

RI EPSCoR brings Bay science to a broader audience



Sunshine Menezes: Science communication skills

Sunshine Menezes, Executive director Metcalf Institute for Marine & Environmental Reporting

Tracking the impact of climate change on marine life and ecosystems demands the attention of researchers throughout the Rhode Island NSF EPSCoR community. Yet, the work doesn't end with the data gathered, conclusions drawn and findings published.

These scientists also have to communicate about their research and the meaning of their work, not only so we understand what is taking place, but also to inform development of policies that will better prepare the Ocean State and its people for an uncertain future.

And yet, explains Sunshine Menezes, executive director of the Metcalf Institute for Marine & Environmental Reporting, scientists traditionally do not receive the training needed to engage an audience without a scientific background: "We go through rigorous training in graduate school about how to conduct our research. But, in terms of communicating research goals and findings, graduate students' training only prepares them to interact with other scientists."

As part of the University of Rhode Island Graduate School of Oceanography (GSO), the Metcalf Institute serves as an international leader in science training for journalists. The EPSCoR grant brought Metcalf on board to flip the paradigm and deliver communication expertise to scientists.

"This grant allowed us to focus our efforts on the other side of the coin," says Menezes, who also holds a Ph.D. in biological oceanography from the URI GSO. "The RI EPSCoR funding is intended to give the grantees whatever they need to boost themselves to the next level, and that is exactly what has happened with Metcalf Institute."



Photo by RISD Nature Lab

Jennifer Bissonnette, Rhode Island School of Design Biological programs designer, The Nature Lab SURF program mentor

With an undergraduate degree in biology, a Ph.D. in marine science, and a passion for art, Jennifer Bissonnette embodies what Rhode Island School of Design brings to the Rhode Island NSF EPSCoR table — the marriage of scientific investigation and artistic inquiry.

The Rhode Island EPSCoR jurisdiction is the only one in the country to include an art and design school, and the partnership has exceeded expectations, enriching the institution and its students as well as the RI EPSCoR community in both intended and previously unimagined ways.

"If you only hear the science, it doesn't always resonate," says Bissonnette, who holds oversight responsibility for the microscopy, imaging, and aquatic systems developed through EPSCoR funding at the RISD Nature Lab. "It doesn't evoke a connection, an urge, a willingness to protect Narragansett Bay in the face of climate change.

"Once you see these organisms, these fish, and get told the story that the science is analyzing, it's not us versus them anymore. We are all a part of it and we are connected. That is what engages people."

Together, the EPSCoR equipment and the RISD pedagogy set the stage for students to take in the science and be rigorous about the discipline while exploring from an emotional perspective, Bissonnette explains: "People have multiple sides to themselves. Science fills our need for knowledge, and the arts evoke meaning.

"In a way, combining the two gives us the freedom to look at the whole picture, reinvigorating the science without losing the factual basis and with the kind of expressiveness that will engage the public."



Jennifer Bissonnette: Novel methods of telling the story