Helen Johnson

What inspired your interest in meteorology?

I have always been fascinated by the natural world, and knew I would choose a physical science degree, but I really wanted it to have an applied, practical aspect to it too. It was the Force 8 gale I experienced while sailing across the North Sea as a trainee on the tall ship Sir Winston Churchill that finally inspired me to study meteorology! My degree provided a solid grounding in basic physics as well as the workings of weather and climate – I loved the theoretical as well as the practical sides of it. Importantly, it also taught me that the ocean plays a crucial and poorly understood role in our climate system, and I've been working on trying to improve that understanding of the ocean ever since.

After 18 fun months working as a research assistant for a physical oceanography professor at Massachusetts Institute of Technology in Boston, USA, I returned to Reading University to do a PhD. I was based in the Meteorology Department, but my work focused on understanding the large-scale circulation of the ocean and how it responds to change. All part of the bigger picture of learning about our climate system! Afterwards I spent two and a half years in Victoria, Canada studying smaller-scale ocean currents, such as the flow through the channels that connect the Atlantic to the Arctic Ocean.

What job do you do now?

I am now a researcher and lecturer at Oxford University where I am funded by the Royal Society to work on ocean circulation and its role in climate. I am particularly interested in the links between the polar oceans and the Atlantic thermohaline circulation, which helps to keep temperatures here in the UK far warmer than the average for our latitude. As well as working with computer models and theory, I spend large chunks of time at sea on research ships and coastguard icebreakers to collect observations of the ocean, in particular the channels of the Canadian Archipelago to the west of Greenland.

Qualifications

PhD in Physical Oceanography from the Department of Meteorology, University of Reading
BSc in Physics and Meterology from the University of Reading
A-levels in Maths, Physics, Chemistry, French and General Studies