Arctic ocean placement.

For my summer placement I undertook 5 weeks sea-going research onboard the James Clark Ross and then 2 week laboratory experience at the university. The research cruise set off from Immingham travelling through the north sea, past the Faroe Islands to reach our sampling transect which started off the coast of Greenland.

For my research project I investigated the distributional and compositional differences of phytoplankton communities at the ice edge and open water over a variety of latitudes. I took water samples from the conductivity, temperature and depth profiler (CTD) and filtered them through a vacuum pumped filtration rig using three different pore size filters to trap the different phytoplankton communities for land based analysis.
Whilst working on the ship I managed to see 14 polar bears, numerous seals and whales and many species of seabirds. The cruise also made a stop at Longyearbyen in Svalbard which gave us all a chance to get on to dry land, briefly. During my time-off I visited, with some fellow researchers, the Longyearbyen museum (which had lots of stuffed polar bears!) and managed to get very confused with the currency! After this short land stop we headed into the Arctic Ocean where we managed to reach 83⁰N only 400 miles off the north pole!

Back in York I used a fluoremeter to measure the chlorophyll concentration to analyze the contribution each size fraction made to the total chlorophyll biomass at the station I sampled. With some exciting results!

This placement has given me extensive sea-going and laboratory experience, plus the opportunity to appreciate skills I would need to undertake further scientific research. The cruise was a great chance to network and make some new friends. I was also really lucky to see some awesome wildlife!