

**Florida A&M University**  
**Sabbatical and Professional Development Leave Report**  
**Academic Year 2025 - 2026**  
**Research Project Summaries**

**Name:** Clement Allen

**College/School:** College of Science and Technology

**Department:** Computer and Information Sciences

**Faculty Rank:** Full Professor

**Leave Requested:** One Semester: Fall 2025

**Summary:** My sabbatical will focus on an area that is rapidly reshaping the landscape of technology: Mobile Programming and Artificial Intelligence (AI). In today's increasingly interconnected world, mobile devices such as smartphones, smart glasses, watches, and other wearables have become integral to how people interact with technology. This sabbatical will allow me to develop a comprehensive course and potentially write a book focused on how AI can be seamlessly integrated with these mobile technologies to create innovative, intelligent applications that meet the growing demands of both industry and society.

**Name:** Victor Eno

**College/School:** College of Social Sciences, Arts and Humanities

**Department:** History

**Faculty Rank:** Associate Professor

**Leave Requested:** One Semester: Fall 2025

**Summary:** During my sabbatical, I plan to conduct research and teach in the the Department of Public Management and Political Studies at the University of Namibia, Windhoek. This leave will provide me opportunity to complete a research project in HIV/AIDS prevention and control and submit a manuscript based on this work. In addition to research, I will teach during my leave to help me acquire international and cross-cultural experiences that I will utilize in course re-design upon my return to FAMU. I will infuse the syllabi of my courses with what I learn which will broaden my students' knowledge and increase their cross-cultural competencies as well.

**Name:** Bobby Granville

**College/School:** College of Science and Technology

**Department:** Computer and Information Sciences

**Faculty Rank:** Associate Professor

**Leave Requested:** One Semester: Spring 2025

**Summary:** My sabbatical will primarily address some issues of storing fuzzy structures using new technical applications such as Fuzzy Relational Database Systems, Fuzzy Inference Systems (FIS), and the Fuzzy Markup Language (FML). These methods of storing binary fuzzy relational information to represent the degrees of membership between characteristics and attributes will be investigated. A common approach is to use a fuzzy relation matrix, where each element represents the degree of membership between a characteristic and an attribute. The application of a fuzzy

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relational database system extends traditional relational databases, allowing for imprecise data representation and querying using fuzzy logic. A fuzzy database incorporates fuzzy logic to handle uncertainty and imprecision in data in a more human-like manner. It highlights how fuzzy logic can enhance traditional relational databases by enabling more flexible and intelligent querying.

**Name:** John Luque

**College/School:** College of Pharmacy and Pharmaceutical Sciences - Institute of Public Health

**Department:** Pharmaceutical Sciences

**Faculty Rank:** Full Professor

**Leave Requested:** One Semester: Fall 2025

**Summary:** My sabbatical leave will allow me to pursue research in Ecuador and be reacquainted with the people and culture of the country where I previously lived and conducted research for my master's and doctoral degrees. The sabbatical will allow me to meet new colleagues in Ecuador that will lead to future research collaborations and faculty or student exchange opportunities. My plans are to conduct colorectal cancer (CRC) education research in Latin America with colleagues from the Universidad San Francisco de Quito, Ecuador (USFQ). I have obtained a letter of support from the Dean of the College of Health Sciences at USFQ in support of my Fulbright application, and I have a public health professor colleague at USFQ named Dr. Gabriela Bustamante Callejas who has agreed to collaborate with me on my proposed research project.

**Name:** Nzinga Metzger

**College/School:** College of Social Sciences, Arts and Humanities

**Department:** Anthropology

**Faculty Rank:** Associate Professor

**Leave Requested:** One Semester: Fall 2025

**Summary:** From the inception of my scholarly career, one of my objectives was to use my training as an academic and an anthropologist to make accessible to a broader audience the information to which I am privy to as a scholar. To that end, for the last 10 years I have consistently worked to showcase and share the beauty and historical significance of Africana cultures with every day people. Continuing in that vein, I will use my sabbatical to continue my research in Africana cultures and by filming and authoring a documentary that focuses on Sierra Leonean Krio masquerading traditions.

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**Name:** Marcia Owens

**College/School:** School of the Environment

**Department:** Environmental Sciences

**Faculty Rank:** Professor

**Leave Requested:** Two Semesters: Academic Year 2025 - 2026

**Summary:** My sabbatical will be used to code and analyze oral histories and further develop a proposed book that will give voice to the foundational, lived, and career experiences of women faculty in science, technology, engineering, and mathematics (STEM) and the social and behavioral sciences (SBS) at Historically Black Colleges and Universities (HBCUs). Ending in November 2024, this research was funded by the National Science Foundation (NSF) ADVANCE (EES-1824267).

**Name:** Keerthisinghe Senevirathne

**College/School:** College of Science and Technology

**Department:** Chemistry

**Faculty Rank:** Associate Professor

**Leave Requested:** Two Semesters: Academic Year 2025 - 2026

**Summary:** The primary objective of my sabbatical leave is to develop a research partnership with Dr. Zachary Hood from the Advanced Electrochemical Materials group at Argonne National Laboratory (ANL). The area of research Dr. Hood is interested in and perform in his laboratory well align with my current research activities that I conduct in my laboratory at Florida A&M University. I have developed a research program in the field of nanomaterials and their applications in catalysis, renewable energy, and pollution remediation in the past nine years. My research has produced a significant number of conference presentations and six peer-reviewed publications with student authors. Currently, two manuscripts are being prepared. Sabbatical leave will enormously help me to complete the unfinished manuscripts and extend and broaden my current research in developing nanomaterials for catalysis. Provision of sabbatical will allow me to focus on new aspects of projects without the burden of heavy course load and to publish the research findings in conferences and peer review journals. Upon my return, I plan to incorporate solid electrolyte and 2-D MXene research into my research program.

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**Name:** Anedra Small

**College/School:** College of Social Sciences, Arts and Humanities

**Department:** Visual Arts

**Faculty Rank:** Associate Professor

**Leave Requested:** One Semester: Fall 2025

**Summary:** During my sabbatical, I plan to study the British theatre curriculum, receive additional training in acting, directing, and vocal techniques, and establish international partnerships to expand my network and promote globalization (Priority 1, Strategy 1.3.2.3). After my return from London, I will focus on conducting a comprehensive analysis of our current curriculum as the chair of the theatre program's curriculum committee. This will involve evaluating the program's requirements and developing an updated performance curriculum to enhance career readiness and prepare students for a competitive market (Priority 1, Strategy 1.3.2). Upon my return in the spring, I will present my findings and propose a new performance curriculum. Additionally, I will also use this time to evaluate my teaching techniques and integrate British actor training methods.

**Name:** Anandhi Aavudai Swamy

**College/School:** College of Agriculture and Food Sciences

**Department:** Biological and Systems Engineering

**Faculty Rank:** Associate Professor

**Leave Requested:** Two Semesters: Academic Year 2025 - 2026

**Summary:** The primary objective of my sabbatical is to enhance my research capabilities in complex system mathematical modeling within natural resource systems, focusing on adaptation, resilience, and sustainability. This initiative is vital for addressing the growing challenges in the food-water-energy (FEW) sectors, which are compounded by environmental changes and limited resources. Collaboration will occur with Dr. Benjamin Zaitchik at Johns Hopkins University.