Who is Oceanographer Amy Bower?

by Amy Bower, Physical Oceanographer

Woods Hole Oceanographic Institution

Amy Bower is a senior researcher at Woods Hole Oceanographic Institution, or WHOI for short (pronounced who-ee) on Cape Cod in Massachusetts. She has been an oceanographer for more than 35 years. Amy studies deep ocean currents and their impact on Earth's climate.

Amy grew up in a coastal town in Massachusetts, where she fell in love with the oceans. She took as many science classes as possible in high school, and then went to Tufts University near Boston to study physics. While Amy was there, she discovered a science topic called physical oceanography, and decided to become an oceanographer. So Amy went to the University of Rhode Island and studied there to get a Ph.D in Oceanography.

While Amy was working on her Ph.D., she started to notice some changes in her vision, and she was eventually diagnosed with Retinitis pigmentosa (RP). An eye doctor recommended that Amy find something else to do for her career, but she was determined to be a physical oceanographer. So she found other scientists who were blind or had low vision to help her learn new ways to be a scientist, and educated herself on assistive technologies like screen readers, tactile graphics and data sonification. As her vision slowly declined over the years, Amy had to adjust to using first a mobility cane, and then a guide dog to get around safely and efficiently. The Woods Hole Oceanographic Institution provided some accommodations as well, like sighted assistants for reading graphics and participating in scientific meetings and conferences. Amy has led a number of oceanographic expeditions in the North Atlantic Ocean and the Indian Ocean to investigate currents deep below the ocean surface.

Amy lives on Cape Cod with her family, and she enjoys many outdoor hobbies there, like sailing, fishing, hiking and tandem biking. She also loves growing garden vegetables and spending time with friends and family.

To learn more about Amy's journey, listen to her talk titled "Inclusion by Example: Adventures of a Blind Woman Navigating the Oceans of STEM Professionals" which she presented at the National Federation of the Blind Convention in July 2024. Here's the link to a YouTube video of her talk. (Amy starts at 3:24:30 and ends at 3:51:48)