activities:

- 2019 Director, Marine Biology Program
Director, Marine Biology Study Away Program
Faculty Advisor, ODU Marine Biology Student Association
- 2017-2018 Executive Committee
Director, Marine Biology Program
Director, Marine & Aquatics Laboratory Facility
Faculty Advisor, ODU Marine Biology Student Association
Chair, Faculty Search Committee - Visiting Assistant Professor in Marine Biology
- 2011-2017 Director, Marine Biology Program
Director, Marine & Aquatics Laboratory Facility
Faculty Advisor, ODU Marine Biology Student Association

2013	Chair, Promotion & Tenure Committee Faculty Search Committee
2008-2010	Chair, Promotion & Tenure Committee Chair, Seminar Committee
2008	Chair, Executive Committee
2007	Chair, Ecology/Evolutionary Biology Search Committee
2005-present	Faculty Mentor
2005	Computational Biologist Search Committee
2002-2004	Assistant Departmental Chair
2002	Chair, Tenure & Promotion Committee Chair, Ecological/Evolutionary Biologist Faculty Search Committee Executive Committee
2001	Parasitology Faculty Search Committee
2000, 2002	Executive Committee
1996-2000	Graduate Program Director, Master's in Biology Program
1997-1998	Chair, Portfolio Review Committee
1997-1998	Chair, Environmental Biology Faculty Search Committee
1994-present	Curriculum Committee
1996	Chair, Executive Committee
1995	Executive Committee
1989-2000	Advisor for Biology Graduate Student Organization

Significant University Service Activities:

2008-2019	Chair, Dive Control Board, ODU Chapter - American Academy of Underwater Sciences
2017-2018	College of Sciences, Research Resources Committee Chair, College of Sciences, Promotion & Tenure Committee University Promotion & Tenure Committee Faculty Qualifications and Guidelines Committee
2016-2017	Chair, College of Sciences, Promotion & Tenure Committee University Promotion & Tenure Committee Faculty Qualifications and Guidelines Committee
2006-2017	Chair, Scientific Diving Control Board, ODU Academic Diving Program
2014-2015	College of Sciences, Promotion & Tenure Committee
2012-2015	Faculty Leader, ODU Study Abroad Program
2013-2015	Council for International Initiatives
2011	Chair, Eminent Scholar Committee University Research Data Management Committee Chair, Cobb Island Station Initiative Committee
2003-2007	College of Sciences Research Building Planning & Design Committee
2003-2004	College of Sciences Research Committee
2002- 2004	College of Sciences Tenure & Promotion Committee
1998-1999	Search Committee for Vice President, Graduate Studies & Research
1998-present	Committee on Marine Mammalogy program for College
1998-1999	Committee for fast-track M.S. degree in Environmental Science
1997	University Intercollegiate Athletic Committee

1997 President's "Bus Tour" to recruit students
1992 - 1994 University Intercollegiate Athletic Committee
1993 College of Sciences Computing Services Committee
1992 Committee on Integrity in Research
1991 College of Sciences Honor Code Committee
1990-1991 Faculty Senate (1990-1991)
Committee M: Intercollegiate Athletics; chairman (1991)
1989 University Parking Services Committee

Professional Association Memberships

American Society for the Advancement of Science
Benthic Ecology Society
Crustacean Society
Gulf and Caribbean Fisheries Institute

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**TENURE AND PROMOTION CURRICULUM VITAE
OF
CARLOS MARTIN CHANG
COLLEGE OF ENGINEERING AND COMPUTING**

(Candidates C.V. should follow the format outlined below. Where there is no reference, indicate by N/A)

EDUCATION (List most recent degree first)

Degree	Institution	Field	Dates
Doctor of Philosophy (Ph.D.)	Texas A&M University College Station, Texas, U.S.	Civil Engineering - Infrastructure Management - Pavements and Materials	January 2003 – May 2007
Master in Science (MS)	Texas A&M University College Station, Texas, U.S.	Civil Engineering - Pavement Management - Pavement Evaluation	August 1997 – July 1999
Civil Engineer	Universidad Nacional de Ingeniería, Lima - Perú	Civil Engineering - Structural Analysis and Design - Seismic Analysis	January 1990 – December 1991
Bachelor in Civil Engineering	Universidad Nacional de Ingeniería, Lima - Perú	Civil Engineering - Structural Analysis and Design - Materials	January 1982 – December 1989

FULL-TIME ACADEMIC EXPERIENCE (list most recent first)

Institution	Rank	Field	Dates
University of Texas at El Paso (UTEP) El Paso, Texas, U.S.	Associate Professor	Civil Engineering - Sustainability - Infrastructure Management - Pavements and Materials	August 2008 – August 2014 Assistant Professor September 2014 - Present Associate Professor
Texas Transportation Institute (TTI) at Texas A&M College Station, Texas, U.S.	Associate Researcher	Civil Engineering - Infrastructure Management - Pavements and Materials	January 2005 – July 2008

PART-TIME ACADEMIC EXPERIENCE (list most recent first)

Institution	Ranks	Field	Dates (Month& Year)
Universidad Ricardo Palma	Visiting Professor	Civil Engineering - Pavement Design	June 2019 June and Nov.2018 July and Nov.2017 June and Dec. 2016 June and Dec.2015 August 2013
Universidad EAFIT Medellin - Colombia	Visiting Professor	Civil Engineering Master in Engineering - Pavement Analysis and Design	Oct. 2019 April and Oct. 2018 April and Oct. 2017 April and Oct. 2016 April 2015 April 2014 April 2013 May 2012
Universidad del Norte, Barranquilla - Colombia	Visiting Professor	Civil Engineering Master in Engineering Pav. Analysis and Design	November 2017
Universidad de Piura Lima - Perú	Visiting Professor	Civil Engineering Master in Transportation - Pavement Analysis and Design / Project Evaluation	August 2019 February 2019 August 2018 April 2017 March 2014 March 2012 July 2010 August 2009
Universidad Nacional de Ingeniería Lima - Perú	Lecturer	Civil Engineering Master Program - Advanced Pavement Analysis and Design	January 2000 - December 2002
Texas Transportation Institute (TTI) Texas A&M. College Station, Texas, U.S.	Research Assistant	Civil Engineering - Infrastructure - Pavements and Materials	August 1997 – December 1999
Peru-Japan Seismic Investigation and Mitigation Center (CISMID) Lima, Perú	Research Engineer	Civil Engineering - Structural Analysis - Seismic Analysis	January 1990 – December 1991
Universidad Nacional de Ingeniería Lima - Perú	Teaching Assistant	Civil Engineering - Structural Analysis and Design	January 1990 – December 1991

NON-ACADEMIC EXPERIENCE

Place of Employment	Title	Dates
Inter-American Development Bank	External Consultant	May 2004 – June 2008
CESEL, S.A. Lima – Perú	Head of the Road Design Department and Quality Assurance/Quality Control Division	Jan. 2000 - Dec. 2002
Ministry of Public Works Lima – Perú	External Consultant	March 2000 – August 2002
Resource International, Columbus, Ohio, U.S.	Pavement and Materials Engineer	August 1999 - Dec. 1999
CESEL, S.A. Lima – Perú	Pavement and Materials Engineer	June 1993 – July 1997

EMPLOYMENT RECORD AT FIU

Rank: Associate Professor

Dates: Effective on August 12, 2020

PUBLICATIONS IN DISCIPLINE

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

Books (give full bibliographical references)

1. Chang, C. *Mechanistic-Empirical Pavement Design Guide: Manual of Practice, AASHTO 2015*. Editor of the Spanish Version. Construction Management Institute. Lima, Perú, August 2017.
2. Chang-Albitres, C. *Pavements: An Integrated Approach*. Construction Management Institute and Texas Transportation Institute. Lima, Perú 2012.
3. Chang-Albitres, C. *Mechanistic-Empirical Pavement Design Guide: AASHTO 2008*. Editor of the Spanish Version. Construction Management Institute. Lima, Perú, December 2011.
4. Chang-Albitres, C. *Urban Concrete Pavements*. ASOCCEM. Lima, Perú, December 2011.
5. Chang-Albitres, C. *Guidelines for Locating, Selecting, and Designing Traffic Barriers*. ASOCCEM. Lima, Perú, March 2010.
6. Chang-Albitres, C. *Guidelines for the Development of Equivalent Pavement Designs: Rigid and Flexible in the Bidding Process*. ASOCCEM. Lima, Perú, August 2009.

7. Smith, R., T. Freeman, and C. Chang-Albitres. *Pavement Management*. Federal Highway Administration, Construction Management Institute, and Texas Transportation Institute. Lima, Perú, 2006.
8. Chang-Albitres, C. *Pavements: A Vision into the Future*. Construction Management Institute and Texas Transportation Institute. Lima, Perú, 2005.

Doctoral Dissertation

1. Chang-Albitres, C., Development of a Multi-Objective Strategic Management Approach to Improve Decisions for Pavement Management Practices in Local Agencies. Doctoral Dissertation. Texas A&M University. College Station, Texas. May 2007.

Master Thesis

1. Chang-Albitres, C., The Impact of Maintenance and Rehabilitation Strategies on the Pavement Network Value. Master of Science Thesis. Texas A&M University. College Station, Texas. December 1999.

Regular Peer Reviewed Articles (give full bibliographical references)

1. Chang C., Ortega, O., and J. Weidner. “Risk-Based Asset Management Approach to Address Climate Change on Bridges”. American Society of Civil Engineering (ASCE), Journal of Infrastructure Systems (In Press).
2. Esteban-Ciria, A. and C. Chang. “Factorial Design Applied to Pavement Mechanistic-Empirical Design Methods”. Scientific Journal Paideia XXI, ISSN 2519-5700. Lima, Perú. Accepted for publication on March 2019.
3. Rodriguez, E., C. Chang, and V. Kreinovich. “Calibration Helps Reduce Disagreement between Different Pavement Condition Indices”. Journal of Uncertain Systems, Vol. 13, No 2, pp 118-121, 2019.
4. Vavrova, M. and C. Chang. “Incorporating Livability into Transportation Asset Management Practices through Bikeway Quality Networks”. *Journal of the Transportation Research Board*. 98th Annual Meeting of the Transportation Research Board. Washington D.C., U.S., February 2019.
5. Rodriguez, E., C. Chang, O. Kosheleva, and V. Kreinovich. “Fuzzy Ideas Explain a Complex Heuristic Algorithm for Gauging Pavement Conditions”. Mathematical Structures and Modeling, Vol. 47. pp 82-90, 2018.
6. Vavrova, M., and C. Chang. “A Framework to Analyze the Feasibility of Vehicle Miles Travelled Fees to Finance a Sustainable Transportation System”. *Journal of the Transportation Research Forum*. Vol. 56, No. 3 (Fall 2017), pp. 57-74, U.S.A., November 2017.

7. Ghadimi, S., S. Gutierrez, and C. Chang. “Development of a Performance-Based Model to Integrate Guardrail System Preservation Policies into Asset Management Practices”. Journal of the Transportation Research Board, 96th Transportation Research Board Meeting. Washington D.C., U.S. February 2017.
8. Chang, C. and A. Chang. “Blended Learning Strategies for Smart Students: Why Do They Fail?” EDULEARN16, Barcelona, Spain, July 2016.
9. Chang, C. and D. Saenz, S., and Z. Li. “A Hybrid Modelling Approach for Quantifying Maintenance and Rehabilitation Treatment Effectiveness of Asphalt”. 2016 Transportation Research Board Meeting. Washington D.C., U.S. February 2016.
10. Chang, C., O. González, and P. Krugler. “Lessons Learned about Successful Flexible Pavements. CRC Press, Balkema, Taylor and Francis Group, June 2015.
11. Chang, C., O. González, and A. Wimsatt. “Why and When to Consider Flexible and Rigid Pavement Alternate Designs in a Bidding Process”. CRC Press, Balkema, Taylor & Francis Group, June 2015.
12. Al-Zoubi, M., C. Chang-Albitres, S. Nazarian, and V. Kreinovich. “A Systematic Approach to Populate Missing Performance Data in Pavement Management Systems”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems*. Volume 21, Issue 4. DOI:10.1061/(ASCE)TE.1943-555X. 0000247, December 2015.
13. Chang, C., E. Montes, H. Taboada, and J. Espiritu. “Allocating Transportation Funds using Fair Division Methods”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems*. DOI:10.1061/(ASCE)IS.1943-555X.0000217, April 2014.
14. Chang, C., and E. Montes. “An Optimization Approach Applied to Fair Division Transportation Funding Allocation Models”. *Journal of the Transportation Research Forum*, Vol. 53, No. 1 (Spring 2014), pp. 101-118, U.S.A., April 2014.
15. Gallegos, A., C. Chang-Albitres, and S. Nazarian. “A Hybrid Technique for Calibrating Network Performance Models of Continuously Reinforced Concrete Pavements”. American Society of Civil Engineering (ASCE), *Journal of Transportation Engineering*. DOI:10.1061/(ASCE)TE.1943-5436.0000579, December 2013.
16. Chang-Albitres, C., D. Salomon, and I. Ibarra. “The State of the Art in the Implementation of International Road Management Systems”. *Journal of Carreteras*. Asociación Española de la Carretera. Spain In Press. Volume Number 189, May-June 2013.
17. Chang-Albitres, C., R. Feldman., P. Krugler, and I. Ibarra. “A Simulation Model to Prioritize Right-of-Way Acquisitions”. American Society of Civil Engineering (ASCE), *Journal of Infrastructure Systems*. ISSN-1076-0342, U.S.A., December 2012.
18. Chang-Albitres, C., P. Krugler, I. Ibarra, and E. Montes. “A Dynamic Programming Optimization Approach for Budget Allocation to Early Right-of-Way Acquisitions”. *Journal of the Transportation Research Forum*, Vol. 51, No. 3 (Fall 2012), pp. 55-66, U.S.A., November 2012.

19. Huaman, N. and C. Chang-Albitres. “Permanent Deformation in Peruvian Asphalt Pavements”. *Technical Journal of Carreteras*, Asociación Española de la Carretera. Spain. Season 4, Vol. 183, May-June 2012.
20. Ramirez, R. and C. Chang-Albitres. “A Stochastic Proposal for Metropolitan Transportation Commission Pavement Management System in the San Francisco Bay Area”. *Academia Journals* (ISSN 1946-5351), Mexico, April 2012.
21. Chang-Albitres, C., R. Smith, and O. Pendleton. “Comparison of Automated Pavement Distress Data Collection Procedures for Local Agencies in the San Francisco Bay Area”. *Transportation Research Record, Journal of the Transportation Research Board* 1990, 119-126. Transportation Research Board. Washington D.C., U.S., January 2007.

Conference Proceedings

1. Chang C., S. Tan, and R. Smith. “Impact of Splitting and Raveling on the Pavement Condition Index (PCI)”. 11th International Conference on Managing Pavement Assets (ICMPA), U.S., August 2020.
2. Rodriguez, E., C. Chang, and V. Kreinovich. “Relationship between Measurement Results and Expert Estimates of Cumulative Quantities, on the Example of Pavement Roughness”, 2019 IEE Symposium Series on Computational Intelligence (SSCI), December 2019.
3. Chang, C., M. Pagola, and R. Salas. “Methodologies to Establish Levels of Service Based on IRI”. XX Ibero-Latin-American Asphalt Congress. Guadalajara, Mexico, November, 2019.
4. Chang, C., M. Svitek, and T. Horak. “Asset Management Systems for A Sustainable Development of Smart Cities”. International Conference on Smart Cities, iSMARTI, South Korea, July 2019.
5. Chang, C. and O. Ortega. “A Methodology to Quantify the Impact of Climate Change on the State of Good Repair of Pavements”. 7th International Conference Bituminous Mixtures and Pavements (ICONFBMP), Greece, June 2019.
6. TaghaviGhalesari, A. and C. Chang. “Sustainable Design of Rigid Pavements Using a Hybrid GP and OLS Method”. ASCE Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering. Philadelphia, Pennsylvania, U.S., March 2019.
7. Chang, C., L. Calderon-Coello, and A. Chang. “A Knowledge Management Model for the Development of Higher-Level Education Multidimensional Competencies”. 13th Annual International Technology, Education, and Development Conference. INTED 2019, Valencia, Spain, March 2019.
8. Rodriguez, E., C. Chang, T. Ngoc, O. Kosheleva, and V. Kreinovich. “How to Take Expert Uncertainty into Account: Economic Approach Illustrated by Pavement Engineering Applications”. The 12th International Conference of the Thailand Econometric Society TES 2019, Chiang Mai, Thailand, January 9-11, 2019.

9. C. Chang, Smith, R., Tan, S. and *E. Rodriguez*. “Reporting the Pavement Condition for Local Roads to HPMS using PCI, IRI, and PSR Criteria”. 98th Annual Meeting of the Transportation Research Board. Washington D.C., U.S., January 2019.
10. *Vavrova, M.*, M. Medina, and C. Chang. “Strategic Active Transportation Planning for Metropolitan Planning Organizations with Limited Resources”. 98th Annual Meeting of the Transportation Research Board. Washington D.C., U.S., January 2019.
11. *Rodriguez, E.*, C. Chang, and V. Kreinovich. “Measurement-Type Calibration of Expert Estimates Improves their Accuracy and their Usability: Pavement Engineering Study”. 2018 IEEE Symposium Series on Computational Intelligence (SSCI). IEEE Symposium Series on Computational Intelligence for Engineering Solutions CIES'2018, Bengaluru, India, November 18-21, 2018.
12. Chang, C., *E. Rodriguez*, M. Yapp, and L. Pierce. “Consequences of Delayed Maintenance of Pavement Networks”. 4th International Conference on Transport Infrastructure. Pretoria, South Africa, July 2018.
13. Esteban-Ciria, A., C. Chang, and *E. Rodriguez*. “Factorial Pavement Design and Analysis based on Mechanistic-Empirical Methods”. XIX Ibero-Latin-American Asphalt Congress. Colombia, November, 2017.
14. Chang, C., J. Marcobal, O. Tapia, P. M Muñoz-Escamilla, and *L. Valdez*. “Serviciability Levels based on the International Roughness Index (IRI)”. XIX Ibero-Latin-American Asphalt Congress. Colombia, November, 2017.
15. P. Lavaud, C. Chang, and *L. Valdez*. “Challenges in the Preparation and Place of Asphalt Mixes with Polymers to Achieve a Good Pavement Performance”, XIX Ibero-Latin-American Asphalt Congress. Colombia, November, 2017.
16. Chang, C., *M. Vavrova*, *E. Rodriguez*, *L. Valdez*. “Incorporating Livability Principles in the Development of Transportation Asset Management Plans”. WCPAM World Conference on Pavement and Asset Management, Milan, Italy, June 2017.
17. Chang, C., and *R. Ramirez*. “Development of Probability-Based Pavement Performance Curves for Pavement Management Systems”. 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), Singapore, July 2016.
18. Chang, C., and *M. Vavrova*. “Vulnerable User Road Safety Enhancements for Transportation Asset Management”. ASCE International Conference on Transportation & Development, Houston, June 2016.
19. Chang, C., *O. González*, L. Lorslof. “Continue Monitoring of the Functional Pavement Condition Using Smart Mobile Devices”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
20. Chang, C., *S. Mejia*, J. Valencia, W. Mena, C. Jaña. “Implementation of the AASHTO 2008 Mechanistic-Empirical Pavement Design Guide in Colombia and Perú”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.

21. Mancero, C., and C. Chang. “Lessons Learned Using Rubberized Asphalt to Improve Pavement Performance”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
22. Chang, C., *M. Vavrova*, and R. Smith. “A Multi-Objective Asset Management Approach to Evaluate Maintenance Strategies for Funding Allocation”. Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, June, 2015.
23. Chang, C., and *R. Ramirez*. “Development of Probability-Based Pavement Performance Curves for Pavement Management Systems”. Transportation Research Record 2015. Washington D.C., U.S., January 2015.
24. *Vavrova, M.* and C. Chang. “A Framework to Integrate On-Street Bikeway Maintenance into Pavement Management Practices”. Transportation Research Record 2015. Washington D.C., U.S. January 2015.
25. Ferregut, C., H. Taboada, J. Espiritu, C. Chang, R. Cheu, N. Vargas-Hernandez, S. Vegas, E. Sanchez, G. Chang, V. Quevedo and D. Marcelo. “Developing global and Regional Sustainability Engineering Skills through a Successful Study aboard Program” Engineering Leaders Conference on Engineering Education. Doha, Qatar, November, 2014.
26. *Vavrova, M.* and C. Chang. "Environmental-Related Performance Measures Framework for Sustainable Asset Management Practices." ICTI 2014 International Conference on Transportation Infrastructure. Italy, April, 2014.
27. *Vavrova, M.* and C. Chang. "Quality Function Deployment Matrix for Sustainable Performance Measures in Asset Management." 17th International Road Federation (IRF) World Meeting. Kingdom of Saudi Arabia, November, 2013.
28. Chang-Albitres, C. and *E. Montes*. “Premature Pavement Failure due to Extraordinary Loads”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
29. Chang-Albitres, C., *D. Saenz*, W. Mertz, and F. Vásquez. “Pavement Roughness Quality Control using Inertial Profilers”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
30. Chang-Albitres, C., M. Bustos, R. Delgadillo, and L. Loria. “Applicability of the Mechanistic-Empirical Pavement Design Method AASHTO 2008 in Latinamerica”. XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 2013.
31. Chang-Albitres, C. and *E. Montes*. “Fair Division Methods for Funding Allocation”. 9th National Conference in Transportation Asset Management. California, U.S., April, 2012.
32. *Ramirez, R.* and C. Chang-Albitres. “A Stochastic Decision-Making Approach for the Metropolitan Transportation Commission Pavement Management System”. 9th National Conference in Transportation Asset Management. California, U.S., April, 2012.

33. Chang-Albitres, C., L. Quintana, and R. Aldouri., “Development of a GIS Fiber Optics Asset Management System”. 91st Annual Meeting of the Transportation Research Board. Washington D.C, U.S., January, 2012.
34. Smith, R., S. Tan, S., and C. Chang-Albitres. “Distress Data Collection Quality Management in a Regional Agency”. 8th International Conference on Managing Pavement Assets (ICMPA). Santiago de Chile, Chile, November 2011.
35. Chang-Albitres, C. “A Quest for Successful Pavements”. 2nd International Road Federation (IRF) Middle East Regional Congress. International Road Federation. Abu Dhabi, United Arab Emirates, November 2010.
36. Chang-Albitres, C. “New Mechanistic-Empirical Pavement Design Guide AASHTO 2008”. 3rd International Road Federation (IRF) Latin American Regional Congress. International Road Federation. Bogota, Colombia, November 2010.
37. Chang-Albitres, C. “State of the Art in Pavement Management Systems”. 3rd International Road Federation (IRF) Latin American Regional Congress. International Road Federation. Bogota, Colombia, November 2010.
38. *Camacho, G.*, N. Gharaibeh, C. Chang-Albitres, and R. Aldouri. “A GIS Technique for Managing Dynamic Infrastructure Data”. 89th Annual Meeting of the Transportation Research Board. Washington D.C, U.S., January, 2010.
39. Chang-Albitres, C., R. Smith, and *R. Ramirez*. “A Multiobjective Strategic Pavement Management Approach”. XV Ibero-Latin-American Asphalt Congress. Portugal, November, 2009.
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26. *"New Advancements in the Implementations of the AASHTO-MEPDG 2015"*. Keynote speaker. XVII International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 17, 2018.
27. *"Modern Tools for the Pavement Concrete Design"*. Workshop. XVII International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 18, 2018.
28. *"MTC Data Integration Peer Exchange"*. Workshop. Oakland, California, July 31 – August 3, 2018.
29. *"Asset Management 101"*. Workshop. 12th National Conference on Transportation Asset Management. TRB Asset Management Committee. San Diego, California. July 14, 2018.
30. *"Consequences of Delayed Maintenance of Pavement Networks"*. International Conference on Transport Infrastructure. Pretoria, South Africa, July 9 – 10, 2018.
31. *"Modern Methodologies for an Efficient Road Infrastructure Management"*. International Workshop. Ministry of Public Works. Santo Domingo, República Dominicana, June 27 – 28, 2018.
32. *"Advanced Structural Pavement Design"*. Workshop. Universidad Ricardo Palma. Lima, Perú. June 23, 2018.

33. "Development of Intelligent Solutions in Engineering". Keynote Conference speaker. Universidad Ricardo Palma. Lima, Perú. June 23, 2018.
34. "Pavement Design Using the MTC Peruvian Manual". Workshop. Construction Management Institute. Lima, Perú, Piura, June 12-13, 2018.
35. "Concrete Pavement Design: From the Parameters to the Structure". 9 Ibero-Latin American Congress of Concrete Pavements. Paraguay, May 24, 2018.
36. "AASHTO Mechanistic – Empirical Pavement Design and Pavement Designer for Concrete Pavement Design". Paraguay, May 23, 2018.
37. "Advanced Mechanistic-Empirical Pavement Design Methods", Workshop. Universidad EAFIT. Medellin. Colombia. April 16 - 21, 2018.
38. "Consequences of Delayed Maintenance of Highway Assets: Bridges". 2018 Transportation Research Board Meeting. Washington D.C. January 9, 2018.
39. "Sustainable Performance-Based Methodology for Strategic Metropolitan Planning" 2018 Transportation Research Board Meeting. Washington D.C. January 8, 2018.
40. "Consequences of Delayed Maintenance of Highway Assets", 55th Annual Paving and Transportation Conference, New Mexico School of Engineering. New Mexico, January 3, 2018.
41. "Models and Numerical Methods for Smart Solutions in Engineering", Keynote Speaker. 1st Engineering International Congress. Cesar Vallejo University. Lima, November 28, 2017.
42. "Factorial Pavement Design and Analysis based on Mechanistic-Empirical Methods". XIX Ibero-Latin-American Asphalt Congress. Colombia, November 2017.
43. "Serviciability Levels based on the International Roughness Index (IRI)". XIX Ibero-Latin-American Asphalt Congress. Colombia, November 2017.
44. "Challenges in the Preparation and Place of Asphalt Mixes with Polymers to Achieve a Good Pavement Performance", XIX Ibero-Latin-American Asphalt Congress. Colombia, November 2017.
45. "Road Maintenance and Preservation: MTC Highway Manual". Workshop. Construction Management Institute. Lima, Perú, November 24-25, 2017.
46. "Advanced Structural Pavement Design", Workshop. Universidad Ricardo Palma. Lima, Perú. November 11, 2017.
47. "Advanced Mechanistic-Empirical Pavement Design and Rehabilitation", Workshop. Universidad del Norte. Barranquilla, Colombia. October 30- November 04, 2017.
48. "Advanced Mechanistic-Empirical Pavement Design Methods", Workshop. Universidad EAFIT. Medellin, Colombia. October 02 - 07, 2017.

49. *"Mechanistic-Empirical Pavement Design Methods and the AASHTO MEPDG 2015"*. Workshop. Infrastructure. Construction Management Institute. Lima, Perú, August 24 -25, 2017.
50. *"Relevant Changes in the AASHTO-MEPDG 2015 and Innovations in Mechanistic-Pavement Design Methods"*. Keynote speaker. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 18, 2017.
51. *"Maintenance and Rehabilitation Techniques for Concrete Pavements"*. Workshop. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 18, 2017.
52. *"Ultrathin Concrete Pavement Overlays: Myths and Truths"*, ASOCEM, Lima, Perú, August 17, 2017.
53. *"Mechanistic-Empirical Concrete Pavement Design Manual"*, Workshop. Costa Rican Cement and Concrete Institute, Cement and Concrete Institute, Costa Rica, August 9, 2017.
54. *"Sustainable Concrete Pavements"*, Keynote Speaker. FIDELITAS University, Costa Rica, August 10, 2017.
55. *"Consequences of Delayed Maintenance of Highway Assets"*, AASHTO Subcommittee 2017 Summer Conference, Providence, Rhode Island, August 01, 2017.
56. *"Whitetopping: A True Alternative to Rehabilitate Old Pavements"*, Keynote speaker, VIII Ibero-American Concrete Pavement Congress, July 20, 2017. Guatemala
57. *"Pavement Design Criteria for Mechanistic-Empirical Methods"*, Workshop, VIII Ibero-American Concrete Pavement Congress, July 19, 2017. Guatemala
58. *"Advanced Structural Pavement Design"*, Workshop. Universidad Ricardo Palma. Lima, Perú. July 08 - 09, 2017.
59. Incorporating livability principles in the development of transportation Asset Management plans, World Conference on Pavement and Asset Management, WCPAM, Milan, Italy - June 15, 2017
60. *"Advanced Pavement Design Methods"*, Workshop. Universidad de Piura. Lima, Perú. April 01, 2017.
61. *"Advanced Mechanistic-Empirical Pavement Design Methods"*, Workshop. Universidad EAFIT. Medellin, Colombia. April 17 - 22, 2017.
62. *"New Technologies for Pavement Evaluation and Quality Control"*. Keynote Speaker. V Pavement International Meeting, Instituto Mexicano del Transporte, Queretaro Board of Civil Engineers, National Association of Independent Labs (ANALISEC), Queretaro, México, March 30, 2017.
63. *"Advanced Structural Pavement Design"*, Workshop. Universidad Ricardo Palma. Lima, Perú. December 03 - 04, 2016.

64. “Concrete Pavement Design Using the Mechanistic-Empirical Pavement Design Guide AASHTO 2008”. Workshop. Guatemala Cement and Concrete Institute, Guatemala, November 28, 2016.
65. “Sustainability for Concrete Pavements”, 7th Ibero-Latinamerican Congress for Concrete Pavements, Lima, November 25, 2016.
66. “Alternatives Solutions and Treatments for Low-Volume Roads”. XVII Congreso Argentino de Vialidad y Tránsito. Rosario, Argentina. October 25, 2016.
67. “Infrastructure Management Strategies to Improve Road Safety”. XVII Congreso Argentino de Vialidad y Tránsito. Rosario, Argentina. October 25, 2016.
68. “New Technologies for Pavement Evaluations”, Keynote Speaker. 10th Asphalt International Conference and 7th Ibero-Latin American Asphalt Seminar, Bucaramanga, Colombia. October 18, 2016.
69. “Advanced Pavement Design”, Workshop. Universidad EAFIT. Medellin, Colombia. October 03 - 10, 2016.
70. “Factors Influencing the IRI Measurements”. XV International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 19th, 2016.
71. “Roads Maintenance and Evaluation Parameters”. Workshop. XV International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 19th, 2016.
72. “Pavement Design Using the MTC Peruvian Manual”. Workshop. Construction Management Institute, Lima, Perú, Tacna, August 22-23, 2016.
73. “Development of Probability-Based Pavement Performance Curves for Pavement Management Systems”. 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8), Singapore, July 27-29, 2016.
74. Chang, C. and A. Chang. “Blended Learning Strategies for Smart Students: Why Do They Fail?”. 8th International Conference on Education and New Learning Technologies. EDULEARN16, Barcelona, Spain, July 4-6, 2016.
75. “Vulnerable User Road Safety Enhancements for Transportation Asset Management”. ASCE International Conference on Transportation and Development, Houston, June 2016.
76. “Advanced Structural Pavement Design”, Workshop. Universidad Ricardo Palma. Lima, Perú. June 11 - 18, 2016.
77. “Soluciones y tratamientos bituminosos para vías de bajo volumen de tráfico”. Workshop. Instituto de Infraestructura y Concesiones de Cundinamarca, Bogota, Colombia, May 24, 2016.
78. “Advanced Pavement Design”, Workshop. Universidad EAFIT. Medellin, Colombia. April 18 - 23, 2016.

79. “*Airport Pavement Evaluation and Management*”, Workshop, Peruvian Board of Engineers, Lima, Perú. March 4 - 5, 2016.
80. “A Hybrid Modelling Approach for Quantifying Maintenance and Rehabilitation Treatment Effectiveness of Asphalt”. 2016 Transportation Research Board Meeting. Washington D.C. January, 13, 2016.
81. “Advanced Structural Pavement Design”, Workshop. Universidad Ricardo Palma. Lima, Perú. November 28 - 29, 2015.
82. “Continue Monitoring of the Functional Pavement Condition Using Smart Mobile Devices”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
83. “Implementation of the AASHTO 2008 Mechanistic-Empirical Pavement Design Guide in Colombia and Perú”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015.
84. “Lessons Learned Using Rubberized Asphalt to Improve Pavement Performance”. XVIII Ibero-Latin-American Asphalt Congress. Argentina, November, 2015. _
85. “Design of Flexible Pavements using the Mechanistic-Empirical Pavement Design Method AASHTO 2008”. Workshop. XXIII Annual Meeting National, National Association of Independent Labs (ANALISEC), Tabasco, México, October 07, 2015.
86. “*Pavement Design Using the MTC Peruvian Manual*”. Workshop. Construction Management Institute, Lima, Perú, Huancayo, August 28-29, 2015.
87. “*Road Maintenance and Basic Solutions for Low-Volume Roads*”. Workshop. Construction Management Institute, Lima, Perú, Huancayo, August 27, 2015.
88. “Mechanistic-Empirical Pavement Design Method AASHTO 2008”. Workshop. Construction Management Institute, Lima, Perú, August 24-25, 2015.
89. “*Routine Maintenance of Highways*”. Workshop. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 21st, 2015.
90. “*Basic Solutions for Low-Volume Roads*”. Workshop. XVI International Congress of Highway Infrastructure. Construction Management Institute. Lima, Perú, August 21st, 2015.
91. “*Pavement Design Using the MTC Peruvian Manual*”. Workshop. Construction Management Institute, Lima, Perú, Lima, July 3-4, 2015.
92. “Advanced Structural Pavement Design”, Workshop. Universidad Ricardo Palma. Lima, Perú. June 27 - 28, 2015.
93. “Infrastructure Management: A Sustainable Approach”. Workshop. Inter-American Development Bank (IDB), Quito, Ecuador, June 19, 2015.
94. Texas Society of Professional Engineers (TSPE), 79th Annual Meeting. Houston, June 17-19, 2015.
95. “*Concrete Pavements and Environmental Sustainability*”, Workshop. Piura, Perú. May, 29, 2015.

96. *"Road Maintenance and Preservation"*. Workshop. Construction Management Institute, Piura, Perú, May 26-27, 2015.
97. *"Concrete Pavements and Environmental Sustainability"*, Workshop. Lima, Perú. May, 25, 2015.
98. *"Infrastructure Management and Strategies for Roadway Maintenance"*. XXX Meeting of Council of Directors of Highway Transportation Agencies in Ibero-LatinAmerica. Managua, Nicaragua, May, 22, 2015.
99. *"Pavement Asset Management Overview"*. Workshop. Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, U.S., May, 18, 2015.
100. *"Highway Development & Management (HDM-4)"*. Workshop. Ninth International Conference on Managing Pavement Assets. Blacksburg, Virginia, May, 18, 2015.
101. *"Advanced Pavement Design"*, Workshop. Universidad EAFIT. Medellin, Colombia. April 20 - 25, 2015.
102. *"The Impact of Maintenance Strategies on Highway Infrastructure: A Sustainable Approach"*. Federation of Pan-American Consultors (FEPAC). Lima, March 24, 2015.
103. *"Modern Methods for Pavement Evaluation"*. Workshop. Peruvian Board of Professional Engineers, Lima, Perú, Lima, March 20, 2015.
104. *"Road Maintenance and Preservation"*. Workshop. Construction Management Institute, Lima, Perú, Lima, March 13-14, 2015.
105. *"Pavement Design Using the MTC Peruvian Manual"*. Workshop. Construction Management Institute, Lima, Perú, Arequipa, March 10-11, 2015.
106. *"Pavement Design Using the MTC Peruvian Manual"*. Workshop. Construction Management Institute, Lima, Perú, Chiclayo, March 7-8, 2015.
107. *"Methodology to Evaluate Stabilized and Non-Stabilized Soils"*. Workshop. CORASFALTOS, Bogota, Colombia, December 04-05, 2014.
108. *"Methodology to Evaluate Stabilized and Non-Stabilized Soils"*. Workshop. CORASFALTOS, Medellin, Colombia, November 28-29, 2014.
109. *"Maintenance of Pavements and Bridges"*. Pre XVII Congreso Argentino de Vialidad y Tránsito. Buenos Aires, Argentina. November 3-6, 2014.
110. *"Pavement Design and Rehabilitation on Highway Projects"*. International Workshop. Construction Industry Bureau. Quito, Ecuador. September 19, 20, 21, 2014
111. *"Pavement Design Using the 2013 Peruvian Manual"*. Workshop. Construction Management Institute, Iquitos, Perú, August 27-28, 2014.

112. "*Pavement Quality Control*". CECATECO, Workshop. Lima, Perú, August 25-29, 2014.
113. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, August 25-26, 2014.
114. "*Road Maintenance and Preservation*". Workshop. Construction Management Institute, Lima, Perú, August 22, 2014.
115. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Piura, Perú, May 26-27, 2014.
116. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Inst, Perú, June 6-7, 2014.
117. "*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*". Workshop. Bolivian Cement and Concrete Institute, La Paz, Bolivia, May 05-07, 2014.
118. "Environmental-Related Performance Measures Framework for Sustainable Asset Management Practices." ICTI 2014 International Conference on Transportation Infrastructure. Italy, April, 2014.
119. "*Advanced Pavement Design*", Workshop. Universidad EAFIT. Medellin, Colombia. April 7 - 12, 2014.
120. "*Flexible Pavements Design and Rehabilitation using the Mechanistic-Empirical Method AASHTO 2008*". Workshop. CORASFALTOS, Bogota, Colombia, April 04-05, 2014.
121. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Lima, Perú, February 03-04, 2014.
122. "*Pavement Design Methods*", Workshop. Universidad de Piura. Lima, Perú. February 01, 2014.
123. "Civil Engineering: A Vision into the Future". I Civil Engineering International Forum, Universidad Nacional de Ingeniería, Lima, Perú, December 17, 2013.
124. "Premature Pavement Failure due to Extraordinary Loads". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November 18, 2013.
125. "Pavement Roughness Quality Control using Inertial Profilors". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November 18, 2013.
126. "Applicability of the M-E Pavement Design Method AASHTO 2008 in Latinamerica". XVII Ibero-Latin-American Asphalt Congress. Guatemala, November, 19, 2013.
127. "*Concrete Pavements as Sustainable Structures*", II International Pavement Symposium. Lima, Perú. October 18-20, 2013.
128. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Cajamarca, Perú, October 16-17, 2013.

129. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Chimbote, Perú, October 14-15, 2013.
130. "*Pavement Design Using the 2013 Peruvian Manual*". Workshop. Construction Management Institute, Ica, Perú, October 12-13, 2013.
131. "*Concrete Pavement Design Using the M-E Pavement Design Guide AASHTO 2008*". Workshop. Guatemala Cement and Concrete Institute, Guatemala, October 07-08, 2013.
132. "Framework to Analyze Vehicle Miles Traveled Fee Implementation", XI European Transport Congress, Prague, Czech Republic, September 19-20, 2013.
133. "*Mechanistic-Empirical Pavement Design Guide AASHTO 2008*". Workshop. Construction Management Institute, Lima, Perú, September 02-03, 2013.
134. "*Concrete Pavements, Sustainable Design, Maintenance and Rehabilitation*" (Keynote Speaker), XII International Congress on Highway Infrastructure, Lima, Perú, August 30-31, 2013
135. "*Pavement Design and Rehabilitation*", Workshop. Universidad Ricardo Palma, Lima, Perú, August 14-21, 2013.
136. "*Design and Rehabilitation of Rigid and Flexible Pavements for Roads*", Workshop. Tacna, Perú, June 24-25, 2013.
137. "*Advanced Pavement Design*", Workshop. Universidad EAFIT. Medellin, Colombia. April 15 - 19, 2013.
138. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Cusco, Perú, March 22-23, 2013.
139. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Trujillo, Perú, March 18-19, 2013.
140. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Huaraz, Perú, March 15-16, 2013.
141. "*New Techniques for the Design and Rehabilitation of Flexible and Rigid Pavements on Highway Projects*". Workshop. Construction Management Institute, Lima, Perú, March 11-13, 2013.
142. "*Engineering in Practice for a Sustainable Healthy Living Community Learning through Professional Practice*". Sun Conference in Teaching and Learning. University of Texas at El Paso, El Paso, Texas, U.S., February 28 – March 1, 2013.
143. "*State of the Art in Pavement Evaluation and Management*" (Keynote Speaker). 41st HOB Anniversary Conference. HOB, Lima, Perú, October 25 – 26, 2012.

144. *"Applicability of the Mechanistic-Empirical Pavement Design Method AASHTO 2008 (MEPDG to Performance-Based Contracts"*. Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
145. *"Pavement Rehabilitation and Management Techniques to Preserve Levels of Service"*. Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
146. *"Equivalent Pavement Designs in Performance-Based Bids"*. Seminar. Inter-American Development Bank (IDB), San Jose, Costa Rica, November 15-16, 2012.
147. *"2012 Soils, Geology, Geotechnical, and Pavements Peruvian Manual and the MEPDG AASHTO 2008"* (Keynote Speaker), XI International Congress on Highway Infrastructure, Lima, Perú, September 14-15, 2012.
148. *"Pavement Rehabilitation and Management Techniques to Preserve Levels of Service"*. Workshop. XI International Congress on Highway Infrastructure, Lima, Perú, September 14-15, 2012.
149. *"Asset Management Principles with Focus on Implementation"*. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
150. *"The State of the Art in the Implementation of Road Management System"*. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
151. *"Fair Division Models for Funding Allocation"*. 4th Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Miami, Florida, September 11-13 2012.
152. *"Applied to Andean Countries"*. *Best Road Engineering Practices 1st*. Andean Highway Congress. International Road Federation. Lima, Perú. August 20, 21, 22, 2012.
153. *"Mechanistic-Empirical Design Method AASHTO 2008 (MEPDG) Applied to High-Altitude Pavements"*. 1st Andean Highway Congress. International Road Federation. Lima, Perú. August 20, 21, 22, 2012.
154. *"Advanced Pavement Design"*, Workshop. Universidad EAFIT. Medellin, Colombia. May 7- 11, 2012.
155. *"A Proposal for a Stochastic Pavement Management System of the San Francisco California Bay Metropolitan Transportation Commission"*, Workshop. International Congress of Investigation of AcademiaJournals.com, Juarez, Chihuahua, Mexico, April 24-27 2012.
156. *"Mechanistic-Empirical Pavement Design Method AASHTO 2008"*. Workshop. Construction Management Institute, Tarapoto, Perú, March 26-27, 2012.
157. *"Pavement Design"*, Workshop. Universidad de Piura. Lima, Peru. March 9- 10, 2012.

158. *“Pavement Management”*. Workshop. 3^{er} Middle East Regional Conference, International Road Federation, Manama, Kingdom of Bahrain, January 8-9, 2012.
159. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Huancayo, Perú, December 13-14, 2011.
160. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Cuzco, Perú, December 9-10, 2011.
161. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Piura, Perú, December 06-07, 2011.
162. *“Concrete Pavements and the Mechanistic-Empirical Pavement Design Guide – AASHTO 2008”*. Workshop. Cementos Progreso, Guatemala, November 09-10, 2011.
163. *“The State of the Art on Pavement Management”*, 3rd Annual Executive Seminar *Preserving Our Highway Assets*, International Road Federation, Orlando, Florida, August 2011.
164. *“Successful Pavements, Are you a Believer?”*, 3rd Annual Executive Seminar *Preserving Our Highway Assets Seminar*, International Road Federation, Orlando, Florida, August 2011.
165. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Arequipa, Perú, June 17-18, 2011.
166. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Trujillo, Perú, June 14-15, 2011.
167. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Tacna, Perú, June 10-11, 2011.
168. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. Construction Management Institute, Lima, Perú, June 07-08, 2011.
169. *“Urban Concrete Pavements”*, Conference, ASOCCEM, Chiclayo, Peru, May 11-12, 2011.
170. *“Urban Concrete Pavements”*, Conference, ASOCCEM, Trujillo, Peru, May 09-10, 2011.
171. *“Urban Concrete Pavements”*, Conference, ASOCCEM, Arequipa, Peru, March 14-15, 2011.
172. *“Urban Concrete Pavements”*, Conference, ASOCCEM, Lima, Peru, March 16-17, 2011.
173. *“Pavement Management”*. Workshop. Second IRF Middle East International Conference. International Road Federation. Abu Dhabi, United Arab Emirates, November 2010.
174. *“Mechanistic-Empirical Pavement Design Guide AASHTO 2008”*. Workshop. International Road Federation. Bogota, Colombia, November 2010.
175. *“Economic Analysis for Highway Project Investments”*, Workshop. Universidad de Piura. Perú. October 2010.

176. *"The State of the Art on Pavement Management"*, 2nd Annual Executive Seminar Preserving Our Highway Assets, International Road Federation, Orlando, Florida, August 2010.
177. *"What is a Successful Pavement?"*, 2nd Annual Executive Seminar Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2010.
178. *"Pavement Design"*, Workshop. Universidad de Piura. Peru. July 2010.
179. *"Mechanistic-Empirical Pavement Design Guide – AASHTO 2008"*. Cement and Concrete Costarican Institute, San Jose, Costa Rica, June 2010.
180. *"Equivalent Pavement Designs: Rigid and Flexible"*. Cement and Concrete Costarican Institute, San Jose, Costa Rica, June 2010.
181. "Initial Findings on Discrepancies in IRI, PSR, and PCI". 2018 Transportation Research Board Meeting. Washington D.C. January 10, 2010.
182. *"Guidelines for the Development of Equivalent Pavement Designs: Rigid and Flexible in the Bidding Process"* (Keynote speaker), 7th Transport Infrastructure International Congress, Lima, Perú, December 2009.
183. "Asset Management Tools for Right-of-Way Advanced Acquisition", 8th National Conference on Transportation Asset Management", Conference, Portland, Oregon, October 2009.
184. *"Pavement Design State of the Art"*, Workshop, Universidad de Piura, Lima, Perú, August 2009.
185. "What is a Successful Pavement?", Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
186. "Considerations for Flexible vs. Rigid Pavement Designs? Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
187. "The State of the Art on Pavement Management", Preserving Our Highway Assets Seminar, International Road Federation, Orlando, Florida, August 2009.
188. *"Pavement Design"*, Workshop. Universidad de Piura. Peru. August 2009.
189. *"Soils Stabilization"*, Catholic University, Santiago de Chile, Chile, May 2009.
190. *"Pavement Design and Soils Stabilization"*, Workshop, Construction Management Institute, Cusco, Peru, May 2009.
191. *"Pavement Management Fundamentals"*, Workshop, California Pavement Preservation Conference, Oakland, California, April 2009.
192. *"Equivalent Designs of Rigid and Flexible Pavements in the Bidding Process"*, Workshop, College of Engineers, Peru, March 16-17, 2009.

193. *"Development and Management of Road Infrastructure: a Challenge to Our Present"*, Anniversary of LEMC International Conferences, Piura, Peru, November 8, 2008.
194. *"Highly Successful Pavements, Experience in Texas"*, (Keynote speaker), VII International Infrastructure Congress, August 28, 2008.
195. "Pavement Design Fundamental Concepts and Applications", Binational Workshop Mexico-U.S. on Paving and Health, Ciudad Juarez, Mexico, December 2007.
196. "Advance Acquisition of Right of Way: When to Buy, What to Buy", Seventh National Conference on Transportation Asset Management, New Orleans, Louisiana, U.S. November 2007.
197. "Better Practices and Tools for Managing Road Assets", First Latin-American Regional Conference, International Road Federation, Fort Lauderdale, Florida, U.S., October 2007.
198. *"Feasibility Study for Highway Projects: Concepts and Tools"* (Keynote speaker), VI International Infrastructure Congress, Construction Management Institute, Lima, Perú, August 2007.
199. *"State of the Art in Pavement Evaluation"* (Keynote speaker), Pre-XV Argentine Congress on Traffic and Road Safety in Buenos Aires, Argentina, August 2007.
200. *"State of the Art in Pavement Design"*, Workshop, Pre-VI Congress of Road Infrastructure, May 4-5, 2007.
201. *"New Design Techniques and Pavement Rehabilitation"*, Iquitos, Peru, April 28, 2007.
202. *"Concrete Pavements in the United States of America"*, Workshop, Lima, Peru, October 28, 2006.
203. *"Pavement Management Systems"*, V International Highway Infrastructure Congress, Construction Management Institute, Lima, Perú, July 7-8, 2006.
204. *"Implementation of a Mechanistic Pavement Design Guide NCHRP 1-37A in Texas"* (Keynote speaker), IV Congress on Highway Infrastructure, Construction Management Institute, Lima, Perú, September 2005.
205. "Development of an Analysis Tool to Assess the Viability of Toll Highway Projects Paper and Presentation" (Keynote Speaker), IV Congress on Highway Infrastructure, Lima, Perú, September 2005.
206. "Pavement Design: A Vision into the Future – AASHTO Guidelines 2002", Workshop , Peruvian Board of Engineers, Lima, Perú, 2002
207. "Asphalt in the Construction of Flexible Pavements", Workshop Peruvian Road Association, Lima, Perú, 2001.

CREATIVE WORK

(List date and type of work and/or place of presentation. If the creative work has received recognition, such as design award, competition prize, exhibition or publication by others, or critical review, indicate the level of recognition as well as the peer-review context and process.)

New Programs and Courses Developed

“Engineering in Practice for a Sustainable Healthy Living Community: 21st Century Engineering Challenges”. College of Engineering. The program seeks to provide students the opportunity to interact with professional engineers extending their education beyond the classroom. The program merges education, research, and professional practice to propose solutions to engineering problems. Started August 2010 (engineeringinpractice.utep.edu).

The program received the NCEES Engineering Award for Connecting Professional Practice and Education award from National Council of Examiners for Engineering and Surveying in three consecutive years for the projects:

“Multidisciplinary Design of a Sustainable, Environmentally Friendly, and Affordable House”, June 2013.

“Multidisciplinary SMART Design of Fire Station 513”, June 2012.

“Development of a Sustainable Infrastructure Management System for a City”, June 2011.

WORKS IN PROGRESS

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

Other completed papers

1. Chang, C., and M. Vavrova. “Incorporating Vulnerable Road User Safety into the Transportation Asset Management Decision-Making Process to Mitigate Pedestrian Fatalities”. (In Progress).
2. Chang, C., and *O. González*. “Quantification of the Impact of Asphalt Pavement Conditions on Gas Emissions”. (In Progress).
3. *Vavrova, M.*, C. Chang, and M. Medina. “Sustainable Performance-Based Methodology for Strategic Metropolitan Planning”. (In Progress).
4. *Makahaube, J.* and C. Chang. “An Approach to Determine Local Government Project Management Performance Level”. (In Progress).
5. Makahaube, J. and C. Chang. “Knowledge Area Assessment of Project Management Processes to Improve Local Government Performance Level”. (In Progress).
6. Makahaube, J., C. Chang, and E. Smith. “Development of a Project Management Measuring Method Using System Dynamics”. (In Progress).

Research in Progress

1. *StreetSaver Training and Guidance Services*, January 1, 2019 – December 31, 2020. Metropolitan Transportation Commission in California (MTC) subcontracted through Nichols Consulting Engineers, \$ 194,170.
2. North Texas Bicycle and Pedestrian Analysis, September 1, 2018 – August 31, 2020. Texas Department of Transportation, \$249,500.

3. Integration of Vulnerable User Road Safety in Transportation Asset Management Practices.
4. A Multi-Objective Sustainable Model for Transportation Asset Management Practices.
5. A Probabilistic Performance-Based Multi-Scenario Approach for Pavement Management Decisions.

Grant Proposals (list title of project, agency receiving proposal, and date of submission)

1. Improve Data Quality for Automated Pavement Distress Data Collection. Texas Department of Transportation (TxDOT), March 2019. \$ 289,395.
2. Identify Risk Factors that Lead to Increase in Fatal Pedestrian Crashes and Develop Countermeasures to Reverse Trend. Texas Department of Transportation (TxDOT), May 2019. \$ 258,073.
3. *Developing Decision Tree Incorporating Surface Conditions*, Texas Department of Transportation (TxDOT), January 2019. \$ 258,073.
4. *Guidance on Pavement Management Systems*, Metropolitan Transportation Commission in California (MTC) through Nichols Consulting Engineers, December 2018, \$ 83,363.
5. *Developing Multidisciplinary Global Skills to Prepare Engineering Students for Leading Sustainable Infrastructure Solutions*. U.S. – Argentina Innovation Competition. Partners of the Americas Foundation and 100,000 Strong in the Americas Program. U.S. Department of State. April 2018, \$ 76,380.
6. North Texas Bicycle and Pedestrian Analysis. Texas Department of Transportation, April 2018, \$249,500.
7. Calibration of Bridge Element Based Deterioration Models. Texas Department of Transportation, April 2018, \$244,999.
8. Determine Proper Selection of Ride Quality Pay Adjustment Schedule and Re-evaluation of Current Bonus/Penalty Structure. Texas Department of Transportation, April 2018.
9. *Quantification of the Performance of Preventive Maintenance and Rehabilitation Strategies*. Texas Department of Transportation, April 2018, \$ 299,115.
10. *Learning Together Engineering, Innovation and Leadership Skills to Mitigate the Social and Economic Impacts Due to Extreme Events*. Partners of the Americas Foundation and 100,000 Strong in the Americas Program. U.S. Department of State. September 2017, \$ 25,000.
11. *Implementation of a Sustainable Performance-Based Methodology to Address the Impact of Climate Changes on the “State of Good Repair” of Transportation Infrastructure*. SPTC Research, Education and Outreach Support, University of Oklahoma and U.S. Department of Transport Network, August 2017, \$ 45,000.

12. *Development of an Active Transportation System Planning Methodology to Enhance Multimodal Connectivity in the El Paso MPO Region*, El Paso Metropolitan Planning Organization, July 2017, \$121,277.
13. Development of a Web-based Application for Visualizing the Performance Measures of the Montana Corridor as a Pilot Study, El Paso Metropolitan Planning Organization, August, 2017, \$ 50,102.
14. Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD), METROPIA, June 2017, \$ 327,000.
15. *Vulnerable User Road Safety Enhancements for Transportation Asset Management*, June 2017. Center for Transportation, Environment, and Community Health (CTECH), \$ 56,308.
16. Center for Transportation, Environment, and Community Health (CTECH), Cornell University (with Kelvin Cheu). November 2016, \$ 280,440.
17. *Development of a Sustainable Performance-Based Methodology for Strategic Metropolitan Planning Based on MAP-21*, El Paso Metropolitan Planning Organization. February 2016, \$ 144,000.
18. Guide for Timing of Asphalt-Surfaced Pavements Preservation (NCHRP), NCHRP Project 14-38, National Cooperative Highway Research Program. December 2015, \$ 300,000 (with Linda Pierce at Nichols Consulting Engineers).
19. *Innovative Tools and Techniques in Identifying Highway Safety Improvement Projects*, Texas Department of Transportation (TxDOT) October 2015, \$ 324,551 (with Aldouri and Smith at UTEP, and Kockelman at UT Austin).
20. *Identification of Effective Next Generation Pavement Performance Measures and Asset Management Methodologies to Support MAP-21*, July 2015, \$ 112,880 (with Philip Tiewater at Opus International Consultants Inc., and Margot Yapp at Nichols Consulting Engineers).
21. Developing a Surface Drainage Rating for inclusion in TxDOT's Asset Management System, Texas Department of Transportation (TxDOT), April 2015, \$174,387 (with Tandon at UTEP).
22. *Development of a Methodological Framework for Cross-Asset Resource Allocation to Support Infrastructure Management*, Texas Department of Transportation (TxDOT) April 2015, \$349,497 (with Taboada, Espiritu, Fullerton at UTEP).
23. *Effect of Preservation on Pavement Performance and Life Prediction in Pavement Design*, Texas Department of Transportation (TxDOT), August 2014, \$300,512 (with Nazarian and Abdallah at UTEP).
24. Sustainable Perpetual Asphalt Pavements and Comparative Analysis of Lifecycle Cost to traditional 20-year Pavement Design, Texas Department of Transportation (TxDOT), August 2014, \$406,732 – UTEP 182,715 (with Ashtiani at UTEP, and Bhasin and Yetkin at UT-Austin-CTR).

25. Cost-Effective Alternatives to Seal Coats, Texas Department of Transportation (TxDOT), August 2014, \$448,765 – UTEP 134,983 (with Tandon at UTEP, and Yetkin and Bhasin at UT-Austin-CTR).
26. *A Multi-Objective Sustainable Model for Transportation Asset Management Practices*, Tier 1 University Transportation Center Consortium led by Rutgers University, November, 2013 - UTEP \$90,000.
27. *Quantification of the Impact of a Road's Condition on Emissions*, Texas Department of Transportation (TxDOT), July 2013, \$288,879 - UTEP \$ 168,879 (with Nazarian and Abdallah at UTEP, and Yu, Qiao, and Azimi at Texas Southern University).
28. *Consequences of Delayed Maintenance of Highway Assets*, National Cooperative Research Program (NCHRP), NCHRP Project 14-20A, June 2013, \$ 450,000 – UTEP \$ 249,500 (with Yan, Nazarian and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Roberts at Spy Pond Partners).
29. *Developing of a Sustainable Asset Capital Improvement Planning Model (ACIPM) for the City of El Paso*, City of El Paso, December 2012, \$ 288,418 (with Aldouri and Fullerton).
30. *Developing a Pavement-Maintenance Database System*, National Cooperative Research Program (NCHRP), NCHRP Project 14-31, December 2012, \$ 250,000 – UTEP \$ 130,000 (with Nazarian, and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Rafiq and Roberts at Deighton Associates).
31. *Cross-Asset Resource Allocation and the Impact on System Performance*, National Cooperative Research Program (NCHRP), NCHRP Project 08-91, October 2012, \$ 500,000 – UTEP \$ 260,000 (with Fullerton, Taboada, Espiritu, and Nazarian at UTEP; Jackson, Yapp, and Senn at Nichols Consulting Engineers, Chtd; and White, Katara, Muench, and Latham at Pavia Systems, Inc.).
32. *Calibration and Validation of Chasqui Profiler*, February 2012, \$ 20,600 – UTEP \$8,554 (with Nazarian at UTEP, and Williams at Fugro).
33. *Best Practices in GIS-Based Asset Management*, National Cooperative Research Program (NCHRP), NCHRP Project 08-87, November 2011, \$ 500,000 – UTEP \$ 293,853 (with Aldouri and Nazarian at UTEP, and Williams and others at Fugro).
34. USA/Peru Study broad Program: Global and Regional Sustainability Engineering. April 2012, \$ 225,000 (with Ferregut as Principal Investigator, Taboada, Espiritu, Vargas, and Cheu).
35. *Validation of TxDOT Flexible Pavement Skid Prediction Model*, Texas Department of Transportation (TxDOT), March 2012, \$340,506 – UTEP \$ 189,911 (with Nazarian, Tandom, Garibay, and Rocha at UTEP, and Prozzi, Murphy, and Smit, UT-Austin-CTR).
36. *Development of a Procedure for Gathering and Storing Pavement Layer and Work History Information*, Texas Department of Transportation (TxDOT), March 2012, \$285,121 (with Nazarian, Tandon, Aldouri, and Abdallah).

37. *Evaluate the Improvement in Pavement Ride, Distress and Condition Based on Different Treatment Types*, Texas Department of Transportation (TxDOT), March 2011, \$ 338,984- UTEP \$ 170,572 (with Nazarian and Abdallah at UTEP, and Wimsatt at the Texas Transportation Institute, Texas A&M).
38. *Quantitative Relationship Between Safety and Reduced Roadway Condition Maintenance*, Texas Department of Transportation (TxDOT), March 2011, \$ 195,155 (with Hernandez, Nazarian, Aldouri).
39. Using “Fair Division” Methods for Allocating Transportation Funds, Texas Department of Transportation (TxDOT), March 2011, \$ 187,185 (with Taboada, Espiritu, and Fullerton).
40. *Performance Life of Various HMA Mixes in Texas*, Texas Department of Transportation (TxDOT), March 2011, \$ 306,000 (with Nazarian as Principal Investigator, Tandon, Abdallah, Celaya).
41. *Evaluation of Pavement Rutting and Distress Measurements*, Texas Department of Transportation (TxDOT), May 2010, \$ 287,778 (with Nazarian).
42. *Management Science Applications for TxDOT – Scoping Study*, Texas Department of Transportation (TxDOT), March 2010, \$ 199,267 – UTEP \$ 22,292 (with Waller and others at the University of Texas in Austin, and Walewski at Texas A&M).
43. *A Comprehensive Evaluation of the Development of a Level of Performance and Level of Service for TxCAP Evaluation Systems*, Texas Department of Transportation (TxDOT), March 2010, \$ 330,223 - UTEP \$ 59,474. (with Texas A&M and University of Texas at San Antonio).
44. *Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure*, National Highway Cooperative Highway Research Program (NCHRP), February 2010, \$1,000,000 - UTEP \$ 50,313 (with Nazarian at UTEP, Anderson and others at Texas A&M and University of Houston).
45. *Evaluation of Skid Measurements Used by TxDOT*, March 2010, Texas Department of Transportation (TxDOT), March 2010, \$ 327,039 – UTEP 232,469 (with Nazarian at UTEP, and Dessouky and Weissmann at UTSA).
46. *StreetSaver Training and Guidance Services*, November 2009, Metropolitan Transportation Commission (MTC-California), November 2009, \$ 97,320.22 (with Nichols Consulting Engineers, Chtd.).
47. *Development of a GIS Fiber Optics Asset Management System*, City of El Paso, October 2009, \$94,415 (with Aldouri and Nazarian).
48. *Implementation of ROW Acquisition Decision-Support-Tools*, Texas Department of Transportation (TxDOT), August 2009, \$ 74,2092 – UTEP \$ 22,198 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M).

49. Development of a Performance Measurement Based Methodology to Objectively Compare Operational Improvements with Capacity Additions, Texas Department of Transportation (TxDOT), March 2009, \$ 177,577.
50. Trans-Atlantic Education System in Transportation Sciences and Logistics, U.S. Department of Education Systems, March 2009, \$ 191,681 (with University of Arizona, Czech Technical University and University of Zilina).
51. *Asset Management for Safety and Operations*, Texas Department of Transportation (TxDOT), August 2008, \$ 242, 449 (with Texas Southern University).

FUNDED RESEARCH

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

1. *Guidance on Pavement Management Systems*, February 2016 – December 15, 2019. Metropolitan Transportation Commission in California (MTC) subcontracted through Nichols Consulting Engineers, \$ 187,000.
2. *Development of an Active Transportation System Planning Methodology to Enhance Multimodal Connectivity in the El Paso MPO Region*, September 1, 2017 – August 31, 2019. El Paso Metropolitan Planning Organization, \$121,277. (with Vavrova at UTEP).
3. *Vulnerable Road User Safety Enhancements for Transportation Asset Management*, August 1, 2017 – January 31, 2019. Center for Transportation, Environment, and Community Health, Cornell University and U.S. Department of Transport, \$ 56,308. (with Rodriguez at UTEP).
4. Development of a Web-based Application for Visualizing the Performance Measures of the Montana Corridor as a Pilot Study, September 1 2017 – August 31, 2018. El Paso Metropolitan Planning Organization, \$181,410. (with Abdallah as Principal Investigator and Vavrova at UTEP).
5. *A Sustainable Performance-Based Methodology to Address the Impact of Climate Changes on the “State of Good Repair” of Transportation Infrastructure*, November 1, 2016 – December 31, 2017. SPTC Research, Education and Outreach Support, University of Oklahoma and U.S. Department of Transport. \$45,000.
6. Cost-Effective Alternatives to Seal Coats, Texas Department of Transportation (TxDOT), January 2015 – August 2017, \$448,765 – UTEP 134,983 (with Tandon at UTEP, and Bhasin at UT-Austin-CTR).
7. *Consequences of Delayed Maintenance of Highway Assets*, NCHRP Project 14-20A, December 9, 2013 - April, 2017. National Cooperative Highway Research Program, \$ 450,000 – UTEP \$ 249,500 (with Nazarian and Abdallah at UTEP; Yapp and Pierce at Nichols Consulting Engineers, Chtd; and Roberts at Spy Pond Partners).

8. *Development of a Sustainable Performance-Based Methodology for Strategic Metropolitan Planning Based on MAP-21*, May 31 2016 – August 31, 2017. El Paso Metropolitan Planning Organization, \$144,473. (with Vavrova at UTEP).
9. *Quantification of the Impact of a Road's Condition on Emissions*, Texas Department of Transportation (TxDOT), July 1, 2014- June 30, 2016. \$288,879 - UTEP \$ 168,879 (with Nazarian and Abdallah at UTEP, and Yu, Qiao, and Azimi at Texas Southern University).
10. *Guidance on Pavement Management Systems*, February 2010 – December 2016. Metropolitan Transportation Commission in California (MTC) subcontracted through Nichols Consulting Engineers, \$ 366,620.
11. USA/Peru Study Abroad Program: Global and Regional Sustainability Engineering, September 2012 – July 2015. United States Department of State. \$ 250,000 (with Ferregut as Principal Investigator, Cheu Espiritu, Taboada, and Vargas).
12. Center for Advanced Infrastructure and Transportation (CAIT) Tier 1 UTC Consortium Led by Rutgers, The State University of New Jersey, January 1, 2012 - January 31, 2014. RUTGERS UNIVERSITY. \$ 150,000 (with Nazarian as Principal Investigator, Cheu, Carrasco, Tandon, Hernandez).
13. Collection of Materials and Performance Data for the Texas Flexible Pavements and Overlays, 2010 – August 2015. Texas Department of Transportation (TxDOT), \$ 1'831,711 – UTEP \$ 599,700 (with Nazarian as Principal Investigator at UTEP; Walubita and others at the Texas Transportation Institute).
14. *A Multi-Objective Sustainable Model for Transportation Asset Management Practices*, January 15, 2014 - December 31, 2015. Tier 1 University Transportation Center Consortium led by Rutgers University, \$ 90,000.
15. Performance Life of Various HMA Mixes in Texas, September 2011- August 2014. Texas Department of Transportation (TxDOT), March 2011. \$ 306,000 (with Nazarian as Principal Investigator, Tandon, Abdallah, Celaya).
16. Improvement of Construction Quality Control by Using Intelligent Compaction Technology for Base and Soil, November 2012- November 2013. Texas Department of Transportation (TxDOT), November 2012, \$ 212,094 (with Nazarian as Principal Investigator, Carrasco, Aldouri, Marshall).
17. *Evaluate the Improvement in Pavement Ride, Distress, and Condition Based on Different Treatment Types*, September 2011 – August 2013. Texas Department of Transportation (TxDOT). \$ 338,984 - UTEP \$ 170,572 (with Nazarian, and Abdallah at UTEP, Wimsatt and others at the Texas Transportation Institute).
18. *Using Fair Division Methods for Allocating Funds*, September 2011 – August 2013. Texas Department of Transportation (TxDOT). \$ 187,185 (with Taboada, Espiritu, and Fullerton at UTEP).
19. El Paso Border Master Plan, April 2012 – April 2013, Texas Department of Transportation (TxDOT), \$ 250,000 (with Hernandez as Principal Investigator).

20. *Validation and Calibration of Chasqui Profiler, August 2012 – December 2012. Fugro Consultants, \$ 8,554 (with Nazarian)*
21. *Implementation of New Pavement Performance Prediction Models in PMIS, October 2011 - August 2012. Texas Department of Transportation (TxDOT). \$ 9,100. (with Wimsatt and others at the Texas Transportation Institute).*
22. *Long-Range Strategic Issues Affecting Preservation, Maintenance, and Renewal of Highway Infrastructure, June 2010 – August 2012, National Highway Cooperative Highway Research Program (NCHRP), \$1,000,000 - UTEP \$ 50,313 (with Nazarian at UTEP, Anderson and others at Texas A&M and University of Houston).*
23. *Management Science Applications for TxDOT – Scoping Study, September 2010 – August 2011 Texas Department of Transportation (TxDOT), \$ 199,267 – UTEP \$ 22,292 (with Waller and others at the University of Texas in Austin, and Walewski at Texas A&M).*
24. *Evaluation and Development of Pavement Scores, Performance Models and Needs, September 2008 – August 2011, Texas Department of Transportation (TxDOT), \$768,716 – UTEP 206,758 (with Nazarian and Abdallah; Wimsatt, Freeman, Scullion, and Gharaibeh at Texas Transportation Institute; and Papagiannakis and Weissmann at UTSA).*
25. *El Paso Regional Ports of Entry Operations Plan, June 2010 – June 2011, Texas Department of Transportation (TxDOT), \$ 90,374 (with Hernandez as Principal Investigator).*
26. *Implementation of ROW Acquisition Decision-Support-Tools, September 2009 – August 2010, Texas Department of Transportation (TxDOT), \$ 74,209 – UTEP \$ 22,198 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M).*
27. *Development of a GIS Fiber Optics Asset Management System, December 2009 – June 2011, City of El Paso, \$119,280 (with Aldouri and Nazarian).*
28. *Technical and Training for Metropolitan Transportation Commission’s Pavement Management, October 2008, December 2009, Metropolitan Transportation Commission in California (MTC), \$ 40,354 (subcontract to Texas A&M Research Foundation).*
29. *Integrating the Transportation System with a University Campus Transportation Master Plan, Texas Department of Transportation (TxDOT), May 2009 – August 2009, \$ 60,886, (with Cheu as Principal Investigator, and Aldrete-Sanchez at Texas Transportation Institute).*
30. *Asset Management – Texas Style, September 2008 – August 2009, Texas Department of Transportation (TxDOT), \$ 107,950 - UTEP \$ 41,500 (with Krugler, Feldman, and Butenko at Texas Transportation Institute and Texas A&M).*
31. *Enhancements to El Paso’s GIS based Infrastructure Management Systems, August 2008 – June 2009, City of El Paso, \$ 106,015.*

32. *Considerations for Rigid vs. Flexible Pavement Designs When Allowed as Alternate Bids*, November 2007- December 2008, Texas Department of Transportation (TxDOT), \$120,000 - UTEP \$ 17,601 (with Wimsatt, Scullion, Freeman, and Krugler at Texas Transportation Institute).
33. Synthesis Study on Variable Asphalt Shot Rates for Seal Coats, Texas Department of Transportation (TxDOT), September 2007 – August 2008, \$78,654 (with Krugler at Texas Transportation Institute).
34. ROW Real Property Asset Management Architecture, Texas Department of Transportation (TxDOT), September 2007 – August 2008, \$ 282,175 (with Quiroga at Texas Transportation Institute).
35. *Program to Support the Development of Long-Lasting Pavement Technology for Roads in Paraguay*, Inter-American Development Bank (IDB) and Unites States Trade Development Agency (USTDA), May 2007 – June 2008, \$ 362,432. (Texas Transportation Institute).
36. A Data Base for Successful Pavement Sections in Texas – Including Both Experimental and Non-Experimental Pavements, Texas Department of Transportation (TxDOT), September 2006 – August 2007, \$ 353,033 (with Krugler at Texas Transportation Institute).
37. Develop a Knowledge Management System for TxDOT Pavement-Related Corporate Knowledge, Texas Department of Transportation (TxDOT), September 2005 – August 2006, \$ 228,146 (with Krugler at Texas Transportation Institute and Fults at Center of Transportation Research)
38. Estimating Revenues Using a Toll Viability Screening Tool, Texas Department of Transportation (TxDOT), September 2003 – August 2004 (with Stockton and Smith at Texas Transportation Institute and Texas A&M).

PROPOSALS SUBMITTED BUT NOT FUNDED

(List title of project, funding agency, project dates, and amount of requested funding)

1. Improve Data Quality for Automated Pavement Distress Data Collection. Texas Department of Transportation (TxDOT), March 2019. \$ 289,395.
2. Identify Risk Factors that Lead to Increase in Fatal Pedestrian Crashes and Develop Countermeasures to Reverse Trend. Texas Department of Transportation (TxDOT), May 2019. \$ 258,073.
3. *Developing Decision Tree Incorporating Surface Conditions*, Texas Department of Transportation (TxDOT), January 2019. \$ 258,073.
4. Calibration of Bridge Element Based Deterioration Models. Texas Department of Transportation, April 2018, \$244,999.
5. Determine Proper Selection of Ride Quality Pay Adjustment Schedule and Re-evaluation of Current Bonus/Penalty Structure. Texas Department of Transportation, April 2018,
6. *Quantification of the Performance of Preventive Maintenance and Rehabilitation Strategies*. Texas Department of Transportation, April 2018, \$ 299,115

7. *Learning Together Engineering, Innovation and Leadership Skills to Mitigate the Social and Economic Impacts Due to Extreme Events*. Partners of the Americas Foundation and 100,000 Strong in the Americas Program. U.S. Department of State. September 2017, \$ 25,000.
8. Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD), METROPIA, June 2017, \$ 327,000.
9. Guide for Timing of Asphalt-Surfaced Pavements Preservation (NCHRP), NCHRP Project 14-38, National Cooperative Highway Research Program. December 2015, \$ 300,000 (with Linda Pierce at Nichols Consulting Engineers).
10. *Innovative Tools and Techniques in Identifying Highway Safety Improvement Projects*, Texas Department of Transportation (TxDOT) October 2015, \$ 324,551 (with Aldouri and Smith at UTEP, and Kockelman at UT Austin).
11. *Identification of Effective Next Generation Pavement Performance Measures and Asset Management Methodologies to Support MAP-21*, July 2015, \$ 112,880 (with Philip Tiewater at Opus International Consultants Inc., and Margot Yapp at Nichols Consulting Engineers).
12. Developing a Surface Drainage Rating for inclusion in TxDOT's Asset Management System, Texas Department of Transportation (TxDOT), April 2015, \$174,387 (with Tandon at UTEP).
13. *Development of a Methodological Framework for Cross-Asset Resource Allocation to Support Infrastructure Management*, Texas Department of Transportation (TxDOT) April 2015, \$349,497 (with Taboada, Espiritu, Fullerton at UTEP).
14. *Effect of Preservation on Pavement Performance and Life Prediction in Pavement Design*, Texas Department of Transportation (TxDOT), August 2014, \$300,512 (with Nazarian and Abdallah at UTEP).
15. Sustainable Perpetual Asphalt Pavements and Comparative Analysis of Lifecycle Cost to traditional 20-year Pavement Design, Texas Department of Transportation (TxDOT), August 2014, \$406,732 – UTEP 182,715 (with Ashtiani at UTEP, and Bhasin and Yetkin at UT-Austin-CTR).
16. *Developing of a Sustainable Asset Capital Improvement Planning Model (ACIPM) for the City of El Paso*, City of El Paso, December 2012, \$ 288,418 (with Aldouri and Fullerton).
17. *Developing a Pavement-Maintenance Database System*, National Cooperative Research Program (NCHRP), NCHRP Project 14-31, December 2012, \$ 250,000 – UTEP \$ 130,000 (with Nazarian, and Abdallah at UTEP; Jackson, and Yapp at Nichols Consulting Engineers, Chtd; and Rafiq and Roberts at Deighton Associates).
18. *Cross-Asset Resource Allocation and the Impact on System Performance*, National Cooperative Research Program (NCHRP), NCHRP Project 08-91, October 2012, \$ 500,000 – UTEP \$ 260,000 (with Fullerton, Taboada, Espiritu, and Nazarian at UTEP; Jackson, Yapp, and Senn at Nichols Consulting Engineers, Chtd; and White, Katara, Muench, and Latham at Pavia Systems, Inc.).
19. *Calibration and Validation of Chasqui Profiler*, February 2012, \$ 20,600 – UTEP \$8,554 (with Nazarian at UTEP, and Williams at Fugro).

20. *Best Practices in GIS-Based Asset Management*, National Cooperative Research Program (NCHRP), NCHRP Project 08-87, November 2011, \$ 500,000 – UTEP \$ 293,853 (with Aldouri and Nazarian at UTEP, and Williams and others at Fugro).
21. *Validation of TxDOT Flexible Pavement Skid Prediction Model*, Texas Department of Transportation (TxDOT), March 2012, \$340,506 – UTEP \$ 189,911 (with Nazarian, Tandom, Garibay, and Rocha at UTEP, and Prozzi, Murphy, and Smit, UT-Austin-CTR)
22. *Development of a Procedure for Gathering and Storing Pavement Layer and Work History Information*, Texas Department of Transportation (TxDOT), March 2012, \$285,121 (with Nazarian, Tandon, Aldouri, and Abdallah).
23. *Quantitative Relationship Between Safety and Reduced Roadway Condition Maintenance*, Texas Department of Transportation (TxDOT), March 2011, \$ 195,155 (with Hernandez, Nazarian, Aldouri).
24. *Evaluation of Pavement Rutting and Distress Measurements*, Texas Department of Transportation (TxDOT), May 2010, \$ 287,778 (with Nazarian).
25. *A Comprehensive Evaluation of the Development of a Level of Performance and Level of Service for TxCAP Evaluation Systems*, Texas Department of Transportation (TxDOT), March 2010, \$ 330,223 - UTEP \$ 59,474. (with Texas A&M and University of Texas at San Antonio)
26. *Evaluation of Skid Measurements Used by TxDOT*, March 2010, Texas Department of Transportation (TxDOT), March 2010, \$ 327,039 – UTEP 232,469 (with Nazarian at UTEP, and Dessouky and Weissmann at UTSA).
27. *Development of a Performance Measurement Based Methodology to Objectively Compare Operational Improvements with Capacity Additions*, Texas Department of Transportation (TxDOT), March 2009, \$ 177,577.
28. *Asset Management for Safety and Operations*, Texas Department of Transportation (TxDOT), August 2008, \$ 242, 449 (with Texas Southern University).

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

N/A

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

Chair of the Infrastructure and Systems Committee, Transportation and Development Institute, American Society of Civil Engineers (ASCE), August 2019 – Present.

Chair of the V International Conference on Infrastructure Transportation (ICTI), International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI). August 2022.

Texas Society of Professional Engineers- TSPE - Excellence Award for the Promotion of TSPE's Mission and Goals. November, 2018.

EAFIT University, Best Professor of the Pavement Engineering and Highway Design Graduate Program, Colombia. December 2014.

American Society of Civil Engineers (ASCE), Journal of Infrastructure Systems. Outstanding Reviewer in 2013. April 2014.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Multidisciplinary Design of a Sustainable, Environmentally Friendly, and Affordable House”, June 2013.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Multidisciplinary SMART Design of Fire Station 513”, June 2012.

National Council of Examiners for Engineering and Surveying, NCEES Engineering Award for Connecting Professional Practice and Education. Project “Development of a Sustainable Infrastructure Management System for a City”, June 2011.

International Road Federation (IRF) Fellowship, August 1997 (Selected as fellow in a worldwide competition. 13 fellows were selected).

OFFICES HELD IN PROFESSIONAL SOCIETIES

Chair of the Infrastructure and Systems Committee, Transportation and Development Institute, American Society of Civil Engineers (ASCE), August 2019 – Present.

Chair of the V International Conference on Infrastructure Transportation (ICTI), International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI). August 2022.

Chair of the Research Subcommittee, Pavement Management Systems, Transportation Research Board (TRB).

Vice President of the North-American Region, International Society for Maintenance and Rehabilitation of Transport Infrastructures (ISMARTI). March 2016- Present.

Chair of the Committee on Implementation of Mechanistic-Empirical Pavement Design (CIDMEP).

Vice Chair of the Infrastructure and Systems Committee, Transportation and Development Institute, American Society of Civil Engineers (ASCE), January 2015 – September 2019.

Chair of the International Road Federation Road Asset Management-Pavement Preservation Task Force, IRF, August 2009 – December 2011.

Chair of the International Road Federation Pavement Management Task Force, IRF, January 2012 – 2014. Delegate of the Ibero-Latin American Asphalt in the United States.

Advisor, Chi Epsilon Advisor. UTEP Chapter.

Advisor, Texas Society of Professional Engineers (TSPE). UTEP Chapter.

Past-Vice-Chair, Education Committee, Texas Society of Professional Engineers (TSPE),

Advisor, Transportation Leadership Council (TLC). UTEP Chapter.

Other Membership

Texas Board of Professional Engineers, P.E. 101970

Peruvian Board of Engineers, P.E. 39748

Phi Kappa Phi Society

Transportation Research Board, Pavement Preservation Committee

Transportation Research Board, Pavement Management Systems
Inter-american Cement Federation

Peruvian Road Association

OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Academic Service at the University of Texas at El Paso

1. Faculty Search Committee, IMSE Assistant Professor Position; Industrial, Manufacturing and Systems Engineering Department; September 2019 - February 2020.
2. Department of Civil Engineering, ABET Coordinator, January 2018 - June 2020.
1. College of Engineering Council, Representative of the Department of Civil Engineering, August 2015 - August 2018.
2. Faculty Search Committee, Construction management or sustainable building materials Faculty Position, July 2013 - December 2013.
3. College of Engineering Infrastructure and Sustainability Team, January 2012 - Present.
4. Faculty Search Committee, Geotechnical and Structural Faculty Positions, January 2011 - December 2012.
5. Faculty Council Committee, College of Engineering, September 2011 - August 2011.
Undergraduate Curricula Committee, College of Engineering, August 2009 - May 2011.
6. Mentor Program Panel Discussion, Center of Teaching Excellence, April 2011.
Sustainable Engineering, Judge for Energy Projects, Industrial Engineering, Fall 2010 (December 2010, and Spring 2011).

7. Construction Management Internship Program, Preparation of Guidelines, July 2009.
8. Faculty Search Committee, Construction Management Faculty Position, March 2009.

Doctoral Dissertations and Thesis

Ph.D. Dissertations (as Chair)

Makahauhe, Johan. "A Quality Based-Approach to Support Project Management Practices in Local Government Agencies", UTEP, August 2020.

Vavrova, Marketa. "Development of a Multi-objective Approach for Asset Management Decision Making." UTEP, May 2016.

Ramirez, Rafael. "A Stochastic Approach for Pavement Condition Projections and Budget Needs the MTC for Pavement Management System." UTEP, May 2015.

Al-Zou'bi, Mazin. "Development of Systematic Approach to Manage Missing Data in Pavement Management Systems." UTEP, May 2013.

M.S. Thesis (as Chair)

Ruiz, David. "Methodology to Identify Risk Factors that Lead to Increase in Fatal Pedestrian Crashes and Develop Countermeasures to Reverse Trend." UTEP, May 2021 (expected)

Rodriguez, Edgar. "A Quality Control Performance-Based Methodology for Pavement Management Systems." UTEP, August 2018.

Ortega, Oscar. "A Sustainable Performance-Based Methodology to Address the Impact of Climate Changes on the "State of Good Repair" of Transportation Infrastructure." UTEP, May 2018.

Ramirez, Armando. "Optimization for the Allocation of Funds for Pavement Maintenance in Pavement Management Systems," May 2018.

González, Oscar UTEP, "Quantification of the Impact of Roadway Condition on Gas Emissions." UTEP, December 2017.

Gutierrez, Sandra. "Asset Management Tools to Support the Development of Preservation Programs for Guardrails." UTEP, May 2017.

Jaña Arellano, Cristian Gonzalo. "Implementation of the AASHTO 2008 Mechanistic Empirical Pavement Design Guide in Piura," Universidad de Piura, Perú, May 2016.

Montes, Edith. "Using Fair Division Methods for Funding Allocation," UTEP, May 2014.

Saenz, Daniel. "Improvement in Pavement Ride, Distress, and Condition Based on Different Treatment Types," UTEP, December 2013.

Mena Abadía, Wilmer Bernardo, "Calibration and Implementation of the MEPDG Climatic Model AASHTO 2008 in Colombia." Universidad EAFIT, Colombia, April 2013.
Vavrova, Marketa. "Development of an Electronic Vehicle Miles Traveled Toll Model." UTEP, May 2012.

Gallegos, Alejandra. "Continuous Reinforced Concrete Pavement Performance Models for Pavement Management," UTEP, May 2012.

Huaman, Nestor. "Permanent Deformation in Asphalt Mixes and the Deterioration of Pavement in Peru." Universidad Nacional de Ingeniería, December 2011.

Quintana, Luis. "Development of a GIS Fiber Optics Asset Management System for the City of El Paso." UTEP, August 2011.

Francis, Dora. "Asset Management Applications to Improve Right-of-Way Acquisitions." UTEP, December 2009.

Gandhar, Wazalwar. "Optimizing Sample Size for Acceptance Plans in Highway Construction," UTEP, December 2009.

Camacho, Gema, "GIS-based Tool for Assessing Hydraulic Performance of Drainage Infrastructure System in El Paso," UTEP, May 2009.

Ph.D. Dissertations (as member)

Rodriguez, Dannel. "Performance Life of Various Hot Mix Asphalt Mixtures in Texas". Chair Dr. Soheil Nazarian, UTEP, August 2015.

Zokaei Ashtiani, Mohammad Ali. "Development of Finite Element Based Software for Analyzing the Rigid Pavement (NYSlab)". Chair Dr. César Carrasco, UTEP, May 2014.

Mazari, Mehran. "Modulus-Based Construction Specification for Compaction of Earthwork and Unbound Aggregate", Chair Dr. Soheil Nazarian, UTEP, May 2014.

Azari, Hoda, "Numerical Study on Performance and Sensitivity of Seismic Nondestructive Methods to Identify Deterioration in Concrete Structures," Chair Dr. Soheil Nazarian, UTEP, May 2013.

Islam, Mouyid. "Modeling Large-Truck Involved Crashes: An Econometric Modeling Framework". Chair Dr. Salvador Hernandez, UTEP, December 2012.

Celaya, Manuel. "Evaluation of NDT Technologies to Assess Presence and Extent of Delamination of HMA Airfield Pavements", Chair: Dr. Soheil Nazarian, UTEP, May 2011.

Abdallah, Imad. "An Expert System Approach to Improve and Preserve Flexible Pavement at Intersections", Chair: Dr. Soheil Nazarian, UTEP, May 2011

Galicia, Luis. "Methodology for Bus Rapid Transit Ridership Estimation and Deployment Phases Implementation", Chair: Dr. Ruey (Kelvin) Cheu, UTEP, December 2010.

Vidaña Bencomo, Jose Osiris. “Methodology to Convert Transportation Planning Origin-Destination Matrix into a Microscopic Traffic Simulation Origin Destination Matrix”, Chair: Dr. Ruey (Kelvin) Cheu, UTEP, December 2011.

Wanyan, Yaqui. “Expert System Design Guide for Lower Classification Roads Over High PI Clays”, Chair: Dr. Soheil Nazarian, UTEP, December 2008.

M.S. Thesis (as member)

Aliasghar Dormohammadi. “Three Dimensional Finite Element Simulation of Pavement Systems with Regular Thickness, Thin, and Ultra-Thin Overlay”, Chair Dr. Vivek Tandon, UTEP, May 2017.

Jan Kapusta. “Safety Measures for Trucks: A Comparison between EU and U.S.”, Chair Dr. Ruey (Kelvin) Cheu, UTEP, August 2013

Luis Hernandez. “An Exploratory and Comparative Analysis of Freight Transportation in EU and U.S. Highways”, Chair Dr. Ruey (Kelving) Cheu, UTEP, August 2013 (expected).

Malina, Petr. “Analysis of Isolated Traffic Signal Control Systems”, Chair: Dr. Ruey (Kelvin) Cheu, UTEP, May 2012.

Gona, Ramakanth. “Enterprise Transformation through a Zachman-Bayesian Framework to Improve Efficiency & Productivity”, Chair: Dr. Eric Smith (Industrial Engineering). UTEP, December 2011.

Moreno, Olivia. “Multi-Objective System Design Optimization Considering Environmental Emissions”, Chair: Dr. Heidi Taboada (Industrial Engineering). UTEP, May 2011.

Chenna, Vasukumar. “Component Replacement Schedules for Electricity Distribution Systems using Evolutionary Algorithms”, Chair: Dr. Jose Espiritu (Industrial Engineering), UTEP, December 2010.

Valdez, Gabriel. “A Risk Analysis Framework for Toll Road Revenue Forecasts”, Chair: Dr. Ruey (Kelvin) Cheu, UTEP, May 2010.

Zuniga, Cynthia. “Estimating Variation in Stiffness and Volume Change of Clays from Geochemical and Index Properties”, Chair: Dr. Soheil Nazarian, UTEP, December 2009.

Mejia, Dante. “Finite Element Modeling of Nondestructive Test Methods Used for Detection of Delamination in Hot Mix Asphalt Pavements”, Chair: Dr. Soheil Nazarian, UTEP, December 2009.

Acevedo, Loreto. “Improved Performance of Soils Stabilized with FBC Ash”, Chair: Dr. Guillermo Thenoux, Catholic University, Santiago de Chile, Chile, May 2009.

Deshmukh, Maithilee. “Development of Equations to Determine the Increase in Pavement Condition due to Treatment and the Rate of Decrease in Condition after Treatment for a Local Agency Pavement Network”, Chair: Dr. Roger Smith, Texas A&M, May 2009.

Lei, Hao. “Allocate Emergency Response Vehicles to Cover Critical Infrastructures”, Chair: Dr. Ruey (Kelvin) Cheu UTEP, December 2008.

Non-Thesis Graduate Students at UTEP

Mejía, Saúl, “Implementing the AASHTO Mechanistic-Empirical Pavement Design-Guide in Texas”, UTEP, May 2016.

Varela E. “Dynamic Adjustment of PCI Family Curves on Field Inspection History”, UTEP, December 2014.

Ibarra, Iraki. “Benefits of Early Right-of-Way Acquisition”, UTEP, December 2010.

Esquivel, Luz. “Design of Sanitary Sewer Improvements for the City of Valentine”, UTEP, December 2009.

Valdovinos, Belen. “Experimental Interfacial Shear Strength Test and its Application for Pavements in the Paraguayan Chaco Region”, Texas A&M, May 2009.

Buena, Luis. “Construction Management Internship”, UTEP, (December 2011).

Rios-Gaytan, Luis. “Construction Management Software”, UTEP, (December 2011).

Senior Undergraduate Projects Supervised at UTEP

Torres, D, E. Saucedo, N. Mercado, L. Cornejo, L., and E. Varela,. “Multipurpose Vinton Village”, Spring 2011.

Cano, L., C. Gallardo, W. Dorantes, and J. Rios-Gaytan. “Construction Management Tools”, May 2009.

TEACHING (The University of Texas at El Paso)

Graduate Courses

CE 5356 Sustainable Engineering Design (Fall 2018: 4.6666)

CE 5365 Decision Making in Infrastructure System Design and Evaluation (Fall 2017, Fall 2015, Spring 2013: 4.8)

CE 6301 Infrastructure Management (Spring 2018: 4.4285, Fall 2016, Fall 2014: 4.1, Fall 2012: 4.625, Fall 2011: 4.8181, Fall 2010: 4.5, Fall 2009, Fall 2008: 4.291)

CE 5351 Mechanistic Pavement Design and Analysis (Spring 2019, Spring 2017: 4.5, Spring 2012: 4.6666, Spring 2011: 4.5)

CE 6195 Civil Engineering Seminar (Spring 2014: 5.000, Spring 2011: 4.7)

CE 6315 Infrastructure Planning (Spring 2010: 4.5714)

CE 5324 Construction Management (Spring 2008: 4.7000)

Undergraduate Courses

CE 1301 Civil Engineering Fundamentals (Fall 2019: 4.1323)

CE 2315 Statics (Fall 2019: 4.7272, Fall 2018: 4.3571, Fall 2017: 4.7368, Spring 2017: 4.7777, Spring 2016: 5.0000, Fall 2010: 4.5277)

CE 3336 Civil Engineering Materials (Spring 2015: N/A, Spring 2010: 4.1000)

CE 3313 Engineering Measurements (Fall 2009)

CE 4188 Senior Design I (Fall 2013: 3.9090)

CE 4288 Senior Design II (Spring 2014: 4.4117, Fall 2013: 4.1304)

CE 4300 Sustainable Engineering (Summer 2019, Summer 2018, Summer 2017)

Aaron M. Kuntz

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EDUCATION

Doctor of Education. *Educational Policy, Research, and Administration*, University of Massachusetts Amherst, Amherst, MA 01003. 2007.

Dissertation Title: *Placing Academic Activism: Constraints and Possibilities of Faculty Work*

Master of Arts, *English Literature*, Northeastern University, Boston, MA 02115. 1998.

Bachelor of Arts, *English Literature*, Saint Michael's College, Colchester, VT 05439.

1996. *Cum Laude*. Minors: Gender Studies; Philosophy

HIGHLIGHTS

- 2020 AERA QR SIG Outstanding Book Award, AERA. 2020.
- Section Editor, *Theory and Philosophy*, Routledge Encyclopedia of Qualitative Research Methods, 2020-present.
- Department Chair, Counseling, Rehabilitation, School Psychology, Florida International University, 2020-present.
- President's Faculty Research Award, The University of Alabama, 2017.
- Department Head, Educational Studies, University of Alabama, 2014-2020.
- SEC Academic Leadership Development Program, Graduate. 2016-2017.
- Guest Editor, Special Issues, *Critical Questions in Education*, Fall 2016; Spring 2017.
- McCrory Faculty Excellence Award, *Distinguished Teaching*, College of Education, University of Alabama, 2016.
- Keynote Lecturer, Foucault and Contemporary Theory SIG, American Educational Research Association, 2016.
- Editorial Board, ACCESS: Contemporary Issues in Education, 2020-present.
- Editorial Board, *Philosophy & Theory in Higher Education*, 2017-present.
- Editorial Board, *Taboo: The Journal of Culture and Education*, 2017-present.
- Editorial Board, *Bloomsbury Research Methods for Education*, 2015-present.
- Editorial Board, *Review of Higher Education*, 2014-present.
- President, Southeast Philosophy of Education Society, 2014-2015.
- Co-Recipient, *Community Engagement Award*, Center for Community Based Partnerships, University of Alabama, 2011.
- Co-Recipient, *Excellence in Community Engagement Award for Scholarship*, Center for Community Based Partnerships, University of Alabama. 2010.
- Program Chair, Division D, *American Educational Research Association*, 2009-2010.

CURRENT POSITION

Professor & Department Chair, Department of Counseling, Rehabilitation, & School Psychology, Florida International University.

AWARDS

- *2020 AERA QR SIG Outstanding Book Award*, AERA. 2020.
- *President's Faculty Research Award*, The University of Alabama. 2017.
- *McCrary Faculty Excellence Award, Distinguished Teaching*, College of Education, University of Alabama. 2016.
- *Community Engagement Award*, Center for Community Based Partnership, University of Alabama. 2011 (with Arcadia Elementary School, Tuscaloosa, AL).
- *Excellence in Community Engagement Award for Scholarship*, Center for Community Based Partnerships, University of Alabama. 2010 (with Bakker, Gleason, Nichols, Busenlehner, Chopra, & Sundberg).

PUBLICATIONS

Books (Peer Reviewed)

Kuntz, A. M. (2019). *Qualitative Inquiry, Cartography, and the Promise of Material Change*. London: Routledge Press.

Kuntz, A.M. (2015). *The Responsible Methodologist: Inquiry, Truth-Telling, and Social Justice*. Walnut Creek: Left Coast Press; London: Routledge.

Petrovic, J.E. & **Kuntz, A.M.** (Eds.) (2014). *Citizenship Education Around the World: Local Contexts and Global Possibilities*. New York: Routledge Press.

Pasque, P., Carducci, R., **Kuntz, A.M.**, & Gildersleeve, R. (2012). *Qualitative inquiry for equity in Higher Education: Methodological implications, negotiations, and responsibilities*. San Francisco: Jossey-Bass.

Rallis, S., Rossman, G., Reagan, T., Cobb, C., & **Kuntz, A.M.** (2008). *Leading dynamic schools: Implementing ethical education policy*. Thousand Oaks, CA: Corwin Press.

Journal Articles (Peer Reviewed)

Kuntz, A.M. (2020). "Piercing This Wall": Truth-Making in a Fascist World. *Qualitative Inquiry*. doi.org/10.1177/1077800420934153

Kuntz, A.M. (2020). Standing at one's post: Post-Qualitative Inquiry as Ethical Enactment. *Qualitative Inquiry*. doi.org/10.1177/1077800420932599

Kuntz, A.M. (2019). Inquiry, Refusal, & Virtuous Resistance in the Anthropocene. *Philosophy & Theory in Higher Education* 1(1), 41-64.

Lynch, S. & **Kuntz, A.M.** (2019). A critical autoethnography of a doctoral students' research journey: learning to take risks in the academy. *Curriculum Studies in Health and Physical Education* DOI:10.1080/25742981.2019.1588762.

Kuntz, A.M. & Guyotte, K. (2018). Inquiry on the sly: Playful intervention as philosophical action. *Qualitative Inquiry*, 24(9). 664-671.

Guyotte, K. & **Kuntz, A.M.** (2018). Becoming Openly Faithful: Qualitative Pedagogy and Paradigmatic Slippage. *International Review of Qualitative Research*, 11(3). 256-270.

Kuntz, A.M. (2017). Higher Education and the Government of Things. *Thresholds in Education*, 40(1). 93-110.

Pickup, A. & **Kuntz, A.M.** (2017). Critical Inquiry, Truth-telling, and the Good: Problematization and Reconstruction for a Socially Just Education. *Critical Questions in Education*, 8(2). 75-81.

Kuntz, A.M. & Petrovic, J. (2017). (Un)Fixing Education. *Studies in Philosophy and Education*. doi:10.1007/s11217-016-9563-y

Kuntz, A.M. & Pickup, A. (2016). Critical Inquiry for the Social Good: Methodological Work as a Means for Truth-Telling in Education. *Critical Questions in Education*, 7(3). 171-177.

Petrovic, J. & **Kuntz, A.M.** (2016). Invasion, Alienation, and Imperialist Nostalgia. *Educational Philosophy and Theory*. Available via online first: <http://dx.doi.org/10.1080/00131857.2016.1198249>

Kuntz, A.M. (2016). Critical Truth-Telling in Absurdity: Educational Inquiry, Bemusement, & Democratic Change. *Critical Questions in Education*, 7(1), 53-69.

Xue, M., Chao, X., & **Kuntz, A.M.** (2014). Chinese visiting scholars' academic socialization in US institutions of higher education: A qualitative study. *Asia Pacific Journal of Education*. DOI: 10.1080/02188791.2013.876389

Kuntz, A.M., Presnall, M., Priola, M., Tilford, A., & Ward, R. (2013). Creative pedagogies and collaboration: An action research project. *Educational Action Research*, 21(1), 42-58.

Chao, X., & **Kuntz, A.M.** (2013). Church-based ESL program as a figured world: Immigrant adult learners, identity and power. *Linguistics and Education*, 24(4), 466-478.

Petrovic, J. & **Kuntz, A.M.** (2013). Strategies of reframing policy in the liberal state: A recursive model. *Journal of Language and Politics*, 12(1), 126-146.

Gildersleeve, R. & **Kuntz, A.M.** (2013). Dialogue as a Requiem for Analysis. *Cultural Studies<-->Critical Methodologies*, 13(4), 263-266.

Carducci, R., Pasque, P., **Kuntz, A.**, & Contreras-McGavin, M. (2013). Disrupting Façades of Clarity in the Teaching and Learning of Qualitative Research. *Qualitative Research in Education*, 2(1), 1-26.

Kuntz, A.M. & Presnall, M. (2012). Wandering the tactical: From interview to intraview. *Qualitative Inquiry*, 18(9), 732-744.

Kuntz, A.M., Petrovic, J., & Ginocchio, L. (2012). A changing sense of place: A case study of academic culture and the built environment. *Higher Education Policy*, 25, 433-451.

Kuntz, A.M. & Gildersleeve, R. (2012). Working Bakhtin's body: A dialogue on critical qualitative inquiry in education. *International Review of Qualitative Research* 5(1), 83-104.

Kuntz, A.M. (2012). Reconsidering the workplace: Faculty perceptions of their work and working environments. *Studies in Higher Education*, 37(7), 769-782.

Mendoza, P., **Kuntz, A.M.**, & Berger, J. (2012). Bourdieu and Academic Capital. *The Journal of Higher Education*, 83(4), 558-581.

Pasque, P. & **Kuntz, A.M.** (2012). From Theoretical Language to the Interstices of Daily Practice: Reducing Competency Stripping through Transformative Teaching and Learning. *Journal of Further and Higher Education*. Available via online first: <http://www.tandfonline.com/doi/full/10.1080/0309877X.2012.684039>

Ott Walter, K., Baller, S., & **Kuntz, A.M.** (2012). Two approaches for using web sharing and photography assignments in teaching Health Sciences. *International Journal of Teaching and Learning in Higher Education*, 24(3), 383-394.

Kuntz, A.M. (2011). Science, Health, and Nationhood: Methodological pathology in an era of conservative modernization. *International Review of Qualitative Research*, 4(3), 199-218.

Kuntz, A.M., Gildersleeve, R.E., & Pasque, P. (2011). Obama's American Graduation Initiative: Race, Conservative Modernization, and a Logic of Abstraction. *Peabody Journal of Education*, 86, 488-505.

Kuntz, A.M. & Berger, J. (2011). Faculty work practices in material environments: A case study. *The Journal of Higher Education*, 82(3), 239-264.

Kuntz, A.M. & Petrovic, J. (2011). The politics of survival in Foundations of Education: Borderlands, frames, and strategies. *Educational Studies*, 47(2), 174-197.

Pasque, P., Carducci, R., Gildersleeve, R., & **Kuntz, A.M.** (2011). Disrupting the ethical imperatives of 'junior' critical qualitative scholars in the era of conservative modernization. *Qualitative Inquiry* 17(7), 571-588.

Carducci, R., **Kuntz, A.M.**, Gildersleeve, R., Pasque, P. (2011). The Disruptive Dialogue Project: Crafting critical space in higher education. *InterActions*, 7(2). Available at: <http://escholarship.org/uc/item/7mflj9mn>

Gildersleeve, R. & **Kuntz, A.M.** (2010). A Dialogue on space and method in qualitative research on Education. *Qualitative Inquiry*. 17(1), 15-22.

Kuntz, A.M. (2010). Representing representation. *International Journal of Qualitative Studies in Education*, 23(4), 423-433.

Gildersleeve, R., **Kuntz, A.M.**, Pasque, P., & Carducci, R. (2010). The role of critical inquiry in (re)constructing the public agenda in higher education: Confronting the conservative modernization of the academy. *Review of Higher Education*, 34(1).

Vincent, J., Kian, E., Pedersen, P., **Kuntz, A.M.**, & Hill, J. (2010). England Expects: English newspapers' narratives about the English soccer team in the 2006 World Cup. *International Review for the Sociology of Sport*, 45(2), 199-223.

Kuntz, A.M. (2006). Academic citizenship: The risks and responsibility of reframing faculty work. *Journal of College & Character*, 7(5), 1-9.

Book Chapters

Kuntz, A.M. (2020). Resistance is becoming not possible: Philosophical inquiry and the challenge of material change. In N. Denzin & M. Giardina (Eds), *Qualitative Inquiry and the Politics of Resistance: Possibilities, Performances, and Praxis*. London: Routledge Press. 24-39.

Kuntz, A.M. (2019). Virtuous Inquiry, Refusal, & Cynical Work. In N. Denzin & M. Giardina (Eds), *Qualitative Inquiry at a Crossroads: Political, Performative, and Methodological Reflections*. London: Routledge Press. 96-109.

Kuntz, A.M. (2016). Jean Anyon, *Ghetto Schooling: A Political Economy of Urban Educational Reform*. In J. DeVitis (Ed), *Popular Educational Classics: A Reader*. New York: Peter Lang. 299-309.

Kuntz, A.M. (2015). Critical and Poststructural Forms of Inquiry: Social Justice Through Productive Critique. In G. Cannella, M. Perez, & P. Pasque (Eds), *Critical Qualitative Inquiry: Foundations & Futures*. Walnut Creek: Left Coast Press. 113-139.

Kuntz, A.M. (2014). Forming Rationalities, Governing Selves. In B. Baez, *Technologies of Government: Politics and Power in the "Information Age."* Charlotte: Information Age. vii-xv.

Kuntz, A.M. & Petrovic, J.E. (2014). Reading Citizenship Education in Neoliberal Times. In J. Petrovic and A. Kuntz (Eds). *Citizenship Education Around the World: Local Contexts and Global Possibilities*. New York: Routledge Press. 237-252.

Petrovic, J.E. & **Kuntz, A.M.** (2014). Citizenship and The Purposes of Education. In J. Petrovic and A. Kuntz (Eds). *Citizenship Education Around the World: Local Contexts and Global Possibilities*. New York: Routledge Press. vii-xxii.

Kuntz, A.M. (2012). Representing Representation. In G. Rossman & S. Rallis (Eds.), *Everyday Ethics: Reflections on Practice*. New York: Routledge. 45-56.

Kuntz, A.M. (2011). The work of the criticalist: Critical civic literacy and intervention in class processes. In J. Devitis (Ed.), *Critical civic literacy: A reader*. New York: Peter Lang. 169-179.

Petrovic, J. E. & **Kuntz, A.M.** (2011). (Re)placing foundations in education: Politics of survival in neo-liberal times. In J. L. Kincheloe and R. Hewitt (Eds.), *Regenerating the Philosophy of Education: What Happened to Soul?*. New York: Lawrence Erlbaum. 69-86.

Kuntz, A.M. (2010). The politics of space in qualitative research. In M. Savin-Baden & C. Howell Major (eds.), *New approaches to qualitative research: Wisdom and uncertainty*. Routledge Press. 145-155.

Kuntz, A.M. (2009). Turning from time to space: Conceptualizing faculty work. In J. Smart (ed.), *Higher Education: Handbook of Theory and Research*. New York: Springer. 355-388.

Book Sections

Kuntz, A.M. (2013). Space as more than setting. In M. Savin-Badin & C. Major (Eds.), *Qualitative Research: The essential guide to theory and practice*. New York: Routledge. 309-310.

Kuntz, A.M. (2011). The Distance of formality: Working within (and through) propriety. In L. Scherff & K. Spector (Eds.), *Culturally Relevant Pedagogy: Clashes and Confrontations*. R&L Education Series. 181-186.

Kuntz, A.M. (2011). Challenges in Anticipating Ethical Issues. In C. Marshall & G. Rossman (Eds.), *Designing Qualitative Research (5th Ed.)*. Thousand Oaks: Sage. 49-50.

Kuntz, A.M. (2004). Affirmative Action. In D. Schuman, *Diversity on Campus (3rd Ed.)*. Dubuque, IA: Kendall/Hunt. 185-190.

Conference Proceedings (Peer Reviewed)

Bakker, M. Staggemeier, K. Grano, A.M., **Kuntz, A.M.**, Gleason, J., & McKenzie, L. (2010). Identification, Development and Implementation of Nanoscience Activities for Alabama K-12. In *Materials Research Society—Published Conference Proceedings*, (Vol. 1233), p 4-21. Warrendale, PA.

Starkey, C., **Kuntz, A.M.** & Dreilinger, T. (2009). Building an Online Professional Development Peer Facilitator Corps: The eLearning for Educators Alabama Experience. In *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2009* (pp. 2470-2475). Chesapeake, VA: AACE.

Encyclopedia Entry

Kuntz, A. M. (2017). “Risky Truth Making in Qualitative Inquiry.” In G. Noblit (ed). *Oxford Research Encyclopedia of Education*. New York: Oxford University Press.

Rossman, G., Rallis, S., & **Kuntz, A.M.** (2010). Standards of proof in qualitative research: Mapping the contested terrain of validity. In E. Baker, B. McGaw, & P. Peterson (eds.), *International Encyclopedia of Education*. Boston: Elsevier.

Book Review

Kuntz, A.M. (2017). Review of: *The Social Foundations Reader: Critical Essays on Teaching, Learning and Leading in the 21st Century* E. Blair & Y. Medina (eds.). Teachers College Book Reviews.

Journal Articles (invited)

Bakker, M., Gleason, J., Nichols, S., **Kuntz, A.M.**, Sundberg, C., & Busenlehner, L. (2010). VISTA: Vertical Integration of Science and Technology in Alabama. *Curriculum Leadership*, 8(30).

O'Meara, K., Kaufman, R., & **Kuntz, A.M.** (2003). Faculty work in challenging times: Trends, consequences, and implications. *Liberal Education*, 89 (4), 16-24.

Newsletter Article

Kuntz, A.M. (Summer, 2010). Qualitative Research – A Gloss. *D'News: A Publication of AERA Division D Measurement and Research Methodology*. 4.

Gildersleeve, R., Pasque, P., Carducci, R., & **Kuntz, A.M.** (October, 2009). At 'home' in the Congress of Qualitative Inquiry: A disruptive story. *International Association of Qualitative Inquiry Newsletter*, 5(4). 16-17.

Manuscripts In Progress:

Rodriguez, S., **Kuntz, A.M.**, & Acree, J. (*under review*). Avowing as healing in qualitative inquiry: Exceeding constructions of normative inquiry and confession in research with undocumented youth. *International Journal of Qualitative Studies in Education*.

Xi, Wang & **Kuntz, A.M.** (*under review*). Chinese University Students' Imaginaries of China in "The New Era." *Asia Pacific Journal of Education*.

Kuntz, A.M. & Mutua, K. (in progress). *The Methodological Problem of Voice and the Intellectually disabled*.

Kuntz, A.M. (in progress). *Methodological Interventions in the Schizoid Society*.

TECHNICAL REPORTS

Kuntz, A.M. (2009). *Math-Science Partnership: First Year Review*. Tuskegee University. Tuskegee, AL.

Kuntz, A.M. (2006). *Student Perspectives of the Campus Development Office: Ways to Better Serve Students*. Campus Development Office, Smith College. Northampton, MA.M.

Kuntz, A.M. (2005). *EPOCH Living Revisited: First-Year Experiences on Campus*. Student Assessment, Research and Evaluation Office, University of Massachusetts Amherst. Amherst, MA.M.

Kuntz, A.M. (2003-2005). *Comments on the First-Year Experience: Focus Group Results*. Dean of Students Office, Smith College. Northampton, MA.M.

Kuntz, A.M. (2005). *Student Perceptions of Campus Center Services: Focus Group Results*. Campus Center, Smith College. Northampton, MA.M.

Kuntz, A.M. (2004). *EPOCH Living: An Examination of First-Year Housing*. Student Assessment, Research and Evaluation Office, University of Massachusetts Amherst. Amherst, MA.

PRESENTATIONS

Invited

Kuntz, A.M. (June, 2019). *Philosophy as Method: Inquiry as Working With Difference*. Keynote Lecture: Beijing Normal University. Beijing, China

Kuntz, A.M. (June, 2019). Critical Geography & The Spatial Turn in Qualitative Research. Keynote Lecture: Peking University. Beijing, China.

Kuntz, A.M. (October, 2017). *Challenging Inquiry: Relational Ethics and Resisting BS*. Keynote Lecture: 15th Annual Dissertation Research Conference. Aurora University.

Kuntz, A.M. (October, 2017). *Cultivating Responsibility Through Inquiry, Truth-Telling, & Social Justice*. Keynote Lecture: College of Education Research Symposium. Western Illinois University.

Kuntz, A.M. (March, 2017). *Higher Education, Inquiry, & the Government of Things*. Research Colloquium Series. College of Education. University of Georgia.

Kuntz, A.M. (April, 2016). *Higher Education and the Government of Things*. Keynote Lecture: Foucault and Contemporary Theory SIG, American Educational Research Association. Washington, DC.

Kuntz, A.M. (November, 2013). *Critical Qualitative Inquiry & Methodological Responsibility*. Mike Moses K-16 Leadership Speaker Series. University of Texas Arlington.

Kuntz, A.M., Gildersleeve, R., Carducci, R., & Pasque, P. (May, 2010). *Dialogic Community Building*. Preconference Workshop, International Congress of Qualitative Inquiry. Champaign, IL.

International Peer Reviewed

Kuntz, A.M. (May, 2019). *Resistance is becoming not possible*. International Congress of Qualitative Inquiry, Champaign, Illinois.

Kuntz, A.M. (May, 2019). *Materialists Teaching Philosophy/Philosophically*. International Congress of Qualitative Inquiry, Champaign, Illinois.

Kuntz, A.M. (April, 2019). *Foucault in a Post-Truth World*. The American Educational Research Association, Toronto, Canada.

Rodriguez, S. & **Kuntz, A.M.** (April, 2019). *Avowing as Healing in Qualitative Inquiry: Exceeding Constructions of Normative Inquiry and Confession in Research With Undocumented Youth*. The American Educational Research Association, Toronto, Canada.

Kuntz, A.M. (May, 2018). *Plenary Session: Virtuous Inquiry, Refusal, & Citizenship*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (April, 2018). *Inquiry as Democratic Action: Considerations for Citizenship in Foucault's The Courage of Truth*. The American Educational Research Association. New York, NY.

Kuntz, A.M. (February, 2018). *Parrhesia, Education, and the Work of the Public Sphere*. European Congress on Qualitative Inquiry. Leuven, Belgium.

Kuntz, A.M. (February, 2018). *Inquiry, Refusal, & Citizenship in the Anthropocene*. European Congress on Qualitative Inquiry. Leuven, Belgium.

Kuntz, A.M. (May, 2017). *On Critical Materialist Pragmatism*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. & Mutua, K. (May, 2017). *Performing Voice: Rendering Narratives of Intellectually Disabled Youth*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (April, 2017). *Truth-Telling, Educational Inquiry, & Affirmative Ethical Practice*. The American Educational Research Association. San Antonio, TX.

Kuntz, A.M. (April, 2017). *Critical Qualitative Inquiry and Affirmative Ethics*. The American Educational Research Association. San Antonio, TX.

Kuntz, A.M. & Guyotte, K. (April, 2017). *Inquiry on the Sly: Playful Intervention as Philosophical Action*. The American Educational Research Association. San Antonio, TX.

Gildersleeve, R. & **Kuntz, A.M.** (July, 2016). *Becoming-Knowledge in Neoliberal Higher Education: Virtuality and Life in American Academe*. Deleuze Studies Conference. Rome, Italy.

Guyotte, K. & **Kuntz, A.M.** (April, 2016). *Activating Playful Work: Engaging Inquiry in the Hope of Becoming Otherwise*. The American Educational Research Association. Washington, DC.

Kuntz, A.M. (May, 2015). *Material Interventions in the Government of Things*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (May, 2015). *Resisting, Reinforcing, & Reproducing Place: Critical Inquiry Amidst the Pace of Hyper-Globalization*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (April, 2015). *Foucault, Truth-Telling, and New Materialism: Critically Engaging Educational Research*. The American Educational Research Association. Chicago, IL.

Kuntz, A.M. & Gildersleeve, R. (July, 2014). *Dialogue, Bemusement, & Higher Education*. Deleuze Studies Conference. Istanbul, Turkey.

Kuntz, A.M. (May, 2014). *Critical and Poststructural Forms of Inquiry: Social Justice Through Productive Critique*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (April, 2014). *Truth-Telling, Risk, & Methodological Responsibility*. The American Educational Research Association. Philadelphia, PA.

Kuntz, A.M. (April, 2013). *Beyond Extraction: Critical Materialism and Parrhesia in Qualitative Inquiry*. The American Educational Research Association. San Francisco, CA.

Kuntz, A.M. (April, 2013). *Parrhesia, Risk, and Materialist Inquiry: Collaborative Representations*. The American Educational Research Association. San Francisco, CA.

Xue, M., Chao, X., & **Kuntz, A.M.** (April, 2013). *Chinese Visiting Scholars' Academic Socialization in U.S. Institutions of Higher Education: A Qualitative Study*. The American Educational Research Association. San Francisco, CA.

Kuntz, A.M. (April, 2012). *Methodological Responsibility*. The American Educational Research Association. Division D Spotlight Session. Vancouver, Canada.

Kuntz, A.M. (May, 2011). *Innovation as Intervention*. International Congress of Qualitative Inquiry. Champaign, IL.

Kuntz, A.M. (April, 2011). *Place-Based Inquiry and Everyday Politics: Critical Geography as Practicing Public*. The American Educational Research Association. New Orleans, LA.

- Kuntz, A.M. & Gildersleeve, R.** (April, 2011). *Working Bakhtin's Body: A Dialogue on Critical Qualitative Research in Education*. The American Educational Research Association. New Orleans, LA.
- Kuntz, A.M. & Presnall, M.** (April, 2011). *Creative Pedagogies and Collaboration: An Action Research Project*. The American Educational Research Association. New Orleans, LA.
- Kuntz, A.M., Petrovic, J. & Tomlinson, S.** (April, 2011). *Interactional Methodology: A Case Study of Ethical Reflexivity*. The American Educational Research Association. New Orleans, LA.
- Kuntz, A.M.** (May, 2010). *Methodological pathology: Canguilhem and the era of conservative modernization*. International Congress of Qualitative Inquiry. Champaign, IL.
- Kuntz, A.M.** (April, 2010). *Relocating the body*. Qualitative Research Special Interest Group. The American Educational Research Association. Denver, CO.
- Kuntz, A.M.** (May, 2009). *What the future holds: Creating new spaces from which to speak*. International Congress of Qualitative Inquiry. Champaign, IL.
- Kuntz, A.M.** (April, 2009). *Academic Embodiment*. Philosophy and Education Special Interest Group. The American Educational Research Association. San Diego, CA.
- Gildersleeve, R. & **Kuntz, A.M.** (April, 2009). *A Dialogue on Space and Method in Qualitative Research on Education*. Qualitative Research Special Interest Group. The American Educational Research Association. San Diego, CA.
- Kuntz, A.M.** (May, 2008). *Employing Conceptual Metaphor: Intersecting discursive and material research practices*. International Congress of Qualitative Inquiry. Champaign, IL.
- Kuntz, A.M.** (May, 2008). *Material place and social space: A qualitative case study of faculty work*. International Congress of Qualitative Inquiry. Champaign, IL.
- Kuntz, A.M.** (May, 2008). *More than tools for the toolkit: The ethical imperative of teaching qualitative inquiry*. International Congress of Qualitative Inquiry. Champaign, IL.
- Kuntz, A.M., Gildersleeve, R., Carducci, R., & Pleasants, H.** (March, 2008). *Interactive Symposium on the Intersection of Critical Qualitative Inquiry and Civic Responsibility*. American Educational Research Association. New York, NY.

Mendoza, P., **Kuntz, A.M.**, & Berger, J. (March, 2008). *The Eroding Effects of Market Forces on Faculty Work in Science and Engineering*. American Educational Research Association. New York, NY.

Kuntz, A.M. (May, 2007). *Faculty Work: Material constraints, spatial possibilities*. International Congress of Qualitative Inquiry. Urbana-Champaign, IL.

Kuntz, A.M. (May 2006). *Faculty activism, faculty work: A case study*, International Congress of Qualitative Inquiry. Urbana-Champaign, IL.

Pasque, P. & **Kuntz, A.M.** (May, 2006). *Faculty and Early Career Qualitative Scholars: Creating a Language for Transformative Research, Teaching and Learning*, International Congress of Qualitative Inquiry. Urbana-Champaign, IL.

Kuntz, A.M. & Ramirez, A.M. (April 2005). *Education, Subjectivity, and Class: Overdetermination, Surplus, and the Study of Education*, American Educational Research Association. Montreal, Canada.

Kuntz, A.M. (April 2005). *Reading Disciplinarity as Modernist Policy Through Graduate Student Identity*, American Educational Research Association. Montreal, Canada.

McClendon, S. & **Kuntz, A.M.** (April 2005). *Examining Students' Gendered Experiences at HBCUs and PWIs*, American Educational Research Association. Montreal, Canada

National Peer Reviewed

Kuntz, A.M. (November, 2015). *Everything and Nothing: Ideological Tactics in an Era of Conservative Modernization*. American Educational Studies Association, San Antonio, TX.

Kuntz, A.M. (November, 2014). *Biopower, Population Racism, and Critical Methodological Work*. American Educational Studies Association, Toronto, CA.

Kuntz, A.M. (November, 2013). *Risk, Methodology, and New Spaces for Inquiry: Foucault's Parrhesia as Challenge to Qualitative Inquiry*. American Educational Studies Association. Baltimore, MD.

Kuntz, A.M. (November, 2012). *In Praise of Wandering: Tactics, Becoming, and Indirect Ways of Knowing*. American Educational Studies Association. Seattle, WA.

Kuntz, A.M. (November, 2011). *Critical Perspectives on the K-16 Movement in Educational Leadership*. American Educational Studies Association. St. Louis, MO.

Kuntz, A.M. (October, 2010). *Class and critical civic literacy: Beyond terminological reductionism*. American Educational Studies Association. Denver, CO.

Kuntz, A.M. (October, 2010). *Obama's American Graduation Initiative & Race*. American Educational Studies Association. Denver, CO.

Kuntz, A.M. (October, 2009). *Irritating anxiety*. American Educational Studies Association. Pittsburgh, PA.

Kuntz, A.M. (November, 2008). *Faculty work & material place: A case study*. Association for the Study of Higher Education. Jacksonville, FL.

Pasque, P. **Kuntz, A.M.**, Gildersleeve, R., & Carducci, R. (November, 2008). *Critical qualitative inquiry & social responsibility*. Association for the Study of Higher Education. Jacksonville, FL.

Kuntz, A.M. & Westbrook, P. (October, 2008). *Safety & Security: An enduring dilemma for schools*. American Educational Studies Association. Savannah, GA.M.

Carduci, R., **Kuntz, A.M.**, Pasque, P., & Gildersleeve, R. (November, 2007). *A Dialogue on the Role of Critical Inquiry in (Re)Shaping the Public Agenda for Higher Education*. Association for the Study of Higher Education. Louisville, KY.

Carducci, R., Contreras-McGavin, M., **Kuntz, A.M.**, & Pasque, P. (November, 2006). *Methodological borderlines: A dialogue on the intersection of Positionality and Quality in Critical Qualitative Inquiry*. Association for the Study of Higher Education. Anaheim, CA.M.

Kuntz, A.M. & Malaney, G. (November, 2005). *Civic Engagement, Social Activism, and Political Dissent in the College Classroom*, Association for the Study of Higher Education. Philadelphia, PA.M. November 18, 2005.

Kuntz, A.M. (November 2005). *Disruptive Dialogue on Critical Theory & Methodology in Higher Education Scholarship*, Association for the Study of Higher Education. Philadelphia, PA.M.

Kuntz, A.M. (November 2005) *Working Theory: Negotiating the Tension between Theory and Practice in Higher Education*, Association for the Study of Higher Education. Philadelphia, PA.M.

Kuntz, A.M. (November 2004). *Interrogating Methodology: Philosophical Questions of Research and Higher Education*, Association for the Study of Higher Education. Kansas City, MO.

Kuntz, A.M. (November 2004). *Agency and Structure: Graduate Assistant Subjection within Institutional Frameworks*, Association for the Study of Higher Education. Kansas City, MO.

Regional Peer Reviewed

Kuntz, A.M. (February, 2018). *Affect*. Southeast Philosophy of Education Society. Chattanooga, TN.

Kuntz, A.M. (February, 2017). *Higher Education & the Government of Things*. Southeast Philosophy of Education Society. Knoxville, TN.

Petrovic, J.E. & **Kuntz, A.M.** (February, 2017). *Why Critical Pedagogy Lost Its Material Edge (If It Had One)*. Southeast Philosophy of Education Society. Knoxville, TN.

Kuntz, A.M. (February, 2016). *Do-We Have to Talk About De-wey?* Southeast Philosophy of Education Society. Asheville, NC.

Kuntz, A.M. (February, 2015). *Presidential Address*. Southeast Philosophy of Education Society. Memphis, TN.

Kuntz, A.M. (February, 2014). *On risk and inquiry*. Southeast Philosophy of Education Society. Decatur, GA.

Kuntz, A.M. (February, 2013). *On Parrhesia and Qualitative Inquiry*. Southeast Philosophy of Education Society. St. Petersburg, FL.

Kuntz, A.M. (February, 2012). *In Praise of Wandering: Tactics, materialism, and indirect ways of knowing*. Southeast Philosophy of Education Society. Birmingham, AL.

Kuntz, A.M. (February, 2011). *Indirect Knowledge Formations*. Southeast Philosophy of Education Society. Huntsville, AL.

Kuntz, A.M. (February, 2009). *Irritating anxiety: Methodological conservatism and the NRC report*. Southeast Philosophy of Education Society. Auburn, AL.

Malaney, G. & **Kuntz, A.M.** (November 2005). *Take Back Student Affairs: Educating for civic engagement, social activism, and political dissent*, National Association of Student Personnel Administrators – Region I, Sturbridge, MA.M.

Malaney, G. & **Kuntz, A.M.** (November 2004). *Leadership Careers in Student Affairs: An Undergraduate Course*, National Association of Student Personnel Administrators—Region I, Mystic, CT.

GRANT & CONTRACT ACTIVITY

Grant Advisory Board:

University of Florida, *National Science Foundation*. Empirical Study on Emerging Research: The Role of Epistemological Beliefs and Cognitive Processing on Engineering Students' Ability to Solve Ambiguous Problems. 2012.

Grants & Contracts Funded:

Kuntz, A.M. (2016). Wilcox County Coalition's CSAP's Strategic Prevention Program Evaluation (\$10,000). *Cahaba Mental Health Center, AL*.

Dantzler, J. & **Kuntz, A.M.**, Co-Investigators (2013-2016). Coosa Pride Coalition's Strategic Prevention Program Evaluation (\$30,000). *Coosa River, AL*.

Kuntz, A.M. & Dantzler, J., Co-Investigators (2013-2016). Wilcox County Coalition's CSAP's Strategic Prevention Program Evaluation (\$30,000). *Cahaba Mental Health Center, AL*.

Vincent, J., & **Kuntz, A.M.**, Co-Investigators (2010-2011). English Newspapers' Narratives about the English Football Team during in the FIFA 2010 World Cup. (\$2000). *University of Alabama, College of Education Internal Grant*.

Boykin, K., Principal Investigator; Evers, S., Gleason, J. & **Kuntz, A.M.**, Co-Investigators. (2008-2013). ALEPSCoR RII-3: ALEPSCoR Education Outreach Initiative. (\$1,500,000.00). *National Science Foundation*.

Kuntz, A.M., Principal Investigator. (2007-2008). Material Place and Social Space: A qualitative case study of faculty work. (\$2000.00). *University of Alabama, College of Education Internal Grant*.

Kuntz, A.M., Principal Investigator. (2007-2009). Curricular Innovation and Change in STEM Fields. (\$5000.00). *University of Alabama, Research Grants Committee*.

Grants Not Funded:

Petrovic, J. & **Kuntz, A.M.** Building a New Social Order: From Schooling to Unschooling. *Center for Ethics & Education*, Ohio State University. (\$40,000).

Kuntz, A.M. A Critical Ethnographic Analysis of Education, Citizenship and Community. *Spencer Foundation*. (\$39,714.34).

Bakker, M., Evans, V., **Kuntz, A.M.**, Gleason, J., Nichols, S., & Templin, S. VISTA: Vertical Integration of Science and Technology in Alabama. *National Science Foundation, Math-Science Partnerships: START*. (\$299,999).

Wilson, E., Principal Investigator; Scherff, L. & **Kuntz, A.M.**, Co-Investigators. Holt High School Full Service Community School. *US Department of Education*. (\$262,269).

Kuntz, A.M., Principal Investigator; Petrovic, J., Co-Investigator. The politics of survival in the social, historical, and philosophical foundations of education. *Spencer Foundation*. (\$38,973).

Schumacker, R., Principal Investigator; **Kuntz, A.M.**, Co-Investigator. Subcontract with Governor's Office of Faith-Based and Community Initiatives. AL Governor's Office. (\$58,077).

TEACHING EXPERIENCE

Professor, Department of Educational Studies. University of Alabama. 2017-2020.

Courses:

The Material Turn in Qualitative Inquiry

Aesthetics & Ethics: Qualitative Research Methods III.

Fieldwork in Educational Research.

Associate Professor, Department of Educational Studies, University of Alabama. 2012-2017.

Courses:

Graduate Level: *Special Topics: Critical Geography; Special Topics:*

Embodiment & Emplacement; Reflexivity and Resistance in Research

(Re)Presentations: Qualitative Research Methods II; Case Study; Multicultural

Education (Bogota, Columbia); Aesthetics & Ethics: Qualitative Research

Methods III; Fieldwork in Educational Research; Readings in Foundations of Education.

Undergraduate Level: *Honors Seminar: Inquiry & Reality TV.*

Assistant Professor, Department of Educational Studies, University of Alabama. Fall 2007-2012.

Courses: *Inquiry as Interpretation: Qualitative Research Methods I; Reflexivity*

and Resistance in Research (Re)Presentations: Qualitative Research Methods II;

Aesthetics & Ethics: Qualitative Research Methods III; Case Study; Evaluation I:

Theory & Practice; Researching Physical Place & Social Space;. All graduate-level courses.

Co-Instructor, University of Massachusetts Amherst. Spring 2007.

Introduction to Program Evaluation. Graduate-level.

Co-Instructor, University of Massachusetts Amherst. Spring 2006.
Strategies for Institutional Change. Graduate-level.

Co-Instructor, University of Massachusetts Amherst. Fall 2005-2007.
Introduction to Inquiry. Graduate-level.

Teaching Assistant, University of Massachusetts Amherst. Fall, 2002-Spring 2005. *Diversity on the College Campus*. Undergraduate-level.

Teaching Associate, University of Massachusetts Amherst. Fall 2004.
Leadership Careers in Student Affairs. Undergraduate-level.

Adjunct Instructor, Saint Michael's College. Fall 1999-Spring 2002.
Special Topics in Gender Studies. Undergraduate-level.

Teaching Assistant, Saint Michael's College. Spring 1999.
Gender Studies in Society. Undergraduate-level.

Teaching Fellow, Northeastern University. September 1996-June 1998.

Tutor, *University Writing Center*, Northeastern University. September 1996-June 1998.

WORK EXPERIENCE

Professor, Department of Counseling, Rehabilitation, & School Psychology, Florida International University. 2020-present.

Department Chair, Department of Counseling, Rehabilitation, & School Psychology, Florida International University. 2020-present.

Professor, Department of Educational Studies, University of Alabama. 2017-2020.

Department Head, Educational Studies, University of Alabama. Oversee all elements of department activities (including day-to-day operations and strategic plan implementation. Report to Dean of Education. Serve as member of College of Education Leadership Council. 2014-Present.

Associate Professor, Department of Educational Studies, University of Alabama. 2012-2017.

Program Coordinator, Research Methodology, University of Alabama. 2012-2016. Manage programmatic activities for department.

Assistant Professor, Department of Educational Studies, University of Alabama. Develop course curriculum for Research Methodology program. Teach graduate-level courses. Pursue active research agenda. Develop and implement grant proposals. Oversee graduate assistants and Qualitative Research Lab. 2007-2012.

Evaluation Consultant, Tuskegee University, *Minority-Teacher Led MSP*. National Science Foundation grant-funded. Consulted on evaluation activities for large NSF grant. 2009-2010.

External Consultant, *National Collegiate Inventors & Innovators Alliance (NCIIA)*. Evaluate grant proposals, produce grant synopsis, collaborate on grant activities. Spring 2007-2008.

Evaluation Specialist, *National Collegiate Inventors & Innovators Alliance (NCIIA)*. Devised interview protocol, conducted phone interviews, interpreted qualitative and quantitative data and wrote reports for internal evaluation of

national granting agency. Served as a consultant to affiliated colleges and universities: conducted campus focus groups, devised interview protocol, and wrote summary reports. Spring 2006-2007.

Research Associate, *Student Assessment, Research and Evaluation Office (SAREO)*, University of Massachusetts Amherst. Conducted focus groups of first year students in alternative housing. Conducted individual interviews of Graduate School staff. Interpreted data and wrote final reports. Spring 2005-2006.

Research Consultant, Smith College. Conducted focus groups centered on retention issues and the first year experience of Smith College students. Interpreted data and delivered reports to management, Smith College. Fall 2003-2007.

Research Assistant, University of Massachusetts Amherst. Assisted faculty member in Department of Educational Research, Policy, and Administration to collect and analyze educational data leading to journal articles. Fall 2002-2007.

Graduate Assistant, University of Massachusetts Amherst. Edited third edition of qualitative methodology book. Suggested and evaluated revisions. Wrote end of chapter responses in conjunction with authors and another graduate assistant.

Co-Coordinator, Undergraduate Leadership Conference, University of Massachusetts at Amherst. Worked with team of Campus Activities staff to construct and employ curriculum for weeklong undergraduate leadership conference. Taught courses in organizational culture, diversity, and conflict management. Trained and oversaw eight undergraduate conference assistants. Summer 2003.

Assistant Registrar, Saint Michael's College. Interpreted college policy for undergraduate students. Served as student advocate within Academic Affairs. Collected, analyzed reported, and distributed graduation data. Evaluated transfer credits. Conducted database reporting for internal and external agencies. Served as facilitator of college historical data. April 2000-August 2002.

Office Assistant, Student Life, Saint Michael's College. Maintained office functions in the Office of Student Life. Facilitated Resident Assistant training. Created office publications. Authored accepted submission to the Templeton Foundation on College and Character. Orchestrated housing and student orientation events. August 1998-April 2000.

Graduate Assistant, Northeastern University. Trained, supervised, and evaluated team of 33 orientation leaders. Emphasized skills of conflict management, communication, and group facilitation.

SERVICE

Disciplinary

Editorial Board, *ACCESS: Contemporary Issues in Education*, 2020-present.

Editorial Board, *Philosophy & Theory in Higher Education*, 2017-present.

Editorial Board—*Bloomsbury Research Methods for Education*, 2015-present.

Editorial Board—*The Review of Higher Education*. 2013-Present.

Guest Editor, Special Issue, *Qualitative Inquiry*, Summer 2020.

Guest Editor, Special Issue, *Critical Questions in Education*, Spring 2017.

Guest Editor, Special Issue, *Critical Questions in Education*, Fall 2016.

Discussant—*Critical Inquiry for the Social Good*. American Educational Research Association. Spring 2016.

President—*Southeast Philosophy of Education Society*. 2013-2014.

Invited Reviewer—*Peer Reviewed Journals*:

- *Educational Researcher*
- *Qualitative Inquiry*
- *International Journal of Qualitative Studies in Education*
- *Qualitative Research*
- *Educational Studies*
- *Higher Education*
- *Journal of Higher Education*
- *Journal of Higher Education Outreach and Engagement*
- *Studies in Higher Education*
- *Journal of Engineering Education*

Invited Reviewer—*Peer Reviewed Books*:

- *Routledge Press*
- *Sage Publications*

Program Chair—*Southeast Philosophy of Education Society*. 2011-2012.

Member, *Division D Executive Committee*, American Educational Research Association. Spring 2008-2013.

Chair, *Division D Significant Contribution Award*, Educational Research Association. Spring 2010-2012.

Discussant, *Concerns & Considerations in Qualitative Research*, American Educational Research Association Annual Conference. Spring 2011.

Discussant, *Critical Inquiry and Transgressive Methodologies in the Study of Higher Education*, American Educational Research Association Annual Conference. Spring 2011.

Discussant, *Division D Exemplary Work From Promising Researchers*, American Educational Research Association Annual Conference. Spring 2011.

Program Chair, Division D, American Educational Research Association. Spring 2009-2010.

Co-Chair, Division D, Section 3, American Educational Research Association. Spring, 2008-2010.

Reviewer of Proposals, American Educational Research Association, *Division D-Research Methodology*. Fall 2007-present.

Reviewer of Proposals, American Educational Research Association, *Division G-Social Context of Education*. Fall 2006-present.

Reviewer of Proposals, American Educational Research Association, *Division J-Postsecondary Education*. Fall 2003-present.

Reviewer of Proposals, Association for the Study of Higher Education, Summer 2003-2013.

Invited Speaker, *Qualitative Research Methodology*, Iowa State University. September, 2008.

Invited Speaker, *Qualitative Research Methodology*, University of Oklahoma. November, 2008.

Invited Speaker, *Qualitative Research Methodology*, Iowa State University. September, 2007.

Chair, *Evolving Perceptions and Organizational Cultures*, Association for the Study of Higher Education, Anaheim, CA, November, 2006.

Chair, *Re-envisioning Pedagogy: Studies of Faculty Work*, Association for the Study of Higher Education, Anaheim, CA, November, 2006.

Discussant, *Perspectives on the Graduate Student Experience*, American Educational Research Association, Montreal, Canada, April, 2006.

University of Alabama

Member, Graduate Council. University of Alabama. 2018-Present.

Chair, Policy Committee, Graduate Council. University of Alabama. 2018-Present.

Chair, Department Head Search Committee. Educational Studies. University of Alabama. 2018-2020.

Chair, School Psychology Search Committee. University of Alabama. 2019-2020.

Member, Capstone Center for Student Success Search Committee. University of Alabama. 2018-2019.

Department Chair, Educational Studies. University of Alabama. 2015-Present.

Member, Leadership Council, University of Alabama College of Education. 2015-Present.

Program Coordinator, Educational Research. University of Alabama. August 2012-2016.

Member, Graduate Council. University of Alabama. Fall 2018-present; Fall 2012-2014.

Member, Policy Committee, Graduate Council. University of Alabama. Fall 2018-present.

Selected Member, Leadership U, University of Alabama, 2015-2017.

Selected Representative, SECU, 2016-2017.

Member, Faculty Senate. University of Alabama. Fall 2012-2015.

Member, Advisory Board. Graduate Parent Support. University of Alabama. Summer 2009-Present.

Chair, Faculty Search Committee. Department of Educational Studies in Psychology, Research Methodology, and Counseling. Summer 2011.

Co-Chair, Faculty Search Committee. Department of Educational Studies in Psychology, Research Methodology, and Counseling. Fall 2009-Spring 2010.

Member, Second Life Committee. Department of Educational Studies in Psychology, Research Methodology, and Counseling. Fall 2007-2010.

Member, Faculty Search Committee. Department of Educational Studies in Psychology, Research Methodology, and Counseling. Fall 2008-Spring 2009.

Member, Faculty Search Committee. Department of Educational Studies in Psychology, Research Methodology, and Counseling. Fall 2007-Spring 2008.

Dissertation Committees--Chair (Completed)

Kelly Berwanger (Chair)

Myrna Williamson (Chair)
 Austin Pickup (Chair)
 Lori Hill (Chair)
 Leigh Booth (Chair)
 Jeffrey Hayes (Chair)
 Mo Xue (Chair)
 Austin Lane (Co-Chair)
 Tedi Gordon (Co-Chair)
 Whitney Burton (Co-Chair)
 Julie Jones (Chair)
 Donna Guerra (Chair)
 Marsha Simon (Chair)
 Michelle Wooten (Chair)

Dissertation Committees—Member (Completed)

Emeka Nzeocha	Karen Nabors
Lynn Allyson Kelley	Carolyn Starkey
Amanda White	Johanna Massey
Dohyoung Ryang	Vernita Moore
Stephanie Baller	Inez Ragland
Tarsha Bluiett	Joan Mitchell
Theresa Jones	Jeena Williams
Susan Welch	Ashley Davis
Christina VanZandt	Julie Hold
Andrea Minear	Reitha Cabaniss
Kristy Black	Margaret Jensen
Robin Jones	Haley Strickland
Elizabeth Wade	Inez Ragland
Juan Walker	John Myrick
Richard Templeton	Sara Hartley
Karen Watts	Rebecca Odom-Bartel
Andrea Word	Alexander Parks
Susan Zimlich	John Gilchrist
Kary Roberts	Caroline Parsons
Amanda Smith	Lou Ginnochio
Alan Brown	Tricia Patterson
Lisa Matherson	Jacqueline Smith
Chris Hutt	Margaret Andrew
Cynthia Green	Caroline Parsons
Chris Franklin	John Gilchrist
Sarah Hartman	Paul Landry
Stephanie Blackmon	Michelle Walton
Moniaree Jones	Nicole Camp
Robert Hayes	Anna-Margaret Yarborough
Tasha Parrish	Paul Atkinson
Josie Prado	Khattiyanant Nonthaisong

Min Wang
Andraa' Perrin
Michelle Walton
Anna-Margaret Yarbrough
Sierra Turner
Shernavia Hall
Sharon Ross

Donna Ross
Kathleen Gillan
Mark Reed
Tasha Smith
Hawken Brackett
Craig Bouvier

Dissertation Committees Member (in progress)

Effie Fields
Emily Sims
Amy Murphy
Katrina Swain
LaTonya Santo
Jacqueline Smith

Haley Srickland
Nicole Camp
Jennifer Barnett
Dwight Jinright

Thesis Committees

Austin McDonald (Communications Dept. – completed)
Jessy Ohl (Communications Dept. – completed)
Brian Oliu (English Dept. – completed)

University of Massachusetts Amherst (2002-2007)

Graduate Student Representative, Educational Policy, Research, and Administration, September, 2002-January, 2004.

Member, Faculty Search Committee, Educational Policy, Research, and Administration, Spring, 2003.

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ACADEMIC AFFAIRS REGULAR REPORTS

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

I. ACADEMIC AND CAREER SUCCESS

1. The Formation of Office of Student Success Operations and Strategy (Student SOS)

This semester, the Division of Academic and Career Success (ACS) created the Office of Student Success Operations and Strategy, also known as The Student SOS. The Student SOS works to improve student success outcomes at FIU by providing actionable data, conducting targeted outreach, and facilitating cross-college collaboration. The Student SOS is made up of two teams: the Strategic Initiatives and Data Coaching team (SIDC) and the Retention Outreach and Advising Resources team (ROAR.) The SIDC facilitates strategic, data-driven initiatives designed to increase retention and graduation by providing actionable data to partners within ACS and across the University. They identify and remove institutional barriers to undergraduate student retention, progression, and graduation such as unnecessary use of registration holds, course availability problems, and curriculum designs which impede timely graduation. ROAR works directly with students in financial and/or academic distress to remove barriers to success and identify pathways that will facilitate progression and timely graduation. They also coordinate university-wide advising initiatives and provide training and professional development for the advising community.

Starting in July, the team contacted 2018 and 2019 FTIC students who were not enrolled for Fall 2020. They worked with students on issues related to change of major, past due balance, and the impacts of COVID-19. They collaborated with partners throughout the University to assist the students. These efforts contributed to nearly a full percentage point increase in second-to-third year retention and over a 2% increase in first-to-second year retention. In September, the team contacted 468 students at-risk of being dropped from their Fall classes for non-payment. They worked with the students and University partners to award grants, resolve financial aid issues, and address other barriers. As a result of their efforts, 98% of those students successfully remained enrolled in their Fall classes. Additionally, they worked with various FTIC populations with outstanding balances, as well as those who lost or were at-risk of losing their financial aid. Efforts included assistance with the appeal process, requirements for maintaining eligibility, and resolution of balances.

2. Analysis of Fall 2020 Virtual Career Fair

Career and Talent Development is a full-service career center with a centrally coordinated and locally deployed model. Like most other units at FIU, as of March 2020, Career and Talent Development (CTD) transitioned to a completely remote environment. All career related services and programs have been offered virtually including our semi-annual Career Fairs.

During the two-day, virtual Career Fair in September, employers had the option of choosing “one-on-one” sessions with students or hosting a “room” where they could interact with several students at a time. Over 114 employers and over 2,500 students and alumni were in attendance. Both numbers are significantly higher than our typical Spring “in person” recruitment events. As colleges and universities nationwide struggle to connect employers and students, FIU has been able to attract and even grow the number of employers recruiting our graduates. 4,629 resumes were submitted, forty-eight (48) group sessions were held, and 2,213 individual meetings took place. This virtual platform of the event gave us valuable data we are not able to gather in a face to face environment. The employers with the highest number of “booth” visits for day 1 (Technical Career Fair) were *GE Healthcare and Appliances, Oracle (US), Facebook, Ultimate Software and the Chevron Group*. During day two (ALL Majors Fair) the top five visited booths were *Wells Fargo, Oracle, Bloomberg, UBS and NextEra Energy Inc. (FPL)*.

II. ENGAGEMENT REPORT

1. Community Outreach and Events: FIU Cafecito Chats & NASEM Town Hall

The Office of Engagement began multiple series of online community engagement activities immediately following community quarantine due to the COVID-19 pandemic.

FIU Cafecito Chats are engagement talk shows featuring local and national community leaders, FIU faculty, staff and students and other local celebrity guests. To date, the show has aired 110 episodes and reached over 50,000 people. For Hispanic Heritage Month, featured speakers included authors Priscilla Oliveras, Anthony De Palma, and poet laureate Richard Blanco.

On August 5th, 2020 FIU held a virtual Town Hall in partnership with the National Academies of Sciences, Engineering, and Medicine. The Town Hall focused on how Florida International University, as a Hispanic Serving Institution, is merging STEM education research and practice to instantiate the community change and institutional transformations necessary to establish equity for underrepresented students in STEM. The aim of the Town Hall was to create an evolving conversation among MSIs regarding best, STEM education research-based practices for creating, implementing, and sustaining equity driven culture and pathways for STEM collegians within our colleges and universities. Ten FIU Faculty members and three students presented their research and programs during the Town Hall. A total of 594 individuals from colleges and universities, and national organizations across the country registered for the event. The live event received 465 live viewers and the virtual recording received 672 plays for a total of 650 hours of video viewing time.

2. Community Coalitions: Life Sciences South Florida (LSSF) COVID-19 Research Symposium

The virtual LSSF COVID-19 Research Symposium showcased the scientific work of South Florida's Science, Technology, Engineering and Math (STEM) students through virtual oral presentations. This virtual Symposium focused on COVID-19 related research projects that students are undertaking within four categories: COVID-19 science investigations, COVID-19 education, COVID-19 technology, and COVID-19 impact on the community.

The event was held on September 19th, 2020, led by FIU Engagement, and hosted undergraduate scholars presenting their work from across 6 colleges and universities: Barry University, Florida Atlantic University, Florida International University, Miami Dade College, Nova Southeastern University, and St. Thomas University. A total of 135 guests attended the live virtual opening remarks. After the welcome session, there were six concurrent presentation sessions in which 4-5 student research groups presented their work to an audience ranging from 30-58 guests. Moderators were faculty members in STEM fields from across our South Florida colleges and universities. The event was held partially via the ForagerOne Symposium platform, which facilitated a-synchronous interactions between student presenters, moderators, and registered guests via prerecorded 10-minute research presentations that all guests could view and comment on via blog feature.

3. New Initiatives and Collaboratives

FIU Engagement has engaged in building a large-scale and long-term strategic partnership with the City of Boynton Beach. The partnership is meant to serve as a pilot in a new type of municipal partnership focused on equity. In Phase 1, the FIU Metropolitan Center and SIPA Department of

Public Policy and Administration will begin assessments of how government systems are impacting equity in the community and how equitable internal practices and policies are. In Phase 2, the City will be able to engage in training and development activities for all city employees based on the outcomes of the assessments. In Phase 3, FIU will advise the City in implementation of policies meant to build equity. Longer term, a steering committee will be built made up of relevant working groups with FIU scholars, City staff, and community members.

FIU Engagement is working with the recently formed South Florida Black Prosperity Alliance (SFBPA) in an effort to support the capacity building needs of the initiative. This is a tri-county economic and racial justice effort with members from Miami-Dade, Broward, and Palm Beach. FIU and SFBPA are currently finalizing a Memorandum of Understanding which will be signed in Fall 2020.

III. ENROLLMENT MANAGEMENT AND SERVICES REPORT

1. University Enrollment

Summer 2020				
<i>Early Fall/Summer Point in Time Comparisons by Count Type and Term</i>				
Count Type	Summer 2019	Summer 2020	Diff	% Diff
Headcount	40,202	42,479	2,277	5.7%
Fundable FTE's	8,634	9,631	997	11.5%
Student Credit Hours	287,807	314,006	26,199	9.1%

As of October 8, 2020, we enrolled 42,479 students in courses for the summer 2020 term. This represents a 6% increase as compared to summer 2019 enrollment of 40,202.

Fundable FTE's have increased by 12% or by 997, from 8,634 in summer 2019 to 9,631 in summer 2020. Student credit hour production increased by 26,199 or 9%, from 287,807 in summer 2019 to 314,006 in summer 2020.

Fall 2020				
<i>Fall Point in Time Comparisons by Count Type and Term</i>				
Count Type	Fall 2019	Fall 2020	Diff	% Diff
Headcount	58,784	58,824	40	0.07%
Fundable FTE's	18,124	18,095	-29	-0.16%
Student Credit Hours	594,173	591,251	-2,922	-0.49%

As of October 8, 2020, 58,824 students enrolled in Fall 2020 courses. This remained flat as compared to Fall 2019 enrollment of 58,784. Fundable FTE's also remained flat from 18,124 in 2019 to 18,095 in 2020. Student credit hour production decreased by 2,922 or 0.49%, from 594,173 in Fall 2019 to 591,251 in Fall 2020.

2. University Admissions

University Admissions transitioned to remote recruitment. Through collaboration and partnership with FIU Online and Academic & Student Affairs, University Admissions created a comprehensive virtual campus visit program which includes information sessions for prospective FTIC, transfer and graduate students; academic interest sessions; and student panels. There are also two virtual tours, one for each campus.

University Admissions is also participating in virtual school visits and college fairs. Prospective students, parents and influencers can have a one-on-one meeting with an admissions professional at college fairs hosted by the National Association for College Admission Counseling; or can join a webcast being hosted by the State University System.

University Admissions contracted with Carnegie Dartlet to begin its 2020-21 digital marketing campaign in the US. This campaign will use leading-edge strategies to maximize social media advertising, search engine optimization and online display marketing to create brand awareness and exposure keeping FIU top-of-mind. The goal is to generate qualified undergraduate and graduate leads and applications for specific programs, in targeted geographic areas. The first campaign will be to generate FTIC applications in key geographic areas outside of Florida.

3. Financial Aid

Disbursement

The Fall 2020 semester the Financial Aid Office has disbursed \$186 million to 33,345 students while working remotely.

As of October 9, 2020, the final 2019-2020 aid disbursed totaled \$538.6 million to 44,764 students a 5% increase compared to 2018-2019 \$512 million to 43,616.

Cohort Default Rate

FIU's 3-Year Cohort Default rate showed an increase for the 2017 cohort. This is an expected increase. The 2016 rate reflects the borrower relief our region received from the impacts of Hurricanes Irma and Maria. The 2017 is lower than the 2015, continuing the decline for "normal" cohort years. The following table provides a comparison to all 4-year public institutions and the national rates for all institutions.

FIU Cohort Default Rate Compared with 4-Year Public Institutions and All Institutions

Institution/Type	Cohort							
	2010	2011	2012	2013	2014	2015	2016	2017
FIU	10.5%	8.9%	6.8%	5.4%	5.8%	5.3%	3.7%	5.2%
4-Year Public	9.3%	8.9%	7.6%	7.3%	7.5%	7.1%	6.8%	7.1%
National All	14.7%	13.7%	11.8%	11.3%	11.5%	10.8%	10.1%	9.7%

4. Office of Scholarships

The Office of Scholarships continues to lead the student emergency aid process in response to COVID-19. Since April 2020, we have received and processed over 17,000 applications for emergency assistance. We successfully distributed our student allocation of the CARES Act and

have been able to make 2,232 additional awards using foundation and institutional dollars and leveraging available financial aid. Since the shutdown we have given over 11,778 awards totaling \$22,444,853.46 in emergency assistance to students.

Total Awards Breakdown	Awards Made	Sum of Total Awards
CARES	9,549	\$ 19,149,680.00
University Grant	346	\$ 537,945.68
FSEOG	591	\$ 1,264,280.43
FIU Foundation Funds	1,205	\$ 1,377,983.27
Institutional Funds	87	\$ 114,964.08
Grand Total	11,778	\$ 22,444,853.46

There is still a great amount of need in our student body. We are working with FIU Foundation and university leadership to find funding for students who have requested emergency assistance, but we have been unable to fund (see details below). Current needs exceed 6 million dollars.

Category	Count of Students Requesting support in this category	Amount Requested
Food	2986	\$1,084,591.31
Housing	2651	\$2,660,806.07
Car	2459	\$856,539.49
Living Expenses	2959	\$1,796,389.43
Total	n/a	\$6,398,326.30

5. University Registrar

Miami Dade College-FIU Summer Transfer project

Due to COVID-19 Miami Dade College, our largest feeder institution for transfer students, delayed their summer term start dates by 3 to 4 weeks. The FIU Fall term began on Monday, August 24th and MDC's Summer term ended on August 21st. This weekend turnaround between MDC's Summer term ending and the beginning of FIU's Fall term could have severely impacted FIU transfer enrollment related to final transcripts and grades available prior to beginning at FIU. The Registrar's Office worked proactively with MDC to secure the final student transcripts. Together with IT, Admissions, Transfer and Transition Services, and academic advisors throughout the institution at FIU, we created a holistic, ad-hoc process that seamlessly allowed for the transition of batch transcripts between FIU and MDC and provided the over 2,500 students a welcoming experience to FIU.

Graduation process – continued enhancements

By the end of the Summer 2020 semester, the enhanced graduation process continued successfully in PantherSoft. The only two remaining colleges, College of Engineering and Computing and College of Communication, Architecture and The Arts (CARTA), will be added at the end of Fall 2020. Below are the latest statistics of the auto/batch graduation process for undergraduate students since the project began in Fall of 2019. Most of the batch graduation process now occurs within 5 days after grades are posted at the end of the term. This has significantly improved customer service for students, who now can order transcripts with their

degree posted within a week. This process was previously manual and took about 4 to 5 weeks to complete. This method also graduates students when all requirements are met, therefore reducing excess credits and improving graduation rates.

As an example, by using this process, in Spring of 2020, we identified students who were eligible but not applied for graduation and facilitated the application process automatically without advisor or student intervention. This led to 259 students being successfully applied and graduated through this process. Of the 259 applications, 35 were for students in the 2016 FTIC cohort. This contributed to nearly a full percentage point increase in the University's 2016 FTIC graduation rate.

As can be noted from below, by the Summer term 82% of all undergraduate degrees were successfully awarded/posted using the batch processing method. By the end of the Fall term, it is expected that 95%+ of all undergraduate degrees will be posted automatically. Next steps include automating the process for Graduate I degrees (Masters) and Certificates.

Term	Count of Auto Post	Count of Manual Post	% Auto Post	% Manual Post
⊕ Fall 2019 (1198)	1,617	2,946	35%	65%
⊕ Spring 2020 (1201)	3,632	1,321	73%	27%
⊕ Summer 2020 (1205)	3,128	697	82%	18%
Grand Total	8,377	4,964	63%	37%

IV. INFORMATION TECHNOLOGY REPORT

1. Division of IT's CIARA awarded \$10.3M

The Division of IT's Center for Internet Augmented Research and Assessment (CIARA) has been awarded two new five-year awards totaling \$10.3M; \$6.5M for the AtlanticWave-SDX: A Distributed Intercontinental Experimental Software Defined Exchange and a new five-year award of \$3.8M from the U.S. National Science Foundation (NSF) for the Americas Lightpaths Express and Protect (AmLight-ExP). The AtlanticWave-SDX has been awarded to CIARA for a second consecutive time and aims to make network paths easy for domain scientist to use. The award will introduce new capabilities, enabling Open Exchange Points (OXF) to react to unplanned network events by adding intelligent closed-loop control of network services powered by in-band network telemetry. An OXF serves as meet points for connecting and facilitating the exchange of data between Research and Education (R&E) networks. They are critical cyberinfrastructure in the transit of data over long geographical distances, switching data flows from one R&E network to the next, to its destination.

The AmLight Express and Protect (AmLight-ExP) project at FIU has helped researchers over the years transport their data through strong multiple 100 Gigabit per second (Gbps) dedicated highspeed network between three continents: North America, South America, and Africa. Creating a strong dedicated network allows for the data to be accessed quicker by scientists, educators, and students. The aggregate bandwidth capacity is planned to increase to 800Gbps from now until 2026 with new network connections envisioned from Brazil to Virginia, and Virginia to Portugal, adding resiliency and capacity between the U.S., South America, and Europe. By 2026, the AmLight project goal aims to achieve 4.4Tbps of aggregate bandwidth capacity.

2. Panthers Protecting Panthers (P3) Invite a Visitor

Over the course of the Summer, the Division of IT finalized the Panthers Protecting Panthers app (FIUP3). The FIU P3 app is a key part of our Panthers Protecting Panthers initiative for our FIU

community. The app follows the Centers for Disease Control and Prevention guidelines. It contains a safety screening questionnaire -- along with additional FIU and community resources -- that screens for COVID-19 symptoms. The app will not determine whether a user has contracted COVID-19, however, depending on the answers submitted, it will let the user know if they can come on campus or if they should stay at home.

Prior to coming on campus, all students, faculty and staff are required to complete the safety screening questionnaire within the FIU P3 app. Most recently, the division made enhancements to the app which gives faculty and staff the ability to “Invite a Visitor” onto any FIU campuses or locations. Once invited, the visitor will receive an email with an invitation and instructions on how to complete the questionnaire online.

3. Technology Fee for the 2020/2021 Academic Year

The Technology Fee Council reviewed one-hundred and twenty-nine proposals (129) from academic and administrative units. The final recommendations were submitted to the Vice President and CIO Robert Grillo and Executive Vice President and Provost Dr. Kenneth Furton for approval. Based on recommendations made by the Technology Fee Council, a total of forty-three (43) proposals were approved. Approved proposals must align with the Next Horizon 2025 strategic plan and should support any of the following: 1) emerging technologies; 2) create innovative concepts for teaching; 3) achieve exceptional student-centered learning; and 4) accelerate academic and career-ready success. Approved proposals include funding for a new large capacity, active learning classroom at BBC to help improve student success and achieve learning outcomes. Also included is the continued expansion and improvements of the University’s teaching and learning technologies across all our campuses.

V. RESEARCH AND ECONOMIC DEVELOPMENT / UNIVERSITY GRADUATE SCHOOL

1. External Grant Awards’ Performance

Last fiscal year (2019-2020) concluded with a 25% increase in research awards, a 34% increase in research proposal amounts of requested funding, and a 9% increase in number of proposals. Moreover, our overall success rate with grant proposals has increased by 14% over the past two years (from 43% to 49%). During the first quarter of FY 2020-2021 our progress continues; awards received were 5% higher than those received during the same period last fiscal year (\$60.2M vs. \$57.1M). External awards received by Centers and Institutes increased by 28%, from \$25.4M to \$32.5M, during the first quarter. Most notable during the first quarter are the STEM Transformation Institute that received \$1.3M, the Community Based Research Institute received \$1.1M and ARC received \$1M. The distribution of awards received by funding source remained the same: 86% from federal sources, 5% from private/other, and 9% from state and local governments. The number of proposals submitted between July and September increased by 13% when compared with the same period last year.

2. Innovation, Partnerships and Economic Development

StartUP FIU is working with 18 faculty and 6 graduate students to commercialize their research. During the first quarter of FY 2020-2021, three teams were accepted to the national NSF I-Corps program (\$50,000 grant/each) and one team started a virtual regional I-Corps five-week program. StartUP FIU staff developed and presented a virtual workshop on commercializing research for 55 faculty—“Research Innovation: A Guide to Knowing if your Idea Will Sell.” Additionally, StartUP FIU staff developed and presented a virtual 4-workshop talk series on commercializing research for the

FIU Graduate School and 92 PhD students attended. As part of the student entrepreneurship programs, four different virtual boot camps attracted the participation of 147 applicants, of which 54 graduate/undergraduate students were accepted. The Office of Technology Management and Commercialization received 19 IP disclosures, filed 9 patent applications, received 8 patents and is on target to finish the calendar year with 60 patents as per goal. The staff assisted in the review and negotiations of numerous grant agreements for ORED during the quarter, especially those with third party corporate sponsors, and provided IP counseling for faculty who were working on grants. During the first quarter of FY 20-21, we participated with GaTech (along with Vanderbilt and a few other universities in the South) in a 5-year/\$15M NSF I-Corps Hub grant proposal submission. If awarded, the grant will allow FIU to become part of the NSF's national innovation ecosystem.

3. University Graduate School (UGS)

The final enrollment numbers for Fall 2020 semester were 381 doctoral students (1% decrease compared to last year; mostly impacted by international students) and 2,787 master's students (12% increase compared to last year). Despite decreases in international enrollment, domestic enrollment increased in doctoral (9%) and master's (22%) programs. The highest doctoral enrollment was in the College of Arts, Sciences and Education (19%) and the highest enrollment in master's was in the Stempel College of Public Health and Social Work (35%). The Fall orientation for graduate students was conducted remotely, with a record of 582 students attending who had the opportunity hear from the UGS leadership and ask questions. Various units and centers that provide services to graduate students also presented. Additionally, 340 students participated in the online version of orientation, which was redesigned in Canvas with the assistance of FIU Online. Led by Dr. Alla Mirzoyan, UGS launched its new Office of Training and Fellowships, which provides support to graduate students applying for external fellowships and faculty members applying for graduate student training grants. We held workshops to prepare students to apply for the National Science Foundation Graduate Research Fellowship and the Ford Foundation Fellowship that were attended by 70 graduate students. In partnership with the Center for Excellence in Writing, we initiated a novel writing mentorship program where graduate students meet on a weekly basis with a writing coach to work on their proposals, thesis, dissertations and manuscripts. We are piloting the program with 24 graduate students this Fall and are planning to extend it in the following terms. As part of our Professional Program for Graduate Program Directors, we offered two workshops in September in collaboration with the Offices of Student Conduct and Conflict Resolution and IDEA to present and discuss new processes related to student conduct and Title VII/Title IX. Over 70 associate deans, graduate program directors and graduate program assistants participated.

VI. ACADEMIC & STUDENT AFFAIRS REPORT

1. Student Health & Wellness National Institute of Health (NIH) Supplemental Grant

Student Health & Wellness was approved for a supplemental grant for FY21 by the National Institute of Health (NIH) that is tied to FIU's MARC U*STAR program, a NIH-funded training program for undergraduate students interested in biomedical research. These students are all highly motivated, ambitious, young researchers that work in various faculty labs across FIU. The program is tailored to provide fellows with specialized educational and professional development opportunities. Due to the nature of the program, these students may experience added stressors, in addition to those normally seen in the college population. This year, MARC U*STAR will partner with the Student Health and Wellness (SHW)'s Healthy Living Program (HLP), to teach students

about life skills outside of academia. HLP will focus on educating the fellows on the 9 dimensions of wellness and how to build their personal toolkit to achieve balance and personal well-being.

2. FIU recognized for supporting students in the military

Florida International University has been recognized for its efforts to support military-affiliated students and those who are veterans. It was recently recognized as a 2020 Top School for Veterans by U.S. Veterans Magazine, which came on the heels of ranking as a 2020-2021 Military College of Distinction last month. U.S. Veterans Magazine works to inform veterans and their families of opportunities and information that can help ease the transition from military to civilian life. The FIU Office of Veteran & Military Affairs (VMA) in the Division of Academic and Student Affairs offers services to veterans and military-affiliated students that includes support and guidance navigating through Veteran Affairs (VA) benefits, career support, connecting students with disability services and counseling resources, and scholarships for veterans. There are over 1,600 veteran and military-affiliated (active duty, reservists, dependents, and national guardsmen) students at FIU, and 125 faculty and staff veterans employed at the university. FIU is dedicated on developing a “holistic approach” to supporting veterans.

3. FIU awarded \$1.3 million to help underrepresented students succeed

Florida International University’s Student Support Services (SSS) program in the Division of Academic and Student Affairs received a \$1.3 million U.S. Department of Education grant over the next five years to ensure more students from underrepresented backgrounds excel and graduate from college. The SSS program helps first generation, low-income, and students with disabilities remove obstacles preventing them from thriving academically. The grant will support an array of services including tutoring, financial aid advice, career and college mentoring, and other forms of assistance. Such services enhance academic success and make it more likely that students will graduate and/or pursue graduate school with the lowest possible debt. At FIU, more than half of the undergraduate student population is eligible to receive SSS services. SSS is one of eight federal TRIO programs – named after the original three programs created in 1965 - authorized by the Higher Education Act to help students succeed in college. Since 1997, approximately 2,500 students have enrolled in FIU’s SSS program and have graduated with their bachelor’s degrees.

4. Who I am Forum

In commemoration and celebration of National Disability Employment Awareness Month, the “Who I Am” Forum, was hosted on Thursday, October 22 from 4pm – 5pm. The forum was developed to promote the recruitment, retention and advancement of people with disabilities by encouraging employers and others to recognize the skills and value they bring to the workplace.

DRC's annual diversity awareness photo also took place during this event and captured a virtual photo of participants in solidarity with the FIU disability community. This event was sponsored by the Disability Resource Center, Multicultural Programs & Services, and Office of Veteran & Military Affairs.

5. Disability Resource Center Scholarships

The DRC has continued in partnership with Dr. Fareed Haj’s family to steward the endowment scholarship which grants awards to students who are blind/low vision and have exhibited academic

success and civic engagement. This year, \$6,000 have been awarded for Fall and Spring to two meritorious students who are pursuing degrees in Law and Business Management, respectively.

In August 2020, the DRC awarded \$126,225 in Johnson Scholarship Foundation awards to 80 undergraduate students with disabilities who are seeking their first baccalaureate degrees. These students have significant unmet financial need and are pursuing majors such as Information Technology, Health Services Administration, and Biology, and have disabilities including psychological/behavioral disabilities, Autism Spectrum Disorder, and specific learning disabilities.

6. Wellness and Recreation Centers

The FIU Wellness and Recreation Center (WRC) has pivoted its programming and resources by creating the Virtual WRC, allowing students to transition to reaching their fitness and wellness goals online seamlessly. Our programs are available On-Demand, live via Zoom, and via a dedicated YouTube Channel, which houses previously recorded programming. In addition to these classes, students have access to programs such as sessions with athletic trainers and sport program administrators, Esports events and leagues, running challenges, and so much more.

To date during the Fall semester, our innovative offerings include 248 fitness and wellness classes, with 3,130 participations. The Virtual WRC has addressed our students' varying needs with a plethora of easily accessible online content.

7. Student Life and Development

Student Life and Development has had a very busy Fall 2020! We just finished an amazing Homecoming with most of the events being virtual including our first ever concert done fully virtual with headlining artist Diplo. We had 1900 students attend the online concert!

The five departments in Student Life and Development have held 45 virtual events with great success such as 317 attended the virtual club fair and 246 participated in sorority virtual recruitment!

8. FIU Online

CLICK-12: For over 20 years, FIU Online has been on the cutting edge of digital course design. When the coronavirus pandemic caused a rapid shift to remote learning, we knew we had to deploy our know-how to support K-12 educators. To that end, FIU Online created CLICK-12, a four-part webinar series that shared best practices with K-12 teachers meeting the challenge of digitizing their classrooms fast. While we suspected a general need for dependable expertise in online learning, the results exceeded our expectations: over 3,750 teachers registered for our webinars, representing upwards of 1,000 schools from around the globe, including 48 states in the US and 34 countries, namely Canada, the Bahamas, Venezuela, North Macedonia, and Brazil. Our success ultimately came down to K-12 educators' immediate need for quickly obtaining well-tested basics and evidence-based practices that guaranteed quality remote learning.

HyFlex Support: In support of the university's goal to offer on-campus learning experiences for students while continuing to follow safe physical distancing guidelines, a flexible hybrid course option called HyFlex is now available, and faculty course design support will be provided by a special projects team managed by FIU Online. These HyFlex courses blend both meaningful on-campus interactions and significant online learning activities. As the name suggests, the HyFlex course mode allows a great deal of flexibility in scheduling and structuring the online and in-person learning experience.

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