Please find a brief description of each proposal below:

Fall 2022

Christine Shane Behavioral Sciences

In 2004, Dr. Shane was asked by Drs. Harris and Maloney to write a chapter on the ADA for undergraduate human service students enrolled in state and community colleges. The chapter appeared as "Americans with Disabilities: Advocacy, Law and Human Services." in Harris, H., and Maloney D., Eds. Human Services: Contemporary Issues and Trends, 3rd Edition, Boston: Allyn and Bacon, 2004. This chapter continues to be part of the curricula for HMSV 1100, Introduction to Human Services and HMSV 3300, Building Community Supports for Persons with Disabilities. Congress passed the ADA Amendment Act of 2008 to overturn two Supreme Court decisions that limit the application of the ADA definitions and narrowed the definition of disability, therefore, diminished the rights of individuals with disabilities. The Amendment Act expanded the definition of disability to include additional chronic illnesses, physical, and mental disabilities. During Dr. Shane's sabbatical, she will expand and update the chapter to include: •An update on the historical overview of societal treatment of disabilities with focus on returning veterans of the Afghan and Iraqi wars. •To expand and refine the medical and social technologies associated with disability and rehabilitation. •To trace the social and legal events that led to the ADA Amendment Act of 2008 •To provide additional case law and social policy implications regarding the ADA and Amendment Act as they continue to evolve.

Margaret Hoey Biology/Chemistry

The primary goal of Dr. Hoey's sabbatical will be the course redesign Decoding Your Genome (formerly Human Genetics). The intent is to update content, develop an online version of the course, and embed General Education learning outcomes and assessments throughout the course. Overall, the redesign will clarify and modify course learning outcomes, map course content directly to outcomes and assessments, and develop General Education assessment components that may be used by the campus for assessment of the Gen Ed curriculum. A secondary goal of the sabbatical is to continue with her scholarly activity by working on the DNase II project. Dr. Hoey will rejoin the DNase II research group (Drs. Ron Krieser and Lisa Grimm) as an active participant in the project. This research group is focused on the functional evolution of the deoxyribonuclease II (DNase II) gene family. The long-term goal of the DNase II project is to determine the functional evolution of the DNase II gene family throughout the vertebrates in order to contribute to our understanding of the connection between changes at the DNA level and their impact on the evolution of phenotype. In particular, the exploration of the impact of gene loss on phenotype.

Robert Harris Communications Media

Dr. Harris's primary focus of his sabbatical involves a filmmaking project he undertook in 1983, documenting the nascent New York City Hip Hop culture of graffiti artists, rappers, and dancers. Two films were produced, but never satisfactorily recognized nor distributed. Now, with the collaboration of his colleague from FSU's History Dept., Dr. Katherine Jewell, and a colleague from U-Mass Boston, Dr. Pacey Foster, he plans to place all the original video materials, along with the finished works, into one or more archives dedicated to the study of Hip Hop Culture. In addition to preparing the archive and study programs to accompany the materials, and negotiating with such archives as the Cornell (University) Hip-Hop Collection, and the Universal Hip Hop Museum (Bronx, NY), Dr. Harris will be seeking a distributor for the films, editing new short films from the newly digitized original materials, and seeking to film contemporary interviews with some of the original participants. Project 2 will be to produce a posthumous edit of his longtime friend and collaborator Shigeko Kubota's multi-chaptered Video Diaries. This project, the planning and execution of which has been postponed by Covid19, involves 4 ½ hours of video that he shot in 1975 with Shigeko while she was hospitalized. Ms. Kubota died in 2015. Her "Broken Diary" project is complete but for the Hospital chapter. Dr. Harris is working with the Shigeko Kubota Video Art Foundation, who have commissioned him to complete this work.

Charles Roberts Communications Media

Dr. Roberts' sabbatical will focus on Film Restoration, Archiving and Distribution Production Work of the City of Fitchburg. The film reels are unique "day in the life" film documents from November of 1941, just on the eve of America's entry into WWII. These films were shot and spliced together during the week of Armistice Day, and as such feature military parades, as well as a tour of the city's leadership, "ordinary" people, schools, and the public and private infrastructure of a small manufacturing city anticipating war. Finishing the restoration will involve months of meticulous restoration work, given the original film source. The film was shot on reversal film and some of the film is deeply over- or under-exposed, requiring creative grading solutions to dig detail out of thin frames of film. The edit contains original splicing that is over 80 years old as of this December, and it is in relatively rough shape in places given the cavalier handling during its original screening run in local theaters and the unknown nature of its storage during the ensuing decades prior to re-discovery and return to the light of day. Dr. Roberts will work with the Fitchburg Historical Society, the Amelia V. Gallucci-Cirio Library, and other partners to develop a permanent storage and server solution to make sure that the footage remains available and relevant to anyone wishing to access it. He will also be spending a portion of the sabbatical doing Previsualization and Initial Production work for a short single-channel video art production featuring some of the content, exploring the narrative relationship between location, architecture, time, and a sense of continuity and "place."

Jeff Warmouth Communications Media

Dr. Warmouth's sabbatical has two primary goals: Boston Sculptors Gallery and a second solo exhibition at Boston Sculptors Gallery scheduled for Oct-Nov 2022. He plans to spend the first part of his Fall 2022 Sabbatical, beginning July 2022, completing artwork and preparations for the exhibition. Dr. Warmouth will spend the later part of his sabbatical leveling up with Unreal Engine to explore Programming for Unreal Engine and incorporate into the Game Programming course, or another new course; Virtual Production. This work will be valuable to Game Design as well as the Film Video concentration in Communications Media. MetaHuman Creator--this is Unreal Engine's system for creating virtual humans that developers can animate and place into virtual worlds.

Teresa Thomas Economics, History, and Political Science

Dr. Thomas's sabbatical will accomplish two goals: First, to finish preparation of her book manuscript, *The Flight of the Nile Mosaic: The Impact of Strategic Bombing on Palestrina and Rome Italy in the Second World War*. This would be defined as completion of the final three chapters and conclusion, along with revision of the first half into a publishable manuscript. Second, to research the Hamilton Woolen Mill Strike of 1934 in Southbridge, Massachusetts and prepare a conference paper with plans to present to the New England Historical Association or other academic conference. Thus, the primary goal for the sabbatical is to complete the *Flight of the Nile Mosaic* manuscript suitable for submission for consideration by a publisher. The secondary goal is to complete a paper on the Hamilton Woolen Mill Strike to submit as a conference presentation, and eventually, for possible publication. Dr. Thomas's sabbatical should result in the further development of materials with direct application to classroom teaching and should appeal to a variety of students.

Denise Sargent Education

During Dr. Sargent's sabbatical, she will revisit the research project started before assuming the Chair of Education role in 2018. This qualitative research project consisted of interviewing, observing, and analyzing documents from four teacher candidates in their practicum. Preliminary findings of this research indicated that the supervising practitioner, who is the teacher of the classroom where they have been placed, has a very strong influence not only on the candidates' pedagogy but on their behavior through language, speech, and interactions with students. Teacher candidate learning "at its best is not merely about the acquisition of knowledge and skills, but the formation and mediation of teacher professional identity." (Mockler, 2013 p. 42) As a teacher educator, understanding the role and impact of the supervising practitioner as a key element in the formation of teacher identity is vital in developing effective teachers. This project will include reconnecting with the four participants of her original study. Dr. Sargent will interview them and examine

where they are presently as well as re-evaluate their teacher identity and the factors that shaped their pedagogy, beliefs, and identity formation. Secondly, she will review the literature and write up the results of this work and submit this work for publication and a presentation at New England Education Research Organization's (NEERO) annual conference in April 2023.

Diego Ubiera English Studies

Dr. Ubiera will work on his full-length manuscript during sabbatical. The working title of the manuscript is *Contrapunteo Dominicano: An Intellectual History of the Counter-Plantation in Nineteenth-Century Hispaniola.* His work examines the relationship between race, slavery, and nationhood in the nineteenth-century Atlantic through the writings of the Dominican nineteenth-century intellectual, Pedro F. Bonó (1828-1906). His manuscript marks this gap in the field and uncovers the significance of an understudied intellectual for re-examining key questions in nineteenth-century Atlantic World historiography. This work will trace a nineteenth-century tradition of "counterhegemonic liberals" - to use Florencia Mallon's term -in nineteenth-century Dominican and Haitian discourse. Dr. Ubiera will complete chapter drafts in order to submit it to publishers for review and has been in contact with Rutgers University Press as a potential publisher.

Deborah Stone Nursing

The Chief Quality & Compliance Officer of Community Health Connections, Inc., Lisa Ellis, has asked for assistance in developing educational programs to identify, treat, and refer victims of human trafficking. She has identified the need for several educational programs targeting clinical staff, non-clinical staff, and the community at large. Community Health Connections (CHC) provides a wide variety of health services to diverse populations including our own students at Fitchburg State University. Dr. Stone will address another important community service, which includes those provided to the homeless population. By developing educational programs about Human Trafficking, we can help staff (clinical and non-clinical) to identify potential victims and provide resources and referrals as needed to stop or break the cycle of abuse. This project aligns well with the university's mission to foster lifelong learning and civic and global responsibility. The CHC is a valuable resource to our community providing many specialty services to a diverse community who may not otherwise have access to healthcare at all. Objectives: 1. Develop an educational program for various levels of staff (provider/clinical persons, front desk, billing, and facilities personnel, and the community at large) 2. Identify the resources available in North Central Massachusetts for victims of Human Trafficking.

SPRING 2023

Dennis Awasabisah Biology/Chemistry

Dr. Awasabisah has supervised several students in various independent study and introductory research studies. In particular, he and his students have worked on his "Synthetic heme-moodel complexes" project, which is geared at determining the role of heme in the development of malaria. They also studied the role heme plays in activating quinoline-based antimalarial drugs activity through several synthetic procedures. During his sabbatical, Dr. Awasabisah plans to repeat some of the experiments the students conducted during their previous studies, re-collect the data, and check for reproducibility. The objective is to obtain high-quality data and eventually publish the work in a chemistry journal. He will use his sabbatical to generate new research data, organize the data, and determine their validity. In addition, he will strengthen his research collaboration with Dr. Douglas Powell at the University of Oklahoma who does X-ray crystal structure analyses for his research. He plans to generate some crystal samples during the study, which will be shipped to Dr. Powell for analysis. In addition, he plans to design new experimental procedures for this project and extend the study to artemisinin-based antimalarials. The goal is to make the research more attractive to students. This will eventually help in Fitchburg State's retention efforts since faculty-student research collaboration fosters a sense of belongingness among students, and helps in overall student retention.

Renee Scapparone Business Administration

Dr. Scapparone's sabbatical will continue her research in identifying barriers that women entrepreneurs continue to face and how they are able to overcome such challenges. For the purpose of this proposed program of study and research, she will seek how the phenomenon of successful women entrepreneurs has changed in recent years and whether or not the barriers and challenges remain the same today. The objective of the research is to develop a course for women entrepreneurs as part of the department's newly-added Entrepreneurship concentration.

Britton Snyder Communications Media

During Dr. Snyder's sabbatical, he plans to create an independent game project as well as further his scholarship in oil painting. The value to the university for these projects is that they would allow him to publish and interact with the professional game development community. The value of the oil painting practice to the university is that he gains recognition and interest enough to help maintain and grow networks in the commercial game industry. The skill cross-over that exists between game development art and fine art has been the cornerstone of Dr. Snyder's scholarship and the source of the great majority of his professional contact. •He will complete an independent game with potential for future publication. •Develop new connections in the game industry through collaboration on this project or other projects. •Continue to expand his oil painting practice either through the galleries he works with and/or possible new representation with shows and publication featuring his work.

Natasha Kurtonina Computer Science

Dr. Kurtonina's sabbatical research interests lie in two areas: 1. Logical Models for Quantum Machine Learning. This is a research project that presupposes updating teaching materials for several CS classes. 2. Incorporating Computer Science History in Programming and Theory of Computation classes. She will write tutorials on the history of computational ideas for several CS classes. The project lies within the scope of Epistemic Logic, and the research focuses on logical models of knowledge and computational information processing in Quantum Machine Learning with special attention to semantic and complexity analysis. In particular, she will study how different models of logic inference in Quantum Machine Learning can be represented in Epistemic Logic. Results will be presented in Logic journal papers and international conferences. The Second Project is Incorporating Computer Science History in Programming and Theory of Computation classes. Creating teaching materials on the history of the computational ideas discussed in CS classes. She will write corresponding tutorials for the following classes: Programming Languages Systems Programming Design and Analysis of Algorithms and Theory of Computation. At the completion of her sabbatical objectives, Dr. Kurtonina will obtain better knowledge of most recent developments in Machine Learning, Quantum Computing, Quantum Machine Learning, Modern Algorithms and Game Theory; and complete research projects that will be documented and published.

Ozge Ozay Economics, History, and Political Science

Dr. Ozay has been working on research projects focusing on the impacts of the U.S. macroeconomic trends on existing structural inequities within the U.S. labor market. In her sabbatical project, she will continue this trend by exploring the consequences of structural changes in the U.S. economy on the employment and wages of women. There have only been a few studies connecting the diffusion of brawn-saving technologies and women's comparative advantage in tasks that are more intensive in communication and interpersonal skills to the rise of women's employment in service industries. To close this gap in the literature, she will first need to construct a panel data for 60 industries in the U.S. for the period 1990-2019. The dataset will include the technology indicators such as investment in different capital types such as software, information, communication technology, and R&D, as well as individual characteristics of workers in these industries. This would mean matching datasets that use different definitions of economic variables from the Bureau of Economic Analysis and Bureau of Labor Statistics.

Aruna Krishnamurthy English Studies

Dr. Krishnamurthy plans to complete her ongoing project of examining the vernacular novel in twentieth-century India. Her study looks at the early-to-mid-20th century vernacular novel as a confluence of at least three influences: the novel/prose genre, working within the vernacular idiom to articulate radical/progressive and/or nationalist ideologies. The project will be of interest to the following constituencies: 1. Modernist studies 2. World literature/South Asian studies 3. Studies of the novel 4. Studies of radical/progressive literature. The Anthem Press has asked Dr. Krishnamurthy to submit a book proposal to them ASAP based on her project description she plans to submit in Spring 22. The project will also help her develop her teaching of South Asian Literature, World Novel and World Literature courses that she offers currently at FSU at both the undergraduate and graduate levels. An in-depth examination of a parallel tradition of the well-established genre of the novel, and expanding the scope and content of world literature, will serve English majors and other students across campus and enhance the teaching of multicultural perspectives.

Frank Mabee English Studies

During Dr. Mabee's sabbatical leave, he will continue research and begin a writing project that includes an annotated bibliography, a literature review, and a publishable article or book chapter on the intersections between literature and game studies. He will develop a new course for the Literature track in English Studies that expands the curriculum to include the study of games. This new course would examine how novels and games may work from the same intellectual property and tell the same stories, but in different ways because of their medium. This Game Narrative Design course could boost enrollments for English Studies and possibly attract Games Design students to minor in English. Many game design students have already expressed interest in (and taken) his literature and writing courses. A course that specifically focuses on game design would continue to forge strong and meaningful connections between the humanities and the professional programs.

Katherine Covino-Poutasse

English Studies

Pre-approved deferral from Spring 2022

Lindsay Parisi

Exercise and Sports Science

During Dr. Parisi's sabbatical, she will work on completing a study on a 10-week rotator cuff strengthening program's impact on shooting accuracy in police officers. It is important that officers perform at their highest level when shooting, and rotator cuff strength may play a role in that performance; however, there is limited research in that area. The purpose of this study is to examine the effect of a 10-week rotator cuff strengthening program on shooting accuracy. Through this research project, they will identify whether or not police departments and other law enforcement personnel should update their fitness programming and requirements in order to improve the shooting performance of their officers. Officers hitting their intended target will increase the safety of themselves, and those around them. The results of this research may be applicable to individuals serving in the armed forces as well. This research is being conducted with another EXSS faculty member and members of the Municipal Police Training Committee (MPTC) of Massachusetts. Dr. Parisi will also commence data collection on her project to determine which factors most closely predict performance in a simulated fireground task. This research is important because it will help them fill in the gaps of previous researchers and provide evidence for firefighters about whether performance on the fireground is determined by experience to a greater, equal, or lesser extent than physical fitness. Presentations will be prepared for fire departments in one of the following topic areas: General Nutrition, Nutrition for Firefighters/How to Cook Healthy Meals While on the Job, Physical Fitness: Where We Have Been and Where We are Going, Fitness Programs with Limited Equipment.

Petri Flint Humanities

Mr. Flint's primary professional goal for this sabbatical is to continue developing a body of artwork related to his long-held interest in large-scale landscape painting that walks a line between representation and abstraction. While these more immersive, large-scale pieces are central to his artistic practice, he also plans

to make a related series of smaller and mid-sized works, because there are fewer exhibition opportunities and appropriate spaces for the large works, and his objective is to emerge from the sabbatical with a flexible body of work that could be exhibited in a range of contexts, in solo shows as well as group exhibitions. The experience of having to move some of his teaching materials in drawing and painting to online formats during the Covid year of 2020-21 led Mr. Flint to create some quick video demonstrations on the fly so that students could get introduced to artistic techniques and principles outside of a classroom context. He plans to update some of the individual demos with more polished videos, and to expand on the series of videos to encompass more topics and techniques.

Connie Strittmatter Library

Ms. Strittmatter's sabbatical project goals are: 1. to develop knowledge and skills In Digital Humanities and Scholarship. a. Knowledge: Increase her understanding of Digital Humanities and its intersectionality between the Library, Humanities, and Technology b. Skills: Develop expertise in several DH software related to text analysis, mapping, and visualization 2. To survey mid-size state university libraries about their Digital Humanities Initiatives. At the end of her sabbatical she is expected to have produced the following: Goal 1: To develop knowledge and skills in Digital Humanities and Scholarship: •Digital Humanities guide outlining openly available software for text analysis, visualization, mapping, as well as resources discussing digital humanities. •Tutorials demonstrating how to use a specific software for text analysis, visualization, and mapping (software will be open source [free to users] so that it supports the Board of Higher Education equity agenda. Preference will be given to software that is used within the Digital Media Innovation major). •Development of a training program for library staff who want to do work within the Digital Humanities •Outline and plan for her own digital humanities project. Goal 2: To survey mid-size state university libraries about their Digital Humanities Initiatives--near final draft of an article about mid-size state academic libraries participation in Digital Humanities work.

Deborah Benes Nursing

During Dr. Benes's sabbatical, she will develop study abroad opportunities for nursing students providing them the opportunity to develop a holistic picture of clients they may care for in a variety of settings including wellness, disease prevention, chronic disease management, hospice palliative care, and restorative care. Due to the rigidity of the nursing curriculum, the ability for nursing students to go abroad is currently limited to 1-2 week faculty-led opportunities without falling an academic year behind in course work. One goal of this sabbatical will be to work on a redesign of the new curriculum to include either a summer or semester abroad opportunity. Costa Rica provides nursing students with an excellent opportunity to learn about a healthcare delivery system that focuses on wellness and disease prevention from a community-based perspective. Course work that focuses on nutrition, alternative therapies, language, and culture will enhance their approach to care they provide for their clients. The second goal is to attend The Turrialba Nursing Spanish Program. This is a 4-week, 20-hr/week program with the goal to develop improve nurse's Spanish language abilities https://www.isls.com/schools/nursing.php. Learning Medical Spanish will help Dr. Benes to achieve two outcomes. First, as a community researcher, the ability to speak Spanish will greatly enhance her ability to conduct research in Spanish-speaking communities. Second, it will be beneficial for students to have a bilingual faculty member in the department of nursing and during study abroad opportunities.

Michael Hove Psychological Science

Pre-approved deferral from Spring 2022

Lena Ficco Psychological Science

Dr. Ficco's primary goal for sabbatical leave is to revise and resubmit for publication a manuscript from her dissertation studies, completed in 2015, which explored hormonal contraceptive effects on learning and memory. Specific revisions include: updating the Introduction and discussion with mention of any relevant publications released after 2015; incorporating the new data analyses into the results and discussion sections; reworking the tone of the manuscript for a researcher-centered audience; and reformatted to the

new-intended journal's style requirements. Ethinyl estradiol, a common exogenous hormone in hormonal contraceptives, has the potential to enhance estrogen-sensitive spatial learning, such as navigation abilities under certain conditions (Mordecal, Rubin, & Maki, 2008; Zurkovsky, Serio, & Korol, 2011); however, contraceptive ethinyl estradiol is always combined with a progestin and findings from nonhuman animal research suggest this combination is detrimental to cognitive functioning (Baudry et al., 2013; Korol, 2004). As such, the cognitive effects and safety of hormonal contraceptive medications remain insufficiently tested and documented. Dr. Ficco's findings indicate a potentially protective cognitive effect of specific hormonal contraceptives; however, these are preliminary findings that need to be replicated. Publication of her findings could potentially facilitate and expedite related research projects in a small, but growing community of scholars invested in researching topics relevant to the well-being of femalized individuals who, historically, have been systematically excluded from medical and basic research, and whose health has suffered as a result of this exclusion.

<u>Daneen Deptula</u>

<u>Psychological Science</u>

During Dr. Deptula's sabbatical, she plans to further her research in the area of cyber victimization bystander intentions. Specifically, what are the factors that may increase one's likelihood to intervene in a positive way when other people are being bullied online? The sabbatical project will consist of compiling an updated literature review, analyzing the data, and preparing the research for dissemination. As part of the sabbatical plan, she will devote some time to strengthening/refreshing her statistical skills by completing at least one online course: Mixture Modeling and Latent Class Analysis; Multilevel Modeling; Measuring Causal Effects in the Social Sciences. This research will help to drive and develop the next phase of her research program. Just as undergraduate students were involved in earlier stages in this project, Dr. Deptula anticipates that there would be opportunities for students to participate in this next phase as well. Preliminary analyses have suggested that gender may be an important variable in the assessment of "blame," in that female victims were more likely than male victims to be blamed in cyber victimization scenarios. However, this analysis was not based on a standardized gender-based scenario and would need further investigation. Undergraduate students enrolled in PSY 4810 could earn psychology major capstone credit by helping to rewrite the scenarios, evaluate survey questions, collect data, and enter data. This would provide students with applied hands-on research learning opportunities, which is directly applicable to their professional development (Strategic Plan Goal 1.2).

FULL 2022/2023

Adem Elveren

Economics, History, and Political Science

Pre-approved deferral from AY 2020/2021