**Faculty Development Grant Awards: 2017 – 2018**

***Awards to Faculty in School of Arts & Humanities***

**Project Title:** Presentation at College Band Director’s National Association Eastern Division Conference

**Faculty Investigator Name:**  James Chesebrough, Music

**Abstract:** The Small Band Showcase presentation is part of the College Band Directors National Association Eastern Division Conference at Yale University from March 7-10, 2018. The presentation is designed: 1. To bring recognition to worthy ensembles and directors that might not otherwise have an opportunity to perform at a conference, 2. To allow directors of exemplary small band programs to share best practices, and 3. To bring to light repertoire that works for smaller bands. Five small college band directors will present a brief outline of their programs and challenges. A challenge to all small college bands is repertoire selection. The Keene State portion of the panel will focus on programming new works for the concert band. Two performances from the 2016-2017 Keene State Concert Band concerts will be presented, demonstrating the advantages of working directly with composers of the repertoire performed. The first piece, *Jump Start,* by Brown University composer, Eric Nathan, was performed during the FA 2016 semester. Eric worked with the Keene State College band in live rehearsals on line and provided a video program note that was shown at the concert. Keene State composer Heather Gilligan composed the second work, *For Whom the Bell Tolls,* for the Cerritos High School Wind Symphony for a performance at the John F. Kennedy Center for the Performing Arts as part of the Washington D. C. Dr. Gilligan attended Keene State rehearsals, describing the compositional process and working directly with the ensemble to create the New England premiere performance.

**Project Title:** Torture, Masculinity, and Resistance in Chilean Documentary Film

**Faculty Investigator Name**: Lisa DiGiovanni, Modern Languages and Cultures

**Abstract:** The Faculty Development Grant will support my participation as a presenter in The Latin American Studies Association (LASA) conference in Barcelona, Spain from May 23-26, 2018. LASA is the largest professional association in the world for individuals and institutions engaged in the study of Latin America. The title of the panel is Gender and Violence in Latin American Cinemas. This panel examines the ways filmmakers are succeeding in transforming established hegemonic narratives that mainly capitalize on women’s victimization. My paper is titled “Torture, Masculinity and Resistance in Chilean Documentary Film.” This panel is based on a collection of essays edited by M. J. Gámez Fuentes, R. Maseda García and B. Zecchi. One of the editors will be the panel chair, while the presenters are essay contributors. The final outcome is threefold. The Faculty Development Grant will provide me with the opportunity to test and disseminate my ideas, to learn from experts in the field, and to enhance my professional associations. Additionally, the grant will allow me to locate materials in Spain that are essential in the development of my scholarship and teaching. This opportunity to engage with activists and scholars will not only benefit me, but also my students at Keene State College. Whether I am teaching a course in Spanish (Modern Languages and Cultures) or in English (the Honors Program, Women’s and Gender Studies, Holocaust and Genocide Studies), I share my research in discussions that enliven the course material and inevitably inspire interest in global learning.

**Project Title:** Haircuts for Trees

**Faculty Investigator Name:** Jonathan Gitelson, Art

**Abstract:** This funding assists with the priming and framing expenses for my upcoming exhibition *Trees II* at Gallery Kayafas in Boston. This exhibition will feature the debut of my newest project, *Haircuts for Trees,* and will be on display from June 8-July 28, 2018. *Haircuts for Trees* consists of a handmade artist book and a series of prints that depict tree covered mountains, which I later digitally manipulated into Photoshop to smooth out the tree line, as a barber would neaten up a person’s hairstyle. The series consists of 6 diptychs featuring a before and after view of each landscape.

**Project Title:** Travel to Barcelona, Spain, to Participate as Solo Performer, Collaborative Artist, and Composer in the 2018 Barcelona Festival of Song

**Faculty Investigator Name:** José Manuel Lezcano, Music

**Abstract:** This funding will help me participate as composer, solo concert guitarist, guitar-accompanist and coach, in the 2018 edition of the Barcelona Festival of Song, from June 25 to July 4, 2018, at the invitation of Dr. Patricia Caicedo, Festival Founder and Organizer. I would be rehearsing with the student singers who attend the Festival, founded and coordinated by Dr. Patricia Caicedo for over 10 years in Barcelona, Catalunya, Spain. The singers typically represent a range of nationalities and come from prestigious graduate and undergraduate music programs in the United States, Latin America, and Europe. The performances are given at various locales and venues around Barcelona, including the Palacio Moya, ESMUC (L'Escola Superior de Música de Catalunya ). We would also be including some of my own songs from song-cycles that I have composed for previous editions of the Festival. (These have included “Canciones de Ausencia,” (Songs of Absence); “Canciones de Nostalgia,” and “Canciones de Lluvia” (Songs of Rain). I also plan to introduce some new song settings of folk-songs from Spain and Catalunya at the Festival. I will also be performing with Dr. Caicedo on a faculty recital at the Festival.

**Project Title:** Diasporic Chicana/Latina Cultural Expressions through Scholarly Presentations on the Life and Work of Gloria Anzaldúa

**Faculty Investigator Name**: Patricia Pedroza Gonzalez, Women’s and Gender Studies/American Studies

**Abstract:** The Faculty Development Grant will support my participation as a presenter and workshop facilitator in the three conferences: El Mundo Zurdo in San Antonio, TX, May 16-19, The Latin American Studies Association (LASA) in Barcelona May 23-26, 2018 and The Global Etymologies: Hemispheric Explorations of Latinidades May 28-30, 2018, Salamanca, Spain. The title of my project is *Diasporic Chicana/Latina Cultural Expressions through Scholarly Presentations on the Life and Work of Gloria Anzaldúa.* My scholarly work engages in conversation with a global community and global view of Chicana/Latina theory concepts, such as mestiza consciousness, embodiment, and hybrid identities. My research focuses on entrance into complex ambivalences, which are the result of mixed hybrid and interacting subjectivities that challenge the ways that dichotomies and binaries are perceived in Western thought. This opportunity to share and engage with a global community will not only benefit me, but also my teaching praxis at Keene State College. I am the only Latina scholar within the Women’s Gender Studies and American Studies departments and I share my passion for research with my students. This research project will help to prove to them the importance of engaging in global conversations about the theoretical production of Latino Studies inside a U.S.A context.

***Awards to Faculty in Mason Library***

**Project Title:** The Role of the Library in Undergraduate Research on Campus

**Faculty Investigator Name**: Amanda Scull, Library

**Abstract:** This proposal funds conference travel to the Council on Undergraduate Research Biennial Conference, where I will present a session entitled “The Role of the Library in Undergraduate Research on Campus.” Although they are largely absent from the literature on this topic, librarians have invaluable expertise to bring to undergraduate research efforts and should be seen as campus partners. The new Framework for Information Literacy in Higher Education, the set of guidelines by which librarians design and deliver their instruction, is much more heavily focused on acknowledging students as information creators than the outdated set of standards it replaced (which were driven by information consumption). In addition, while the new Framework applies directly to information literacy it can also be read through a collections lens which reveals even more connections between the library and undergraduate research in the form of institutional repositories, institutional publishing, and collection development specifically for students engaging in original research. In this session I will present the case for librarian inclusion in undergraduate research programs as well as practical steps to ensure these collaborations happen. While attending the conference I will also seek to establish connections with others involved in the Council on Undergraduate Research in order to better understand current trends and best practices, utilize this knowledge in my work at KSC, and develop future scholarly work in this area.

***Awards to Faculty in School of Sciences and Social Sciences***

**Project Title:** Changing the Tide: Empowering Girls Strengthens Reef Conservation

**Faculty Investigator Names**: Karen Cangialosi and Scott Strong, Biology

**Abstract:** For the past 10 years (since we created in it 2008) we have successfully directed a coral reef monitoring and youth education program in Providenciales, Turks and Caicos Islands. Our Reef Education Program (REP) is focused on helping youth develop an understanding of the tropical marine environment and emphasizes that sustainable practices can ensure not just the health of TCI’s coral reefs, but lead to healthier and more equitable living for its people. Our program has been very successful in contributing to increased environmental awareness, internships, university admission and other opportunities for our Turks Islander REP participants. While we have always included both boys and girls (ages 15-17), for various reasons, girls end up leaving the program before finishing, so this year, we are planning a girls-only focused program. There is much research that shows that empowering girls and young women can have powerful effects on the economy, families and social structure of a community. In 2015, the United Nations highlighted the importance of girls to achieving global goals for sustainable development. Creating a girls-only Reef Education Program for 2018 will allow us to focus on the specific needs that girls face. Participants will engage in classroom activities, snorkeling, kayaking, excursions to local environmental centers and environmentally-focused businesses, and discussion groups focused on female leadership and empowerment.

**Project Title:** Latin American California via Catalonia, Spain

**Faculty Investigator Name**: Marie Duggan, Economics

**Abstract:** This funds travel to Catalonia to participate in a panel organized by Deborah Besseghini for the Latin American Studies Association in Barcelona, Catalonia (May 23-May 26, 2018.) I will then travel for two days to Porrera, Catalonia to search for documents left by two early 19th century California missionaries. The LASA panel on Latin American business networks of the Pacific Rim concerns 1808-1830, a time when Latin America was adapting its institutions to the collapse of the Spanish empire. Our panel is entitled: Global Merchants in Spanish America: Business, Networks and Independence (1808-1830). Dr. Mazzeo of Lima will present on mercantile alliances between Lima, Valparaíso (Chile) and Buenos Aires (Argentina) from 1820 to 1830, while my own paper concerns the business network of José de la Guerra y Noriega out of California with Lima, 1808-1830. Many merchants and ship captains from Peru were Noriega’s personal friends. Given the unsettled nature of politics 1810 to 1830, it was often the case that merchants of Lima fled to California for safe haven in retirement; it was also the case that two Spaniards expelled from California in 1829 for political reasons (including Peyrí, a missionary of Porrera) wound up lodged in Lima with mercantile friends. Upon completion of the session, Dr. Besseghini plans to publish our papers in an edited volume, and I will use the work to improve two chapters of the book I plan to complete on next sabbatical.

**Project Title:** Physiological Differences in Motor Planning and Execution in Practitioners of the Alexander Technique

**Faculty Investigator Name**: Harlan Fichtenholtz, Psychology

**Abstract:** Alexander Technique (AT) is a somatic practice aimed at increasing awareness of one’s movement habits in order to undo inefficient neuromuscular patterns that people learn in response to environmental shifts or stressors over time. Research has shown that practicing AT has therapeutic effects for people with Parkinson’s Disease and chronic back pain, but there is no basic research regarding the underlying physiological shifts that AT practice may correlate with. The goal of the current study was to determine the changes in electrophysiological measures of motor preparation and their relationship to motor output in people with AT exposure.

**Project Title:** Maternal Effects and Offspring Provisioning in an Intertidal Seaweed

**Faculty Investigator Name**: Cynthia Hays, Biology

**Abstract:** A maternal effect occurs when the environment of the parent (usually the mother) has a direct effect on the traits expressed by the offspring. Maternal effects are an important non-genetic source of variation among individuals in a population, and may act to either help or hinder offspring fitness and population adaptation to environmental change. As part of my sabbatical research, I am using a common species of intertidal seaweed (*Silvetia compressa*) as a model system to explore the role of maternal effects in nature and the effect of ‘nature versus nuture’ on offspring trait expression. To do so, I am conducting a “split individual” transplant experiment with *S. compressa* in central California, to separate the effect of maternal environment from maternal genotype. This experiment will allow me to directly test for correlations between maternal environment (specifically, how long and how often that particular alga is exposed to the air at low tide); the size, number and nitrogen content of the eggs produced; and the subsequent growth and survival of the offspring.

**Project Title:** Oral Presentation at 255th American Chemical Society National Meeting

**Faculty Investigator Name:** James Kraly, Chemistry

**Abstract:** An oral presentation titled “What’s the buzz!? Undergraduate investigations of caffeine and other chemicals using analytical techniques” will be presented at the 255th American Chemical Society National Meeting. Students at Keene State College actively engage with analytical instrumentation as they progress through the chemistry curriculum. Introductory laboratory experiences with Raman spectroscopy and capillary electrophoresis (CE) provide contextual applications to newly learned foundational principles. Students will soon complete a new lab to use hand-held Raman spectra to analyze the forensics of a mock party crime scene, as well as the historical provenance of artists’ paintings using pigment identification. After an aspirin synthesis experiment, students asses purity using CE and compare the data to non-instrumental methods. Several more in-depth experiments in second year courses now offer hands-on learning with modern analytical instrumentation. A gas chromatography mass spectrometry lab has students analyze various components in electronic cigarette liquids, while learning chromatographic principles and the power of mass identification. In the ‘Caffeine Lab’ students propose, develop, and present the results of their quest to quantify and investigate caffeine levels in a product of their choosing. This multi-week project based lab uses CE and introduces students to separation science, applied acid-base chemistry, complex sample preparation, and quantitative calibration procedures. Students work in teams to propose an experiment in a round-table setting, and the group helps discuss and critique each other’s experimental design to improve the scientific outcomes. Highlights, pitfalls, and challenges will be presented to illustrate the pedagogical approach and its impact on KSC students’ education.

**Project Title:** Making the Cut: 3D Microscale Measurement of Stone Tool Edges and Microwear Analysis using the Sensofar SNeox White-light Confocal Microscope/Interferometer

**Faculty Investigator Name**: James Stemp, Sociology, Anthropology, and Criminal Justice Studies

**Abstract:** The application of micro-and nanotechnology, adopted from engineering and materials sciences, is proving extremely successful in studying use-wear on archaeological stone tools. Measurement systems for surface documentation, primarily based on laser or light scanning, have been coupled with parameters, which allow for the mathematical characterization of worn stone tool surfaces. For this project, the Sensofar SNeox white-light confocal microscope/ interferometer housed in the University of Tulsa’s Lithic Microwear and Technology Laboratory/Surface Metrology and Tribology Laboratories is used to mathematically document edge profiles/curvature on chipped stone tools made from chert and obsidian. The findings of this experimental research will be presented at a meeting of stone tool specialists in England in 2018.

**Project Title**: The Irish Immigration Reform Movement: A Social Movement Analysis

**Faculty Investigator Name:** Niall Moran, Sociology, Anthropology, and Criminal Justice Studies

**Abstract:** This award will fund research into the development of collective identity and the use of framing strategies in the Irish Immigration Reform Movement (IIRM) in New York City between 1997 and 2007. The IIRM was considerably influential in lobbying for the passing of immigration legislation that allowed undocumented migrants to achieve residency and a pathway to citizenship. In order to complete this task, I will travel to NYC and interview 10-15 former members of the IIRM. This will build upon extensive archival work that I have already conducted in NYU’s Tamiment Library.

**Project Title**: Life-History Changes in Keystone Aquatic Herbivore Across Natural Gradients of Phosphorus in New England Lakes

**Faculty Investigator Name:** Priyanka Roy Chowdhury, Biology

**Abstract:** This study focuses on how anthropogenic environmental alterations affect crucial life-history traits in keystone species. Specifically, I am looking at how natural populations of *Daphnia*, a keystone aquatic herbivore is affected by differences in dietary phosphorus (P) supply. This study is unique because we utilize natural populations of *Daphnia* that are isolated from 8 different New England lakes varying in their P-supply from oligo to eutrophic condition. The effects of environmental P-supply are especially important in the light of current global change scenarios where more than half of North American lakes have been eutrophied within the last century. We will test six vital life-history traits in these populations after feeding them on high P and low P diets for a month. These traits include growth rate, size at first egg production, age at first egg production, total number of eggs produced over the lifetime, lifespan and somatic body P-content. We will also test the fitness of individual population by conducting competition experiments between these natural populations. Our study will demonstrate how variation in key physiological traits underlie success in high P and low P environments that might help us to understand the impact of environment (e.g. cultural eutrophication) on the survival and fitness of these natural populations.

**Project Title**: Educational Film For Language and Autism Project

**Faculty Investigator Name:** Larry Welkowitz, Psychology

**Abstract:** This project involves the development of a high quality “video explainer” of our iPad-assisted language training software platform designed to improve conversational skills in Autism. The video will be used to educate both potential funders (e.g. patient advocacy organizations and foundations) and Autism specialists about use of this new clinical tool. Ultimately I hope to incorporate the video explainer in to a website that will include links for downloading the speech training program on to a personal digital device. Eventually use of cloud-based data analytics will permit automatic feedback to users about how well they are progressing toward their social skills goals. While it is broadly understood that Autism consists of two major components, repetitive behaviors and social/communication problems, the latter has been a neglected area in terms of availability of empirically supported computer applications. The video explainer is one tool towards creating clinical tools that are easy to access and which arise out of sound clinical studies.