

3-27-2019

NBC TODAY Show Features ODU Researchers on Location in Arctic Circle April 1 and 2

Betsy Hnath

Follow this and additional works at: https://digitalcommons.odu.edu/odurc_news

 Part of the [Atmospheric Sciences Commons](#), and the [Climate Commons](#)



NBC TODAY Show Features ODU Researchers on Location in Arctic Circle April 1 and 2

March 27, 2019

By Betsy Hnath (<mailto:ehnath@odu.edu>)

NBC's TODAY Show, the country's top-rated morning news program, featured two Old Dominion University researchers who are studying climate change in the Arctic during live segments April 1 and 2.

TODAY Show host Al Roker joined Victoria Hill, an assistant professor in the Department of Ocean, Earth and Atmospheric Sciences in the College of Sciences, and Petros Katsioloudis, professor and chair of the Department of STEM and Professional Studies in the Darden College of Education and Professional Studies, as they launched Warming and irRadiance Measurement (WARM) buoys in the Arctic Ocean north of Utqiagvik, Alaska.



Roker has been a vocal advocate for climate change awareness.

"We are stewards of this Earth," Roker said on a TODAY Show broadcast this past December. "And to not take care of it and to not take action is a sin."

Hill has studied the effects of climate change on the rate of melting icecaps in the Arctic Circle since her first trip to the region in 2004. She is particularly interested in how sunlight impacts both the ice and the water below it.

The buoys - either tethered to the ice or floating in the water - measure temperature, salinity and the amount of sunlight absorbed in the water under the thinning ice pack. They send hourly observations via satellite to ODU and to the National Science Foundation (NSF) Arctic Data Center website.

The buoys last only about a year in the Arctic climate, requiring annual visits to replace them.

"Sunlight absorbed by the ocean under the ice causes warming, which can lead to accelerated ice melt resulting in even more sunlight reaching the ocean," Hill said.

Hill added that species living in the Arctic Ocean are also at risk due to thinning ice, which increases the light available for photosynthesis. This can change phytoplankton blooming seasons.

"The organisms that feed on them can miss the bloom with consequences for the entire food web of the Arctic," Hill said.

Katsioloudis joined the research team in 2017 when Hill asked if he could help design and fabricate a light sensor to replace the \$800 one she had been using on the buoys.

Using 3-D printing technology, Katsioloudis, with the help of ODU lecturer Basim Matrood, created a new version for around \$40. The updated sensor has the potential to be used in other environmental research.

ODU President John R. Broderick said the TODAY show is highlighting research the University has been pioneering for more than a decade. In 2010, Broderick instituted the Climate Change and Sea Level Rise Initiative, now known as the ODU Resilience Collaborative, to examine the threat of sea level rise and its effects on Hampton Roads.

"Climate change and sea level rise are undeniable, especially in Virginia," Broderick said. "But the research at Old Dominion University has never been focused on only our region. Since 2008, ODU has been on the forefront of global coastal adaptation research. We've learned and shared critical information and strategies to help address its effects."

"Having the TODAY show accompany us on this trip is a dream come true for every researcher," Katsioloudis said. "It allows us to share the findings of our research and to educate individuals across the globe. Bringing this type of awareness could eventually influence the creation of new regulatory measures that will protect the environment and ensure its existence for future generations."

The team's trip is being funded by a grant from the NSF Office of Polar Programs and the Joshua P. and Elizabeth E. Darden Foundation. You can follow the buoys and learn more on the project's [website](https://sites.wp.odu.edu/BORG/). (<https://sites.wp.odu.edu/BORG/>)

Contact

Public Affairs & News Bureau (/public-affairs)

1000 Koch Hall

Norfolk, VA 23529

757-683-3114 (office)

757-683-5501 (fax)

https://www.odu.edu/news/2019/3/odu_arctic_today