Center for **EXPERIMENTAL & APPLIED ECONOMICS**

urture a community engaged in evidence-based research and dissemination of results to inform policy and promote sustainability at the nexus of agriculture and the environment.





UD's Center for Experimental & Applied Economics uses the scientific process of laboratory control and replication to study the critical causal relationships of economic behavior impacting agriculture, the environment and natural resources. Our work informs the design of improved policy, markets, and products that benefit individuals and society. The Center for Experimental & Applied Economics furthers UD's land-grant mission promoting teaching, research and extension.



This is a partial list; we are appreciative of all our supporters over the years!

WHAT IS EXPERIMENTAL ECONOMICS?

Experimental economics studies how individuals or groups make decisions. Using careful experimental design, economic experiments help us understand the decisions people make, while also making them put their money where their mouth is, using non-hypothetical decisions.



CENTER STATS



SPACE

The Center for Experimental and Applied Economics is housed in a dedicated research lab (approximately 2,000 square feet) that can hold up to 40 participants in Townsend Hall on UD's south campus in Newark, Delaware. In addition, we have a research room for small groups, kitchen space for studies with food products, and office space for students, postdocs, and staff.



TECHNOLOGY

Our research is enabled by over 100 computers, including fleets of Dell laptops, iPad Pros, and Surface Pros. These machines enable us to accommodate a variety of lab and field studies.



TUKTUK

The TukTuk is an electric research vehicle that enables us to take the lab into the field to reach key decision makers. The TukTuk has traveled far and wide - it has traveled throughout Delaware, to Washington, D.C., and even to a farm expo in Georgia.

PROJECT WICCED

Project WiCCED (Water in the Changing Coastal Environment of Delaware) is a \$23 million project from the National Science Foundation EPSCoR Track-1 program and the State of Delaware that brings together researchers from the University of Delaware, Delaware State University, Delaware Technical Community College, and Wesley College.

This multi-institution project aims to assess major threats to Delaware's water quality and develop viable technological and policy solutions for meeting the challenges imposed by them.

CBEAR

The Center for Behavioral & Experimental Agri-Environmental Research (CBEAR) is a consortium of major land grant and research universities. It was created in 2014 with funding from the USDA Economic Research Service and is currently supported by USDA-National Institute of Food and Agriculture and other partners interested in evidencebased agricultural and environmental programs. CBEAR has received over \$13 million in funding to support its research and outreach efforts.

MAJOR INITIATIVES



PROJECTWICCED.ORG



CENTERBEAR.ORG



To foster future generations of experimental economists, we teach courses on experimental economics and research. Throughout these hands-on courses, students design their own study and conduct pilot sessions. We emphasize the value of replication, and some of these projects have ultimately been published in peerreviewed journals.



We aim to conduct impactful research that provides insights to improve the design of policies and programs. To accomplish this, we partner with a variety of stakeholders to inform our study designs, conduct research embedded in their programs, and share our research findings.



Some of our stakeholders that we have partnered with are:







INLAND BAYS OYSTERS A Southern Delaware delicacy





OUTREACH AND STAKEHOLDER ENGAGEMENT

Conservation Fund













RESEARCH ON LOCAL AND REGIONAL ISSUES

TRUST IN DRINKING WATER

Our researchers investigate if residents of the South Wilmington community trust their drinking water and if not, how their trust could be restored.

OYSTERS

To help grow Delaware's nascent oyster aquaculture industry in the Delaware Inland Bays, research investigates consumer preferences for oysters and estimates how much consumers value the environmental benefits provided by oysters.

RESIDENTIAL DECISION MAKING

Household lawns and septic systems are some of the major sources of local water pollution, a challenging environmental problem. Our researchers investigate homeowner willingness to pay for proenvironmental practices and identify approaches that increase adoption and long-term use of these practices.



PREFERENCES FOR FOOD GROWN WITH NON-TRADITIONAL WATER SOURCES

Fresh water sources, particularly in areas of high agriculture production, are threatened due to water scarcity concerns. Technological advances have made it so that non-traditional water sources, like recycled water, can be used for irrigation to reduce pressures on over tapped water sources. Our researchers evaluate consumers' preferences for various types of irrigation water sources.

FOOD LABELING

Our work on food labeling encompasses the new practice of process labeling, and both the challenges and opportunities that this can provide to consumers and food companies.

We have studied attribute labels, such as identifying a product as "local" or "environmentally friendly" and providing insights to industry about consumer willingness to pay for these different types of labels.



RESEARCH ON CONSUMER PREFERENCES

REDUCING INDIVIDUAL CARBON FOOTPRINTS

Environmentalists believe that changing individual decisions, like reducing an individual's beef consumption, can aggregate into large scale environmental benefit in a cost-effective manner. To test this, our researchers use an auction, where participants submit a bid for how much the researchers would have to pay them to reduce their beef consumption or personal vehicle use for a set period.





ADOPTION OF BEST MANAGEMENT AGRI-ENVIRONMENTAL PRACTICES

Our research suggests evidencebased strategies to increase adoption of agricultural best management practices that conserve water and reduce the amount of pesticides, fertilizers, animal waste and other pollutants entering our water resources from agricultural land.

PROGRAM AND POLICY DESIGN

Our researchers use economic experiments to inform the design of cost-effective policies and programs that improve environmental outcomes in agricultural landscapes.



MASCOTS

Our researchers investigate whether community mascots can inspire environmentally-beneficial behavior change in a lab experiment.

SEED FRAUD IN AFRICA

Our researchers investigate how smallholder farmers' perceptions of fraud in the input supply chain influences their willingness to invest in hybrid maize seed in Kenya.

The research team worked with local village chiefs, leaders and elders, and conducted an economic field experiment with over 250 farmers.

MEASURING THE COSTS OF STIGMA AGAINST HIV

Globally, stigma surrounding the spread of HIV/AIDS is a result of the lack of education about the transmission of the disease, which can also influence the spread of HIV/AIDS. In Kenya, to understand some of the costs of stigma against HIV/AIDS, we conducted a field experiment in Kenyan villages using real money and incentives.





INTERNATIONAL RESEARCH



MEASURING ISRAELI CONSUMER PREFERENCES FOR FOOD GROWN WITH NON-TRADITIONAL WATER

Water scarcity is a pressing challenge in many regions across the world. Israel is a global leader in adopting solutions, such as non-traditional irrigation water, to avoid a severe water crisis. Our research team measured preferences among Israeli consumers for foods grown with water from nontraditional sources, as little was known about them despite Israel using nontraditional water for over three decades.

CENTER FOR EXPERIMENTAL & APPLIED ECONOMICS

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