



# Accomplishments 2003–2020

## Research Themes & Network

In October 2019, we completed Year 1 of our research on Water in the Changing Coastal Environment of Delaware (WiCCED). Faculty and students have been involved in examining the extent to which Delaware's water security is threatened by deteriorating water quality; 2) the effect that deterioration may have on ecosystem health; 3) how we can mitigate effects; 4) and how we can design policies and programs to affect change in water quality.



As part of research on Ecological Stresses from Nutrients and Salinization, Delaware State University scientists are shown taking samples from Cedar Creek, Slaughter Beach, Delaware.



## Track 2 & 4

In 2019, DE EPSCoR completed the third year of a four-year, \$6-million Track 2 project in cognitive neuroscience along with programs in Nebraska and Nevada and the 2nd year of a \$6-million Track 2 grant to probe how viruses impact other microbes critical to our lives, from producing oxygen to growing food, with programs in Nebraska, Hawaii, and Rhode Island.

## Economic Development

Across the State, the Spin In® initiative enables undergraduate students to engage in an entrepreneurial, experiential learning program to solve real-life business challenges faced by early stage Delaware start-ups. The real-life educational experience obtained by the students is invaluable and unique, and results in significant economic development and workforce training achievements including 8 new products, 5 new business starts, and over 150 students engaged in 27 projects.

## Empowering Students

Through EPSCoR, we launched the Environmental Fellows program at the University of Delaware and since 2014, we have invested \$2M to support 28 doctoral students who are becoming environmental leaders in academia, government and the private sector.



## Ghost Forests



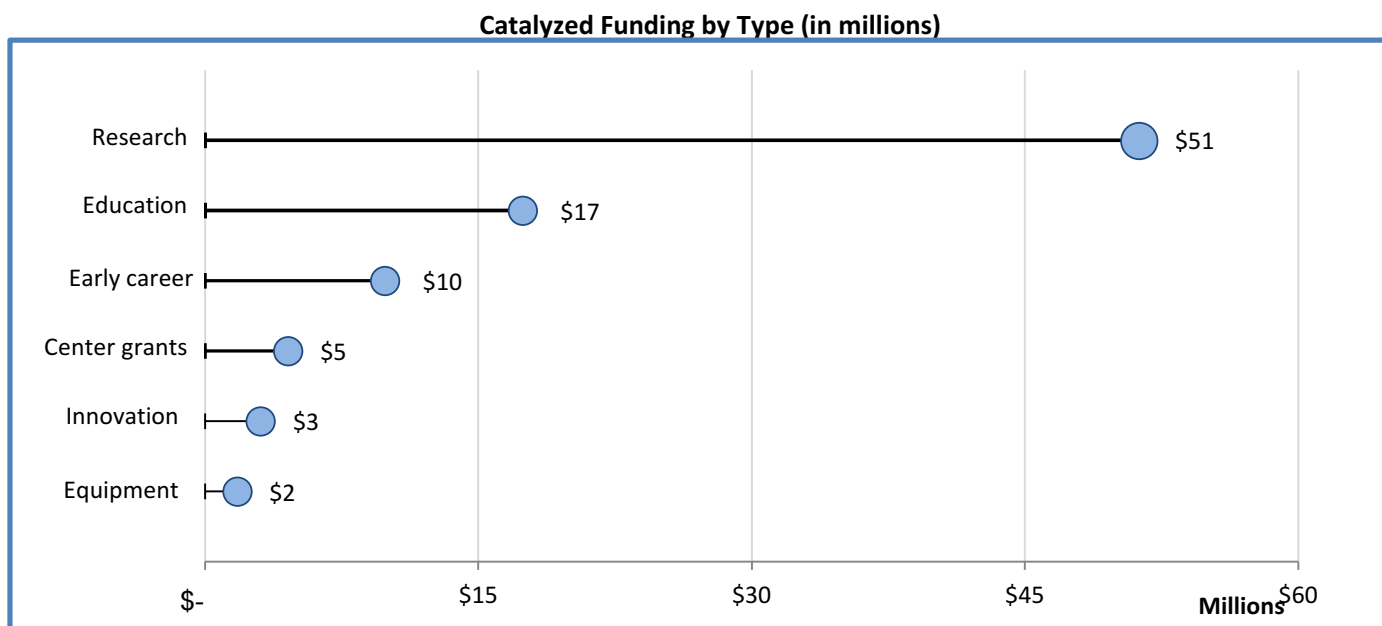
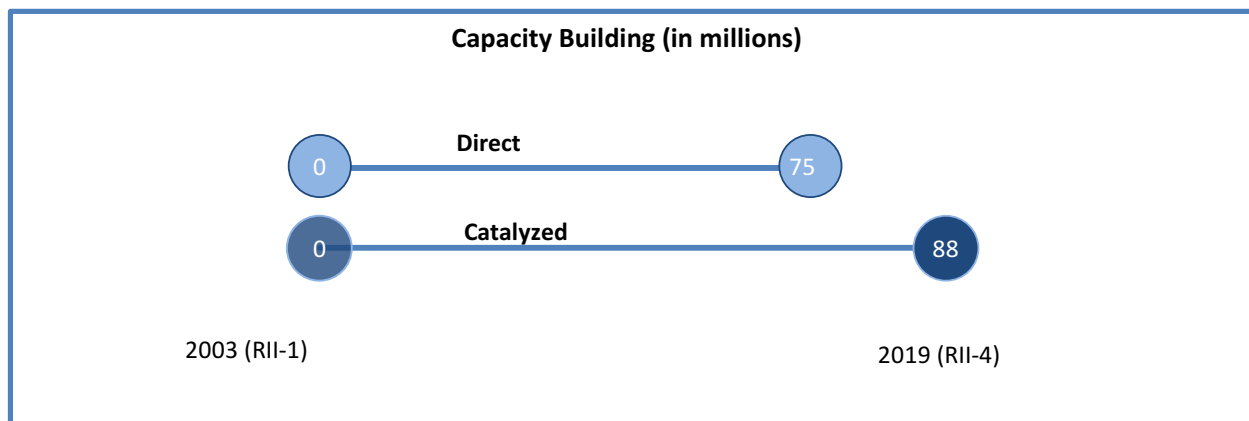
Photo: Jerry Habraken, Delaware News Journal

Dr. Stephanie Stotts of Wesley College is currently studying the environmentally pressing issue of Ghost Forests. Ghost forests are formerly thriving ecosystems that now consist of standing dead trees due to a change in the environmental conditions, primarily saltwater from the rise of sea-level. Stotts' work combines climactic data and tree-ring series, called chronologies, of ghost forests to identify the growth drivers of these trees and how those drivers change when the tree is exposed to salt stress. This research is a part of Threat 4 of Project WiCCED, which focuses on ecological stresses from nutrients and salinization.



The student in the picture is from SN100 Frontiers in Science: Climate Change. Students in the class helped collect cores that were analyzed by an EPSCoR summer intern.

# Total Funding to Delaware 2003-2019\*



\*as of January 28, 2019

## Overall Funding Since 2003: \$163 Million

The NASA/NSF EPSCoR programs and the State of Delaware have provided \$75 million in direct EPSCoR funding to Delaware to support capacity building. The support has resulted in an additional \$88 million in funding for 225 awards to the EPSCoR faculty, including \$51M for 151 research awards, \$17M for 31 education awards, \$10M for 25 CAREER awards, \$3K for 4 center awards, \$5M for 9 innovation awards, and \$2M for 5 equipment awards.

