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Faculty Achievements, April 2019 Report

OFFICE OF ACADEMIC AFFAIRS

KATHRYN M. PLANK, Interim Associate Vice President for Academic Affairs/Associate Professor in the Department of Education/Director of the Center for Teaching and Learning

Peer-Reviewed Presentations and Posters

Plank, K. M., Smith, J., Sherman Heckler, W., and McClanahan, T. L. (2019). Becoming student-ready: College and high school faculty learning together. Poster presentation at the AAC&U Diversity, Equity, and Student Success Conference. Pittsburgh, PA, March 28-30.

WENDY R. SHERMAN HECKLER, Provost and Vice President for Academic Affairs/Professor in the Department of Education

Peer-Reviewed Presentations and Posters

Plank, K. M., Smith, J., Sherman Heckler, W., and McClanahan, T. L. (2019). Becoming student-ready: College and high school faculty learning together. Poster presentation at the AAC&U Diversity, Equity, and Student Success Conference. Pittsburgh, PA, March 28-30.

DEPARTMENT OF ART AND ART HISTORY

NICHOLAS A. HILL, Professor

Artistic Exhibits and Performances

"Los Estaciones," group exhibition, Casaplan Gallery, Valparaiso, Chile, January-February 2019.

Print exhibition, Taller 99 printmakers, Carpeta El Paisaje, Santiago, Chile, February 2019.

Morgan Conservatory National Juried Exhibition, oil painting triptych, Morgan Conservatory Gallery, Cleveland, OH, March 2019.

Honors and Awards

Residency at La Macina di San Cresci, Greve in Chianti, Italy. Studio residency in painting and drawing and research in art museums in Florence and Siena, Italy, March 2019.

AMANDA L. KLINE, Assistant Professor

Artistic Exhibits and Performances

Participation in juried art exhibitions in Ohio, and a juried film festival in India:

2019, Cut & Paste, Rochester Contemporary Art Center, Rochester, NY, juried.

2019, Ohio Art League Spring Juried Exhibition, Denison Art Space, Newark, OH, juried by Tyler Cann.

2018, Underwater, 934 Gallery, Columbus, OH, juried by Sarah Achor and Kathryn Seyerle.

2018, Domestic Bliss, Blue Ash Art Gallery, University of Cincinnati, Cincinnati, OH, invitational.

2018, DFK New Wave, Indian Council for Cultural Relations, Kolkata, West Bengal, juried.

2018, Impressions of Havana, Port Columbus Gateway to the Arts Gallery, Columbus, OH, juried solo exhibition.

DEPARTMENT OF BIOLOGY AND EARTH SCIENCE

ELIZABETH V. BERKELEY, Assistant Professor

Invited Presentations

"Monitoring Limits to Health and Adaptations to Environmental Stress in African Elephants," Elephant Behavior and Human Elephant Conflict meeting, Bonwa Phala, Limpopo, South Africa, March 11-14, 2019.

Peer-Reviewed Publications (Books, Book Chapters, Journal Articles, Essays, or Book Reviews)

Hynd, T.E., E.V. Berkeley, J.C. Daniel, J.W. Brown, and B.T. Velayudhan. A rough semester: what's wrong with Katie? [Case Study] Buffalo, NY: National Center for Case Study Teaching in Science, University at Buffalo, State University of New York. 2019.

http://sciencecases.lib.buffalo.edu/cs/collection/detail.asp?case_id=1038&id=1038

SARAH S. BOUCHARD, Professor
Peer-Reviewed Presentations and Posters
Bouchard, S.S., Broderick, G.A. and E.C. Kimberly.
2019. Competition and predation induce changes in metabolic rate and organ size in red-eyed treefrog larvae. Annual Meeting of the Society of Integrative and Comparative Biology, Tampa, FL.

KEVIN D. SVITANA, Associate Professor
Invited Presentations
Invited by the National Groundwater Association to conduct a training for Ohio EPA. Svitana and Douglas Hunter trained the Ohio EPA hydrogeologists on methods for conducting groundwater pumping tests and analyzing aquifer hydraulics. Svitana also worked with Ohio EPA regarding the revisions to the Ohio Administrative Code relative to the pumping test analysis rules. Data from the well field behind The Point was used for in-the-field demonstrations. April 3-4, 2019.

Peer-Reviewed Publications (Books, Book Chapters, Journal Articles, Essays, or Book Reviews)
Chapter on Contaminant Hydrogeology in the recently released electronic book, "Groundwater: State of the Science and Practice," National Groundwater Association, Westerville, OH, 2018.

ANNA M. YOUNG, Associate Professor
Community Outreach and Service
Zoos and Aquariums Committing to Conservation Conference, March 6-7, 2019. Hosted at The Point, Otterbein University.
Finding Your Voice, Inspirational Stories from Women who Protect Wildlife and Wild Places, March 9-10, 2019. Hosted at The Point, Otterbein University.

DEPARTMENT OF CHEMISTRY

JOAN M. ESSON, Professor
Community Outreach and Service
Selected by the American Chemical Society (ACS) President as one of 30 national participants at the ACS Safety Education Summit at the ACS

Headquarters in Washington, DC, February 28-March 2, 2019.

DEPARTMENT OF COMMUNICATION

SUSAN P. MILLSAP, Professor
Honors and Awards
Induction into the Pi Kappa Delta Hall of Fame. Pi Kappa Delta is the national honorary organization for collegiate speech and debate competition. Founded in 1911, the honor society consists of speech and debate educators, students, and alumni from across the country. The Hall of Fame recognizes individuals for their outstanding service to the Honorary and their role in promoting the honorary's motto of "the art of persuasion, beautiful and just." Millsap is the 42nd member to be inducted.

COURTRIGHT MEMORIAL LIBRARY

ALLEN REICHERT, Professor/ Electronic Access/
Government Documents Librarian
Non-Peer-Reviewed Publications (books, book chapters, journal articles, essays or book reviews)
Review of Defining Documents in World History: Asia, ed. Salem Press. American Reference Books Annual 50 (2019).
Review of Speeches of the American Presidents: 1789-2018, 3rd ed. H.W. Wilson. American Reference Books Annual 50 (2019).
Review of Historical Dictionary of Postwar Japan, 2nd ed. William D. Hoover, Choice 56, no. 9 (May 2019).
Review of Historical Dictionary of Tajikistan. 3rd ed. K.N. Abdullaev, Choice 56, no. 5 (January 2019).

DEPARTMENT OF EDUCATION

PAUL J. WENDEL, Associate Professor
Grants and Fellowships (PI, Co-PI, or other)
Pepsico Recycling Zero Impact Fund, \$10,000.
Troy Bonte, Paul Wendel, Melissa Gilbert, co-PIs. In a pilot project to initiate sustainable campus living spaces, Otterbein will introduce substantial energy savings via introduction of

new HVAC controls, saving about 22,000 kwhr of electricity per year; install solar panels that will produce an estimated 5,000 kwhr of electricity per year; and initiate a campus-wide Student Energy Challenge to motivate efforts to live more sustainably in the Otterbein community. All savings will be reinvested in new sustainability initiatives. Awarded March 2019.

Peer-Reviewed Presentations and Posters

Wendel, P. J., Pochodylo, A., Spoltman, J. (2019, March 14). Learning through teaching: The middle school density dilemma. Presentation at the International Consortium for Research in Science and Mathematics Education (ICRSME) Meeting XV, San Jose, Costa Rica. Presentation with two in-service p-12 teachers regarding co-development of a series of density lessons for 6th-grade science.

DEPARTMENT OF ENGINEERING

MICHAEL W. HUDOBA, Assistant Professor
Non-Peer-Reviewed Publications (books, book chapters, journal articles, essays or book reviews)

Hudoba M., Castro C.E. 2019. Structural DNA nanotechnology for educational laboratories. Article 36 In: McMahan K., editor. Tested studies for laboratory teaching. Volume 40. Proceedings of the 40th Conference of the Association for Biology Laboratory Education (ABLE). <http://www.ableweb.org/volumes/vol-40/?art=36>

Peer-Reviewed Presentations and Posters

Hudoba, M., Castro, C.E., Kucinic, A. (2019). Structural DNA Nanotechnology for Educational Laboratories. Science Education Council of Ohio 2019 Conference workshop. Columbus, OH, January 29, 2019.

DEPARTMENT OF HEALTH AND SPORT SCIENCES

KRISTY L. MCCRAY, Assistant Professor
Community Outreach and Service
Co-Chair, Diversity Committee. North American Society for Sport Management, June 2017-present.

Peer-Reviewed Presentations and Posters

McCray, K., and Zonder, E. (2019, March). Title IX, the NCAA, and the Sixth Circuit: What recent developments mean for addressing sexual misconduct on campus. Paper presented at the Sport Recreation and Law Association Conference, Philadelphia, PA.

Schwarz, B., McCray, K., and Davis, J. (2019, January). "I learned how to help stop the spread of rape culture"-Sexual violence prevention education in intercollegiate athletics. Workshop facilitated at the Ohio College Personnel Association Annual Conference, Worthington, OH.

McNeil, C., Prysock, J., and McCray, K. (2019, January). Black student-athlete identity in a private liberal arts college environment. Research presented at the Black Student-Athlete Summit, Austin, TX.

SHELLEY S. PAYNE, Associate Professor
Community Outreach and Service

High School Recruitment Efforts: Panel at Westerville Central High School (4 hours); invited Guest Speaker at Pickerington Central (2 hours); invited Guest Speaker at Northridge High School (2 hours) and the development and execution of an Interactive Lab through the Biomechanics Institute 2 day experience: 1 day at the high school, 1 day at Otterbein (8 hours).

Organized the Hunger Heroes 5K Run, raising nearly \$1700 to support WARM and The Promise House.

Faculty Advisor for the Health Professions Club.
Faculty Co-Advisor for the Special Olympics Club.
Faculty Co-Chair for the Health and Sport Sciences Alumni Board.

Honors and Awards

Selected as a Board Member of the International Society of Self-Directed Learning.

Peer-Reviewed Publications (books, book chapters, journal articles, essays, or book reviews)

Payne S. Reliability of a 2-dimensional running gait analysis [Abstract 2]. J Sport Med Allied Health Sci. 2018;4(1).

DEPARTMENT OF MUSIC

DENNIS F. DAVENPORT, Professor

Artistic Exhibits and Performances

Music Director and Accompanist for the Otterbein Summer Theatre production of *Snoopy!* Cowan Hall, July 5-21, 2018.

Composition of a choral anthem based on the hymn "The Day Thou Gavest." During the Concert Choir's tour in Germany in December 2017, Pastor Rainer Schumacker of Schwelm mentioned a hymn that appears with both German and English text in the Evangelisches Gesangbuch. Schumacker expressed a wish that Germans and Americans could sing this song together. Davenport composed an arrangement of the hymn using both English and German texts, which was sung when Schumacker and members of his congregation visited Westerville in October 2018.

Performance dates included:

Concert Choir and the choir of Westerville United Church of Christ, October 14, 2018.

Concert Choir and Otterbein Singers, Midday Choral Concert, Otterbein University, October 17, 2018.

Choir of St. Stephen's Episcopal Church, March 10, 2019.

DEPARTMENT OF NURSING

KAY A. BALL, Professor

Community Outreach and Service

Prison Ministry, Marion Correctional Institute, Marion, OH.

Elected representative, Delaware County Republican Central Committee.

Honors and Awards

Received the Sigma Theta Tau, Kappa Lambda chapter Community Service Award, February 16, 2019.

Peer-Reviewed Presentations and Posters

Ball, K. (2019, January 19). Hazards of Surgical Smoke and Creating a Business Plan for Smoke Evacuation. AORN meeting. Tampa, FL.

Ball, K. (2019, January 26). Excellence in Perioperative Nursing (closing keynote). AORN/ASPAN Conference. Columbus, OH.

Ball, K. (2019, February 16). Excellence in Nursing (keynote). Kappa Lambda induction ceremonies. Westerville, OH.

Ball, K. (2019, March 6). Otterbein University overview. Ohio Council of Perioperative Registered Nurses overview at Nurses Day at the Statehouse. Columbus, OH.

Ball, K. (2019, March 18). Building a Business Case for Smoke Evacuation; Legal Issues in Laser Surgery. International Laser Safety Conference. Kissimmee, FL.

Ball, K. Hazards of Surgical Smoke. Ethicon dinner meetings:

Ft. Walton, FL (2019, January 22)

Columbus, OH (2019, February 5)

Syracuse, NY (2019, February 7)

Boston, MA (2019, February 13)

Montgomery, AL (2019, February 20)

Tifton, GA (2019, February 21)

Miami, FL (2019, February 27)

Jacksonville, FL (2019, February 28)

Orange County, CA (2019, March 7-8)

Omaha, NB (2019, March 14)

Tampa, FL (2019, March 18)

JOHN D. CHOVAN, Associate Professor

Community Outreach and Service

Abstract Reviewer, 33rd Annual Conference of the American Psychiatric Nurses Association, New Orleans, LA. October 2019.

Peer-Reviewed Publications (books, book chapters, journal articles, essays or book reviews)

Chovan, J. D. (2019). Chapter 4. Principles of Patient and Family Assessment. In, B. R. Ferrell, N. Coyle, and J. A. Paice (Eds.), Oxford University Textbook of Palliative Nursing (5th ed.). New York: Oxford University Press.

Chovan, J. D., and Morgan, B. D. (2019). Chapter 40. Palliative Care of Persons with Mental Illness. In, B. R. Ferrell, N. Coyle, and J. A. Paice (Eds.), Oxford University Textbook of Palliative Nursing (5th ed.). New York: Oxford University Press.

DEPARTMENT OF PSYCHOLOGY

ROBERT N. KRAFT, Professor

Peer-Reviewed Presentations and Posters

Kraft, R. N. (2019, March). The chronology of memory. Paper presented at the annual meeting of the Eastern Psychological Association, New York.

DEPARTMENT OF SOCIOLOGY, CRIMINOLOGY AND JUSTICE STUDIES

HEIDI R. BALLARD, Associate Professor

Grants and Fellowships (PI, Co-PI, or other)

Participatory action research in global health and sustainable community development. FSDC internal grant (\$2,000) to continue work in global health interventions in rural Uganda.

CARLA R. CORROTO, Associate Professor

Peer-Reviewed Presentations and Posters

Corroto, Carla. (2019) "Masculinity Stories in Architecture." North Central Sociological Association Annual Conference. Cincinnati, OH. March 29.

Corroto, Carla. (2019) "The Architecture of Masculinity Contest Cultures." Midwest Sociological Association Annual Conference. Chicago, IL. April 18.

MELISSA K. GILBERT, Instructor/ Associate Dean of Experiential Learning, Center for Community Engagement

Community Outreach and Service

Representative, NASPA LEAD Advisory Institution. Research Chair, NASPA Civing Learning and Democratic Engagement (CLDE) Knowledge Community.

Member, Ohio Campus Compact Advisory Board. Member, Central Ohio Higher Education Non-Profit Alliance.

Peer-Reviewed Presentations and Posters

Gilbert, Melissa K., Rusterholz, Stacey, and Green, Jaymi. (2019) Cultivating civic ecotones for food justice. Paper presented at Partnering for

a Resilient and Sustainable Future: Ohio State Community Engagement Conference, Columbus, OH.

Peer-Reviewed Publications (Books, Book Chapters, Journal Articles, Essays, or Book Reviews)

Gilbert, Melissa K. and McCunney, D. (2019) Educated in the arts of democracy: Preparing students for civic participation. In NASPA Civic Learning and Democratic Engagement Knowledge Community Publication (pp. 28-31). Washington, DC: NASPA.

Service Learning Course Projects

INST 2006 Dimensions of Culture and Society: Students served as civic apprentices each week for service organizations and conducted an "Interrogating Social Inequality" ethnography and improvement plan for the organization.

DEPARTMENT OF THEATRE AND DANCE

T.J. GERCKENS, Associate Professor

Artistic Exhibits and Performances

Lighting Design for *Metamorphoses*, adapted and directed by Tony and MacArthur Foundation Genius Award Winner Mary Zimmerman, Berkeley Repertory Theatre, Berkeley, CA, January 2019.

STELLA A. KANE, Associate Professor

Artistic Exhibits and Performances

Together-Then, Now and Always, a world premiere piece featuring the music of Motown choreographed for the February 2019 Columbus Dance Theatre concert titled Women Leading. Women leaders in dance from across the country choreographed the program.

CHRISTINA M. KIRK, Professor

Artistic Exhibits and Performances

Director, *Singin' in the Rain* for the Otterbein Department of Theatre and Dance, March 2019.

SABBATICAL ABSTRACTS, ACADEMIC YEAR 2019-2020 PROJECTS

Sarah Bouchard (Biology & Earth Science, Fall 2019)

Bouchard will compile recent experiments into publishable manuscripts (one completed manuscript and significant progress on two more). To do this, Bouchard will learn a new statistical program. Bouchard will also take a field course where she will increase her knowledge of natural history and field techniques.

Sue Constable (Education, Spring 2020)

Constable will continue her career-long study of literacy tutoring, manifested in scholarly studies and research, community service, and curriculum consultation. Central to this work will be a tutoring program where she will provide twice-weekly tutoring to 3-5 elementary students who are identified (by teachers, parents, school districts) as struggling readers and writers.

Anthony DeStefanis (History & Political Science, Fall 2019)

DeStefanis will finish revising a book manuscript and re-submit it to the University of Illinois Press. His research uses the Colorado National Guard to examine military strikebreaking, about which little is known even though the National Guards were established for this purpose and military strikebreaking was common between the Civil War and World War II.

Denise Hatter-Fisher (Psychology, Spring 2020)

Hatter-Fisher's sabbatical will involve development of a biofeedback seminar and significant progress on research examining psychosocial factors and health locus of control in a diverse population of women. Continuing education will be pursued to inform seminar development. Statistical consultation and concentrated focus will be employed to support her scholarly research.

Ioan Hrinca (Mathematics & Actuarial Science, Spring 2020)

Hrinca will investigate the controllability of the Lotka-Volterra system with Delay under a different set of constraints that, hopefully, will lead to a more realistic controller of a better behaved system.

Stella Kane (Theatre & Dance, Spring 2020)

Kane will create a dance theatre piece based on the Geisha and her artistry; focusing on dedication, tradition, grace, honor, mystery and femininity. This composition will premiere in the 2020-2021 Otterbein Theatre and Dance season performance schedule.

Jean Kelly (Communication, Fall 2019)

This creative research project, writing and publication of a memoir, builds on Kelly's experience as a freelance writer and writing instructor. She will travel to places where writers of faith—both true believers and the lapsed—lived, wrote, questioned and believed. The goal is a completed manuscript by Winter 2020.

Dee Knoblauch (Education, Fall 2019)

Knoblauch's sabbatical will involve three tasks for the department's upcoming CAEP (Council for the Accreditation of Educator Preparation) accreditation. Teacher preparation programs now have a new accreditation body, CAEP, and the Education Department must adjust accordingly. The three tasks will involve analyzing and revising reliability and validity, diversity, and technology.

Margaret Koehler (English, Spring 2020)

Koehler will finish researching and begin writing her book project on poetry and medicine in 18th-century England. After several weeks working in archives and libraries in London, she will draft the first two chapters and also a book proposal for scholarly presses.

Shannon Lakanen (English, Fall 2019)

Lakanen will complete field research for, write, revise, and submit for publication a personal essay based on her travel experiences in Cuba. Furthermore, she plans to also completely revise and submit for publication her first book-length collection of essays.

Michael Levin (Business, Accounting & Economics, Spring 2020)

Levin will submit an article to the Journal of Service Research. This manuscript will incorporate the household life cycle as a predictor to consumer purchase of a service and explain how the variable can be used as segmenting or grouping variable in the context of purchasing a leisure activity.

Yiyuan Liu (Business, Accounting & Economics, Fall 2019)

Liu will focus on text mining technique applied to online pricing and digital marketing. She will explore text mining in both English and Mandarin for user generated content to advance the understanding of web analytics in online brokerage model. She plans to present her findings at an academic conference.

Jessica Crossfield McIntosh (Library, Spring 2020)

Crossfield McIntosh will explore services and spaces in public libraries and how they can influence the practices of a university library as they adapt to changing demographics. These lessons will be examined through the lens of critical librarianship, the idea of librarians as advocates for social justice, diversity and inclusion.

Meredith Meyer (Psychology, Fall 2019)

Meyer will conduct an empirical investigation of people's beliefs about policy efficacy, specifically the extent to which people believe institutional laws/rules can change or control gender-stereotypical or gender-relevant behaviors. She plans to complete two studies with adults, and to start collect data collection from a developmental sample (ages 5-10 years).

Shelley Payne (Health & Sport Sciences, Spring 2020)

Payne will evaluate the Allied Health curriculum student learning outcomes and the current progress toward those goals. Specifically, Payne will look for ways to measure the growth of self-directed learning in our students and examining ways to promote this type of learning within the curriculum.

Chris Reynolds (Communication, Fall 2019)

This project will develop and execute a year-round pilot program to strengthen relationships between Columbus State Community College 2+2 and Dual Degree students with faculty, students and experiential activities within Otterbein's Department of Communication.

Denise Shively (Communication, Spring 2020)

This project will develop and execute a year-round pilot program to strengthen relationships between Columbus State Community College 2+2 and Dual Degree students with faculty, students and experiential activities within Otterbein's Department of Communication.

Jeremy Smith (English, Spring 2020)

Smith will continue his work on a book project (specifically a foundational article and the first chapter) which explores and defends the notion of truth in literary art. He claims that the function of literature is to make values convincingly present in a way that transcends conceptual thought.

David Stucki (Engineering/ Mathematics & Actuarial Science, Spring 2020)

Stucki will research the relationship between the mathematical and the theological infinite. He has been invited to spend his sabbatical at Wheaton College (IL), teaching one course and collaborating as a member of their math and computer science community, with access to their theology faculty and archives.

La Trice Washington (History & Political Science, Spring 2020)

Washington's sabbatical will address the presidency of Donald Trump and the use of propaganda to promote his political agenda.

The research treats the presidential campaign of Donald Trump. The project also treats and evaluates Trump's propaganda on health care, global warming, Kim Jong Un, fake news, U.S. relations with Russia, and immigration.

FACULTY SCHOLAR DEVELOPMENT COMMITTEE

FSDC INTERNAL GRANTS

FSDC provides funds to support full-time faculty at all levels of career development in scholarly and artistic activities related to their work at Otterbein University. These grants are primarily intended for the enhancement of the professional activities of faculty; specifically research, artistic projects, and publications.

SUZANNE ASHWORTH, English

Queer Digital Poe (\$2,000)

Ashworth will participate in the Digital Humanities Summer Institute at the University of Victoria in British Columbia. From June 10-14, Ashworth will take a course titled "Queer Digital Humanities." The Summer Institute will serve as research that advances her scholarship in early American literature, queer theory, and gender and sexuality studies. The Institute will help Ashworth identify digital humanities applications for her book project, *Queer Poe*. A digital counterpart to the book will enable Ashworth to translate elements of her research into an interactive experience that links users to the nineteenth-century letters, photographs, conduct books for men, and medical and psychological texts on manhood that inform her argument. Following the Summer Institute, Ashworth will generate a digital archive devoted to the investigation of Poe's estrangement from his foster father, John Allan.

HEIDI BALLARD, Sociology, Criminology and Justice Studies

DIANE ROSS, Co-collaborator, Education
Participatory action research in global health and sustainable community development (\$2,000)

Ballard will continue her work in global health interventions in rural Uganda. Ballard will

collaborate with Diane Ross of the Otterbein Education Department to establish menstrual hygiene management (MHM) and reproductive health education (RHE) programs for young adolescent girls in remote schools. The funded project will allow Ballard to travel to the equatorial Rwenzori Mountains and collaborate with Ross and the Rwenzori Mountaineering Association, a charitable nonprofit organization, to plan the establishment of an MHM and RHE program in a remote school in June 2020. Ballard and Ross will conduct an international service learning course that allows Otterbein students to travel to this remote school in June 2020 to assist with program implementation.

JENNIFER BENNETT, Biology and Earth Science
JEFFREY LEHMAN, Co-collaborator, Biology and Earth Science

An Electron Microscopic Examination of Developmental Mutants in Pathogenic and Non-pathogenic Species of Streptomyces (\$2,000)

The goal of the research is to examine *Streptomyces* development and ability to cause disease by scanning electron microscopy (SEM) through a collaboration with Ohio Wesleyan University. Electron microscopy uses an electron beam instead of light, therefore it has much greater capabilities for magnifying and resolving fine

details than types of light microscopy. This greater detail should allow a better understanding of bacterial mutant phenotypes and provide a complimentary approach to visual and light microscopy evaluations. It also provides unique micrographs that can be published with our other data.

ELIZABETH BERKELEY, Biology and Earth Science
Living Large in a Hot World: Application of Thermal Camera Imaging for Monitoring African Elephant Health and Welfare (\$2,000)

Large body size leads to a lower ability to radiate heat through the skin so maintaining a constant body temperature in hot environments can be challenging. Elephants adjust for their body size by having large ears to increase the rate of heat loss and by performing behaviors such as bathing. Berkeley proposed adapting thermal imaging technology to assess body temperature remotely in active and resting elephants. The information produced will help us better conserve and manage this iconic endangered species by providing information on when elephants are subject to heat stress under natural ranging and working conditions.

Glycemic Response to Moringa Trees in African Elephants (\$2,000)

Nothing is known about how what an African elephant eats influences its glucose physiology yet excess glucose in diets is suspected in numerous diseases and conditions that harm captive elephants. African elephants are increasingly at risk due to human-elephant conflict, habitat fragmentation, and poaching, with an estimated 1 elephant being killed every 15 minutes. As elephants are more intensively managed in zoos and smaller reserves, we need to understand what foods best approximate wild diets. To further understand how elephants metabolize dietary glucose, Berkeley measured the elephants' glycemic response to different wild and provisioned diets. Berkeley conducted trials on *Moringa* spp., a small

extremely fast-growing tree endemic to the Horn of Africa. This tree has a long history of use for food and medicinal purposes for humans and livestock and could potentially be a cost-effective alternative to current elephant browse options.

TAMMY BIRK, English
Contemporary Graphic Narrative and the Queering of Gay Shame and Pride (\$2,000)

Within traditional LGBT studies, gay shame and pride are often read as antagonists to one another. Pride serves an antidote to shame, which is an affect assigned to LGBT persons who are encouraged to understand their subjectivities as malignant. Queer studies, on the other hand, has re-envisioned not only the apparent opposition of gay shame and pride, but also the overvaluation of pride and repudiation of shame. Drawing on scholarship on queer negativity, gay shame opens space for a more progressive and thoroughgoing rejection of the neoliberal fetishizing of pride in all of its forms. This article intends to investigate the impact of the queer redefinition of gay shame and pride in three queer graphic narratives--'Blue is the Warmest Color,' 'Skim,' and 'Cannonball'--that centrally feature characters who struggle--surprisingly--with both gay shame and pride. In this way, these three texts make material the queer argument that gay shame and pride are falsely opposed and we are in need of a different language to describe non-hetero subjectivity.

JIM BOWLING, Art and Art History
Male Homoerotic Expression in Art Nouveau Design (\$2,000)

Through direct observation and study, Bowling will research Art Nouveau design and Aestheticism in the art and architecture of London, Paris and Brussels, focusing on male homoerotic expression in Art Nouveau design and associated art movements. After this research, Bowling will continue his scholarship by creating associated work as an artist in residence at C.R.E.T.A. Rome in Rome, Italy. This project connects to his

broader research and creative work of homoerotic expression in the visual arts; results will advance his personal scholarship and will also be used to enhance curricular content of courses he teaches.

STEFFANIE BURK, Equine Science

JENNIFER BENNETT, Co-collaborator, Biology and Earth Science

A Comparative Study of Equine Parasite Infestation and Gut Microbiomes Using 16S and 18S rRNA Sequencing (\$2,000)

This study will analyze interconnectedness of bacteria, fungal, and eukaryotic parasite communities, comparing the domestic horse (*Equus ferus caballus*) and Przewalski's horse (*Equus ferus przewalskii*). Fecal samples were collected from each equid. Fecal egg counts were completed using a modified Stoll method. To determine the fecal microbiome taxonomy, DNA will be extracted, amplified, and processed utilizing a combination of 16S and 18S rRNA Illumina Sequencing and QIIME2 software. This has been performed for domestic horses, but we require funds to sequence the Przewalski's horse samples. The identification of relationships between gut organisms could have clinical applications to equine health.

ANDREW CALINGER-YOAK, Biology and Earth Science

Establishing a Fecal Parasite Resource: Piloting with Virginia Opossum Parasites (\$375)

Gastrointestinal parasites are a drain on animal health in domestic and wildlife populations. They increase mortality during stressful life stages, reduce reproductive output, and spill over into non-target species, including humans. FSDC funds allowed for the purchase of the essential equipment needed to safely perform fecal float assays on hundreds of samples. After the initial purchase, the operating costs for a fecal parasite lab are minimal, approximately \$100 a year. By increasing departmental capacity to study the incidence of parasites, we deepen the already-established connections with organizations like the Ohio Wildlife Center,

open ourselves to new partnerships, and provide a valuable skill to undergraduates.

MEGAN CHAWANSKY, Health and Sport Sciences

The use of 'sport for good' strategies for displaced persons (DP) of Ukrainian heritage: A case study of the Berchtesgaden (Orlyk) DP Camp (\$2,000)

At present, hundreds of grassroots projects use sport as a vehicle to teach life skills and to build community cohesion. Taken together, these operate under the latest social movement in sport: the "Sport for International Development and Peace" (SOP) movement, which boasts its own website and peer-reviewed journal. Existing research largely focuses on contemporary projects, and historical considerations have been overlooked by scholars. This project addresses this oversight through an archival exploration of sport initiatives delivered for displaced persons (DP) of Ukrainian heritage residing in the post-WWII Berchtesgaden (Orlyk) Camp.

JOAN ESSON, Chemistry

Development and application of methods to identify textile dyes and their sources (\$2,000)

The analysis of dyes and pigments is important in art history and conservation since their identification can aid in confirming authenticity of artifacts, furnish insights to inform conservation choices, and provide a more detailed understanding of how objects were made. The purpose of this work is to (1) develop methods that can differentiate the source of dyes, specifically for indigo, and (2) analyze dyes used on textiles in Otterbein's collection at the Frank Museum of Art.

MEREDITH FREY, Psychology

CINDY LAURIE-ROSE, Co-collaborator, Psychology
Inquisit Lab Software (\$1,560)

Inquisit is a web-based research platform that will allow Frey and Laurie-Rose to expand their data collection dramatically. In addition to being hardware independent, the software comes with an extensive library of tasks that have been preprogrammed. More than 300

experimental tasks, covering the major domains of cognitive abilities and attention, are available and ready to deploy with minimal programming required. Moreover, the extensive battery of tasks would allow Frey and Laurie-Rose to expand their research agenda by incorporating robust measures of mental rotation (a key component of intelligence they've never been able to study), and to explore other potential predictors of achievement in complex domains.

NICHOLAS HILL, Art

Traditional and Contemporary Practice:

Printmaking Residency in India (\$2,000)

Hill was awarded a month-long, artist residency by Sanskriti Kendra art center in New Delhi, India for December 2018. During the residency, Hill created work combining traditional Indian woodcut practices with contemporary printmaking. Sanskriti Kendra will bring traditional printmakers from Jaipur to support his technical explorations. Hill researched contemporary Indian printmaking as well as popular culture posters and mass produced prints. After the residency, Hill will complete and exhibit a series of new work through a variety of peer-reviewed, exhibition opportunities.

JONATHAN JOHNSON, Art and Art History

Solo Exhibition at Coop Gallery, Nashville, TN (\$2,000)

This project is a solo exhibition of recent photographs at the internationally recognized COOP Gallery in Nashville, TN and will include work created in June 2018 during an artist residency at Museum Ricklundgården in Sweden. The exhibition may include existing, never before shown work depending on the nuances of the creative and editing process.

JEAN KELLY, Communication

Research and Travel Related to Writing a Spiritual Travel Memoir

Kelly will conduct research and travel related to the writing of two chapters of a spiritual travel memoir that she hopes to publish as a

trade book. Kelly will conduct research on Flannery O'Connor in Milledgeville and Atlanta, Georgia, (the home where she wrote most of her work and her archives at Emory) as well as travel to Portland, Oregon, home of the late essayist, poet, novelist Brian Doyle.

CHRISTINA KIRK, Theatre and Dance

Research for Otterbein University Theatre Season and Partnerships on New Work Development (\$1,325)

Kirk will research new plays and new play and musical development in New York City. Kirk extended her travel to New York City for an additional week to focus on seeing Broadway, Off-Broadway, and Off-Off Broadway plays and musicals as part of her research as Producer and Artistic Director of Otterbein University Theatre. In addition, Kirk will seek out industry professionals with interest in new play and musical development for potential projects for the Otterbein University Theatre season.

KRISTY MCCRAY, Health and Sport Sciences

Fair Play: Sexual Violence Prevention for Athletes (\$2,000)

Fair Play: Sexual Violence Prevention for Athletes is a comprehensive sexual assault prevention and bystander intervention program designed by McCray specifically for intercollegiate student-athletes. Fair Play features active learning methodologies while emphasizing four curricular components: (1) awareness and understanding of sexual assault, consent, and rape culture in sports; (2) healthy sex education; (3) gender and sexuality; and (4) bystander intervention. Male and female student-athletes from the football, softball, and women's tennis and golf teams will participate in the 10-hour program during Fall 2018. Participants will complete pre-and post-test surveys as well as interviews to assess program efficacy.

MARK MINEART, Theatre and Dance

Appetite for Excellence: Conversations with Master Teacher Jewel Walker (\$1,696)

Jewel Walker is one of the great living acting teachers. Apart from students, Walker's teachings have never reached the wider theatre community because, apart from a short essay in *Master Teachers of Theatre: Observations on Teaching Theatre by Nine American Masters* edited by Burnet M. Hobgood (SIU Press 1988), Walker has never interviewed or published. This project will record conversations with Walker detailing his life, work, and teachings to be released as a serialized podcast as well as a freely distributed e-book. This material will also be used in Mineart's classes.

RARES PILOIU, Library

Book Manuscript Index (\$1,350)

With Rares' book manuscript (*The Quest for redemption: Central European Jewish Thought in Joseph Roth's Work*) pending publication, the publisher (Purdue UP) requested a professional indexer be hired to create an index. This grant will cover the indexing costs, which run at an average of 3\$ per typescripted page.

NICHOLAS ROSS, Music

Leopold Godowsky: Apostle of the Left Hand (\$2,000)

Leopold Godowsky (1870-1938) was a Polish-American pianist who gained the nickname "Apostle of the Left Hand" for his contributions to the literature of piano music for the left hand alone. As the culmination of his fall 2018 sabbatical project, Ross recorded three of Godowsky's most important works in this genre, *Suite for the Left Hand Alone*, *Waltz-Poems* and *Concert Album*, in Riley Auditorium in December. The grant will cover the first of two payments for the production and distribution costs of this recording, which will be released in CD and digital format by Centaur Records Inc.

AMY SHEERAN, Modern Languages and Cultures
Latinx Literature via Sweden: A Critical Edition of the Graphic Novel 'United States of Banana' (\$2,000)

The purpose of this project is to finalize research and editing of a critical edition of an English-language graphic novel based on Giannina Braschi's 2011 novel and postcolonial manifesto, 'United States of Banana.' Braschi's work inspired the Swedish graphic artist, Joakim Lindengren, to create rich, evocative illustrations in the form of a graphic novel, for which he adapted and translated the novel's original text into Swedish. This critical edition will make this significant contribution to Latinx literature more accessible, particularly in the undergraduate classroom. Working with Braschi, Lindengren, and a colleague, Sheeran will prepare a finalized manuscript for publication.

DAVID SHERIDAN, Biology and Earth Science
A fixed stage and digital camera for the custom modular fluorescent microscope, CardyScope (\$2,000)

Two previous FSDC grants (Round 2, 2016 & Round 2, 2017) allowed the department to build a modular microscope with multiple fluorescent protein detection capabilities, the "CardyScope," out of modular microscope components for a fraction of the cost of commercially available scopes. After using this microscope, we wish to adapt it to the specific needs of the neuroscience experiments we will conduct in our lab; this customizability and low-cost are the huge advantages to these modular microscopes. The specific purpose of this grant is to acquire components to improve the imaging capabilities and construct a fixed specimen stage for the CardyScope.

ERICA VAN DOP, Health and Sport Science
The Impact of Physical Activity & Self-Regulation Coaching in Young Adults with Cognitive Impairment (\$2,000)

Reducing inactivity by 10% is part of the World Health Organization's 25 x 25 initiative, to

reduce premature mortality by 25% from non-communicable diseases by the year 2025. A gap in the literature exists surrounding physical activity behavior in young adults with cognitive disabilities. This study aims to inform best practices to increase overall fitness, balance, and physical activity behavior adherence. A Social Cognitive Theory (SCT) based physical fitness program with self-regulation strategies is implemented by peer mentors for individuals with cognitive delays. The central hypothesis is that implementing a theory driven 12-week activity program will improve fitness markers, physical activity patterns, and bolster self-efficacy in participants.

Increasing Self-Efficacy of Future Health Promotion Professionals through Community Engagement (\$750)

Preparing knowledgeable and efficacious students is an essential component of professional development and liberal arts education. Practical fitness experiences for Exercise Science/Health Promotion students are abundant in the literature. However, few studies examine health promoting effects on student learning. This study aims to provide developing professionals with an opportunity to engage in teaching practical skills in partnership with the American Heart Association's CPR in Schools. Students' teaching self-efficacy will be measured pre- and post- intervention, along with community member's pre- and post-knowledge assessments. A repeated measures ANOVA will be conducted as well as a secondary analysis of the effectiveness of the AHA program.

THOM WARREN, Theatre and Dance
Summer 2018 Research (\$1,500)

Warren traveled to Alabama, Scotland, Paris, and New York City to conduct dramaturgical research for the upcoming main stage production of Andrew Lippa's "BIG FISH," which he will direct in the fall 2018. Warren also worked with the New York Public Library in their TOFT division (Theatre on Film and

Tape) to research a number of Broadway and Off-Broadway productions, searching for material for our students in their performance-based classes.

MICHAEL YONCHAK, Music

Fishing for a Yellow Shark: Continued Exploration of Frank Zappa's Magnum Opus (\$2,000)

Frank Zappa's *The Yellow Shark* (1993) is considered by many to be the pinnacle achievement for this composer and record producer. Continuing from his 2015 sabbatical project, this endeavor seeks to re-establish (or create) connections to identified individuals crucial to the completion of a book manuscript about this specific album. The 33 1/3 Book Series (published by Bloomsbury) is the target series for publication once the manuscript is completed.

ANNA YOUNG, Biology and Earth Science

JOAN ESSON, Co-collaborator, Chemistry

*Reflectance spectrometry: Applications to taxonomic distinction in *Poicephalus* parrots and analysis of cultural heritage objects (\$2,000)*

Color is the perception of reflected light and, thus, a spectrometer capable of operating in the reflectance mode is needed for any type of color analysis. The reflectance is measured at each wavelength of light to generate a spectrum unique to the object being studied. The objects being studied can vary from flat objects, such as paintings, to three dimensional objects, such as statues or even feathers. Young and Esson propose to analyze both the colors of parrot feathers to assess taxonomic color differences in subspecies, and cultural heritage objects to aid in possible restoration of Otterbein's Frank Museum art collection.

Assess, Plan, Act: Applied conservation to save the Cape Parrot (\$2,000)

The Cape Parrot was recently declared to be a separate species from its close relatives. The conservation of this species is at a critical point, and presents exciting opportunities to

1) organize an unprecedented gathering of key stakeholders to review of the outdated Action Plan, assess current data, and make recommendations to the IUCN as to what

conservation priorities should be planned and start one action item; 2) collect data on the effects of anthropogenic noise on the calls of this species.

FSDC HIGH IMPACT GRANT

The High Impact Grant provide funds to support a full-time faculty member at any level of career development in the scholarly and artistic activities related to their work at Otterbein University. This grant is primarily intended for the enhancement of the professional activities of faculty; specifically research, artistic projects, and publications.

SHERI BIRMINGHAM, Equine Science

Evaluation of oral administration of Alpha-Casozepine supplementation and its effect on morbidity rates in weanling foals (\$5,000)

Morbidity rates contribute to animal health and welfare concerns, as well as economic losses in weanling foals. The stress of transportation and sales can contribute to an increased risk of disease. Reduction of the stress response to environmental factors in weanling foals may result in improved immune function

during the weaning period. Alpha-casozepine is a tryptic peptide which has demonstrated calming anxiolytic like effects in treated horses. The goal of this pilot study is to determine whether oral administration of alpha-casozepine supplementation decreases the risk of disease in 20 foals, as measured through monitoring of salivary cortisol levels, temperature, clinical signs of disease, and body weight during the weaning period.

INTERNATIONAL COLLABORATIVE FACULTY ENRICHMENT GRANT

The Otterbein University Faculty Collaborative International Enrichment Grant is designed to expand faculty members' international learning, awareness, and experience, both for the potential enhancement of the curriculum and for their own intellectual enrichment. Although global learning can be meaningfully addressed in a local or broader national context, the purpose of these grants involves the travel, collaboration, and immersion of a team in a context outside of the United States.

HALARD LESCINSKY, Biology and Earth Science

MICHELE ACKER, Psychology

ELISABETH MARR, Biology and Earth Science

Community based conservation in SE Asia:

Preparation for a student experience

Lescinsky, Acker and Marr will visit community based conservation efforts in South East Asia to develop a travel course for Otterbein students. A principle focus will be communities around Gunung Palung National Park in Western Kalimantan (Indonesian Borneo) where "Health in Harmony" has worked with local communities to establish a medical clinic and provide alternative livelihoods for residents. This has allowed a significant decline in illegal deforestation and

the hunting of orangutans and other wildlife in the park. This project, and the course it develops, will explore the scientific and societal sides of conservation in an area that is home to some of the largest blocks of little touched rainforest in the world. It will emphasize the importance of local people, culture, and livelihoods in solving large global issues such as the loss of diversity and natural habitats.

EXTERNAL GRANT AWARDS: OFFICE OF GRANTS AND SPONSORED PROGRAMS (OGSP)

Otterbein faculty and administrators have received three grants totaling \$16,280 since our last update. Ranging widely from research to academic studies to community education, faculty and administrators pursue grants to support the mission of Otterbein, enhance faculty achievement and student learning, and strengthen social justice in the central Ohio community. We await word on the funding status for five proposals we have submitted to funders, totaling \$197,888.

Grants Awarded

Science Lecture Series

Lubrizol Foundation (\$2,500)

Funding supported the fee for the 2019 Science Lecture Series speaker, Dr. Richmond Sarpong, Professor of Chemistry, University of California, Berkeley.

TROY BONTE, Executive Director, Facilities

PAUL WENDEL, Associate Professor, Department of Education

MELISSA GILBERT, Associate Dean, Center for Community Engagement

PepsiCo, *Toward Sustainable Living: Introducing Energy Efficiency and Solar Production to a Campus Apartment Complex* (\$10,000)

In response to the Otterbein community's requests to improve campus energy efficiency, this pilot project will track energy savings from the installation of photovoltaic (solar) panels at the Park Street Commons residency. The request includes costs associated with wireless thermometers, equipment, and installation, as well as education materials to be used by the student group Plan-It Earth during April Earth Month, 2019. Cost share is not required but is met by the donated solar panels.

MELISSA GILBERT, Associate Dean of Experiential Learning, Center for Community Engagement
City of Columbus and Franklin County Community Gardens Grant Program, *Otterbein Community Garden* (\$3,780)

The Otterbein Community Garden will increase access to local and nutritious produce for Westerville and Otterbein community members experiencing food insecurity during the 2019 garden season. Funds from this grant would be used to buy lumber for additional raised beds at the garden. Raised beds would allow for more growing space and better drainage, which would increase food production. Additionally, funds would be used to buy new gloves, tools, harvesting crates, and seeds for plot owners. In order to increase youth education experience at the garden, funds would be used to purchase youth-sized gloves, youth-sized gardening tools, educational tools for the summer programs, and education signage.

Proposals Submitted, Pending Review by Funder

KRISTIN BOURDAGE, Chair and Associate Professor, Department of Education

Reinberger Foundation, *Diversifying the Teaching Workforce with a Grow Your Own (GYO) Movement*

Request: \$45,000 (3 years)

Expected reply: April 2019

NATHANIEL TAGG, Chair and Associate Professor, Department of Physics

National Science Foundation, *MSRI-2 Pre-Proposal subaward*

Request: \$54,516

Expected reply: August 2019

CARL PFENDNER, Adjunct Professor, Physics
National Science Foundation, *Subaward*
Request: \$74,372
Expected reply: Spring 2019

JANICE GLOWSKI, Director of Museum and Galleries
Ohio Arts Council, Arts Access, *Frank Museum*
Operating Support
Request: \$5,000
Expected reply: July 2019

JANICE GLOWSKI, Director of Museum and Galleries
National Endowment for the Arts, Art Works
Program, *Patti Warashina: Conversations in*
Clay
Request: \$19,000
Expected reply: April 2019