

Artist: Ali Trueworthy

Juried Winner

### **Artist Statement**

This piece was inspired by physical concepts of ocean wave energy tested and exhibited by data taken in O.H. Hinsdale Wave Lab at Oregon State University. The research was focused on understanding the ways that wave energy converters interact with waves and, thereby, change the wave field. We used these concepts of hydrodynamic interactions to establish a method for creating this piece. The piece, made with acrylic paints on canvas, was interactively created with visitors young and old at DaVinci Days in Corvallis, OR. We, along with the visitors to the exhibit, placed five splotches of paint in the same configurations as the wave energy converters were placed in experiments on the 6x9 foot canvas. Then we painted a different colored stripe of paint along a PVC pipe as a conceptual representation of a wave. We helped visitors roll the PVC pipe through the splotches of paint and on down the canvas. The paints interacted, and as the day went on, the repeated method created even more interaction through which we ended up with this artwork. We gave the visitors at DaVinci Days a tactile, creative way to explore the concepts of wave-wave energy converter interactions. Many people had heard of wave energy, as the Oregon Coast is the hub for research and testing of marine energy devices in the United States.

The making of this piece was itself a coastal journey. It was important to us to not just let the science be reflected in the art, but to us the science to inspire the methods used to make the art. We tested many methods, and were delighted with the accessibility and results of this one. Creating the piece collectively with participants gave us the time and space to share the science and artistic methods with participants, hear their concerns about the oceans, wave energy, and climate change, and discuss ideas of better futures. One young boy, while rolling his PVC pipe and asking questions about wave energy said, “wow, it seems like you are going to save the world.”

I smiled and said, “I hope so, but there are many different things that we all need to do.” He agreed and I asked him what he thought was one of the first things humans needed to do. He began, “Well, first, we have to go green...” This 10-year-old showed me a perspective on the climate emergency that I rarely see. We sat on the grass, wet paint on our hands in the hot valley sun, sharing an experience that broke boundaries and allowed us to share our worries and our hopes. We, the artists, believe that creating art also creates space for exploration and new pathways for scientific inquiry. We are both female engineers and creatives, inspired by the explosive opportunities between art, science, and engineering. We aim, through our artwork, to give voices to the concepts, solutions, and individuals which may otherwise be overlooked.

*Ali Trueworthy is a PhD student in Mechanical Engineering at Oregon State University doing research in ocean wave energy and a Master's of Arts student in Environmental Arts and Humanities in which she works with topics of climate change, technology, and renewable energy. Paris Myers is an undergraduate at Oregon State University in Biological Engineering and Fine Art. She pursues many projects at the intersection of art and engineering and is a part of the Honors College.*

### **Images**

1. Close-up of acrylic on canvas
2. Artist Ali Trueworthy painting with DaVinci Days visitor
3. Artists Paris Myers and Ali Trueworthy with entire canvas



