



national science week 2019

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Seals in electric hats: ocean secrets revealed!

Oceanographer

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Born in Brazil, I grew up wanting to be an astronaut, an actress, a writer and a journalist. Nowadays I am a physical oceanographer!



I have been fascinated by Antarctica since I got involved in science. I look at how climate change affects the ocean, which means I have been working on boats, on computers, with equipment both large and small in Antarctica and at home. At the moment, I am doing research at the Institute of Marine and Antarctic Studies, surrounded by other scientists working to understand the ocean. One of my favourite things is to be out on the sea!

My current project focuses on the melting of ice shelves in East Antarctica and how this input of freshwater affects the overall ocean circulation. To measure the temperature and salinity (saltiness) of the water in the region, I get to use special marine explorers to do the swimming work for me: elephant seals!

We attach a device (an electric hat) to their heads that contains salinity, temperature and pressure sensors and they transmit all the data they collect to us via satellite. After a year or so, the device falls off, and their contribution to our research is done.



For more information about studying marine and Antarctic science: www.imas.utas.edu.au