West Chester University: Full and part-time faculty members who conducted research related to one or more of the United Nations’ Sustainable Development Goals between the fall semester of 2018 and the end of summer sessions of 2019. These 73 faculty members represent 29 separate academic departments and collectively are addressing research questions related to most of the 17 SDGs. Information for this inventory was collected by an electronic survey distributed to all 980 full- and part-time faculty in September 2019 by WCU’s Office of Sustainability in collaboration with Professors Lisa Calvano (Management) and Joan Welch (Geography & Planning). Inventory compiled on February 26, 2020 by Bradley Flamm, Director, Office of Sustainability.

<table>
<thead>
<tr>
<th>Name</th>
<th>Academic Department</th>
<th>Description of Research Project(s)</th>
</tr>
</thead>
</table>
| 1. Michael A. Di Giovine | Anthropology and Sociology | 1. Sustainable Food as Cultural Heritage in Central Italy  = This program directly speaks to research into sustainability. Ethnographic in focus, it examines the discourse and practices of sustainability by small-scale food producers to negotiate social tensions. This is undertaken as part of ANT375: Ethnographic Field School, and in cooperation (though not with) The Umbra Institute in Perugia, Italy. My book, Edible Identities: Food as Cultural Heritage (2014) was the source of this. I am in the process of writing a paper for Food and Foodways about this research.  
2. Sustainable Tourism = My main area of expertise is in tourism, and I have spoken and written extensively on the subject. In particular, I have been increasingly asked to write and speak on how tourism and cultural heritage preservation can be mutually sustainable. I have distributed surveys to anthropologists soliciting their input through the American Anthropological Association and the Society for Applied Anthropology. I have been asked to research and address issues of “overtourism” and carrying capacity from an anthropological standpoint as well. I have keynoted the United Nations World Tourism Organization’s 40th Plenary Meeting of Affiliate Members in Hamburan, Iran (Nov 2018) on “Innovation: Potential or Pariah? for sustainable tourism”; and at ICOMOS’ International Cultural Tourism Committee’s workshop on the "Anthropological Perspective on Sustainable Tourism and Heritage" (May 2017), among other places.  
3. Sustainable Study Abroad = In part with Paul Sylvester at WCU (Education), I am researching ways in which study abroad travel can be made more sustainable from the ecological, economic and social perspectives. With John Bodinger de Uriarte, I am publishing an edited volume on study abroad; my contributions deal with social sustainability and ethics. The book, Study Abroad and the Quest for an Anti-Tourism Experience, will be out in March 2020. Paul and I recently won a $P Internationalization Award to upgrade 2 training sessions with study abroad directors, and I will be participating in the Forum for Education Abroad’s annual conference, where the panel will be |
Jennifer Maresh  
Marine Sciences, University of California, Santa Cruz, CA, 95060, USA. Southern sea otter populations were recently on the brink of extinction due to overharvesting for their fur, and have been slow to recover since protections were established a few decades ago. The slow recovery of this textbook species is an ecological phenomenon known as “mesopredator release”. Mesopredator outbreaks are associated with high ecological, economic and social costs, thus, studies focus on documenting changes in population sizes and the completely altered wildlife communities that oftentimes result. However, little is understood about the eco-evolutionary effects of mesopredator outbreaks by comparing the modern-day loss of ecologically-dominant species with similar events of the deep past. This project seeks to study these effects using a novel approach that integrates animal morphology, ecology, physiology and evolution to document the current rise of mesopredators following the loss of apex predators, and we look to previous mass extinction events to inform this study. Type: This is an entirely new research program, no papers are anywhere near in the works yet, but it is expected to generate many smaller projects and resulting published papers. 

Project 4: When the wolf's away the coyotes will play: detecting the rise of mesopredators following the extirpation of apex predators. Collaborators: TBD – this is a brand new project. 

The large-scale decline of many species worldwide due to human activity is increasingly referred to as Earth’s sixth mass extinction event. Ongoing extirpation of apex predators in particular has had destabilizing effects on a wide range of ecosystems as smaller, middle-ranked predators are released from top-down control and their populations increase dramatically – an ecological phenomenon known as “mesopredator release”. Mesopredator outbreaks are associated with high ecological, economic and social costs, thus, studies focus on documenting changes in population sizes and the completely altered wildlife communities that oftentimes result. However, little is understood about the eco-evolutionary effects of mesopredator outbreaks by comparing the modern-day loss of ecologically-dominant species with similar events of the deep past. This project seeks to study these effects using a novel approach that integrates animal morphology, ecology, physiology and evolution to document the current rise of mesopredators following the loss of apex predators, and we look to previous mass extinction events to inform this study. Type: This is an entirely new research program, no papers are anywhere near in the works yet, but it is expected to generate many smaller projects and resulting published papers.

Project 5: Moving into Living Spaces, Not Landfills: WCU Move-out Day Reuse & Recycling Initiative. Collaborators: numerous members of the Sustainability Advisory Council; staff (e.g., Facilities, Grounds, and student housing such as the Office of Residence Life and Housing Services and the WCU Foundation); student groups: (e.g., SUBSAC, Pack It Up Pass It On, Reside Advisers); and other support groups (e.g., WCU Transcript Office). This project was an initiative to reduce the amount of “waste” removed from the WCU campus during Move-Out day by providing students alternative disposal options for their furniture and other household items. Funding from the Campus Sustainability Research and Creative Activity Grant was used to purchase supplies and rent containers for the storage of furniture and other household items suitable for resale to incoming students. Data were collected to determine the volume of materials diverted from WCU dumpsters; the amount of money saved by reducing the number of waste containers removed from campus by vendors; and student attitudes regarding reselling and purchasing of second-hand items at reduced costs. These data will be used in support of efforts to understand the long-term viability of this and similar campus initiatives. The benefits of a successful initiative would be two-fold: it would bring WCU closer towards its Climate Action Plan’s Zero Waste goals while simultaneously providing a service to incoming students with financial need. Type: report and work in progress.

Project 2: Current and future carbon storage capacity in a southeastern Pennsylvania forest. Jessica L. Schedlbauer and Sarah Polohovich, Dept. Biology WCU. This study quantified aboveground carbon accumulation and storage in southeastern Pennsylvania forest fragment, while assessing whether carbon storage capacity will be supported in the future. There is a manuscript based on this work currently in review at a journal. 

PROJECT 1: The influence of edge effects on soil carbon storage and CO2 efflux in temperate deciduous forest of southeastern Pennsylvania. Collaborators: Jason Miller and Jessica L. Schedlbauer, Dept. Biology, WCU. Fragmented forest ecosystems throughout eastern North America have significant “edge areas” that are exposed to microclimatic environments different from that found in the forest interior. This project seeks to quantify changes in soil carbon cycling and storage at forest edges in southeastern PA and make predictions about potential positive feedbacks to climate change. Research in progress (Master’s thesis).

PROJECT 3: Plant physiological changes along an encroachment gradient: an assessment of US Mid-Atlantic serpentine barrens. Nicole A. Havrilchak and Jessica L. Schedlbauer, Dept. Biology, WCU. This project sought to understand both environmental and physiological dynamics of encroachment along an encroachment gradient in globally rare serpentine barren ecosystems. Published journal article (Master’s project) in the International Journal of Plant Ecology.

PROJECT 4: Intensified inundation shifts a freshwater wetland from a CO2 sink to a source. Junbin Zhao,1,2, Sparkle L. Malone1, Steven F. Oberbauer1, Paulo C. Olivais1,3, Jessica L. Schedlbauer,4, Christina L. Staudhammer4, Gregory Starr5. 1 Department of Biological Sciences and Southeast Environmental Research Center, Florida International University, Miami, Florida; 2 Division of Environment and Natural Resources, Department of Terrestrial Ecology, Norwegian Institute of Bioeconomy Research, Ås, Norway; 3 GISgiMAERS Center, Florida International University, Miami, Florida; 4 Department of Biology, Western Chester University, West Chester, Pennsylvania 5Department of Biological Sciences, University of Alabama, Tuscaloosa, Alabama. We analyzed 10 years of eddy covariance data collected in the Florida Everglades to quantify the effect of changing inundation regimes on CO2 exchange in these extensive wetlands. Evidence indicates that intensified inundation will increase the CO2 source strength of these wetlands, thereby serving as a positive feedback to climate change. Published journal article in Global Change Biology.

Project 6: New pathways to nanostructured semiconductors that are suitable for applications in energy systems, water filtration/purification, and drug delivery. Published papers include:


Affiliations include Department of Materials Science and Engineering, University of Connecticut; Department of Physics, Turku University (Finland); Department of Applied Physics, University of Eastern Finland; Laboratory for Cancer Biology, University of Tartu, Tartu, Estonia. 

Textbook that addresses numerous aspects of sustainability.
12. Maxine Gesualdi
Communication and Media

**Title:** Uber, Amazon and Walmart: Managing Ethical Organizational Accountability When Employee Experience Differs from External Reputation (addresses goal #8 - Decent Work)

**Collaborators:** Susannah McMonagle (first author - Eastern University)

**Brief Description:** This article explores issues of accountability that organizational stakeholders face when a gap exists between employee organizational identity (internal) and reputation (external). Although these responsibilities paper, suggest that organizations consistently prioritize managing their external reputation over rectifying internal issues that harm employees. While each of these companies responded differently in times of crisis or amid employee dissatisfaction, their cumulative effect on corporate culture, (mis)treatment of employees, and employee working environments has a substantial impact on how reputation and employee identification are prioritized to whom organizations feel accountable.

---

13. Kathryn Alessandria
Counselor Education

UN Sustainable Development Goal target: Good Health and Well-being

Project: Animal Assisted Intervention for Counselors in Training: Exposure and Introduction to an AAI Program during High Stakes Testing

Collaborator: Nicole Ruddrro, M.S. recent alumnus of WCU

**Description:** Animal Assisted Interventions (AAI) are growing in popularity and practice. This is evident in the increase in conference programs and literature on this topic, including ACAT’s endorsement of Competencies for Animal Assisted Therapy (Stewart, Chang, Parker, & Grubbs, 2016), and the Higher Education Mental Health Alliance’s forthcoming guide on Emotional Support Animals on Campus. AAI has many applications, two of the most common or college campuses are therapeutic outreach or as part of individual therapy. AAI has grown in popularity for its low cost, and its ability to reach a large number of people while requiring few resources.

Research indicates that elevated perceived stress over high stakes tests is associated with lower predicted grades, feelings of being less prepared for exams, and a negative view of courses completed (Austin, Salkofskie, & Mastoras 2010). Homesickness and friendliness, sleep deprivation, depression and anxiety are prominent concerns in college counseling centers for stress-induced students (Adams, Sharkin, & Bottinelli, 2017). Too much of these negative feelings can impact test performance. Studies have demonstrated a reduction in stress levels associated with participant interactions with therapy dogs in clinical settings (Allen, Shykoff, & Izzo, 2001; Cole, Gawinski, Steers, & Kotterman, 2007; Stewart, Dispensa, Parker, Chang, & Cunnie, 2014; Hoffmann, Lee, Wettnerauer, Ricken, Jansen, Gallnalt, & Lang, 2009; Henry, & Crowley, 2015). Animals, primarily therapy dogs, have been used on college campuses to address stress, loneliness, and anxiety, often through outreach programs on campus (Gladding, 2016). Research on such interventions suggests that interacting with a therapy animal can lower anxiety and loneliness and that these types of outreach programs can be a way to assist students on campus whose needs may not warrant ongoing counseling, but could benefit from programs aimed at reducing stress and anxiety. West Chester University often brings dogs to campus during high stress periods, such as final exams. Unfortunately, these programs occur on the main campus and our graduate students attend classes at a satellite campus and do not have the opportunity to take advantage of these programs. Thus, our graduate students are an underserved population. My dog recently became a certified therapy dog. My intention was to develop programs to bring our to our satellite campus, the Graduate Center, to offer the AAI benefits to our graduate students while simultaneously introducing them to AAI. In the Fall of 2018 I developed a wellness program for counselors in training (CITs) taking their comprehensive exam, a high stakes test and graduation requirement. For 45 minutes prior to the CPEC Comprehensive exam my therapy dog was available for student interaction, along with mindfulness coloring pages and coloring supplies, a Worry Jar, meditation balls, and snacks. Students were able to interact with the dog, each other and me in a positive and low stress environment. Informal conversations with the eleven students (out of 15 taking the test) who opted to see the dog room indicated that the major draw was the dog and that she helped them feel calm prior to the exam. Therefore we plan to repeat this program for the Spring 2019 administration and conduct a formal program evaluation. The purpose of this program is twofold: 1. to ease student stress and anxiety prior to taking their comprehensive exam, a high stakes test; 2. to introduce CITs to the benefits of AAI and an example of AAI outreach through this program. While the students interact with the dog, they learn about how the dog came to be certified, proper ways to interact with a therapy dog, and I am able to informally teach them about the benefits of AAI and its forms.

I (Principal Investigator) recently developed a course on AAI that will soon be offered. Hopefully this intervention will pique student interest in learning more about AAI. Type of project: Currently in data collection phase it has been submitted for presentation at a Winter conference and will eventually be submitted for publication. Data collection will end in March 2020.

This might be a stretch, but I think could qualify as the “Life on Land” UN criterion as an issue of animal rights/animal welfare. This study is a qualitative content analysis of the role the media plays in disseminating information about cruelty committed against companion animals (i.e., pets). It was printed in the journal Society and Animals this year.

14. Shannon Grugan
Criminal Justice


This might be a stretch, but I think could qualify as the “Life on Land” UN criterion as an issue of animal rights/animal welfare. This study is a qualitative content analysis of the role the media plays in disseminating information about cruelty committed against companion animals (i.e., pets). It was printed in the Journal Society and Animals this year.


Again, maybe a stretch, but this is another study related to animal welfare in which I attempt to create a classification scheme which is common in criminology, but has not yet been accomplished for incidents of companion animal abuse. It was published in the Journal Deviant Behavior in 2018.


Related to the Gender Equality UN goal, this paper was a collaboration between me, two of my faculty colleagues in the CJ department, and two of our graduate students. The paper was a quantitative analysis of future CJ professionals’ views on the LGBTQ community and LGBTQ police officers. This study was published in The Journal of Criminal Justice Education in 2019.


The purpose of this forthcoming book is to introduce the reader to the complex and interdisciplinary nature of environmental offending by presenting a complete and holistic examination of the realities of environmental harm and environmental crime in the United States and internationally. Many existing titles focus on one sector of environmental offending, such as focusing solely on justice system responses or solely on the harm of environmental crime. This work will present students with information on the consequences of harming the natural world for humanity, the influence of environmentalism and the environmental movement on creation of environmental policy and law, the criminal justice system and other governmental bodies’ responses to violation of environmental law, and the way forward in regard to the future and environmental offending. Sustainability as an alternative to environmental

15. Vishal Shah
CSM Dean’s Office

Research in our lab focuses on investigating the role of microorganisms in soil in releasing NOx into the atmosphere; studying the impact of climate change on soil microbial community; and understanding the impact of engineered nanoparticles on soil microbial community.

16. Paul Sylvestre
Early and Middle Grades Education

1. Curriculum inquiry group
2. Action research with student teacher volunteers (as collaboration)
3. Collaboration to plan lessons that do not follow the “I do, we do, you do, we do” lesson planning format.
4. Conference presentations and an article in submission

17. Tim Lutz
Earth and Space Sciences


Lutz, T. & Cote, R., Turning uncertainty into action: The case for probability-based scenarios of flood futures: accepted for the annual meeting of the American Geophysical Union, December 2019. Work on this project begun in Spring 2019. Robert Cote is a WCU undergraduate.
Project title: Application of a Numerical Model to Evaluate the Impact of Future Sea-level Change in Coastal Inundation

Collaborators: Prof. Daria Nikitina in Earth and Space Sciences department & Prof. Heather Wholey in Anthropology and Sociology department

Project description: The study area includes long extension of coastal low-lying lands by the Delaware River, including Philadelphia city as well as Chester and Delaware counties, which is under the risk of coastal inundation when hurricanes hit the mid Atlantic regions. The SLOSH (Sea, Lake and Overland Surges from Hurricanes) model, initially developed by the National Weather Service (NWS), was implemented to the study area to evaluate the probability of inundation due to combined effect of Hurricane storm surge and the climate change and subsequent sea-level rise. The simulation results show that the low land areas around Chester, Philadelphia airport and Philadelphia Naval business area could be inundated even under category 3 hurricanes if we have a sea-level rise of 2.23 ft above the present level at year 2050 (based on IPCC 5th Assessment Report). With category 5 hurricanes, some residential area in southeastern Philadelphia and oil storage tanks fields along Schuylkill river could also be under influence. This study shows high risk of inundation in lowland coastal areas in eastern Pennsylvania during severe hurricanes when we

19  Drew Anderson  Earth and Space Sciences  Created sustainability campus walking tour for classes using Metaverse...an Augmented Reality app.

20  Daria Nikitina  Earth and Space Sciences  Impact of sea level rise, coastal erosion, flooding, salt marsh inundation, salt water intrusion. Delaware Geological Survey, University of Delaware, Rutgers University, Nanyang Technical University, Singapore, Temple University, NJ Department of Environmental Protection, Academy of Natural Sciences at Drexel University, National Geographic Explorer Grant

21  Matthew McMahon  Economics and Finance  "Green Markets: An Experimental Analysis of Technology and Policy" with Nicholas Buske (Sallaray University) "Working Academic Paper/Work in Progress". Description: This paper compares the effects of technology innovation and pricing policy in green markets on the provision of the public good. We extend the standard model of impure public goods to draw a distinction between green goods and green services, which are both subsets of impure goods. The motivating example of a green good with a price policy is a consumer installing a subsidized solar panel on her roof, while that of a green service is a consumer paying a surcharge for green electricity generated by her utility company. Experimentally, subjects face several sequential allocation decisions designed to mirror the underlying impure goods model. We find that increases in the technology of the impure good increase the public characteristic, as do increases in its subsidy and decreases in its surcharge. Equivalent technology and subsidy increases have identical effects, as do equivalent green good and green service markets (when the underlying technology is the same). In line with the previous literature, theoretically irrelevant impure goods actually decrease overall public provision. The added opacity of green markets also leads to greater efficiency loss in public provision than in private consumption. Market efficiency decreases as technology improves or as equivalent policy changes are made. Efficiency is significantly higher for individuals who indicate higher cognitive effort. These results taken together suggest a large toolbox is available to policymakers and that these tools can be complementary.

"Racial Bias in the NFL: Evidence from Penalty and Challenge Data" with Sarah Quintanar (Midwestern State University) Working Academic Paper/Work in Progress Description: We use a unique detailed dataset from the National Football League's (NFL) 2017 regular season to study whether the league's instant replay review system eliminates racial biases made in on-field calls. Previous empirical literature broadly shows that individuals are more prone to making reactions that are subconsciously (racially, in this case) biased when facing instantaneous decisions that when taking time to process information more carefully. For example, police officers are often forced to make split-second judgment calls in stressful criminal situations, while judges often have more time to review the full set of details before coming to a decision. Within the labor market, job performance in various fields may be subject to similar dualities. In particular, professional sports markets offer an interesting glimpse into this because (i) they are relatively unique in that they are government-sanctioned and government-regulated monopolies, thereby offering workers no outside alternatives if indeed their performance is judged along racially biased lines (that is, a black player who is discriminated against cannot simply leave and work for a competitor, because the NFL has no competitors) and (ii) data for professional sports is plentiful, unlike in many other labor markets. Preliminary results are mixed regarding the efficiency of having referees' bosses use the

22  Simon Condiffe  Economics and Finance  Behavioral health research to encourage increased gym usage. With Dr. Ebru Iğgin, Dr. Matt Saboe, and students Todd Randolph, Joanne Syba, Amanda Flynn and Brynne Fitzgerald. Outcomes include presentations, papers and works in progress.

23  Paul Alan Morgan  Educational Foundations and Policy Studies  Grants, Presentations and Consultations:

National Geographic Society education grant. $150,000 for The ACEER Conservation Learning Web in the Peruvian Amazon. With Nora Bynum and Carmen Chavez. Ongoing

Paul A. Morgan, Education for Sustainability After the Sh*t Hits the Fan, presentation at the annual meeting of the Association for Environmental Studies and Sciences (AESS). June 2019. (Orlando, FL)


Paul A. Morgan, Sustainability, Biomimcy, and Design. Invited presenter in Professor Jon Cox’s undergraduate Design course at the University of Delaware. March 25, 2019. (Newark, DE)


Paul A. Morgan. The UN Sustainable Development Goals. Invited presenter for WCU’s Global Leadership Series. February 8, 2019

Paul A. Morgan, What Are We Educating For? Education for Sustainability from Philadelphia to the Amazon. Invited presentation, WCU Sustainability Research and Practice Seminar. 10 October 2018.


24  Yanira Rodriguez  English  Presentations on Social and Educational Justice and Gender Equity: Intergenerational Art-Making as Movement Healing Practice Cultivating Change Conference. West Chester, PA. February, 2019


"Living the ‘Work’: Being Accountable to Communities within and Beyond the Institution" Conference on Community Writing ( with Ben Kuebrich from West Chester University, Vani Kannan from Leham College, Latoya Sawyer and Tamara Issak from St. Johns University). Philadelphia, PA. October, 2019

Articles on Social and Educational Justice: Rodríguez, Yanira and Ben Kuebrich. The Tone It Takes: An 18-day Sit-in at Syracuse University. Unruly Rhetorics. Edited by Jonathan Alexander, Nancy Welch, and Susan Jarratt, Pittsburgh UP. Nov. 2018


2. Two WCU campus presentations based on this article.

3. "University Workshops Cultivating a Culture of Sustainability on Campus and Beyond," AASHE national conference, Pittsburgh PA, October 2018. Collaboration with Paul Morgan and Aliza Richman (both WCU faculty). Conference talk that provided an overview of design and outcomes of our campus faculty sustainability workshop, the Brandywine Project
26. Kristin Kondrlik English

1. Animal nature would reign: Animal appetites, vegetarian bodies, and healthy societies in Victorian vegetarian periodicals. This presentation focused on archival research on vegetarian periodicals of the nineteenth century and the intersections with citizenship. Conference presentation at Research Society for Victorian Periodicals

27. Kyle Valely English


28. Michael Burns English


We also presented at several national conferences in support of this work.

Burns, Michael; Dougherty, Ben; Kuebrich, Ben; Rodriquez, Yanira. *Soundwriting and Resistance: Toward a Pedagogy for Liberation.* (2018)

29. Justin Rademaker English

"Ontological Shifts in the Environmental Imagination." No collaborators. This research project is examining the idea of ontologies. The research explores whether ontological shifts are possible—moments in history where humanity collectively shifts the rationalities that guide their ways of being, and explores avenues for encouraging a new ontological shift in the contemporary environmental imagination toward a sustainability ontology. This work is in progress

30. Joy Frischle Geography and Planning

1. An Evaluation of Forest Restoration Efforts in the Brandywine Creek Watershed, Chester County, Pennsylvania

2. No collaborators

3. The purpose of the research is to evaluate the survival rates and cost-effectiveness of reforestation efforts in the Brandywine Creek Watershed. The project utilizes tree planting data in the watershed over the past 10 years to evaluate tree-planting techniques and maintenance strategies to determine the most cost-effective strategies and techniques that maximize long-term environmental benefits. The results of this project will identify strategies that lead to more successful tree planting practices and provide justification for organizations like Brandywine Conservancy to request funding support for maintenance and monitoring.

4. research grants, works in progress: conference presentations, published paper

31. Dottie Ives Dewey Geography and Planning

Zoning for Climate Change: An Exploration of Suburban Practices

Presentation at the Planning Law and Property Rights Conference in February 2019

Part of a larger research project on how suburban communities are using the local regulatory process to adapt to climate change

32. Joan M. Welch Geography and Planning

1. West Chester Borough Street Tree Geodatabase

2. Undergraduate students Kimberly Kutler and Eric Chapman

3. We completed the data collection for all street trees in the Borough using the collaboratively developed ArcGIS-Geodatabase and ArcGIS online collector. The Geodatabase development was a collaboration between the Borough Free Commission, and urban forester Michael Dunn. The geodatabase was then used to calculate the ecosystem benefits provided by the West Chester Borough street trees/urban forest.

4. Research Grant/Work in progress

33. Josh Marcink Geography and Planning

Malaga Scenario Based Development Modeling. University of Malaga, City of Malaga. The project goal was to create 3D GIS models of development areas in the city of Malaga, Spain, to show how urban growth in a smart city environment could match UN sustainability goals. The project produced an Open Data Hub for the municipality

34. Megan Heckert Geography and Planning

1) Greening Coatesville Analysis: Working with students to assess the impacts of the Greening Coatesville initiative and to identify the characteristics of park users and the ways that they use parks in Coatesville. This is an ongoing project supported by WCU's Center for Community Solutions, the final report of which will be a report provided to The Natural Lands Trust and Brandywine Health Foundation for use in planning future park renovations

35. Bradley Flamm Geography and Planning

Commute Choices Program Assessment: An Analysis of WCU’s Uptown Loop Shuttle Bus, RideAmigos, Zagster BikeShare, and Rideshare Parking Spaces programs. Ms Omolola Adewaklu (Principal Investigator), Master of Public Health Student at West Chester University of Pennsylvania and Dr. Neha Surger, Assistant Professor in the Environmental Health Program of the Department of Health, West Chester University. This research project utilized a series of focus group conversations with users of WCU’s Uptown Loop Shuttle Bus, RideAmigos, Zagster BikeShare, and Rideshare Parking Spaces programs to assess levels of satisfaction, benefits, and challenges of these efforts to provide WCU employees and students with commuting choices. Research conducted during the spring and summer 2019 semesters, with publication of a report in July of 2019 (copy available on digital commons at https://digitalcommons.wcupa.edu/ercs/ and sharing of findings with WCU’s Strategic Transportation and Parking Task Force.

36. Stacie Metz Graduate Social Work

1) Youth Mental Health First Aid (YMHFA) Training in Coatesville, PA. YMHFA Planning Committee Members other than myself: Dana Heiman, Senior Vice President, Brandywine Health Foundation; Jacqueyll C. Taylor, Executive Director, Planning Team Chair, The COAD Group; Amy Barcus, Supervisor, Coatesville, Human Services, Inc.; Tracy Behringer, Community Outreach, Education, Chester County Mental Health/Intellectual & Developmental Disabilities; Brad Bentman, Friendship Elementary School Principal, Coatesville Area School District; Jarvis Berry, Community Mobilizer, Coatesville Youth Initiative; Chelsea Buckley, Program Coordinator, Home of the Sparrow; Kelly Cook, Director, Residential Services, Human Services, Inc.; Colleen Cooney, Staff Development Coordinator, Child Guidance Resource Centers; Cathy Copley-Henderson, Community Liaison, Brandywine Hospital; Alyson Ferguson, MPH, Director of Grantmaking, Scattergood Behavioral Health Foundation; Linda K. Hershey, SAP, Liaison/Premium Specialist and YMHFA coordinator, The COAD Group; Krista Kapczynski, MS/LBS, Training and Consultation, Chester County Intermediate Unit; Andrew Kind-Rubin Ph.D., VP for Clinical Services, Child Guidance Resource Centers; Stacie Metz, PhD, MSW, MPH, MA, Assistant Chair/Graduate Coordinator, Professor, Department of Graduate Social Work, West Chester University; Bridgette Miles, Ed.D., Principal, Coatesville Area School District; Jennifer Miller, Family Specialist, Reach Program/Leaning Center, Chester County Intermediate Unit; Jason Paalia, Director of Special Education K-5 and Curriculum and Instruction K-5, Coatesville Area School District; Beth Quinn, Mental Health First Aid Mental Health First Aid Program Coordinator, The COAD Group; and Christopher J. White, MBA, MA, Program Director, Gaudenzia Coatesville Outpatient.

Fall 2018-Summer 2019 Activities: Produced final evaluation of 4-year grant funded WMYFA training program in Coatesville, PA. Activities included data management, analysis, grant funder evaluation reports (SAMHSA and local funders); panel discussion, WCU Sponsored Research Faculty Research presentation, peer-reviewed presentation at NASW-PA, peer-reviewed presentation abstract accepted at 2019 APAH, newsletter article, and manuscript writing

Summary of Impact: From August 2014 to June 2018, 81 trainings were held. These trainings reached 1429 people with the 96% receiving the YMHFA Training Certificate of Completion from the National Council. Out of the 1429, 1386 consented to participate in the WCU evaluation. The majority of evaluation participants were female, aged 25-60, and reported their race as White/Caucasian or Black/African-American. Only 14% reported employment as a mental health or substance abuse provider. Three-quarters either worked with youth at their place of employment or had regular contact with a child or adolescent in the home. Analysis of the 4-year pretest-posttest data demonstrated statistical improvements in mental health knowledge, attitudes towards persons living with mental health challenges, and confidence in providing first aid support to youth experiencing mental health challenges or crises (p<.05). At the conclusion of the training, participants reported high satisfaction with training goal attainment, content, and instructors’ skill set (~95% strongly agreed or agreed across all items). Ninety-eight percent reported they would recommend the YMHFA training to others.
### Tina Chiarelli-Helminiak
**Graduate Social Work**

Completed projects:
- Chiarelli-Helminiak, C. M., & Lewis, T. (2018). Sustainable development goal 4: When access to education is not enough. Journal of Access, Retention & Inclusion in Higher Education, 1, 17-27. Research assessed how it is not only access but a sustained commitment to supporting URM students throughout their higher education journey that will lead to graduation. Lewis is a former WCU faculty.

**Works in progress:**
- Human Rights Exposure and Knowledge in social work education in collaboration with Helminiak, L. and Faul, A. C. (both WCU) and Metz, M. (WCU-CSB)

### Debra Bill
**Health**

Lyme Disease and Latinos in Chester County, PA: Qualitative research project with interviews with key informants of the health and human service providers working with Latinos and knowledgeable about Lyme disease in Chester County, PA. Published abstract, and conducted workshops on topic.

### Gopal Sankaran
**Health**

Independent works completed:

### Melanie Vile
**Health**

The research is funded by the Bill and Melinda Gates Grand Challenges Explorations Challenge grant to develop and test in partnership with adolescent mothers, community health workers, and key community stakeholders a community-based peer-support intervention targeting adolescent mothers aged 14-18 years in Mabvuku, Harare. The intervention leverages peer support, technology, community health workers, and involvement of key community stakeholders to develop, operate, test, and communicate an able to mitigate potential barriers and improve adolescent motherhood.

### Mary Beth Gilboy
**Health**

Food Insecurity among College Students. We analyzed data from a survey of WCU students on food insecurity. We submitted a manuscript to a peer reviewed journal in August 2019.

### Charles Hardy
**History**


### Dr. Karin Volkwein-Caplan
**Kinesiology**

"Sustainability and Sport" presentation(s) with Dr. Selen Razon/Kinesiology and Dr. Jasmin Tahmaseb Conchata/Psychology at the International conferences: 4APESGW in Madrid in July 2019 and Sport and Society conference in Toronto, Canada, in October 2018.

Modern sport and fitness events and their associated venues, whether natural or man-made, impose significant impact on the environment. This was assessed looking at various sport (ie. soccer) and fitness activities (ie. running) and possible solutions, how to reduce the ecological footprint of sport and associated events were addressed.

### Dr. Steve Portman
**Literacy**

Reflective Journaling: A Portal into the Virtues of Daily Writing. I am the sole researcher. The paper dealt with the use of journaling in the classroom in order to create strong empathic relationships among and between students and professor. Social justice, critical theory, restorative practices all fall under the purview of this research. My project was accepted on September 15th, 2019, for publication as an article in the peer-reviewed journal, The Reading Teacher, a publication of the International Literacy Association.
Kathleen Riley

Literacy


The current political climate is characterized by damaging discourses about immigrants and communities of color, growing mainstream dialogue about systemic injustices, and an uptick in youth civic engagement and activism. In this context, Dr. Riley and Dr. Soslau are exploring what happens when activism is the aim of teaching and learning in public elementary and middle grades classrooms, specifically in schools that serve students who have been marginalized based on race, income, geography, and language. While social justice-oriented teaching practices are well theorized, there is a need for research that depicts authentic practices in situ. The researchers use qualitative methods to document teaching and learning in classrooms from four geographic regions within an urban school district. Teacher-participants use an asset-based critical service-learning framework, which amplifies and values student voice and systematically engages students in a yearlong process of identifying a social issue; unearthing and exploring root causes and effects; and collaboratively planning and taking action to address one of the root causes by drawing on community resources. The study will provide examples of what student-led socially conscious activism looks like when seamlessly integrated into mainstream elementary and middle school classrooms.


Dr. Soslau and I are currently teaching literacy methods courses within the context of a school and community. This grant supports collaboration with two elementary teachers at Anderson Elementary School in Philadelphia, allowing us to teach culturally relevant literacy education strategies alongside practicing teachers in an urban context.


A team of four WCU faculty in different departments in the CESW are teaching a semester of integrated course work (5 courses across 3 departments) in a community and school context with the explicit goal of supporting the development of community teachers who look to the wisdom of communities in order to teach. This program aims to support students in taking a strengths-based, rather than deficit-based, approach to working with class communities.

Lisa Calvano

Management

Quality Education SDG

Academic Paper:


Conference Presentations:


In these two related project, Kate Hall (Roger Williams University) and I study the relationship between course design and the development of moral and ethical thinking among business students.


In the research presentation, Liz Wang (WCU Marketing Department), Johanna Capitano (WCU Management Department) and I reported on a study we conducted to examine whether class size impact students learning outcomes and student satisfaction.


This conference presentation is a collaboration among WCU Faculty (Casey Bohman, Grad Social Work and staff (Marcie Cohen and Ben Morgan from Philadelphia campus and Kenneth Jones from the Admissions Office) to discuss how we equitably address the needs of adult learners on our campus.

Matthew Shea

Management


Linda Zhu

Management

Zhang, Ying, Xue, Qing-Ming, and Zhu, Xiaowei. Optimal green product’s pricing and level of sustainability in supply chain: effects of information and coordination. Annals of Operations Research, 2018, 1-26. Abstract: Nowadays, achieving sustainable development goals is critically important. With the proper use of information, supply chain management can significantly help enhance sustainability. In this paper, we analytically study a supply chain model where a manufacturer produces a green product and sells it to the end consumers through a retailer. We formulate the analytical model as a Stackelberg game. In the game, the manufacturer is the Stackelberg leader who decides the wholesale price and product sustainability level, and the retailer is the follower who reacts by setting the retail price. After deriving the Stackelberg equilibrium of the wholesale price, the product sustainability level, and the retail price in the closed form expressions, we compare these analytical results and also conduct numerical experiments to analyze the manufacturer’s, the retailer’s, and the whole supply chain’s performances. We derive and compare the equilibrium under three business scenarios, including Decentralized Supply Chain with Non-information Sharing (Scenario N), Decentralized Supply Chain with Information Sharing (Scenario I), and Centralized Supply Chain (Scenario C). We give managerial suggestions to the manufacturer and the retailer on how to promote the green products and achieve organizational sustainability goals. We also analytically illustrate how to coordinate the channel, and illustrate the crucial role played by information in the green product supply chain.
50. Mark Yang Management I was working on several papers related to sustainability mainly to publish journals with data set collected. My research is based on the survey data collected from manufacturing companies. Here are some of the research papers I published or I have been working on:

1. Supply chain integration and its impact on sustainability. Published in industrial management and data systems. 2018. With Dr. Kang, Dr. Park and Dr. Huo.

- The purpose of this paper is to examine the role of supply chain integration in improving sustainability management practices (SM) and performance. Based on data collected from 931 manufacturing firms in multiple countries and regions, we conducted a structural equation modeling analysis to test the proposed hypotheses. The findings suggest that supplier and customer integration are vital enablers for both intra- and inter-organizational SMs. The results also reveal that both intra- and inter-organizational SMs are significantly and positively associated with sustainability performance and function as complements to jointly enhance environmental and social performance.

2. The role of strategic environmental orientation in environmental design practices. Under first revision from Management Decision (2019) with Dr. Kang - work in progress (journal paper)


51. Susan Fiorentino Management Presentation at regional Greater Valley Forge HR Summit conference on issues of disability discrimination.

52. Shayna Frawley Management Title: Why comply with workplace law? A qualitative investigation of human resource practitioners. Authors: S. Frawley (WCUPA), D. Doorey (York University), M.H. Budworth (York University), P. Singh (York University). Project: This qualitative investigated factors HR professionals feel influence compliance with labor and employment laws governing work, what role HR plays, and how organizational cultures influence compliance. Type of project: Presentation at AOM in summer 2019, in the HRM division.

Title: What is HR Law? Authors: D. Doorey (York University) and S. Frawley (WCUPA). Project: This presentation looked at how the idea of 'HR Law' may decouple labor and employment legislation from workers' rights and promote. At the same time, it may spread fairness norms that would otherwise be resisted. Type of project: Presentation at the Canadian Industrial Relations Association Conference in summer 2019. We are currently working on a manuscript that will be submitted to a law journal.

Title: Expert guide, ethical steward, HR police, or clerk of works? Workplace compliance cultures and the compliance roles of human resource practitioners. Authors: S. Frawley (WCUPA), D. Doorey (York University), M.H. Budworth (York University), P. Singh (York University). Project: This qualitative study investigated how HR professionals and compliance with labor and employment law. Specifically, it examined the different compliance roles HR professionals play, and the different compliance cultures in organizations. Type of project: Manuscript. This paper is currently under review at the Journal of Business Ethics.

Title: Legal non-compliance and human resource professionals: A reasoned action approach. Authors: S. Frawley (WCUPA), D. Doorey (York University), M.H. Budworth (York University), P. Singh (York University). Project: This quantitative study investigates factors that influence Canadian HR professionals' self-reported compliance with labor and employment law, using the reasoned action approach as a theoretical framework. Type of project: Work in progress. We aim to submit this presentation to AOM by January 2020, and submit the full manuscript to the Journal of Human Resource Management once we receive feedback from AOM (likely in February/March 2020).

Title: When (and for whom) does "sorry!" cut it? An examination of how gender influences trust repair. Authors: S. Frawley (WCUPA), J. Harrison (NEOMA University), M. Bligh (Claremont Graduate University). Project: This quantitative study will investigate how trust repair may be influenced by the gender and leadership role of the transgressor.

Type of project: Work in progress. We will collect data once our IRB application is approved.

Title: Human resource practitioners and the decision to comply with US labor and employment laws. Authors: Authors: S. Frawley (WCUPA), S. Fiorentino (WCUPA), S. Tomkowicz (WCUPA), D. Doorey (York University), M.H. Budworth (York University), P. Singh (York University). Project: This quantitative project will examine factors that influence US HR professionals' compliance with labor and employment law. Type of project: Work in progress. We are currently working on a manuscript that will be submitted to a law journal.

53. Allison Kolpas Mathematics Math Modeling as a Tool to Understand Many Climate Change Impacts on Freshwater Ecosystems. Collaborators: John Jackson, Dave Funk, and Bern Sweeney (All Stroud Water Research Center). Using math modeling as tool to predict the effects of warming stream temperatures on mayfly vision (number of generations per year) and synchrony in emergence. Paper under review, sabbatical research.

54. Julie McCulloh Nair Nursing 2016-2019. McCulloh Nair, J., & Meehan, C. (co-Pis). Undergraduate Student Nurse Peer Mentorship Program. (IRB approved; Protocol ID # 20160411-2). The purpose of this mixed methods study is to examine the effectiveness of a student nurse peer mentorship program that aims to address previously identified WCUI student risk factors for decreased wellness among nursing students. This study will utilize wellness surveys and a series of open-ended questions formed from the results of a previous WCUI study conducted within this population.

Meehan, C. & McCulloh Nair, J. (co-Pis) (2019, July). Peer Mentoring in Undergraduate Nursing Education: An Innovative Strategy to Promote Successful Role Transition. Abstract accepted for podium presentation at the Nursing Science Conference, Los Angeles, CA and accepted for a poster presentation at the International Nursing Research Congress, Sigma Theta Tau International Honor Society of Nursing, Calgary, Canada.

55. Kimberly E. Johnson Nutrition No poverty, health and well-being, equity:

1) Food Democracy, Health Disparities and NYC Trans Fat Policy-sole investigator-focusses on food democracy, policy processes and health disparities

2) Rabbit Farming, Community Food Security: An analysis of recurring themes in media text-with Dr. Patricia Davidson, Dr. Chiwoneso Tinago in CHS- focus on low-input agriculture in Africa

3) Food work and food insecurity in college students: with several graduate and undergraduate students at WCU. Community food security, another on work influences of college student food security.


59. Ashlie Delshad Political Science 1) Seeking Food Justice for College Student: Dr. Mary Beth Gilroy, WCUI Dept of Nutrition, Mrs. Jodi Roth-Saks, Jewish Relief Agency, Dr. Lynn Monahan, WCUI Dept of Nutrition (retired). We conducted a survey of WCUI students to assess the prevalence of food insecurity and determine predictors of risk for food insecurity. We have an article manuscript under review that reports on our survey findings and also offers recommendations for improving policies at the campus, state, and federal levels to better address food insecurity among college students.

2) Community Gardens: The Elixir of All Maladies. For my sabbatical in fall 2018 I conducted interviews with community gardeners in 10 cities, in 10 states across the country and conducted a national survey of community gardeners. My objectives were to understand the social, health, economic, and environmental impacts of community gardens, and to understand how local governments are supporting or thwarting the efforts of community gardens. I presented a paper on my preliminary findings at the Western Political Science Conference in April 2019. I am continuing to work on an additional analysis of interviews.
My scholarly focus on sustainability is limited to the concept of human health and wellbeing. All projects are currently in progress, with plans to publish and present this work at national and international conferences once data collection and analysis is complete. The projects on which I collaborate in this regard include:

1. Identifying a biomarker for trauma, with Ms. Jazmine Cooper, PsyD student. Jazmine has chosen to focus on utilizing techniques for salivary immunoassay learned in my laboratory to find out if there is a way to differentiate among different trauma categories in children. Such categories are not yet recognized by the DSM, the "bible" of diagnosis in clinical psychology. Jazmine hopes to offer a non-intrusive technique for identifying trauma categories to best intervene in the lives of at-risk children and their families. This work has resulted in several grant proposals for Jazmine (NIH NRSA, Sigma Xi, and CSM), and is in work in progress, with data collection planned for spring, 2020.

2. BREATHE, with Drs. Geeta Shidlov, Sandra Kerr, and Vipanchi Mishra. This ongoing project is utilizing me and Ms. Cooper as collaborators to assess and compare the endocrine outcomes for young adults (students) who have or have not participated in a 10-week mindfulness training program. The focus of this project is to discover the ways in which mindfulness training can foster emotional and social wellbeing. This is also a work in progress, with data collection ongoing now.

3. Development of a personal health monitoring device: I am collaborating with Mr. Alfred Bedell, who is in the process of assessing the validity and reliability of a personal health monitoring technology that he developed and is hoping to bring to market. Mr. Bedell envisions this technology as a means of helping individuals who may be struggling with personal issues, such as opioid addiction, as they find their way to health and recovery. It will do so, in part by alerting individuals to levels of their own stress hormones, as a visual representation of a possible trigger for drug seeking. This has obvious implications for the current opioid crisis, and may revolutionize trauma and stress research as well. We will be conducting reliability tests within the next month.

4. My longstanding collaborator, Dr. Vanessa Johnson, has initiated an important project aimed at intervening in couple relationships in families with children with autism. This is a neglected area of study, given the increasing rate of autism diagnosis in our country and overseas, and the high rate of lowered mental health, accelerated aging, and conflict and divorce among couples who have children with autism. She has asked me to assess stress hormone (cortisol) levels in these couples before and after the intervention, as one means of assessing the success of the intervention. Prior work from our laboratory has indicated that cortisol response to challenge can serve as a biomarker for family functioning and success during life transitions. Data collection for this project is ongoing and will be complete by next week.

5. My laboratory is training graduate students and research associates for Dr. Ellie Brown, who is continuing her longstanding work at Head Start programs in Philadelphia with at-risk families by looking at both cortisol and oxytocin (a hormone of affiliation) changes across the day in young children who are experiencing programs with integrated arts and without. Prior work from this laboratory has revealed the salubrious effects of arts education on child mental health and wellbeing. We will be training Dr. Brown's students and colleagues to conduct their own salivary hormone assays, which will help this important project to limit costs and continue to contribute to the literature on at-risk populations.


Music Education Pathways: This project, funded by the William Penn Foundation, focuses on after school music education as a vehicle for promoting equity for children facing economic hardship and has just ended. Arts and Mindfulness: This project, funded by the National Endowment for the Arts, focuses on the impact of arts and mindfulness programming for reducing stress levels and promoting school readiness for children facing economic hardship.

The following paper was published by our lab during the time period in question:


Research on agism in the workplace, well-being among immigrants, building sustainable communities. Titles should be descriptive - all co-authors colleagues at WCU


<table>
<thead>
<tr>
<th>ID</th>
<th>Author(s)</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td>Maria Urrutia</td>
<td>Theater and Dance Carnival of Ruin. Constance Case, Gretchen Studlien-Webb and Maria Urrutia. West Chester University. This research is being woven into creating a Theater Dance performance that uses single use plastic as part of the costuming and set design. The work is about bringing awareness to the amount of trash being generated in our area, and activate the community into action to make simple changes to reduce - reuse - refuse. This work will be performed in various locations in the Chester County area in the Spring and Summer of 2020.</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>Gretchen Studlien-Webb</td>
<td>Theater and Dance Carnival of Ruin (beginning planning stages)</td>
<td>Constance Case, Gretchen Studlien-Webb, Maria Urrutia (WCU theatre and dance)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full length installment dance/theatre performance that is designed to bring awareness to consumer waste. We are building costumes and sets using all post-consumer materials for the creation of this performance. During 2018 until fall 2019 we have presented workshops, written and received a PRG grant, held design meetings, and produced designs for the larger project. Build of the project is taking place fall 2019 - spring 2020. Full performance will take place in the Spring and early Summer 2020.</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Constance Case</td>
<td>Theater and Dance Carnival of Ruin</td>
<td>Associate Professors in the dpt of theatre and dance Gretchen Studlien-Webb, Maria Urrutia, Martin Dallago Production created from all post consumer waste Public awareness and social change.</td>
</tr>
<tr>
<td>69</td>
<td>Susan Wysor Nguema</td>
<td>Undergraduate Social Work</td>
<td>Work on understanding how race and identity shape experiences and perspectives for individuals identifying as Black or White in South Africa and the United States. This work involves examining narratives of individuals who have experienced racism and discrimination, as well as conducting interviews with members of these communities to understand their experiences and perspectives.</td>
</tr>
<tr>
<td>70</td>
<td>Claire L. Dente</td>
<td>Undergraduate Social Work</td>
<td>Submitted Paper for Peer-Review BadSex Sexual Assault and #MeToo: The Personal is Political and What to Do About It Morehead State University November 8 2018 Invited Lecture</td>
</tr>
<tr>
<td>71</td>
<td>Walt Cressler</td>
<td>University Libraries The Flow of History along the Chester, Ridley, and Crum Creeks. Public histories of the natural and cultural features within three small local watersheds. Three online books published with Creative Commons licenses on Digital Commons @ WCU. Digital Walking Trail Library. Stu Thompson and Katie Faull, Bucknell University; Whitney Katirai, West Chester University. Adding maps to the Ready, Set, Fit! digital trail walking app (developed at Bucknell) and studying its effect on promoting nature relatedness, physical fitness, and civic engagement. Works in progress, consisting of trail maps and potential published papers and presentations.</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Martha Donkor</td>
<td>Women's and Gender Studies Women and Old Age Poverty in Rural Ghana. Women and Old Age Poverty in Rural Ghana is a Provost Research Grant funded project that examines poverty among predominantly illiterate rural populations in the Bono East Region of Ghana. Per UN indicators, the women I interviewed fall within the poverty index; however, the women did not see their poverty in terms of those indicators. They think that ageing (and its associated &quot;disabilities&quot;) is the single most important factor in their understanding and experience of poverty. I'm still analyzing the interview data and hope to present my findings at a conference in 2020.</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>Lisa C. Huebner</td>
<td>Women's and Gender Studies Student-Parents Experiences at West Chester University: Shining a Light on an Invisible Population. Collaborator, Cheryl Neale-McFall WCU. The purpose of this study is to invite WCU student-parents to share their experiences. Both quantitative and qualitative methods will be used to collect data to inform our institution about resource allocation and institutional policy, with the overall goal of increasing student-parents rates of on-time degree completion. Research in Progress. Empowering Femininity. Co-writer, Dr. Bernadette Barton, Morehead State University. To challenge hegemonic gender regimes and based on two ethnographic data sets this paper theorizes several components to powerful femininity. Submitted Paper for Peer-Review Success at a Price: Women of Color College Students. A three year ethnographic research project on the experiences of women of color college students to explain their success in college and the obstacles they face. Monograph in progress.</td>
<td></td>
</tr>
</tbody>
</table>