Kaitlyn Becker

Kaitlyn Becker is an assistant professor in the Mechanical Engineering Department and recipient of the Doherty Professorship in Ocean Utilization at MIT. She completed her B.S. in Mechanical Engineering at MIT in 2009, after which she worked on subcutaneous defibrillators as a manufacturing engineer for Cameron Health Inc, and then worked on the development of various nanofabrication technologies and UV water treatment as a senior engineer for Nano Terra Inc. She completed her PhD in Professor Wood's Microrobotics Lab in 2021 and was postdoctoral researcher in Professor Mahadevan's Soft Math lab at Harvard University. Her primary research thrust is on gentle and adaptive soft robots for grasping and manipulation from the desktop to the deep sea and focuses on novel soft robotic platforms that add functionality through innovations at the intersection of design and fabrication. Her work has been featured on the covers of the journals Soft Robotics and Advanced Functional Materials, and in the Unseen Oceans special exhibit in the American Natural History Museum. Her robotic platforms have also been successfully tested at depths down to 3.5km on research vessels including the Nautilus (Ocean Exploration Trust), Falkor (Schmidt Ocean Institute), and the Rachel Carlson (MBARI). She is a recipient of a Microsoft graduate research scholarship and a NSF Graduate Research Fellowship. Outside of her research and teaching in Mechanical Engineering, she also teaches glassblowing in the Department of Material Science and Engineering at MIT, where she fuses art and applied engineering in her classes.