

By Pamela Ellertson

Art and Science Join Forces at The Umbrella Arts Center

“People have been deaf to the science of climate change, there needs to be another way to reach them,” says Stephanie Marlin-Curiel, the visual arts manager at the Umbrella Arts Center in Concord, Massachusetts, and co-curator of its second environmentally themed exhibition in

less than a year, *Tapped In: Moving Hearts and Minds through Art and Science*.

This statement reflects a shift at the Umbrella, one that seeks to weave environmental themes throughout its programming. For this show, the work of ten climate scientists will be reimagined and interpreted through the creative

lens of ten environmental artists. “I handpicked artists I knew were passionate about the environment,” says Marlin-Curiel.

Finding scientists willing to collaborate was somewhat effortless says Dr. Linda Booth Sweeney, an award-winning author and systems educator who is co-curating the exhibition. “Most of them did not need to be convinced. I asked them ‘what message in your work needs to be amplified?’” She adds that as scientists, “many of us have our hair on fire,” with regards to the often laissez-faire attitude with which the science surrounding the climate crises is met. Her frustration is backed up by her own research. As a doctoral student at Harvard she coauthored a paper, “Understanding Public Complacency about Climate Change,” with another leader in the field of climate science, John Sterman, a Jay W. Forrester Professor of Management at the MIT Sloan School of Management and the director of the MIT System Dynamics Group and the MIT Sloan Sustainability Initiative.

Sterman’s popular metaphor for climate change known as “Bathtub Dynamics,” which Sweeney helped promote, was featured as a Big Idea by *National Geographic* in 2005. It also provides the thematic basis for *Tapped In*. In it, Sterman uses a bathtub as a metaphor for climate change. The water flowing from the bathtub tap represents the emission of greenhouse gases, like carbon dioxide, into the atmosphere. The water level in the tub represents the amount of greenhouse gases in earth’s atmosphere. The drain symbolizes the rate at which greenhouse gases are taken out of the atmosphere through both natural and human-assisted mitigation processes. The problem we now experience, explains Sweeney, is that “If we put two times as much in the tub as is going out, the tub will overflow.” The result? Global warming and climate change.

Multidisciplinary environmental artist Raquel Fornasaro was already a fan of Sterman’s work and familiar with the bathtub analogy when Marlin-Curiel invited her to collaborate for *Tapped In*. Conducting research for her solo

