

## KEENE STATE COLLEGE SUSTAINABILITY RESEARCH INVENTORY

Covering Years 2018, 2019, and 2020

Keene State College embraces the AASHE STARS holistic definition of sustainability that encompasses the UN Sustainable Development Goals and the Earth Charter (<https://stars.aashe.org/resources-support/help-center/the-basics/what-is-sustainability/>). The seventeen UN Sustainable Development goals provide an excellent framework for identifying major sustainability challenges. The following research inventory reflects this perspective. It offers a broad-base of research with topics addressing the “pluralistic and inclusive way” AASHE defines sustainability, especially in the areas of:

- Human and ecological health
- Environmental degradation
- Economic inequality
- Sustainably built and natural environments
- Peace and justice
- Nutrition and well-being
- Gender equality.

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Fernando del Ama Gonzalo</b>	Architecture	Energy simulation and monitoring systems in net Zero energy buildings; new materials for regenerative buildings; energy efficiency in buildings; building information modeling  (UN Sustainable Development Goals 7, 9, 11)	Recent research includes developing and testing new designs for stand-alone solar photovoltaic power systems (see <a href="https://pdfs.semanticscholar.org/f2c4/50be131bd438d5eca0e81e40b1eba8bd2ccc.pdf">https://pdfs.semanticscholar.org/f2c4/50be131bd438d5eca0e81e40b1eba8bd2ccc.pdf</a> ), and use of water flow glazing as a radiant heating and cooling system as an energy savings and human well-being improvement to excessive solar radiation in buildings (see <a href="https://www.ripublication.com/ijaer18/ijaerv13n11_60.pdf">https://www.ripublication.com/ijaer18/ijaerv13n11_60.pdf</a> )
<b>Jonathan Gitelson</b>	Art and Design	Explores place and “converts his observations of ordinary objects or events into exaggerated photographs and graphic posters.” Gitelson states that “By examining the overlooked artifacts of everyday life such as discarded letters or receipts, I catch a glimpse into the daily lives of people in my community.” Much of his work	Gitelson’s commission by For Freedoms is described here: <a href="https://www.jonathangitelson.com/public-commissions/for-freedoms">https://www.jonathangitelson.com/public-commissions/for-freedoms</a> For Freedoms is an artist-led organization that models and increases creative civic engagement, discourse and direct action. For Freedoms “work[s] with artists and organizations to center the voices of artists in public discourse, expand

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		addresses topics related to justice and equality as demonstrated by a recent public commission by For Freedoms. <a href="https://www.mocp.org/collection/mpp/past/gitelson_jonathan.php">https://www.mocp.org/collection/mpp/past/gitelson_jonathan.php</a> (UN Sustainable Development Goals 10, 12, 16)	what participation in a democracy looks like, and reshape conversations about politics.” Gitelson’s commission emerged from his work collecting “Free” signs throughout Southern Vermont that are left as a way for neighbors and community members to offer unwanted items to others to reuse at no cost. (See: <a href="https://www.jonathangitelson.com/archive/free">https://www.jonathangitelson.com/archive/free</a> )
<b>Karen Cangialosi</b>	Biology	Coral reef monitoring and youth education about coral reef care and monitoring; Behavioral ecology, focusing on spiders <a href="https://www.keene.edu/site/directories/profile/facstaff/71/">https://www.keene.edu/site/directories/profile/facstaff/71/</a> (UN Sustainable Development Goals 4, 13, 14)	A thorough summary of Dr. Cangialosi’s research is provided at: <a href="https://karencang.net/about/">https://karencang.net/about/</a> Her research on coral reef monitoring and youth education are providing important data on the ongoing impacts of environmental conditions and climate change on coral reef health. Participating students learn about sustainable behavior. See: <a href="https://karencang.net/tci-reef-education-program/">https://karencang.net/tci-reef-education-program/</a>
<b>Loren Launen</b>	Biology	General environmental microbiology Microbiology of contaminated sites Coastal ecosystems, decision-making and sustainability (UN Sustainable Development Goals 13, 15, 15)	A thorough description of Dr. Launen’s research is provided at: <a href="https://lorenlaunen.wordpress.com/research/">https://lorenlaunen.wordpress.com/research/</a> . One example includes research on sediment microbial diversity in the Gulf of Maine, Great Bay Estuary to understand the effects of environmental degradation, land-use change, and climate ( <a href="https://lorenlaunen.wordpress.com/great-bay-estuary-nh-sediment-microbial-diversity-projects/">https://lorenlaunen.wordpress.com/great-bay-estuary-nh-sediment-microbial-diversity-projects/</a> ).
<b>Cynthia Hays</b>	Biology	Trait differentiation and local adaption to depth with meadows of the foundation seagrass <i>Zostera marina</i>  Population genetic processes and environmental change	Current research “examines the patterns and consequences of trait differentiation, and the potential for local adaptation, across depth in multiple life history stages of the seagrass <i>Zostera marina</i> . A better understanding of seagrass demography and trait differentiation by depth is not simply a matter of academic interest, but also critical to successful seagrass restoration efforts.” Summary of NSF Grant 1851432: “RUI: Collaborative Research: Trait Differentiation and Local Adaptation to Depth Within Meadows of the Foundation Seagrass <i>Zostera Marina</i> .” See also:

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goal 14)	<p><a href="https://link.springer.com/article/10.1007/s12237-020-00813-1">https://link.springer.com/article/10.1007/s12237-020-00813-1</a></p> <p>Dr. Hays also describes “The central theme of my research program is to explore how population genetic processes (things like gene flow, inbreeding, and local adaptation) influence how a species is distributed across the landscape, especially at the ‘edges’ or the limits to the distribution. This issue is particularly relevant in the context of ongoing environmental change.”</p> <p><a href="https://www.keene.edu/site/directories/profile/facstaff/225/">https://www.keene.edu/site/directories/profile/facstaff/225/</a></p>
<b>Jason Pellettieri</b>	Biology	Regenerative medicine and acute porphyrias  (UN Sustainable Development Goal 3)	A thorough description of Dr. Pellettieri’s work is found at: <a href="https://www.pellettierilab.com/projects">https://www.pellettierilab.com/projects</a>
<b>Priyanka Roy Chowdhury</b>	Biology	Uses an evolutionary ecology lens to understand the mechanisms underlying species’ responses to rapid human induced environmental changes. Dr. Roy Chowdhury’s lab uses a combination of genetic, molecular, biochemical and physiological approaches to determine how multiple environmental stressors can influence organismal adaptation.  (UN Sustainable Development Goals 2, 3, 10, 14)	Example projects include the role of nutritional status on arsenic susceptibility and the processes by which nutrition acts as a mediator of toxicity. The lab also researches effect of aquaculture on the structure of function of sediment microbial communities. Learn more at: <a href="https://www.roychowdhurylab.com/projects">https://www.roychowdhurylab.com/projects</a>
<b>Susan Whittemore</b>	Biology	Toxicity and development of PAHs	Dr. Whittemore maintained an active undergraduate research program that was funded through the NH-INBRE program. She and her students investigated whether certain common pollutants known as polycyclic aromatic hydrocarbons (or PAHs) are toxic during development. They used <i>Xenopus laevis</i> , the African clawed frog, and maintained a breeding colony of these amphibians, to generate embryos for the research. Some discoveries showed that developmental exposure to certain PAHs leads to alterations in heart rate, arrhythmia, and impaired

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goal 3)	cardiac conductivity in <i>Xenopus</i> embryos during heart development. They also developed behavioral assays for tadpoles to assess the impact of PAH exposure on nervous system function.  <a href="http://www.keene.edu/academics/programs/bio/faculty/556/">http://www.keene.edu/academics/programs/bio/faculty/556/</a>
<b>Paul Baures</b>	Chemistry	Disease research; emphasis on cancer  (UN Sustainable Development Goal 3)	Dr. Baures describes his research interests as drug discovery efforts with research on the structure and function of biomolecules as well as small molecules with bioactivity. Through this work, his Keene State laboratory has synthesized biologically active small molecules that target biological pathways of importance against HIV, Hepatitis C, tuberculosis, and cancer. One notable project is a NH-INBRE collaborative pilot project (Advancement of a Novel Fatty Acid Synthase Inhibitor) that aims to deliver a valuable tool compound and potential therapeutic agent that is potent and specific against fatty acid synthase, a known oncology target, thereby facilitating research into treating cancer by targeting tumor lipid metabolism. Over this latest time period (2018-2020), the research team identified an improved inhibitor of fatty acid synthase with broad toxicity to breast cancer cell lines but with greatly reduced toxicity against non-cancerous cells. The difference in toxicity indicates a therapeutic window to target the cancer cells specifically over health.  <a href="https://www.keene.edu/news/stories/detail/1517942001237/">https://www.keene.edu/news/stories/detail/1517942001237/</a>
<b>Amber Davisson</b>	Communication	Interdisciplinary scholarship on identity, politics, and digital technology	Dr. Davisson is the author of <i>Lady Gaga and the Remaking of Celebrity Culture</i> (McFarland, 2013) and co-author of <i>Poaching Politics: Online Communication during the 2016 US Presidential Election</i> (Peter Lang, 2018). Additionally, she is the co-editor of two collections: <i>Controversies in Digital Ethics</i> (Bloomsbury, 2016) and <i>Theorizing Digital Rhetoric</i> (Routledge, 2017). Her interdisciplinary scholarship on

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
			identity, politics, and digital technology has appeared in such journals as Rhetoric & Public Affairs, Communication Quarterly, Transformative Works & Culture, Electronic Journal of Communication, Journal of Media & Digital Literacy, Journal of Visual Literacy, and American Communication Journal. <a href="http://www.keene.edu/academics/programs/comm/faculty/1958/">http://www.keene.edu/academics/programs/comm/faculty/1958/</a> <a href="https://keene.academia.edu/AmberDavisson/CurriculumVita">https://keene.academia.edu/AmberDavisson/CurriculumVita</a>
Jamie Landau	Communication	How verbal discourse and visual media rhetorically impact U.S. public policy and social change related to gender/sexuality and health/medicine  (UN Sustainable Development Goals 5, 10)	One example of recent research argues that one important role of the contemporary president is to be a <i>conductor of public feelings</i> . Using former U.S. President Barack Obama's national eulogy speech delivered on January 12, 2011 in Tucson, Arizona, the research showed how Obama acted as a musical or energy conductor, redirecting a soundscape of boisterous enthusiasm to be in concert with discordant feelings of national pain and anger and moving them toward social love that is non-partisan and at times civic-centered. This essay has implications for public policy, racial registers of feeling, and writing the bodies of rhetorical scholars into criticism. <a href="https://www.tandfonline.com/doi/full/10.1080/00335630.2018.1447138">https://www.tandfonline.com/doi/full/10.1080/00335630.2018.1447138</a> <a href="http://www.keene.edu/academics/programs/comm/faculty/290/">http://www.keene.edu/academics/programs/comm/faculty/290/</a>
Meenalosini Vimal Cruz	Computer Science	Using machine learning and deep learning techniques, types of Artificial Intelligence technology, to detect patterns that automatically classify brain tumors and skin disorders as benign or malignant, using a dataset. Also, the development of Artificial Intelligence-based Remote Health Monitoring System (AIRHMS).  (UN Sustainable Development Goals 10, 16)	Titles of two recent research efforts are: Computer-Aided Diagnosis of Brain tumor through MRI images using advanced Deep Learning and Image Processing techniques <i>and</i> Development of Artificial Intelligence based Remote Health Monitoring System (AIRHMS). Additional information about Dr. Vimal Cruz can be found at: <a href="https://www.keene.edu/news/stories/detail/1572637506730/">https://www.keene.edu/news/stories/detail/1572637506730/</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goal 3)	<a href="https://meenacruz.com/Research/AI%20Projects.html">https://meenacruz.com/Research/AI%20Projects.html</a> The research on “Hybridization of Machine Learning Techniques in Brain-Computer Interface” could support people with physical challenges (e.g., “interpreting one’s thoughts to message and control physical devices like a wheelchair”).
<b>Angela Barlow</b>	Criminal Justice Studies	Research focuses on evaluating the support systems of incarcerated female groups affected by trauma and other issues of gender equality.  (UN Sustainable Development Goals 3, 5, 10)	Dr. Barlow’s current research focuses on mixed-methods research with incarcerated women, specifically investigating the link between coping with trauma through substance abuse, and the ways in which incarcerated women exercise agency through beauty rituals. Her previous research focused on deviant behavior, investigating workplace deviance within the hair salon industry, and on organizational factors related to the production of culture in the beauty industry. One recent publication demonstrates the scope of Dr. Barlow’s work: Angela Barlow (2019) “Can I take out my penis?” Navigating Sex and Intimacy in the Workplace: An Empirical Test of Black’s Theory of Conflict, <i>Deviant Behavior</i> , 40:6, 621-634.
<b>Armağan Gezici</b>	Economics	Industrial and production economics, with a focus on firm behavior, market structure, technological and structural change; analyses of firm- and industry-level changes in the context of globalization and macro policies; and racial and gender justice regarding employment. <a href="https://www.keene.edu/site/directories/profile/facstaff/183/">https://www.keene.edu/site/directories/profile/facstaff/183/</a>  (UN Sustainable Development Goals 5, 8, 10)	Dr. Gezici’s current research projects are: <ol style="list-style-type: none"> <li>1. The impact of new technologies on the female employment share of the U.S. industries.</li> <li>2. The impact of market concentration on the productivity in the U.S. industries - an early version is available as a working paper at <a href="https://tinyurl.com/y3ot6o4v">https://tinyurl.com/y3ot6o4v</a></li> </ol> Dr. Gezici also has a strong interest in gender equity and race as related to Covid-19 pandemic unemployment as evidenced in her recent research that used the April 2020 Current Population Survey (CPS) micro dataset to explore the racialized and gendered effects of the COVID-19 pandemic on the probability of being unemployed. <a href="https://www.researchgate.net/publication/347253153_An_Intersectional_Analysis_of_COVID-19_Unemployment">https://www.researchgate.net/publication/347253153_An_Intersectional_Analysis_of_COVID-19_Unemployment</a> <a href="https://www.researchgate.net/profile/Armagan-Gezici">https://www.researchgate.net/profile/Armagan-Gezici</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Daryl Hucks, Tanya I. Sturtz, Katherine E. Tirabassi</b>	Education	Civic engagement among college students and millenials	Book project aptly describes the collaborative research of these Keene State College Education professors. <i>Fostering Positive Civic Engagement Among Millennials: Emerging Research and Opportunities</i> (Advances in Higher Education and Professional Development) is a book that “provides in-depth discussions on the latest trends among millennial engagement practices in social and political contexts. Featuring pertinent topics such as student self-assessments, mentoring roles, and educational tools, this scholarly resource is ideal for educational leaders, academicians, students, and researchers that would like to discover better ways to promote engagement within the millennial generation” ( <a href="https://www.amazon.com/Fostering-Positive-Civic-Engagement-Millennials/dp/1522524525">https://www.amazon.com/Fostering-Positive-Civic-Engagement-Millennials/dp/1522524525</a> )
<b>Mark Long</b>	English	Teaching environmental literature; climate change and the stories of place	Dr. Long’s most recent research on pedagogy, literature and nature resulted in the recent book, <i>Approached to Teaching the Works of Ralph Waldo Emerson</i> . Learn more about this project and others at: <a href="https://thefarfield.org/welcome/">https://thefarfield.org/welcome/</a>
<b>Emily Robbins Sharpe</b>	English	Multiculturalism and marginalized populations as described through literature  (UN Sustainable Development Goals 5, 10)	Dr. Sharpe’s research is described in her book <i>Mosaic Fictions</i> —the first book-length critical analysis of Canadian Spanish Civil War literature through a multicultural lens. A more thorough description of the research and book is found at: <a href="https://utorontopress.com/us/mosaic-fictions-3">https://utorontopress.com/us/mosaic-fictions-3</a> . <a href="https://www.keene.edu/news/stories/detail/1588597560723/">https://www.keene.edu/news/stories/detail/1588597560723/</a>
<b>Tim Allen, Department Chair Karen Seaver Brett Amy Thelen</b>	Environmental Studies faculty with students	Undergraduate conservation research on New Hampshire ecology through the Harris Center; emphasis on ecological inventory. Faculty research mentors support the projects.	The Harris Center gives opportunities to KSC undergraduates to have an innovative, eight-week summer conservation internship experience. Under the guidance of Harris Center staff and KSC faculty, four interns gain specialized training and firsthand experience with many facets of the Harris Center’s diverse work each summer, focusing on ecological inventory. Together, the interns document vernal pools, inventory forest communities and

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goals 4, 13, 14, 15)	invasive plants, survey road-stream crossings, monitor chestnut plantings, and more. See: <a href="https://harriscenter.org/conservation-research/undergraduate-research">https://harriscenter.org/conservation-research/undergraduate-research</a>
<b>Denise Burchsted</b>	Environmental Studies & Sustainability Studies	Dr. Burchsted applies her research to setting targets for restoration of rivers and wetlands that have been damaged by human actions. Topics include dam removal, water quality, health of aquatic ecosystems.  (UN Sustainable Development Goals 6, 14, 15, 17)	Example research includes ongoing work as part of the LTER: Long Term Ecological Research at the Hubbard Brook Experimental Forest, as well as a National Science Foundation subaward from New Hampshire EPSCoR, 2015-2019. \$100,184. RII Track-2 FEC: Strengthening the scientific basis for decision-making about dams: Multi-scale, coupled-systems research on ecological, social, and economic trade-offs.
<b>Nora Traviss</b>	Environmental Studies & Sustainability Studies	Environmental health and risk assessment, with a focus on air pollution from biofuels and community-based research. Topics include physical, chemical, and biological effects of exposures to particulate matter from the use of biodiesel fuels compared to petroleum diesel  (UN Sustainable Development Goals 3, 7, 11, 13)	Dr. Traviss is currently engaging students in studies of community exposure to particulate matter from woodsmoke and biodiesel compared to petroleum diesel. In a study called "Toward a self-regulating, data-driven and citizen-led system for wood smoke pollution management in Keene NH using citizen science and social media" she is working with colleagues to educate the community about local air quality dynamics and provide timely alerts when conditions are unfavorable for burning wood. Forecasting air inversions and making the concentration map available to the public via social media is part of that effort. <a href="https://www.keene.edu/news/stories/detail/1553104780843/">https://www.keene.edu/news/stories/detail/1553104780843/</a> Most recently, because of her background in aerosols, she has been working on the all-volunteer New Hampshire Science and Public Health Task Force to ensure NH citizens have the latest science on COVID19. She teaches courses in Environmental Health, Environmental Regulation, Risk and the Environment, as well as Introductory courses and the 1-year Environmental Studies Capstone sequence.



RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Thomas Webler</b>	Environmental Studies & Sustainability Studies	Social science research in energy transition, sociology of risk, communications, and participatory policy making  (UN Sustainable Development Goal 3, 7, 9, 11, 13, 14, 15)	A recent study explored using social media campaigns, collaboration with universities' Student Health Services, and advertisements from National Estuary Program directors and National Sea Grant College Programs to design, test, and finalize positive, humorous multimedia text messages to send to college students who live in proximity to National Estuary Programs across the US in order to assess behavior change surrounding cigarette butt disposal methods. See: <a href="https://marinedebris.noaa.gov/prevention/butt-joke-using-humor-social-media-messages-motivate-proper-cigarette-butt-disposal">https://marinedebris.noaa.gov/prevention/butt-joke-using-humor-social-media-messages-motivate-proper-cigarette-butt-disposal</a> Dr. Webler's Energy Transitions Research Lab is described in more detail at: <a href="https://www.energytrans.org/research.html">https://www.energytrans.org/research.html</a> .
<b>Taylor Dunne</b>	Film Studies	Films that "examine the interconnectedness of time, history and landscape" and environmental topics  (UN Sustainable Development Goals 3,10, 15, 16)	Current filmmaking project, "Off Country," explores the impacts of radiation and atomic weaponry. Dunne describes the project as "a feature length film that uses first person accounts and oral history to critique the inequities built into the nuclear weapons industry. This project focuses on three landscapes: The Trinity Site in New Mexico, the former Rocky Flats Plant in Colorado and the Nevada Test Site. The project archives and curates a chorus of activists, public health workers and community members who tell a story outlining the environmental racism built into military-industrial policy." <a href="http://taylordunne.com/">http://taylordunne.com/</a>
<b>Sasha Davis</b>	Geography & Sustainability Studies	Social change, tourism, environmental hazards	Dr. Davis's research is based mostly on field studies in the Island Pacific, Asia and Latin America and focuses on environmental hazards, social movements, international politics, radioactive contamination, and tourism development. His recent book, "Islands and Oceans: Reimagining Sovereignty and Social Change" ( <a href="https://www.jstor.org/stable/j.ctvqmp3th?turn_away=true">https://www.jstor.org/stable/j.ctvqmp3th?turn_away=true</a> ) uses case study research to "explore how struggles for decolonization, self-determination, and political rights permeate conceptualizations of how sovereignty operates."

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goal 10, 16, 11, 15)	<a href="https://sashadavisprojects.wordpress.com/">(https://sashadavisprojects.wordpress.com/)</a> <a href="https://www.keene.edu/news/stories/detail/1588597560723/">https://www.keene.edu/news/stories/detail/1588597560723/</a>
<b>Christopher Brehme</b>	Geography & Sustainability Studies	Dr. Brehme's research interests center on the application of geospatial technologies to a variety of natural resource and community-based contexts.  (UN Sustainable Development Goals 3, 11, 14, 15)	Dr. Brehme's work has explored the interaction between endangered whales and lobster gear in the Gulf of Maine region. More recently Dr. Brehme is with Dr. Nora Travis in the Environmental Studies Department to model the spatial patterns of wintertime air pollution and the associated health effects in Cheshire County, NH.
<b>Christopher Cusack</b>	Geography & Sustainability Studies	Cities, sustainability, and geospatial technologies and renewable energy opportunities  (UN Sustainable Development Goals 7, 11, 13)	Recent research contributed to a book on the Multidimensional Approach to Quality of Life Issues. His chapter examined sustainable development and quality of life using the life satisfaction rating and the human development index available from the United Nations Development Programme (UNDP). See: <a href="https://link.springer.com/chapter/10.1007/978-981-13-6958-2_3#citeas">https://link.springer.com/chapter/10.1007/978-981-13-6958-2_3#citeas</a>  Dr. Cusack frequently includes his students on applied research in the City of Keene, including a recent study using drones to determine the location and practicality of achieving the city's Sustainable Energy Resolution Goal of 100% renewable electricity by 2030 ( <a href="https://www.keene.edu/news/stories/detail/1557170216940/">https://www.keene.edu/news/stories/detail/1557170216940/</a> ).  <a href="https://www.keene.edu/site/directories/profile/facstaff/108/">https://www.keene.edu/site/directories/profile/facstaff/108/</a>
<b>Nicolas Germana</b>	History	German nationalism and German orientalism  (UN Sustainable Development Goal 10, 16)	<a href="https://www.keene.edu/news/stories/detail/keene-state-announces-faculty-distinction-in-research-and-scholarship-honoree/">https://www.keene.edu/news/stories/detail/keene-state-announces-faculty-distinction-in-research-and-scholarship-honoree/</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Lisa DiGiovanni</b>	Holocaust and Genocide Studies	Interdisciplinary research and teaching centers on representations of war and dictatorial violence in 20th - 21st century Spain and Latin America.  (UN Sustainable Development Goals 5, 10, 16)	Dr. DiGiovanni deals with narrative (novels, short stories, graphic novels) and films (fiction and documentary) that render visible the multiple traumas related to state repression and militaristic culture. She takes an intersectional approach, examining how identity positions (gender, class, race, sexuality, age) shape the experience of subjugation and resistance. In her studies of memory and representation, she has also analyzed the topic of nostalgia and views it as an emotional response and a tool for survivors to mitigate the lingering sense of loss in the aftermath of rupture, persecution and displacement. <a href="https://www.keene.edu/site/directories/profile/facstaff/1455/">https://www.keene.edu/site/directories/profile/facstaff/1455/</a> <a href="https://www.keene.edu/news/stories/detail/1588597560723/">https://www.keene.edu/news/stories/detail/1588597560723/</a>
<b>Jim Waller</b>	Holocaust and Genocide Studies	Genocide and research specifically on perpetrators of genocide and the psychology of human evil (UN Sustainable Development Goal 16)	Detailed descriptions of Dr. Waller's work can be found at: <a href="https://www.keene.edu/site/directories/profile/facstaff/531/">https://www.keene.edu/site/directories/profile/facstaff/531/</a> <a href="https://en.wikipedia.org/wiki/James_Waller">https://en.wikipedia.org/wiki/James_Waller</a>
<b>Melanie Adams</b>	Human Performance and Movement Sciences	Exercise Psychology, Fitness in Special Populations and Public Health  (UN Sustainable Development Goal 3)	Dr. Adams' most recent research investigated the effects of brief fitbit use on physical activity and cardiometabolic risk <a href="https://www.researchgate.net/publication/327968403_Effects_of_Brief_Fitbit_Use_on_Physical_Activity_Cardiometabolic_Risk">https://www.researchgate.net/publication/327968403_Effects_of_Brief_Fitbit_Use_on_Physical_Activity_Cardiometabolic_Risk</a>
<b>Kathleen Johnson</b>	Management	Workplace diversity with a special focus on disabilities, leadership, civic engagement, and pedagogy. (UN Sustainable Development Goal 10)	<a href="https://www.keene.edu/site/directories/profile/facstaff/259/">https://www.keene.edu/site/directories/profile/facstaff/259/</a>
<b>Tammy Warner</b>	Management	Entrepreneurial education, the management of conservation organizations, and rural business development in New England  (UN Sustainable Development Goals 8)	Currently working on a large Connecticut Sea Grant three-year, multi-state initiative to create an "economic and business framework needed to spur the fledgling domestic kelp industry into the mainstream" <a href="https://seagrant.uconn.edu/2021/01/27/ctsg-led-project-looks-to-help-unlock-potential-of-seaweed/#">https://seagrant.uconn.edu/2021/01/27/ctsg-led-project-looks-to-help-unlock-potential-of-seaweed/#</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>William Bendix</b>	Political Science	The U.S. Congress, especially its role in developing and monitoring national security policies; voting records of females in congress toward war  (UN Sustainable Development Goals 16)	Current projects include a book on the Patriot Act and other major surveillance laws enacted after the 9/11 attacks. Other example publications: William Bendix and Gyung-Ho Jeong. 2019. "Gender and Foreign Policy: Are Female Members of Congress More Dovish Than Their Male Colleagues?" <i>Political Research Quarterly</i> , DOI: 10.1177/1065912919879764. Paul J. Quirk, William Bendix, and André Bächtiger. 2018. "Institutional Deliberation." In <i>The Oxford Handbook of Deliberative Democracy</i> , eds. André Bächtiger, John Dryzek, Jane Mansbridge, and Mark Warren. New York: Oxford University Press, 273-299. William Bendix and Jon MacKay. 2017. "Partisan Infigting among House Republicans: Leaders, Factions, and Networks of Interests." <i>Legislative Studies Quarterly</i> 42(4): 549-577
<b>Jacob Pleasants</b>	Physics	Teaching efficacy, especially for science literacy and STEM education  (UN Sustainable Development Goal 4)	Dr. Pleasants does research on how to prepare teachers to be highly effective STEM teachers. He is particularly interested in how to develop teachers' abilities to accurately communicate the nature of science, engineering, technology, and mathematics to their students. Recent research explored the effects of a teacher education and professional development project in which elementary student teachers and their cooperating teachers were teamed with engineering graduate students to incorporate engineering into grades 3–5 classrooms. <a href="https://www.tandfonline.com/doi/abs/10.1080/1046560X.2019.1709295">https://www.tandfonline.com/doi/abs/10.1080/1046560X.2019.1709295</a> <a href="https://scholar.google.com/citations?user=eoSsaEsAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=eoSsaEsAAAAJ&amp;hl=en</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Harlan Fichtenholtz</b>	Psychology	Cognitive neuroscience investigations on how people understand and interpret the vast array of social and emotional signals that they encounter every day  (UN Sustainable Development Goal 3)	Currently pursuing research under the New Hampshire IDEa Network of Biomedical Research Excellence - Neural Mechanisms of Emotional Vigilance in Posttraumatic Stress Disorder (PTSD) program. Summary and example publications are available at <a href="https://www.researchgate.net/profile/Harlan_Fichtenholtz">https://www.researchgate.net/profile/Harlan_Fichtenholtz</a>
<b>Becky Dunn</b>	Public Health	Maternal and child health, particularly lactation-based research and early infant feeding practices as well as in the scholarship of teaching and learning  (UN Sustainable Development Goals 3, 5)	Since 2013, Dr. Dunn has worked with Dr. Karrie Kalich in leading nutrition and physical activity self-assessments in licensed child care centers in New Hampshire through funding from the NH Department of Health and Human Services. My lactation-based research focuses on understanding barriers and contributors to breastfeeding in low-income women and in child care settings.  Recent work includes a large federal grant to research and promote wellness in New Hampshire schools and child care programs. This award provides funds for KSC, in collaboration with the NH Department of Health and Human Services, “to assess current wellness policies specific to the areas of nutrition and physical activity and to identify strategies to implement that can allow students and staff easier access to healthier foods and opportunities for physical activity”. <a href="https://www.sentinelsource.com/news/local/keene-state-awarded-grant-to-promote-wellness-in-schools-child/article_0bf9ba75-a378-5d89-87fc-46d9a1baea80.html">https://www.sentinelsource.com/news/local/keene-state-awarded-grant-to-promote-wellness-in-schools-child/article_0bf9ba75-a378-5d89-87fc-46d9a1baea80.html</a>
<b>Margaret Henning</b>	Public Health	Dr. Henning’s work has examined health conditions, including health disparities, health education, and community interventions, from a cross-cultural perspective	Dr. Henning is interested in global health, and focuses on the problems of mobilizing, allocating, and maintaining limited resources to improve health. Recent research includes exploring the lived experience of adolescent mothers and the services provided to them by community health assistants (CHAs) in rural Zambia <a href="https://www.researchgate.net/publication/338176989_Adolescent_Mothers'_Experiences_With_Community_Health">https://www.researchgate.net/publication/338176989_Adolescent_Mothers'_Experiences_With_Community_Health</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
		(UN Sustainable Development Goals 1, 2, 3, 5, 10)	<a href="https://pubmed.ncbi.nlm.nih.gov/31876258/">Assistants in Rural Zambia and https://pubmed.ncbi.nlm.nih.gov/31876258/</a> ). She has also worked with faculty colleagues to assess the experience of hunger in college athletes and barriers and supports to breastfeeding across industries. <a href="https://www.keene.edu/site/directories/profile/facstaff/228/">https://www.keene.edu/site/directories/profile/facstaff/228/</a> <a href="https://pubmed.ncbi.nlm.nih.gov/31876258/">https://pubmed.ncbi.nlm.nih.gov/31876258/</a>
<b>Amanda Hickey</b>	Public Health	Variety of public health topics including breastfeeding access and justice; hunger in students  (UN Sustainable Development Goals 2, 5)	The current study examines perceived hunger, which may result from food insecurity, and its effect on academic and athletic performance in students on a liberal arts college campus in New Hampshire. It also examines how students compensate for hunger and their preferences for different types of resources to address hunger ( <a href="https://www.mdpi.com/2227-7102/9/3/242/htm">https://www.mdpi.com/2227-7102/9/3/242/htm</a> ).  Breastfeeding access: <a href="https://www.keene.edu/news/stories/detail/1547579435453/">https://www.keene.edu/news/stories/detail/1547579435453/</a>
<b>Jeanelle Boyer</b>	Public Health	Presence of Covid-19 in wastewater; comparison of the mycobiome between children with Food Protein-Induced Enterocolitis Syndrome (FPIES) and children that have outgrown FPIES  (UN Sustainable Development Goal 3)	<a href="https://granitegeek.concordmonitor.com/2020/08/05/in-keene-theyre-hunting-covid-19-in-the-sewage/">https://granitegeek.concordmonitor.com/2020/08/05/in-keene-theyre-hunting-covid-19-in-the-sewage/</a>
<b>Shannon Mayers</b>	Redfern Arts; Art and Design; Music; Theater and Dance Departments	The Redfern Arts Center of Keene State College routinely collaborates with the College's Art and Design; Music, and Theater and Dance Departments to develop and sponsor performances with social justice, health, and sustainability topics.	One such collaborative program occurred over three weekends where artist in residence Brad Houk led a community mapping initiative where participants throughout Keene and Keene State College pictorially created maps that captured the character of Keene through themes, memories, local treasures, and valued places. See: <a href="https://www.keene.edu/news/events/detail/9071/">https://www.keene.edu/news/events/detail/9071/</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Abdulrazak Balogun</b>	Safety and Occupational Health Applied Sciences	Ergonomics and musculoskeletal disorders among the mining worker population. More recently, he has developed additional interests in occupational safety management systems and their relationship with business performance as well as Total Worker Health. He has also conducted research involving air pollution and its effects on human cardiorespiratory health.  (UN Sustainable Development Goals 3, 8, 10)	Recent research identifies risk factors associated with musculoskeletal disorders (MSD) in Stone, Sand and Gravel Mining (SSGM) operations ( <a href="https://www.mdpi.com/1660-4601/17/10/3512">https://www.mdpi.com/1660-4601/17/10/3512</a> ).  <a href="https://www.keene.edu/sitemedia/uploads/kscpeople/cv/Abdulrazak.Balogun.pdf?20201217">https://www.keene.edu/sitemedia/uploads/kscpeople/cv/Abdulrazak.Balogun.pdf?20201217</a>
<b>Christopher P. Rennix ScD CIH</b>	Safety and Occupational Health Applied Sciences	Industrial hygiene; assessing occupational exposure to various chemicals and the risk of breast cancer in women, cancer and disease clusters, the use of "Big Data" for public health surveillance, and injury epidemiology; public health surveillance among military (epidemiology and surveillance of communicable and reportable disease, antibiotic resistant organisms, behavioral and deployment health, and occupational and environmental health and the development of computer applications to collect public health data from the field).  (UN Sustainable Development Goal 3)	His current research investigates the impact of open burn pit exposure on respiratory and cardiovascular health among military veterans. Dr. Rennix provided input on the proper use and limitations of deployment and exposure data in a study of 25,000 veterans and the impact of exposure to burn pits on respiratory and cardiovascular health.  <a href="https://www.keene.edu/sitemedia/uploads/kscpeople/cv/Christopher.Rennix.pdf?20201217">https://www.keene.edu/sitemedia/uploads/kscpeople/cv/Christopher.Rennix.pdf?20201217</a>
<b>Saran Ghatak</b>	Sociology and Anthropology	Crime and social justice  (UN Sustainable Development Goal 10)	Recent research explores "stand your ground" (SYG) laws on violent crime and the question of why states are more likely to take measures to allow gun violence (albeit in self-defense) in the public sphere <a href="https://journals.sagepub.com/doi/abs/10.1177/0731121419845877?journalCode=spxb">https://journals.sagepub.com/doi/abs/10.1177/0731121419845877?journalCode=spxb</a>

RESEARCHER	DEPARTMENT	RESEARCH INTERESTS (CONNECTION TO UN SUSTAINABILITY GOALS)	DESCRIPTION
<b>Md Ahasan Habib</b>	Sustainable Product Design & Architecture	Design for 3D printing, scaffold architecture and biomaterial design for 3D scaffold fabrication using extrusion-based 3D bioprinting technique; future research focuses on regenerating the large-scale functional tissue scaffold using 3D bio-printing (UN Sustainable Development Goal 3)	This research provides important insights into the field of designing functional biomimetic structures that can advance public health for topics like vasculature regeneration, nervous system repair, and bone, cartilage and muscle reconstruction (see <a href="https://www.sciencedirect.com/science/article/abs/pii/S1526612518318735">https://www.sciencedirect.com/science/article/abs/pii/S1526612518318735</a> )
<b>Karen Honeycutt</b>	Women's & Gender Studies	Professor Honeycutt's primary research interests fall into two broad categories: (1) the sociology of the body and (2) the sociology of social class and its intersections with gender, race, and sexuality, with a focus on individuals from working-class backgrounds who have become upwardly mobile in the U.S., Canada, England, and other countries.  (UN Sustainable Development Goals 5, 10)	In both categories of research, Dr. Honeycutt is particularly interested in how <i>ideologies</i> (ingrained ideas about social class, gender, race, etc. that are maintained partly through the realm of mass media and popular culture) perpetuate inequality, and in how members of marginalized groups themselves cope with their devalued identities. She is working on several projects that explore these themes including some that examine images in popular media products (such as TV shows, commercials, and films).
<b>Taneem Husain</b>	Women's & Gender Studies	Interdisciplinary research and teaching interests center on Islam in America, ethnic studies and comparative racialization, queer theory, and literature and media studies (UN Sustainable Development Goals 5, 10)	Current research is on representations of Muslim Americans post-9/11, looking particularly at how Muslim Americans use media to construct identity in ways that complicate understandings of racial and religious othering in the United States

28 DEPARTMENTS ARE REPRESENTED HERE

49 different professors

Compared this to the end of year research summaries provided by the Office of Sponsored Research and only identified three professors that are doing research not sustainability related