

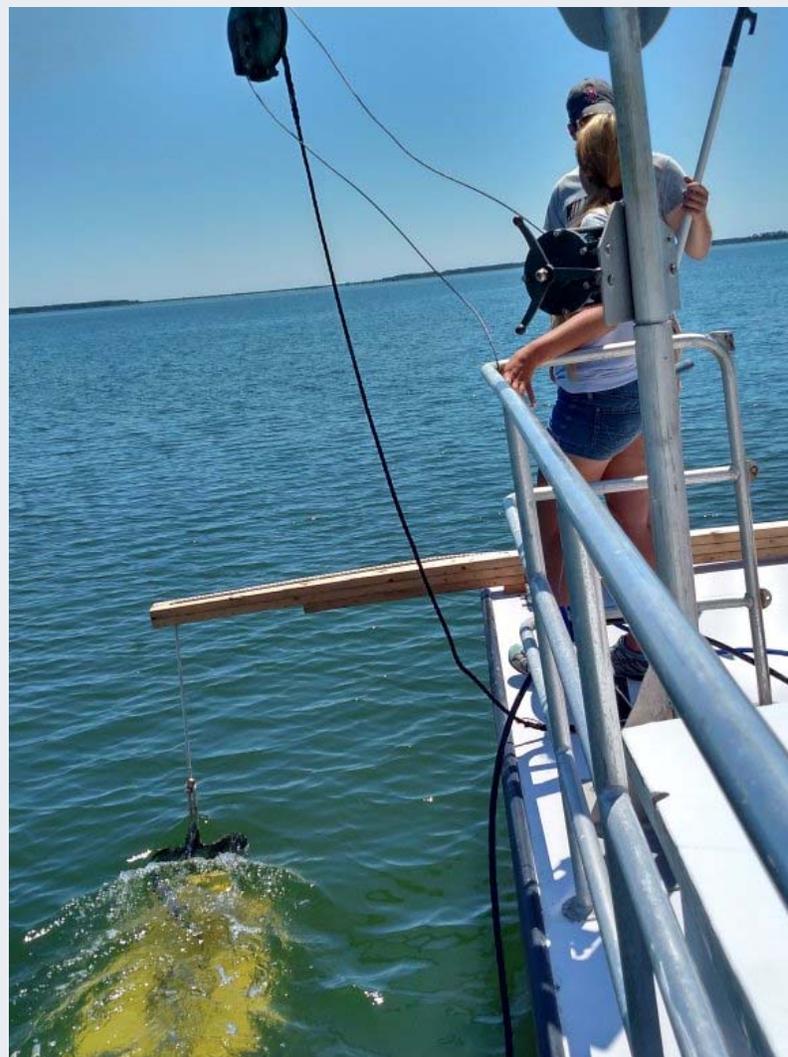


Grants and Sponsored Projects

Funding Year in Review

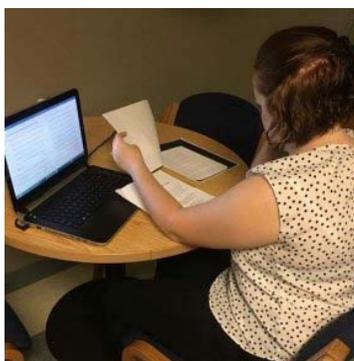
July 1, 2015 - June 30, 2016





Kutztown University Bringing Experiences About Research in Summer (KU BEARS)

The purpose of the KU BEARS program is to support faculty/student research pairs over the summer. The goals are twofold: to develop the necessary skills set of undergraduate students to help them become student researchers and to provide faculty members with paid student research assistants. Undergraduate students selected for the program will receive summer pay for research tasks assigned by a faculty supervisor. By assisting faculty members in their research, students selected for the program will learn the knowledge and skills necessary for conducting advanced research in their field.



Tabetha Bernstein-Danis

College of Education | Special Education

Kate Serrill

Major: Special Education

Funds of Knowledge in Latino Households: A Survey of Latina Mothers in Northeastern Pennsylvania

Amount Awarded: \$2,000

Overview: Our research project focused on developing an understanding of funds of knowledge in Latino households – those literacy, numeracy and other academic skills embedded in everyday life activities. These funds of knowledge can serve as a basis for creating more effective connections between home and school. We collected data through the use of surveys and revised our surveys based on initial findings and planned our next steps, including focus group interviews. We developed a protocol for our focus group interviews and prepared for developing an amendment to the IRB. Another dimension to this research included collaboration with the Social Work department as the fields of Social Work and Education intersect in myriad ways, and our research project is of interest and relevance to both fields. Through this collaboration undergraduate students preparing to be practitioners in each field had the opportunity to collaborate and share perspectives on the research. We will present our findings at the California Association for Bilingual Education 2017 conference and are preparing an article on student-faculty research to be submitted this spring to the state-level peer-reviewed journal *The Pennsylvania Teacher Educator*.



Dr. Kaoutar El Mounadi

College of Liberal Arts & Sciences | Biological Sciences

Michael Toolan

Major: Biological Sciences

Characterization of the In Vitro Antifungal Activity of Four Novel Plant Defensins

Amount Awarded: \$2,000

Overview: Fungal pathogens impose major constraints globally on agricultural production and food safety. There is therefore an urgent need for the development of a new class of safe and effective antifungal agents in agriculture. The researcher and undergraduate student research identified novel plant defensins: RcDef, MdDef1, MdDef2 and TcDef1 from castor oil plant, apple and cocoa plant respectively. The student tested these defensins for their ability to kill some of the most devastating plant fungal pathogens including *Fusarium graminearum*, *Fusarium verticilloides*, and *Alternaria solani*. Quantitative data showed that all screened defensins, except MdDef1, have high antifungal activity against most of the fungi tested. RcDef had the highest antifungal activity which indicates that its mode of antifungal action is different. Data generated during this project constitute a first step towards the characterization of the mechanisms by which these plant defensins kill fungi. The goal is to use these peptides to design strategies that ensure durable and robust resistance in plants against fungal pathogens. The grant offered a great opportunity for a student to work on this project and learn techniques in microbiology, fungal biology, and plant pathology, including valuable insight into the processes, interactions, and adaptations of both plants and fungi that are vital to the understanding of ecosystems.



Gregory Hanson

College of Liberal Arts & Sciences | Modern Language Studies

Sara Wingert

Major: Modern Language Studies

Asseba un Sabina: A Pennsylvania Dutch Dialect Radio Play Series From the 1940s and 1950s

Amount Awarded: \$2,000

Overview: In the 1940s and 1950s the radio station WSAN in Allentown broadcast a popular weekly radio play, entitled *Asseba un Sabina*, written and performed in the Pennsylvania Dutch dialect. These episodes depict the lives and adventures of a Dutch-speaking farm couple, *Asseba* and *Sabina*, and their friends. The plays detail, often in a humorous manner, the rural life of many speakers of Pennsylvania Dutch during the

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(Gregory Hanson continued)

mid-20th century. The transcripts of these radio plays are housed in the archives of Muhlenberg College. The researcher and the undergraduate student will transcribe and translate episodes into English and publish volumes.

Ko-Hsin Hsu

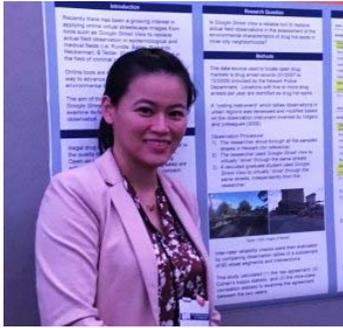
College of Liberal Arts & Sciences | Criminal Justice

Richard Ward

Major: Computer Science & Information Technology

Stacie Ford

Major: Criminal Justice



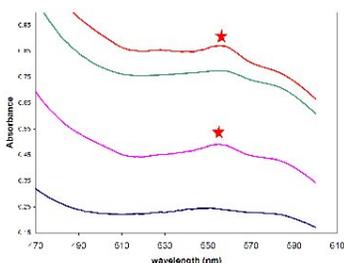
Inter-Rater Reliability on Assessing Environmental Characteristics of Street Drug Activity Using Google Street View

Amount Awarded: \$2,000

Overview: The purpose of this project was to examine forty-two physical variables around drug activity hot spots in Belo Horizonte, Brazil. This project aims to collect observational data in crime-ridden neighborhoods, using Google Street View (GSV). Previous studies have shown that GSV can be a suitable alternative to audit neighborhood environments instead of in-person observation; however, the application of GSV in crime research is rarely addressed. To ensure the reliability of the data observed, two undergraduate students with excellent academic standing from the Department of Criminal Justice were hired and trained to code variables on GSV images into numerical or dichotomous data, using Microsoft Excel, and their observations were compared for the inter-rater reliability check. The data obtained from this project are currently being used to develop a research paper examining street drug markets. The students were expected to maintain a high degree of attention to detail while completing the rigorous coding process independently and promptly. By the completion of this project, the students demonstrated a sense of responsibility of their performance, good time-management skills, and obtained hands-on experience and skills in academic research.

“I would absolutely participate in research again if given the opportunity. I think research is important in every field but it is especially important in criminal justice and psychology. Being a criminal justice major and a psychology minor means I need experience and confidence in research work.”

-Stacie Ford



Matthew Junker

College of Liberal Arts & Sciences | Physical Sciences

Tom Nguyen

Major: Biochemistry & Mathematics

Development of a Biochemical Assay to Study the Function of the Enzyme CCH (cytochrome c heme lyase)

Amount Awarded: \$2,000

Overview: This project investigated the biochemical mechanism for the assembly of the metabolic protein cytochrome c. Cytochrome c is required for respiration in many organisms, including humans. It functions in electron transfer reactions that enable cells to convert the energy from food into chemical energy stored in ATP. Cytochrome c function requires a bound heme molecule that is attached to cytochrome c by the enzyme cytochrome c heme lyase (CCHL). Defects in CCHL cause serious disease in humans. Little is known about the chemical mechanism of CCHL function, mostly due to the lack of an in vitro (cell-free) assay based on purified proteins. To develop such an assay, yeast CCHL and cytochrome c were expressed as recombinant proteins in *E. coli* and subsequently purified. When expressed in the same cells, CCHL successfully inserted heme into cytochrome c as evidenced by the cells turning a red color and by the proteins released from the cells exhibiting absorbance peaks for mature cytochrome c. This demonstrated that the *E. coli* produced-CCHL was functional. CCHL and cytochrome c were then expressed and purified separately before they were mixed in the presence of heme to test for CCHL function outside of cells. Unexpectedly, absorbance spectra detected spontaneous incorporation of heme to cytochrome c even in the absence of CCHL. However, this incorporation was not covalent, producing b-type cyt c and not c-type cyt c as generated enzymatically by CCHL. While CCHL gave only slight if any enhancement to this heme attachment, the signals from the assay were very strong and readily detectable. The assay conditions are now being optimized to boost the CCHL contribution to heme attachment.

Yoon Mi Kim

College of Liberal Arts & Sciences | Social Work

Alexandria Blackman

Major: Social Work

Integrating Empirical Research and Community-Based Learning in Undergraduate Social Work Education: Paths of Engagement

Amount Awarded: \$2,000

Overview: This is a community-based research project, partnered with local community centers. A freshmen social work student has been



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(Yoon Mi Kim continued)

involved in the process of conducting a survey on acculturation and educational experiences among Latino immigrants. Existing literature found that a majority of Latino students are from culturally linguistically diverse families, and that they struggle with psychological stress emerged from cultural adaptation and discrimination. The majority of Latino underachievers reported the challenges in acculturation as the major reasons for their educational underachievement. Through the summer project, a freshmen social work student conducted extensive library research on acculturation and diverse populations, and went into community settings and collected survey data with the researcher. The student attained a breadth of research skills and coded data under faculty supervision, and submitted a conference proposal on research findings.

Phill Reed

College of Liberal Arts & Sciences | Physical Sciences

Luke Maritch

Major: Physics / Astronomy

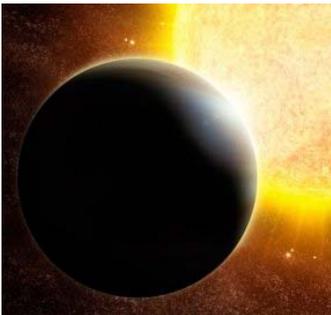
Exoplanet Discovery Using the Kutztown University Observatory

Amount Awarded: \$2,000

Overview: Exoplanets are planets orbiting other stars outside of our solar system, and exoplanet discovery is currently in a “golden age.” Space-based telescopes are discovering the first Earth-like and possibly habitable exoplanets. Ground-based projects are discovering Jupiter-like exoplanets, which are prime candidates to be the first exoplanets to have their atmospheres studied. KU is a member of a ground-based network – the Kilodegree Extremely Little Telescope (KELT) exoplanet discovery project.

KELT uses a small telescope located in Arizona to survey large sections of the sky in search of transiting exoplanets. A transiting exoplanet is a planet that periodically passes in front of its host star, from Earth’s perspective, temporarily blocking some of the star’s light causing it to appear to dim very slightly. While KELT’s telescope has found thousands of transiting exoplanet candidates, most of its transit-like signals are due to other phenomena such as nearby eclipsing binary stars, blended light from background stars, triple star systems, or spurious data. The KELT candidates must be confirmed using larger telescopes, including KU’s on-campus observatory, to eliminate the other possibilities.

Since 2013, KU astronomers have helped discover at least five new exoplanets. In summer of 2016 they worked to eliminate false positives from KELT’s database, and found very clear evidence of a planet-sized object orbiting a KELT candidate star. Further observations are underway to measure the mass of the object discovered in order to verify its planetary nature.





Robyn Underwood

College of Liberal Arts & Sciences | Biological Sciences

Austin Stoudt

Major: Biological Sciences

Using Organic Methods and Restricting Brood Nest Size to Improve Honey Bee Colony Health and Control Varroa Mites

Amount Awarded: \$2,000

Overview: During the summer of 2016, the researcher conducted the second year of a research project on the effects of organic versus conventional beekeeping practices on honey bee health. Recent honey bee colony losses have brought attention to the various stressors bees experience. Therefore, the researcher is studying the impact of the choices that beekeepers make in terms of chemical use and pest reduction, because it is something that can easily be changed. An undergraduate student was involved in this work after a KU BEARS grant was obtained. Together, the researcher and student took 16 overwintered colonies and made them into the 28 colonies that will go into the winter of 2016-17. They managed the colonies by visiting them regularly throughout the summer, monitoring them for diseases and pests, watching their populations grow, splitting strong colonies into two smaller colonies, and collecting samples. The student experienced the seasonality of beekeeping, including extraction of honey, and the heartache of a bear visit. This experience taught the student beekeeping skills, and more importantly, the ability to handle any beekeeping situation that might come his way.

Wing Hong Tony Wong

College of Liberal Arts & Sciences | Mathematics

Diego Manzano-Ruiz

Major: Mathematics & Philosophy

Two-Person Coloring Game on Graphs

Amount Awarded: \$2,000

Overview: Graph theory is an important topic in mathematics, which studies the structures and properties of graphs that consist of vertices and edges. Graphs are especially useful for simulating networks, so graph theory is closely related to operations research and computer science.

This project focuses on a game in graph coloring, a long-standing research area in graph theory. In this game, two players, Alice and Barbara, color a vertex of a given graph by alternating turns: Alice uses color A and Barbara



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(Wing Hong Tony Wong continued)

and Barbara uses color B. The only rule is: once a vertex is colored, no neighbors of that vertex may receive the same color. The first player who is unable to color a vertex loses the game.

In this project, we determine which player has a winning strategy on certain types of graphs, such as paths, cycles, and some grids. We also prove some general assertions about all graphs. For graphs with up to 9 vertices, we find that less than 30% can be won by Alice, given that both players make their moves optimally.

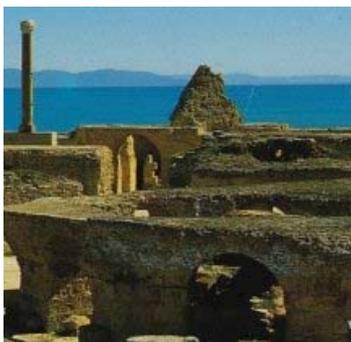
As a variation of the above game setting, we also investigate in the situation where both players use a common color C. Again, we are able to determine which player has a winning strategy on some special graphs. Furthermore, we discover that our game in this case is closely linked to other games introduced by John Conway and Richard Guy, two renowned mathematicians at Princeton University and the University of Calgary respectively.

“This experience has helped me understand a part of mathematics that I have not been exposed to before. It has also further piqued my interest in more areas of mathematics, including graph theory and combinatorics. It also helped me to have a taste of what mathematics research is like so that I am better prepared for graduate studies in mathematics.”

-Diego Manzano-Ruiz

Kutztown University Research Committee Funding

The Kutztown University Research Committee provides funding to support research, scholarly activity and professional development. The maximum award is \$8,000.



Christine Atiyeh

College of Visual & Performing Arts | Fine Arts

Re-excavating Carthage: Digitization and Online Publication of the White Fathers Archive (Rome)

Amount Awarded: \$7,385

Overview: To conduct research and documentation at the archive of the Missionaries of Africa (also known as the White Fathers) in Rome, Italy. Researchers will digitize, catalog, and ultimately make accessible online an archive of approximately 2,500 photographs and 10,000 folios of letters, field notes, diaries, and other textual materials documenting the excavation of Roman and early Christian objects and sites by Father Alfred-Louis Delattre and the White Fathers in Carthage, Tunisia from 1875-1956.

Daniel Aruscavage

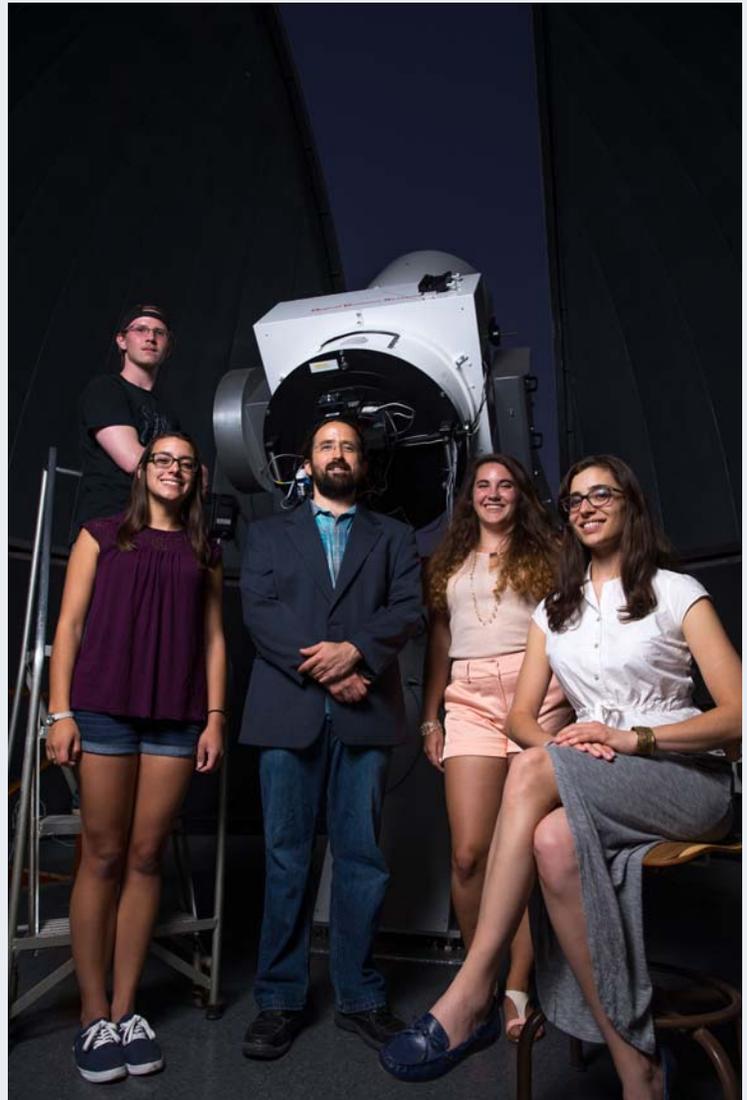
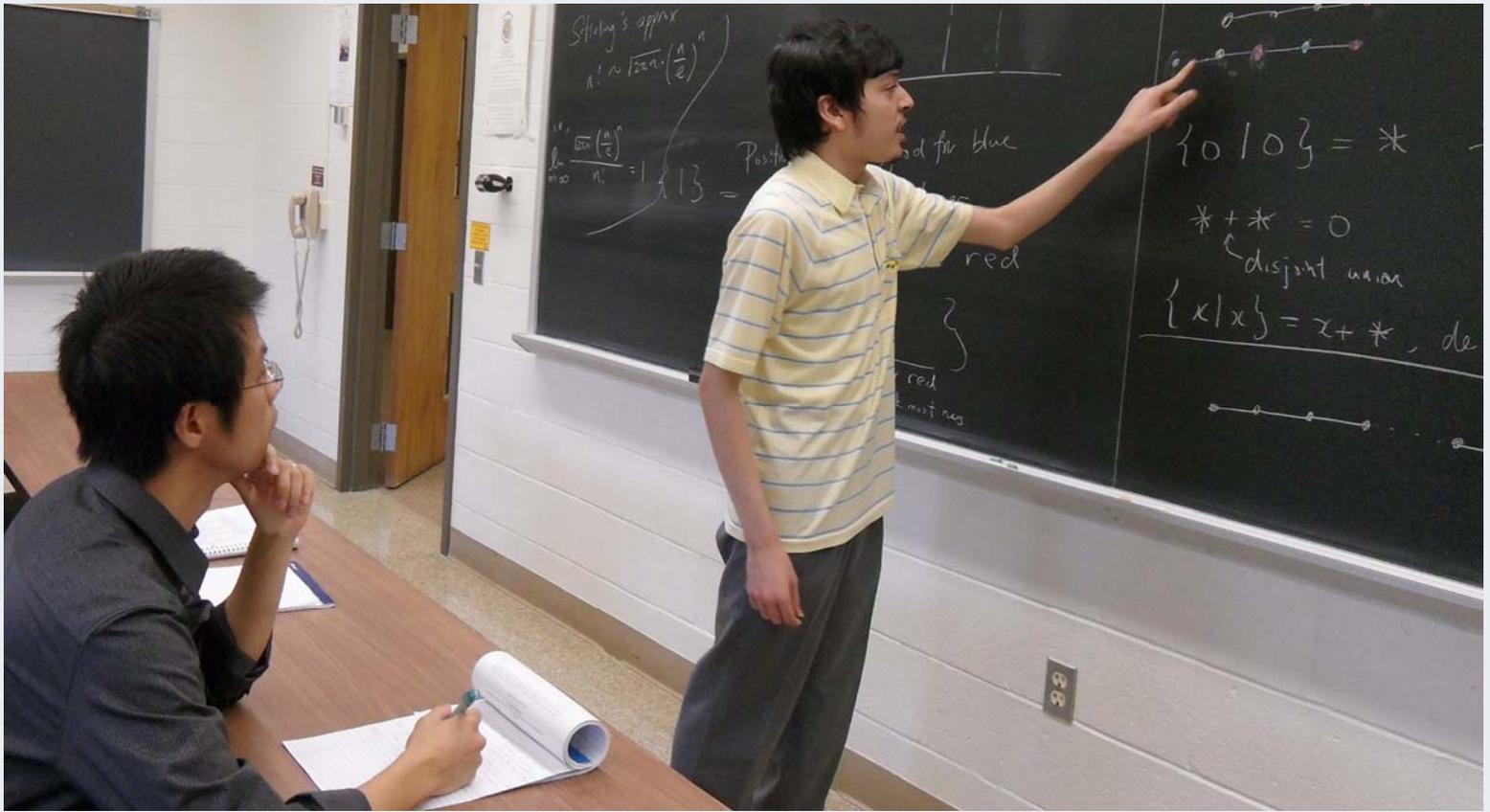
College of Liberal Arts & Sciences | Biological Sciences



Identification of Antibiotic Resistant Bacteria in the Intestinal Flora of Pre-term Infants

Amount Awarded: \$4,200

Overview: The rise in antibiotic resistant bacteria is a major health concern. It is unknown from where many of these resistant elements arise, but there are many hypotheses. There is overuse of antibiotics and use in agriculture. It is important to find where these pools of bacteria exist and how well they can be spread. Since pre-term infants establish their flora from their environment and they are in a hospital with limited contact, they are ideal population for determining if antibiotic resistant bacteria are common in the environment. We are interested in identifying very potent antibiotic resistant elements, since they should be less common. In this study, we attempt to identify the number of high level antibiotic resistant bacteria and to which specific antibiotics they are resistant.



Mario Cardozo

College of Liberal Arts & Sciences | Geography



Mennonite Soy Farming and Smallholder Livelihoods in Eastern Paraguay

Amount Awarded: \$4,172

Overview: Smallholder communities in South America have fought soy expansion for reasons that include encroachment into their territories and the difficulty of integrating an industry that requires substantial financial inputs and little labor. In Paraguay, one of the largest soy exporters in the world, broad-scale soy cropping continues to expand, in many cases taking over smallholder lands and displacing families to urban slums. The present study, by contrast, investigates emerging alliances between smallholders and Mennonite communities for the sustained production of export soy in Paraguay. Based on interviews in a Mennonite community in 2016 and satellite imagery analysis, this study complements previous research in peasant and indigenous communities and finds that a diverse group of small- and medium-scale farmers are growing export soy. In doing so, they are downscaling the Brazilian, broad-scale model that is prevalent for soy cropping in eastern Paraguay. While these emerging models provide viable livelihood alternatives to smallholders and Mennonite communities in the short term, the study also discusses factors that question the environmental and economic sustainability of soy cropping at any scale in the study area.

Angela Cirucci

College of Visual & Performing Arts | Communication Studies



Narrative Demographics

Amount Awarded: \$6,000

Overview: Traditional demographic methods are often restrictive. This study introduces a less violent method of interpreting socio-cultural phenomena. Participants were asked to share autobiographies, capturing their perceptions and interpretations of lived experiences. Goals are two-fold: to introduce a new “identification” standard that no longer promotes violent categories and to explore the ways in which simple narrative plots can be used to better appreciate acts on, and through, social media. Participants (n=366) were recruited through Mechanical Turk and shared autobiographies. They also provided data regarding their social media usage. Narratives were analyzed using the Syuzhet R Package, generating a simple plot for each. These plots were then analyzed to reveal autobiographical clusters. Autobiographical data were represented through three main clusters: low-to-high, human-in-hole, and human-on-hill. Significant findings include that human-in-hole use social media more frequently, human-on-hill use social media the least, and low-to-high are most likely to use reddit instead of more traditional social media. In sum, perceived lived experiences predict social media use choices and frequency of use.



Kaoutar El Mounadi

College of Liberal Arts & Sciences | Biological Sciences

Characterization of the In Vitro and In Planta Antifungal Activity of Novel Plant Defensins

Amount Awarded: \$7,000

Overview: Despite the continued release of resistant cultivars and chemical fungicides, estimated 10-40% of crop yields are lost due to fungal infections. There is, therefore, an urgent need for the development of a new class of safe and effective antifungal agents in agriculture. Plant defensins have proven to be greatly efficient in killing fungal pathogens. In fact, several plant defensins have been overexpressed in various transgenic crop plants and have been shown to provide excellent levels of resistance to fungal pathogens. Yet, although the outcomes were very promising, this technology has not yet moved to commercialization. Thus, there is a great need to design strategies to develop plant defensins into antifungal agents in agriculture. In this project, a set of molecular, biological and live-cell imaging tools will be used to characterize the in vitro and in planta antifungal activity of four novel plant defensins. Data generated from this research will further our understanding of the modes of antifungal action of plant defensins and the role these peptides play in fending off fungal pathogens and in plant growth and development.

Joleen Greenwood

College of Liberal Arts & Sciences | Anthropology & Sociology

The Identical Twin Sibling Relationship: Not Your Ordinary Sibling Bond

Amount Awarded: \$4,911



Overview: This research project builds upon the researcher's earlier pilot study that included 39 identical twins. An additional 80 identical twins (matched twin pairs) were recruited from the annual 2016 Twins Days Festival—the world's largest gathering of twins in the world. In-depth qualitative interviews were conducted to ask identical twins about their experience of being an identical twin. Specifically, twins were asked about their relationship with their twin over the lifecourse. Additional questions were asked about relationships with other siblings, intimate partners, and friends. The following themes emerged: twins as built-in best friends; the uniqueness of the bond between the twins; codependency of identical twins; identity issues; effects on intimate partnerships (positive and negative); effect of identical twins on other sibling relationships; and effects on friendships over the lifecourse. This research project is the first of its kind to be based off of in-depth qualitative interviews of a large sample of identical twins, providing the “voice” and perspectives of identical twins themselves—an opportunity for identical twins to reveal to “outsiders” what it is like to be an identical twin.



Mauricia John

College of Liberal Arts & Sciences | Anthropology & Sociology

A Comparative Analysis of Assimilation, Transnationalism, and Multiculturalism among Cuban and Haitian Immigrants in Miami, Florida

Amount Awarded: \$6,566

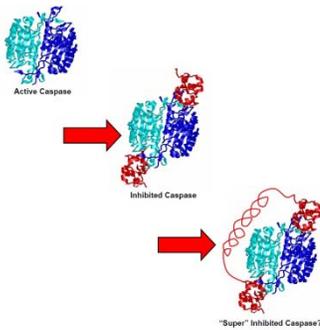
Overview: Caribbean migration remains an important topic in the migration literature. More specifically, the ways in which immigrants maintain ties to their countries of origin while still adopting characteristics of the destination country has been a topic of debate. Many argue that migrants leaving the origin country represents a drain on wealth-talent, and knowledge; while others argue that even though many migrants leave, their remittances are detrimental to the economic success of the origin country. This research project focuses on the ways in which Cuban and Haitian immigrants in Miami, Florida, maintain a multicultural lifestyle in the US, while still maintaining strong ties to the Caribbean through communication, travel, language, and culture. The ability to remain multicultural, and also the challenges involved with living dual lives in the US are both integral parts of Caribbean immigrants' experiences.

Matthew Junker

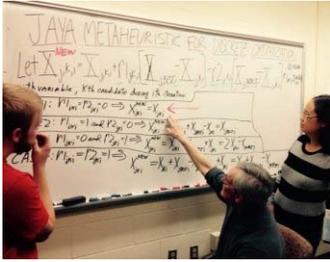
College of Liberal Arts & Sciences | Physical Sciences

Does Dimerization Enhance the Potency of a Programmed Cell Death Inhibitor?

Amount Awarded: \$7,391



Overview: The researchers will investigate a biochemical step in the regulation of apoptosis (programed cell death). Apoptosis is a process in all animals that safely removes unneeded or potentially harmful cells. Misregulation of apoptosis occurs in cancer (too little apoptosis) and many neurodegenerative diseases (too much apoptosis). Apoptosis requires the activity of caspase enzymes which are kept inhibited in living cells by IAP (inhibitor of apoptosis) proteins. Caspases are symmetric proteins with 2 catalytic sites. This research tests if self-associating 2 IAPs into a dimer (an attached pair) increases the potency of the IAP for inhibiting caspases. Such an effect would provide a route for development more potent apoptosis inhibitors.



Yun Lu

College of Liberal Arts & Sciences | Mathematics

Francis J. Vasko

College of Liberal Arts & Sciences | Mathematics

Heuristic Solution Approaches for Solving Large-Scale Instances of the Multi-Demand, Multiple-Choice, Multi-Dimensional Knapsack Problem

Amount Awarded: \$7,715

Overview: There are many real-world applications that can be formulated in mathematical terms as combinatorial optimization problems. Many of these problems due to their size and complexity can only be solved approximately. Metaheuristics are appropriate for these problems because they are solution strategies that are used to generate very good solutions (possibly optimum, but not guaranteed) to complex mathematical optimization problems using a reasonable amount of computer resources (time and memory).

In this project, the recently (2012) defined Multi-Demand, Multiple-Choice, Multi-Dimensional Knapsack Problem (MDMMKP) will be investigated. This problem is difficult to solve because it is the first extension of the basic Knapsack Problem to include all three types of constraints: demand, choice, and dimensional. The first step in this project will be to define a variety of test problem instances (since none exist in the current literature) that we and other researchers can use to test proposed solution procedures to the MDMMKP. Next, will come the design and computer coding of one or more metaheuristic strategies with the goal of generating near-optimal solutions to large-scale MDMMKPs efficiently.

Khori Newlander

College of Liberal Arts & Sciences | Anthropology & Sociology

The Archaeology of Industrialization in Northeast Pennsylvania

Amount Awarded: \$4,500

Overview: Over the last 200 years, the United States was transformed from a mostly rural and agricultural society to a largely urban and industrial society. Historical studies of this period of dramatic socioeconomic transformation commonly focus on the lives of famous people. This project, in contrast, seeks to tell the stories of the “invisible” men and women who lived and worked at Stoddartsville, a 19th-century milling village built along the



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(Khorl Newlander continued)

upper Lehigh River. To that end, fieldwork conducted by the 2016 Kutztown University Archaeology Field School included geophysical survey of an historic cemetery, pedestrian survey, and excavations in the general store, workers' cottages, and Stoddart's mansion. Currently, several students are analyzing the artifacts we recovered in order to reconstruct everyday life at Stoddartsville and, in turn, document the cultural changes that accompanied this attempt to bring industry to northeast Pennsylvania.

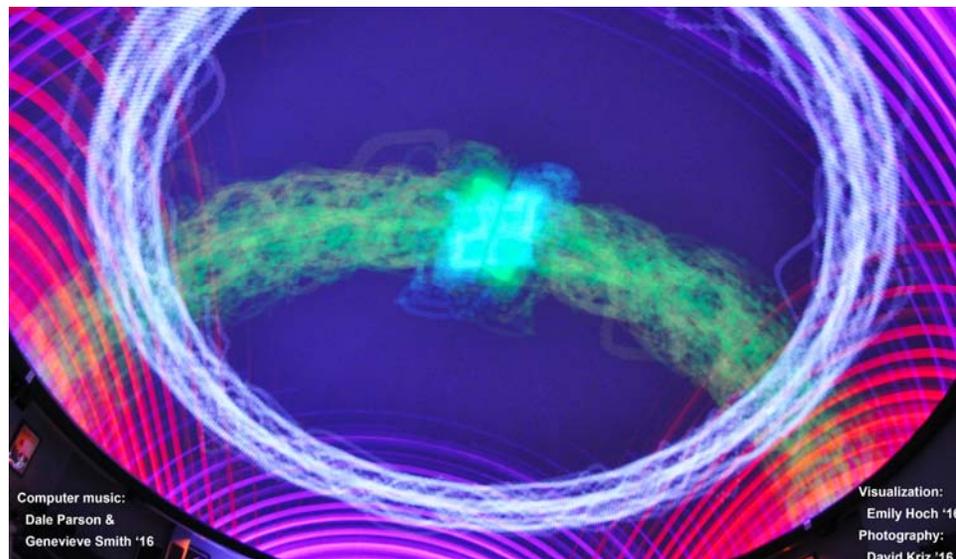
Dale E. Parson

College of Liberal Arts & Sciences | Computer Science & Information Technology

Scoring Software for Laser Projector / Surround Sound Systems

Amount Awarded: \$3,324

Overview: The primary research goal for this project is to integrate the live performance of computer-processed music and computer-processed graphics into an ensemble software instrument for improvisational performance in a planetarium and similar immersive performance spaces. The primary institutional goal is to make the \$59,350 laser projector acquired by Dr. Phill Reed and Dr. Parson in 2015 more accessible for custom programming by KU faculty members and students. The projector comes with a proprietary, non-portable scripting language that requires direct attachment of the computer to the projector for programming. After initial tests and design, Dr. Parson and graduate assistant David Kriz are in the midst of writing a software library that will allow programmers to control the projector using the standard multimedia language called Processing (<https://processing.org/>) across a local area communications network. The library will also support remote development of software for the projector, including its use in several multimedia programming courses at Kutztown.



Michael Radyk

College of Visual & Performing Arts | Art Education & Crafts

Fine Art Industrial Jacquard Weaving

Amount Awarded: \$6,000

Overview: This project will include research and production on an industrial Jacquard loom. The project will begin in Providence, RI and continue at the Oriole Mill in Hendersonville, NC. The Jacquard loom in contemporary art and its use as a tool for expression is the context for this project.



Edward Simpson

College of Liberal Arts & Sciences | Physical Sciences

Gas Escape Generated Geomorphic Features, Lake Powell Delta, Hite Utah

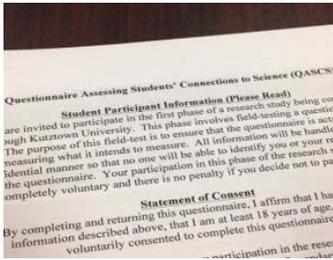
Amount Awarded: \$7,192

Overview: Lake Powell located in southern Utah serves as a natural laboratory to examine the surface and subsurface features that are generated by the escape of gases, mainly methane. The methane is generated by bacteria as they decompose subsurface organic matter. Two faculty members and three KU undergraduate students conducted extensive sampling of vented gas that are currently being examined with KU instrumentation. In addition, the low water levels exposed the vent surface features permitting their excavation to the water table. These trenches across these features exposed the conduits that delivered the gases to the surface, soft sediment deformation features, and the internal layering of the cones and the crater fill. The data is currently being developed into a series of manuscripts to be submitted to international journals.



“The measure of greatness in a scientific idea is the extent to which it stimulates thought and opens up new lines of research.”

-Paul Dirac



George Sirrakos

College of Education | Secondary Education

Investigating the Effectiveness of Audio-Production Assignments in an Introductory Science Course

Amount Awarded: \$5,418

Overview: The President's Council of Advisors on Science and Technology forecasts a shortage of one million STEM graduates in the workforce in the next decade. Given this estimated shortage, this study aimed to explore the effectiveness of audio-production assignments as a tool to motivate students in introductory science courses to more deeply engage with science content. Effectiveness was measured in terms of students' perceptions of the learning environment and attitudes toward science. In order to measure these constructs, Dr. Sirrakos and a graduate assistant developed the Questionnaire Assessing Connections to Science (QuACS). In Spring 2016, the QuACS underwent reliability and validity testing with a sample of 495 undergraduate students across five institutions of higher education. The data collected during this phase of the study led to a refined version of the instrument. Findings related to the development and validation of the QuACS will be presented in April 2017 at the American Educational Research Association in San Antonio, Texas. In Fall 2016, Dr. Sirrakos used the refined version of the QuACS to assess the effectiveness of audio-production assignments in an introductory science course. The data for this phase of the study is actively being collected.

Sarah Tindall

College of Liberal Arts & Sciences | Physical Sciences

Tons and Tons of Tiny Cracks

Amount Awarded: \$7,355

Overview: Small fractures called joints are nearly ubiquitous in sequences of sedimentary rock layers. The spacing and orientations (positions) of joints vary from one rock layer to the next, for reasons that are not thoroughly understood. Tindall and Eckert (2015) proposed that strength contrasts between adjacent layers, and the pre-existing tilt of the layers at the time of joint formation, can influence joint orientation and spacing. In the proposed field study, Tindall and two KU undergraduates will test the hypothesis that strength contrasts and layer orientation result in joints with variable orientation and spacing in different rock layers. Results are significant to understanding the mechanics of rock joint formation in general, and to exploration and recovery of oil and natural gas resources.





William F. Towne

College of Liberal Arts & Sciences | Biological Sciences

The Sun, Landscape, and Learning in Honeybee Orientation

Amount Awarded: \$4,745

Overview: Honey bees use conspicuous features of the landscape to navigate, but we have known little about how they do this. Based on suggestive, indirect evidence, Dr. Towne and his undergraduate research students hypothesized that the skyline—the panoramic profile of terrestrial objects against the sky—is important to bees in this context, and over the last two years, they tested this hypothesis by constructing an artificial replica of the natural skyline around an artificial sugar-water feeder and recording the bees' departure bearings as they left the feeder toward the hive. When the artificial skyline was set up around the feeder and rotated, the bees' departures were predictably deflected accordingly, showing that the bees do indeed use the panoramic skyline in directional orientation. In 2016, the artificial skyline was painted with ultraviolet-reflecting paint for the sky and ultraviolet-absorbing paint for the ground. The resultant orientation was much stronger than it had been in the previous year without the ultraviolet treatments, suggesting that bees distinguish the sky from the ground using the high ultraviolet content of skylight.

Ju Zhou

College of Liberal Arts & Sciences | Mathematics

Hamiltonian Problem and Group Connectivity Problem

Amount Awarded: \$3,102

Overview: Graph theory is the study of graphs, which are mathematical structures used to model pairwise relations between objects from a certain collection. It can be used to solve problems in many fields, which include physics, biology, chemistry, computer science, sociology, and operations research. The researcher plans to work on two application areas of graph theory: 1) Hamiltonian cycle problem (such as Traveling Salesman Problem); and 2) group connectivity problem (such as Network Flow Problem).

Kutztown University Research Committee Facts

The Research Committee awarded \$96,976 in grants to 18 faculty members (17 awards). Research was funded in the following disciplines: fine arts, anthropology, sociology, mathematics, geology, education, art education & crafts, computer science, biology, geography, and communication studies.

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Received	14	28	19	28	21	26
Awarded	12	21	17	20	12	17
Total Requested	\$ 68,676	\$ 178,596	\$ 100,940	\$ 144,454	\$ 111,044	\$ 137,654
Total Awarded¹	\$ 51,860	\$ 86,266	\$ 82,421	\$ 87,236	\$ 64,079	\$ 96,976
Annual Funding Available	\$ 50,783	\$ 75,783	\$ 75,783	\$ 75,783	\$ 75,783	\$ 75,783

1.Total Awarded may exceed Annual Funding Available due to the return of grant funding not expended from prior awards.

Kutztown University Undergraduate Research Committee Funding

The Undergraduate Research Committee primarily supports laboratory or field research, as well as research projects in the arts, humanities, and computer science. Funding is available for undergraduate students who plan to conduct research and/or present their research at conferences or research symposiums. The committee awarded 46 students funding, for a total of \$40,748.

	SUBCOMMITTEES		TOTAL
	Science	Arts & Humanities	
Awarded	41	5	46
Total Awarded	\$ 34,915	\$ 5,843	\$ 40,748



EXTERNAL FUNDING

Maria Asteriadou

College of Visual & Performing Arts | Music



Student Performance, Study and Collaboration at the University of Macedonia

Funding Source: Kutztown University Foundation

Amount awarded: \$2,100

Overview: The purpose of the trip is to expose KU music students to different musical and cultural experiences, as well as enhance international relationships. The students will have the opportunity to absorb different musical points of view from various music scholars from the University of Macedonia, interact and collaborate with gifted music students from another country, and gain international performance experience. The trip will also strengthen the exchange agreement between both universities.

Leah Cassellia

Academic & Student Affairs | Office of Student Involvement



Alicia Garza Speaking Engagement

Funding Source: Kutztown University Foundation

Amount Awarded: \$1,500

Overview: Alicia Garza, one of the founders of the #blacklivesmatter movement, spoke with the KU community in a packed Schaeffer Auditorium on Tuesday, March 29, 2016. Outraged by the 2013 acquittal of George Zimmerman in the shooting death of Trayvon Martin, Alicia Garza took to social media to express her anguish and love for the black community. Ending her message with Our Lives Matter/We Matter/Black Lives Matter, Garza—together with Opal Tometi and Patrisse Cullors—turned those powerful last words into a Twitter hashtag. Immediately prompting activism nationwide, #BlackLivesMatter has evolved into the banner under which this generation's civil rights movement marches. Empowering and enlightening, Garza serves as a beacon for individuals and organizations across the country fighting against the plague of social injustice, and galvanizes citizens to organize and stand together to transform society into a world where the lives and contributions of all individuals are recognized equally.



Leah Cassellia

Academic & Student Affairs | Office of Student Involvement

Vote Everywhere Program

Funding Source: The Andrew Goodman Foundation

Amount Awarded: \$1,500

Overview: Vote Everywhere seeks to leverage the history of the US Civil Rights Movement to inspire today's students to take action for positive social change. Through the Vote Everywhere program, the Andrew Goodman Foundation collaborates with colleges and universities that share a commitment to promoting student civic and political engagement. The program ambassadors on campus work to increase voter participation and education, break down barriers to voting access and use the vote to impact social justice issues.

Lisa Frye

College of Liberal Arts & Sciences | Computer Science & Information Technology

PA Association of Computer and Information Science Educators Spring Conference

Funding Source: Kutztown University Foundation

Amount awarded: \$1,000

Overview: Kutztown University hosted the 31st annual PA Association of Computer and Information Science Educators Spring Conference April 1-2, 2016. The conference allows for Computer and Information Science educators in Pennsylvania to gather. The conference included a keynote address, faculty and student presentations, and a student programming competition. The presentations allowed the faculty and students to present research and provided the attendees an opportunity to learn about and discuss recent developments in Computer Science.

The conference theme was "Women in Computing," which provided attendees a chance to gain a better understanding of the hurdles faced by females in a male-dominated discipline. The keynote speaker was Harley Baldwin, Vice-President of Design for Schell Games. She discussed her rise in the computer science industry. As part of this theme, there was a track for female students to report their experiences and struggles.

There were 135 attendees, with 13 presentations, 9 posters, a panel session, and 14 teams participated in the programming competition.





Albert Fu

College of Liberal Arts & Sciences | Anthropology & Sociology

Assessing a Sociology Living Learning Community: Curriculum, Extra Curricular Activities, and a Culture of Good Writing

Funding Source: American Sociological Association
Amount awarded: \$2,500

Overview: The study will examine a living learning community and the building of a “culture of good writing” that begins at the start of the academic career. Assessment of the living learning community will consist of a mixed methods approach, including surveys, interviews, reflective writing pieces, and the program’s ongoing analyses of senior portfolios already in use at Kutztown. The goal is to examine how co- extra- curricular activities can influence students’ development of disciplinary writing.

Dolores Hess

Academic & Student Affairs | Health and Wellness Services

Health Services Family Planning

Funding Source: Maternal Family and Health Services, Inc. (MFHS)
Amount Awarded: \$72,939

Overview: The Reproductive Health Services at Kutztown University Clinical Services is offered free of charge due to a grant from MFHS. This service helps students to take charge of their own sexual and reproductive health. It is available to all male and female students of the university. Some of the resources available to students include: STD screening and treatment, gynecological and pelvic exams, contraceptive methods and counseling, pregnancy tests, breast and cervical screenings, and counseling and referrals as indicated.



Loriann Irving

Academic & Student Affairs | Academic Enrichment

Student Support Services Program (SSSP)

Funding Source: U.S. Department of Education
Amount Awarded: \$301,115

Overview: Students with motivation and the potential to succeed in college are given support to help realize their academic, personal, and career goals. Eligible students must be first-generation or learning disabled and meet certain academic and economic criteria.



continued

(Loriann Irving continued)

SSSP provides students with opportunities for academic development, assists them with college requirements, and motivates them toward the successful completion of their postsecondary education. The program provides academic tutoring, advice and assistance in postsecondary course selection, assistance with information on obtaining financial aid, education to improve financial and economic literacy, and assistance in applying for admission to graduate and professional programs.

As a comprehensive academic support program, SSSP is dedicated to excellence and to the success of its diverse community of students. Through intrusive advisement, counseling, tutoring, learning communities, mentoring, support groups, and cultural activities, the program helps prepare its students “to meet lifelong intellectual, ethical, and career challenges.”

Bruce Jensen

Academic & Student Affairs | Library Services



Dalí Quartet and El Sistema Lehigh Valley

Funding Source: Kutztown University Foundation

Amount Awarded: \$3,000

Overview: The work of José Antonio Abreu to bring musical opportunities to children of Venezuela's middle and lower economic classes has been rightly compared to that of influential popular education and literacy pioneer Paolo Freire. Among the thousand-some programs worldwide, in more than 50 nations, that follow Abreu's principles is El Sistema Lehigh Valley (ESLV) under the aegis of the Allentown Symphony Association and a team of passionate music educators.

Members of Philadelphia's celebrated Dalí Quartet began their musical training in Abreu's program. Thanks to the grant, dozens of young ESLV musicians from Allentown's Roosevelt Elementary School and South Mountain Middle School came to spend a day at Schaeffer Auditorium and a campus dining hall enjoying a rousing and inspiring performance by the Dalí Quartet along with a meal in the company of KU music students and faculty. The performance was open to and attended by members of the general public.

Jeremy Justeson

College of Visual & Performing Arts | Music



Presser Foundation Undergraduate Scholar

Funding Source: The Presser Foundation

Amount Awarded: \$4,300

Overview: Kutztown University Department of Music announced

continued

(Jeremy Justeson continued)

music education major Joseph Coco '17 of Topton, Pa., as the first Presser Scholar at KU. Funded through a grant from The Presser Foundation, the Presser Scholar is awarded to an outstanding music student finishing his or her junior year and at least one-third of the student's credits over four years must be outside the field of music. Only institutions with recognized, high-quality music programs are considered for Presser Undergraduate Scholar Award.

Yoon Mi Kim

College of Liberal Arts & Sciences | Social Work

Tabetha Bernstein-Danis

College of Education | Special Education



Interdisciplinary Learning and Collaborative Research among Undergraduate Students in Social Work and Special Education

Funding Source: Kutztown University Foundation

Amount Awarded: \$2,400

Overview: This is an interdisciplinary community-based project, partnered with local community centers. Undergraduate students in the social work and special education departments at KU have engaged in the process of conducting a survey on acculturation and educational experiences of local Latino immigrant families since fall 2015. The purpose of this project is to provide KU undergraduate students with a community-based research opportunity and collaborative learning experience to develop an understanding of the acculturation experiences of immigrants, how those experiences impact education, and to explore the home literacy and numeracy practices that may not otherwise be recognized by professionals who often view immigrant families from a deficit perspective. The undergraduate students have attained a breadth of theoretical knowledge and research skills, and successfully completed an oral presentation at a local conference on November 11, 2016.

Diane King

College of Education | Special Education

Project MAX: Maximizing Access and Learning

Funding Source: Pennsylvania Department of Education

Amount Awarded: \$10,000



Overview: Kutztown University (KU) Department of Special Education began Project MAX: Maximizing Access and Learning activities in August 2015 through a partnership with the Pennsylvania Training and Technical Assistance Network (PATTAN). As part of the grant, Dr. King attended

continued

(Diane King continued)

two meetings to gain primarily and on-going information about the intent, materials and resources, and available supports. As a result of these meetings, Dr. King informed KU faculty about Project MAX, uploaded Project MAX resources to D2L for use in several special education courses, encouraged faculty participation in relevant professional development activities, and provided access to Project MAX funding for the purchase of relevant curricula for students with complexed instructional needs. As a result of this project, special education course syllabi were revised to address the training needs of pre-service teachers, faculty increased their knowledge and skills for teacher preparation, and pre-service teachers are better prepared to teach students with complexed instructional needs.

**NOVEL PERSPECTIVES
ON GERMAN-LANGUAGE
COMICS STUDIES**

HISTORY, PEDAGOGY, THEORY

Edited by LYNN MARIE KUTCH



Lynn Kutch

College of Liberal Arts & Sciences | Modern Language Studies

Awkward Doodles and Weird German Language Comics: An Academic Publishing Project

Funding Source: Kutztown University Foundation

Amount Awarded: \$500

Overview: Beyond the classroom, one important aspect of faculty/student interaction is professional support for students. This grant has allowed a student an opportunity to develop professional skills that can equip him for work in the academic or publishing field.

In June of 2016, Dr. Kutch published the anthology *Novel Perspectives on German-language Comics: History, Pedagogy, Theory*, a collected volume about German-language comics and graphic novels. It is the first English-language book-length study to assemble scholarly work from an international group of scholars on the topic. During the production process, when Dr. Kutch was working on final line and copy edits as well as the index, the grant provided for an editorial and research assistant that would help move the project along in a timely manner. The student, Josh Steinberg, was a German minor and also took *The German Graphic Novel*, making him uniquely qualified for the required tasks. He also gained valuable real-world experience in the realm of academic publishing.

Eric Landquist

College of Liberal Arts & Sciences | Mathematics

Preparation for Industrial Careers in Mathematical Sciences (PIC Math)

Funding Source: Mathematical Association of America (MAA)

Amount Awarded: \$5,000

Overview: The PIC Math program is an NSF-funded program



continued

(Eric Landquist continued)

administered by the Mathematical Association of America (MAA) and trains faculty to mentor undergraduates in solving open-ended real-world industrial problems. This grant funds the development of a mathematical modeling course which is running in the spring 2017 semester. In the course, students work in groups on problems obtained from business, education, industry, government, and non-profits, in communication with an industrial liaison. Eric Landquist has contacted dozens of potential liaisons in the area and has identified several problems appropriate for the course. These problems include improving local economy, optimizing profit from housing developments, and predicting success in college from the reformat-
ted SAT scores. The mathematical modeling course itself will culminate with each group writing a 12-page paper and giving a recorded 12-minute presentation on their results. Each liaison will receive a final version of the paper and a digital copy of the presentation. At least one student will receive funding from PIC Math to present their group's results at MathFest, the annual summer meeting of the MAA, in Chicago in July.

Linda Lantaff

Social Equity | Disability Services Office

My Place: Enhanced Services for Students with Autism Spectrum Disorder

Funding Source: Pennsylvania Department of Education & Pennsylvania Training and Technical Assistance Network

Amount Awarded: \$5,000

Overview: The KU Disability Services Office along with three sister universities including West Chester, Indiana, and Edinboro developed support programs and resources to increase the degree completion rate for college students with autism spectrum disorders. This grant supported the hiring of a graduate assistant to help research and develop the program. In fall 2016, KU will pilot enhanced services for students on the autism spectrum through a program called My Place. Students participating in this program will receive weekly support through one-on-one coaching/mentoring sessions, structured study sessions, and group activities and recreation.



Lyn McQuaid

College of Liberal Arts & Sciences | Mathematics

Yun Lu

College of Liberal Arts & Sciences | Mathematics



High School Mathematics Day for Girls

Funding Source: Kutztown University Foundation

Amount Awarded: \$1,435

Overview: Mathematics is a magnificent subject that has numerous applications in real life. However, many high school students view it as boring drudgery and something necessary to learn only in order to do well on State testing. In many cases, they have not been exposed to mathematics beyond mere number crunching and “solving for x.” In order to encourage high school aged young women to pursue the study of mathematics and to have active careers in the mathematical sciences, the Association for Women in Mathematics Chapter at Kutztown University organized a High School Mathematics Day for Girls. Through this one-day program, college students and faculty engaged high school females in activities to explore the beauty of mathematics; provided them with an opportunity to learn how female professionals in a variety of different fields utilize mathematics in their careers; and encouraged them to study mathematics and to pursue a career in the mathematical sciences in the future.

Maggie Monet

Academic & Student Affairs | College Readiness Programs



Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)

Funding Source: U.S. Department of Education

Amount Awarded: \$117,809

Overview: The Pennsylvania State GEAR UP grant is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. This seven-year grant replicates a research based collective impact model to address the college access needs of its students and families, and includes early intervention strategies as well as a scholarship component. Kutztown University has partnered with the Allentown School District to provide college readiness services for their entire class of 2020 which is comprised of approximately 1,250 students.

In the second year of the grant, GEAR UP students had the opportunity to visit Kutztown University for specific themed days focused on topics such as non-cognitive skills, sports-related careers and communication design. Kutztown University students also visited middle schools in Allentown to help lead mentoring sessions as well as support school-wide presentations focused on college readiness and succeeding in school. Additionally, GEAR UP students from the Allentown School District attended a two-day summer camp at KU to learn more about art related majors and careers.

Adrienne Oakley

College of Liberal Arts & Sciences | Physical Sciences



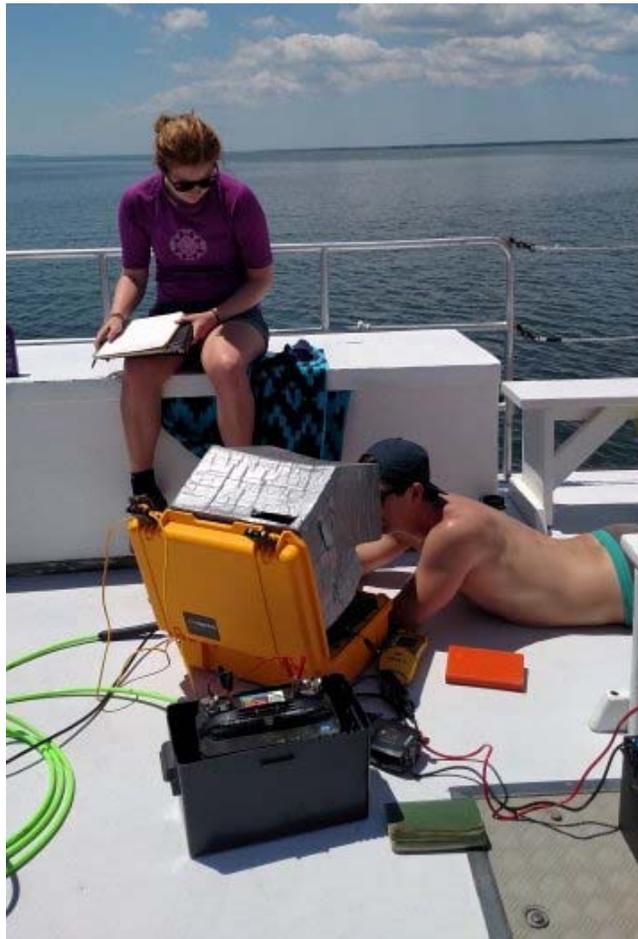
Seismic Data

Funding Source: U.S. Department of the Interior

Amount Awarded: \$10,000

Overview: Kutztown students and faculty, under contract with the US Geological Survey (USGS) out of Woods Hole, MA, conducted a high resolution CHIRP sonar survey in Chincoteague Bay. The CHIRP system uses high frequency sound “pings” to penetrate the soft sediments of the bay and image structures beneath the seafloor. We were particularly interested in imaging old river channels and finding evidence of previous inlets.

Chincoteague Bay is a shallow estuary that separates the barrier islands of Assateague and Chincoteague from the mainland Delmarva Peninsula. This region is particularly vulnerable as local sea level rise is twice the global rate and it lies in the path of both hurricanes and Nor’easters. The USGS will use the data we collected to aid them in their post-Hurricane Sandy assessment. Our data show where historical breaches in the barrier islands have occurred and can shed light on parts of the islands that are particularly vulnerable to future overwash and breaching. We will continue to share data with the USGS as we conduct more surveys in the bay.



Ernie Post

College of Business | Small Business Development Center



Small Business Administration

Funding Source: U.S. Small Business Administration (SBA)

Amount Awarded: \$336,500

Overview: The Kutztown University Small Business Development Center provides services to small businesses in Berks, Chester, Dauphin, Lancaster and Lebanon counties. The program focuses on activities to strengthen the small business community by providing consulting, educational and informational services to entrepreneurs and small business owners through all phases of business development.

Areas of assistance include: 1) assistance in international business, including referrals to other SBDCs, and federal, state and local agencies; 2) activities to emphasize minority and women enterprise development; and 3) maintain working relationships with the local business and financial community, as well as economic development organizations, technical assistance providers and government agencies.

Procurement Technical Assistance Center

Funding Source: U.S. Department of Defense

Amount Awarded: \$70,000

Overview: Federal, state, and local governments purchase billions of dollars of goods and services every year. Federal purchasing offices are often required to set aside contracts or portions of contracts for exclusive bidding by small and/or minority-owned businesses. In addition, major prime contractors are required to subcontract part of their work out to small firms. The Procurement Technical Assistance Center (PTAC) helps businesses of all sizes market to the government – federal, state and local. Businesses interested in government contracting and needing assistance can talk to a PTAC counselor to learn how to explore the government arena for possible market opportunities.

DCED-State SBDC Funding

Funding Source: Pennsylvania Department of Community & Economic Development (DCED)

Amount Awarded: \$345,903

Overview: The Kutztown University Small Business Development Center provides services to small businesses in Berks, Chester, Dauphin, Lancaster and Lebanon counties. The program focuses on activities to strengthen the small business community by providing consulting, educational and informational services to entrepreneurs and small business owners through all phases of business development.

(Ernie Post continued)

Jump Start Incubator (NAP Program)

Funding Source: Pennsylvania Department of Community & Economic Development

Amount Awarded: \$79,500

Overview: The purpose of this project is to promote diverse entrepreneurship within Reading, PA, by expanding bilingual training education and consulting to Hispanic entrepreneurs and other diverse populations who are identified as having high potential for being successful entrepreneurs. The Jump Start Incubator addresses the problems of the low rate of business startups from minorities and the slow rate of growth among the existing minority businesses in the city. The program allows private sector firms to contribute funding to the Jump Start Incubator and the Kutztown University Latino Business Resource Center diversity program. The program allows the private firms to take advantage of a 75% Pennsylvania tax credit.

Micro-Enterprise Assistance Program (CDBG)

Funding Source: City of Reading- Community Development Block Grant

Amount Awarded: \$100,000

Overview: This program targets both established entrepreneurs within the Downtown Improvement District (DID) and nascent entrepreneurs residing within the city who are identified as having a high potential of being successful entrepreneurs and who meet the HUD low-to-moderate household income guidelines. Goals include: 1) Increase the capacity of existing entrepreneurs to expand in the downtown corridor; 2) Increase the number of eligible clients to start new businesses; 3) Increase the level of customer service and customer experiences; 4) Create a digital presence to attract customers; and 5) Increase awareness and participation in government contract opportunities.

SBA Growth Accelerator (IDEA)

Funding Source: U.S. Small Business Administration (SBA)

Amount Awarded: \$50,000

Overview: \$50,000 was awarded by the SBA to offer customized training to ten food manufacturing companies of the Greater Reading area to help them scale more efficiently. Ten minority and/or women owned companies will be selected with sales above \$50,000. Participants will receive training in innovation and creativity in the food industry, product development technology trends, packaging and labeling, package design, trade shows, nutrition, international trade, and wholesale distribution.

(Ernie Post continued)

The Workforce and Economic Development Network of Pennsylvania (WEDnetPA)

Funding Source: Pennsylvania Department of Community & Economic Development

Amount Awarded: \$243,885

Overview: WEDnetPA brings training funds to qualified companies across the Commonwealth through a network of community colleges, state system universities, and other educational institutions.

Coatesville Regional Entrepreneurial Assistance and Training Endeavor – Neighborhood Assistance Program (CREATE-NAP)

Funding Source: Pennsylvania Department of Community & Economic Development

Amount Awarded: \$63,625

Overview: Promote diversity entrepreneurship within the targeted area of the City of Coatesville by expanding entrepreneurial training education and consulting to African American and Hispanic entrepreneurs and other diverse immigrant populations. Support business outreach initiatives complementing and supporting the overall goal of helping minority entrepreneurs succeed in the City of Coatesville.

Southeast Pennsylvania Defense Transition Initiative (DoD-SE)

Funding Source: U.S. Department of Defense

Amount Awarded: \$27,133

Overview: Under the Defense Industry Adjustment Program, with Philadelphia Works as the Lead Fiscal Agent, carry out a multi-regional program to assist defense businesses and workers throughout the state that have been negatively impacted or are at significant risk of being adversely impacted by cutbacks in DoD contracts and expenditures.



Phill Reed

College of Liberal Arts & Sciences | Physical Sciences

Student Assisted Global Exoplanet Search

Funding Source: National Science Foundation

Amount Awarded: \$113,450

Overview: Exoplanets are planets outside of our solar system, either orbiting stars other than the Sun or drifting through the galaxy without a host star. While there are believed to be billions of exoplanets in our galaxy, only a few thousand of them have been discovered so far. Kutztown University (KU) astronomers have used our on-campus observatory to help discover at least five of these new exoplanets. With this grant, the National Science Foundation (NSF) is supporting KU's exoplanet discovery effort for the next three years. Six KU students (two each year) will participate in this program. The students will search for exoplanets at KU during the academic year, and they will then become visiting scientists at foreign research observatories for 10 weeks during the summer.

In summer 2017 the participating students will work at the University of Salerno in Italy, where they will utilize the method of gravitational microlensing to discover new planets. The summer 2018 group will travel to University of Southern Queensland in Australia to perform exoplanet searches using spectroscopic methods. The summer 2019 location is yet to be finalized, but will likely be an observatory in Turkey, Italy, or Australia.

Nicole Romanski

College of Visual & Performing Arts | Art Education & Crafts

Performing Stories: Explore the Possibilities of Narrative Pedagogy to Engage, Lead and Transform the Classroom Experience

Funding Source: Kutztown University Foundation

Amount Awarded: \$5,275

Overview: The funding will support internationally known performers and presenters at the 78th Annual Art Education & Crafts Conference at Kutztown University. The conference is intended to bring to life creative possibilities and the utility of narrative pedagogy in teaching and learning in the art classroom. Narrative is a powerful form of discourse in the construction and reconstruction of knowledge and meaning in society. There are multiple layers of narrative discourse including individual, cultural, and societal myths. These pluralistic narratives are shaped and defined in the social space of the classroom. This unique conference will bring together dynamic modes of art and storytelling as means for meaning making in the field of art education.



Jerry Schearer

Academic & Student Affairs | Community Outreach Center



Next Steps AmeriCorps Program

Funding Source: AmeriCorps

Amount Awarded: \$4,500

Overview: The Next Steps AmeriCorps Program recognizes, trains, and supports 100 low-income students from Philadelphia by engaging them in service and mentoring. Selected students pledge to complete 300 hours of service in one calendar year, and, in exchange for that commitment, receive leadership training, support, and participate in ongoing supervision and reflection activities. Students who successfully complete program receive an AmeriCorps Award of \$1,212.

The bulk of the service by the KU Next Steps members was completed through the Community Outreach Center's after-school Mentoring program at the Salvation Army and Boys & Girls Club. Next Steps members averaged 10 hours per week of service and attended bi-weekly supervision/reflection sessions. They also spent two hours per week mentoring two incoming KU first year students from Philadelphia.

In 2015-16, 16 KU students were enrolled in this program. This grant specifically went toward funding a Graduate Student to assist the program administrator in working with students to keep them encouraged and up to date, assist with the mentoring selection and training, and support monthly workshops.

Gregory P. Setliff

College of Liberal Arts & Sciences | Biological Sciences



Host Plant Survey and Trap Efficacy Study for Spotted Lanternfly (*Lycorma delicatula*) in Pennsylvania

Funding Source: U.S. Department of Agriculture

Amount Awarded: \$27,761

Overview: The spotted lanternfly (SLF) is an invasive pest insect that was first detected in North America in Berks County, PA in September 2014. The univoltine planthopper is reported to attack more than 80 plant species worldwide. In our 2015 study, SLF was observed to frequent more than thirty Pennsylvania plant species including *Ailanthus altissima* (primary host) and twenty-five native tree species. The objective of this study is to further document secondary host use by SLF in Pennsylvania through field trapping surveys on thirty species of native trees, woody shrubs, and vines. Additionally, we will isolate wild caught SLF adults in

continued

(Gregory P. Setliff continued)

mesh sleeve enclosures on seven putative host plant species to observe feeding and survivorship. This study will inform the eradication effort being implemented by our cooperators at the Pennsylvania Department of Agriculture. We will determine the extent to which SLF are able to use secondary host species for nourishment and development and identify alternate hosts that may act as local refugia for the insect while its primary host, *A. altissima* is being managed in the quarantined area by the State.

Terre Sychterz

College of Education | Elementary Education



Kutztown University Children’s Literature Conference

Funding Source: The Anne M. and Philip H. Glatfelter, III Family Foundation

Amount Awarded: \$11,000

Overview: The Glatfelter grant provided funding to bring nationally known authors/illustrators (Andrea Davis Pinkney, Jonathan Bean, Daniel Kirk and Emily Arnold McCully) to Kutztown University for the Eighteenth Annual Kutztown University Children’s Literature Conference. The purpose of the Kutztown University Children’s Literature Conference is to heighten knowledge and excitement about children’s literature for education, library science, communication and design, and art majors by bringing renowned authors/illustrators to campus; increasing awareness of recent children’s authors and illustrators among educators and librarians, and providing outreach to local school districts that otherwise could not afford such renowned authors and illustrators. The conference provides professional development where teachers and librarians have the opportunity to hear from award-winning authors and illustrators of children’s books at an all-day conference. It offers presentations for local school children and the KU community. This year we were able to host students from the John Paul II Center for Special Learning.

“An investment in knowledge pays the best dividends.”

-Benjamin Franklin



Todd Underwood

College of Liberal Arts & Sciences | Biological Sciences

Christopher Sacchi

College of Liberal Arts & Sciences | Biological Sciences

Environmental Education and Watershed Protection in North Park, Kutztown, PA.

Funding Source: Pennsylvania Department of Environmental Protection

Amount Awarded: \$3,000

Overview: For the past ten years, the Borough of Kutztown's Environmental Advisory Commission and Berks Nature have been working to restore the native plant riparian buffer along the Sacony Creek in Kutztown and the newly established North Park. Riparian buffers are important for maintaining water quality and providing habitat for native plants and animals. In this project, Drs. Underwood and Sacchi will guide Kutztown University Environmental Biology students in service learning projects where students will work to remove invasive shrubs and plant native shrubs along the Sacony Creek at North Park. Students will also develop webpages about environmental topics related to North Park, such as water quality, invasive plants, pollution, and local native plants and animals. These webpages will be accessed by visitors with cell phones through signs mounted along the riparian trail. Finally, Drs. Underwood and Sacchi will produce two large format education signs about the importance of riparian zones and rain gardens to be installed at North Park. This project will enhance habitat along the Sacony Creek and public knowledge of the importance of riparian buffers to water quality.

Robin Zaremski

Communications, Marketing & External Affairs | KU Presents!



Arts Organizations & Arts Programs

Funding Source: Pennsylvania Council on the Arts

Amount Awarded: \$5,210

Overview: KU Presents! mission is to be the center of cultural life at Kutztown University and the regional community through presentations of innovative and engaging live music, theatre and dance of the highest quality. With generous grant funding from the Pennsylvania Council on the Arts (PCA), KU Presents! Performing Artist Series is supported in presenting world-class artists, bringing together thousands of community members, faculty, alumni, and students to Schaeffer Auditorium each year. The 2015-2016 season hosted renowned New Orleans artist Trombone Shorty & Orleans Avenue, political satirists Capitol Steps, Broadway star Ramin Karimloo, fiddle masters Natalie MacMaster & Donnell Leahy, and Deke Sharon's a'capella powerhouse Vocalosity, along with over 150 marimbists for Celebrate Marimba! PCA funding helps defray the costs of artist fees, production, hospitality, hotel, FOH, and educational outreach.

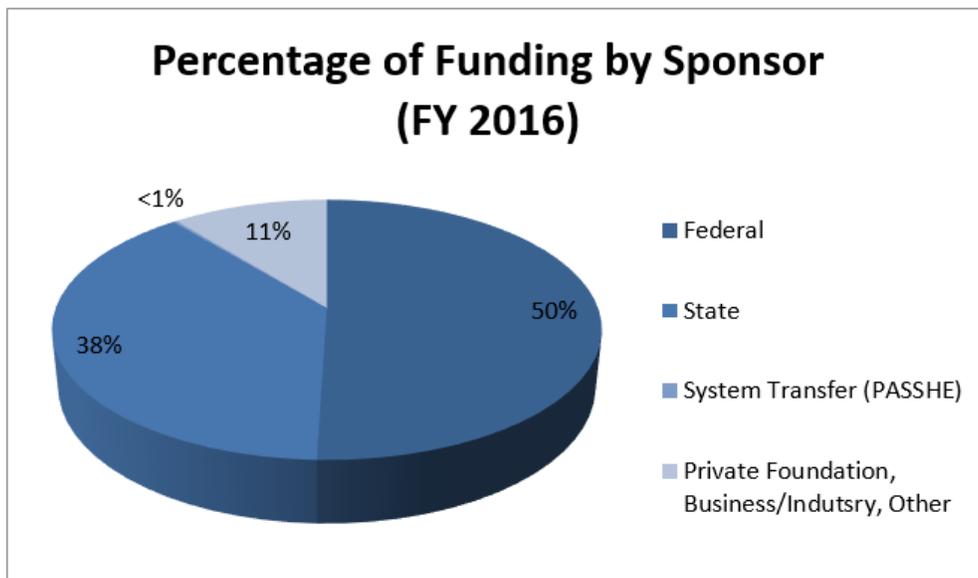
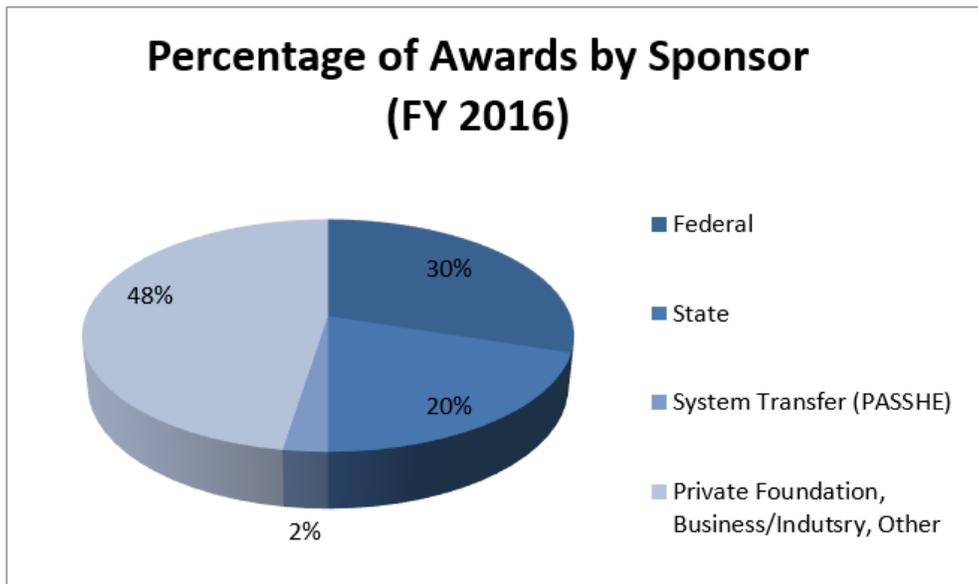
External Funding Facts and Figures

During Fiscal Year 2016, faculty and staff submitted 51 proposals to external sponsors requesting \$2,391,873 and received 40 awards totaling \$2,078,547. Seven proposals were pending at the end of the fiscal year.

The largest number of awards, 19 out of 40 awards, came from the Private Foundation category. Awards in other categories included 12 Federal, 8 State, and 1 System Transfer. The largest amount of funding came from Federal sponsors (51%), approximately \$1,049,500.

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016 ¹
Submissions	62	41	41	72	65	51
Awards	41	31	22	41	42	40
Total Requests	\$3,673,977	\$3,196,552	\$3,803,443	\$4,613,784	\$4,783,487	\$2,391,873
Total Awards	\$2,212,222	\$2,785,480	\$1,616,612	\$1,832,577	\$2,533,805	\$2,078,547

1. 7 proposals were pending at the end of fiscal year 2016.



Kutztown University Professional Development Committee Funding

The Professional Development Committee provides funding to promote scholarship. Funding is available for 1) travel assistance for professional and scholarly activities, 2) projects that enhance instruction, and 3) the purchase of items necessary to develop a novel approach and/or new direction for a course.

Recipients of Professional Development Committee Funding

NAME	DEPARTMENT
Aimee Adams	Counseling & Psychological Services
Mohammad Adeel	Philosophy
Okan Akcay	Business Administration
Roman Altshuler	Philosophy
Maria Asteriadou	Music
Allan Back	Philosophy
Michele Baranczyk	Psychology
Kristen Bazley	Elementary Education
Catherine Best	Psychology
Margaret Bestwick	Elementary Education
Christopher Bloh	Special Education
Colin Bolger	Criminal Justice
Anne Brawand	Special Education
Nancy Butler	Biological Sciences
Mario Cardozo	Geography
Gary Chao	Business Administration
Leslie Chaundy	Social Work
Colleen Clemens	English
Joanne Cohen Hamilton	Counseling and Student Affairs
John Conahan	Social Work
Duane Crider	Sport Management & Leadership Studies
Jason Crockett	Anthropology & Sociology
Halim Dalgin	Business Administration
Michael Davis	Geography
Anne DeLong	English
Rose DeSiano	Fine Arts
Todd Dodson	English
Michael Downing	English
Diana Ebersole	Communication Studies
Kaoutar El Mounadi	Biological Sciences
Kristina Fennelly	English
Robert Folk	English
Jennifer Forsyth	English

Lisa Frye	Computer Science & Information Technology
Albert Fu	Anthropology & Sociology
Michael Gambone	History
Arthur Garrison	Criminal Justice
Janice Gasker	Social Work
Jennefer Gehringer	Elementary Education
Ronald Grapsy	Communication Studies
Joleen Greenwood	Anthropology & Sociology
Christopher Habeck	Biological Sciences
Bruce Hall	Geography
Helen Hamlet	Counseling and Student Affairs
Edward Hanna	Social Work
Gregory Hanson	Modern Language Studies
Kathleen Hartman	English
Daniel Haxall	Fine Arts
Dina Hayduk	Sport Management & Leadership Studies
Richard Heineman	Biological Sciences
Curt Herr	English
Brian Heslop	Communication Studies
Cheryl Hochberg	Fine Arts
John Howell White	Art Education & Crafts
Ko-Hsin Hsu	Criminal Justice
Loriann Irving	Academic Enrichment
Joseph Jedwab	Philosophy
Mauricia John	Anthropology & Sociology
Nicole Johnson	Special Education
Michael Johnston	Electronic Media
Jeremy Justeson	Music
Randy Kaplan	Computer Science & Information Technology
Kelley Kenney	Counseling and Student Affairs
Soojin Kim	Sport Management & Leadership Studies
Yoon Mi Kim	Social Work
Diane King	Special Education
Kevin Kjos	Music
Sue Kong	Business Administration
Erin Kraal	Physical Sciences
Jonathan Kremser	Criminal Justice
Brian Kronenthal	Mathematics
Rajeev Kumar	Business Administration
Frank Kumor	Music
Lynn Kutch	Modern Language Studies
Heather LaBarre	Social Work

Eric Landquist	Mathematics
Jason Lanter	Psychology
Mathias LeBosse	Geography
Perry Lee	Mathematics
Steve Lem	Political Sciences
Sandra Leonard	English
John Lizza	Philosophy
Keith Logan	Criminal Justice
Ronald Longsdorf	Art Education & Crafts
Yun Lu	Mathematics
Patricia Lutz	Elementary Education
Debra Lynch	Special Education
Amy Lynch-Binieck	English
Sharon Lyter	Social Work
Mostafa Maksy	Business Administration
Jermaine Martinez	Communication Studies
Therese Maskulka	Business Administration
Nicole McClure	English
Catherine McGeehan	Elementary Education
Padraig McLoughlin	Mathematics
Anita Meehan	Psychology
Avidan Milevsky	Psychology
Carolina Moctezuma	Modern Language Studies
Amanda Morris	English
Lauren Moss	Counseling and Student Affairs
Feisal Murshed	Business Administration
Dan Neuenschwander	Music
Khori Newlander	Anthropology & Sociology
Carrie Nordlund	Art Education & Crafts
Christine Nunez	Modern Language Studies
Melissa Nurczynski	English
Adrienne Oakley	Physical Sciences
Connie O'Brien	Business Administration
Megan O'Byrne	Communication Studies
Mary Ann O'Neil	Elementary Education
Dale Parson	Computer Science & Information Technology
Sylvie Pascale Dewey	Modern Language Studies
Amy Pfeiler-Wunder	Art Education & Crafts
Carissa Pokorny-Golden	English
William Prystauk	English
Celine Przydzial	Mathematics
Patricia Pytleski	English

Michael Radyk	Art Education & Crafts
Phillip Reed	Physical Sciences
Glenn Richardson	Political Sciences
Shawn Riley	Business Administration
Angelo Rodriguez	Modern Language Studies
Jesus Rodriguez	Modern Language Studies
Wendy Rogers	Special Education
Elizabeth Rogol	Sport Management & Leadership Studies
Nicole Romanski	Art Education & Crafts
John Ronan	English
William Roth	Business Administration
Wendy Ryan	Biological Sciences
Christopher Sacchi	Biological Sciences
Christine Saidi	History
Jennifer Schlegel	Anthropology & Sociology
Steven Schnell	Geography
Gregory Setliff	Biological Sciences
Jacob Sewall	Physical Sciences
Yasoda Sharma	Social Work
Laura Sherrod	Physical Sciences
Charlie Shim	Computer Science & Information Technology
Kim Shively	Anthropology & Sociology
Edward Simpson	Physical Sciences
Georgeos Sirkakos	Secondary Education
Dawn Slack	Modern Language Studies
Kathleen Stanfa	Special Education
Donna Steslow	Business Administration
Stephen Stoeffler	Social Work
Ronald Stoffey	Psychology
Matthew Stone	Biological Sciences
Cynthia Stunkard	Special Education
Juliana Svistova	Social Work
Mary Theis	Modern Language Studies
Sarah Tindall	Physical Sciences
Robyn Underwood	Biological Sciences
Todd Underwood	Biological Sciences
John Vafeas	Social Work
Michelle Vaughn	Sport Management & Leadership Studies
Andrew Vogel	English
John Walker	Business Administration
Patricia Walsh Coates	Secondary Education
Patrick Walters	English

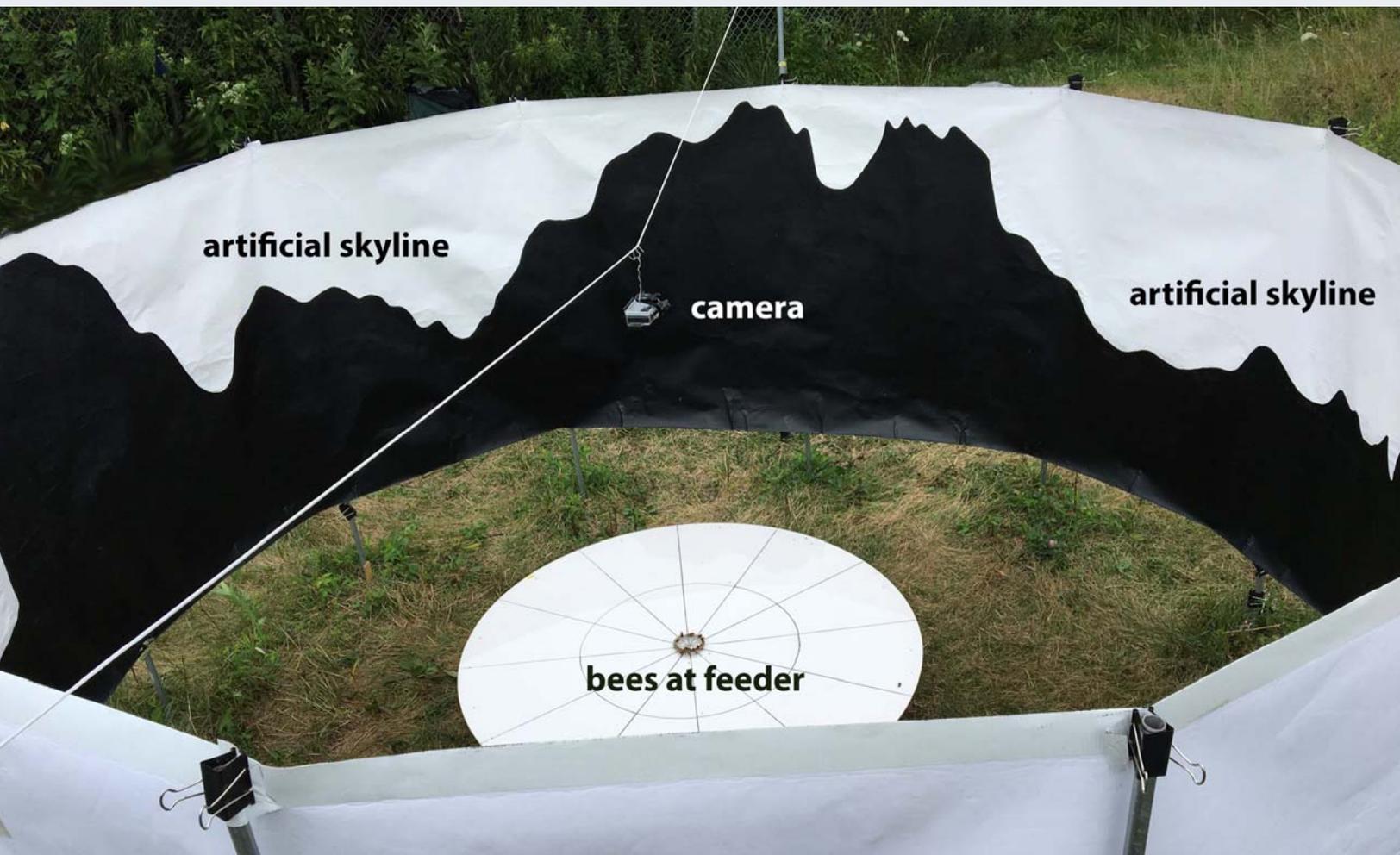
Carol Watson	Elementary Education
FangHsun Wei	Social Work
Christopher Weiler	Elementary Education
Mary Rita Weller	Social Work
Todd Williams	English
Mark Wolfmeyer	Secondary Education
Wing Hong Tony Wong	Mathematics
Yong Zhang	Computer Science & Information Technology
Ju Zhou	Mathematics
Nancy Zimmerman	Modern Language Studies
Maximiliano Zuniga	Modern Language Studies

Professional Development Committee Facts

The Professional Development Committee awarded approximately \$169,084 in funding to 182 applicants. The majority of the funding was used to support faculty travel to present scholarly work. Other funding was used to support faculty purchases of materials to develop a novel approach and/or new direction for a course.

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Received	151	137	152	139	163	185
Awarded	143	128	146	137	159	182
Total Requested	\$ 104,454	\$ 99,848	\$ 128,552	\$ 113,372	\$ 145,939	\$ 171,426
Total Awarded¹	\$ 94,350	\$ 91,986	\$ 120,921	\$ 112,372	\$ 141,401	\$ 169,084
Annual Funding Available	\$ 94,482	\$ 120,482	\$ 120,482	\$ 120,482	\$ 120,482	\$ 150,482

1. Total Awarded may exceed Annual Funding Available due to the carryover of funds from prior years.



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artificial skyline

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U N I V E R S I T Y

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