

Francisca Vermuelen – Fellowship Report, 2010-11

I am a PhD student at Victoria University of Wellington and I received a SCAR fellowship for 2010-2011. My research is a comparison of particulate organic carbon and biogenic silica availability between sea ice algae in the Antarctic and the Arctic. I used the Fellowship to do fieldwork in both Antarctica and the Arctic Ocean and also to attend a course on ice-covered ecosystems at UNIS (University of the Arctic, Svalbard).

The Fellowship gave me the opportunity to learn an enormous amount, including a number of new techniques, as well as collecting samples for my own research. Perhaps most importantly, it gave me the opportunity to talk about science ideas and research with several researchers leading in their field. I was able to interact with a wide range of researchers, from students to post-doctoral fellows to full professors.

My results show that silica availability is important in controlling the rate of growth of sea ice diatoms of both hemispheres. I still have much to do in my research, and I look forward to further field studies in both locations. I can't thank SCAR enough for the opportunities they give me in my studies and research.

Costs	2010-2011
Silica analysis	700
Carbon (POC and DOC)	950
Cultures maintenance	600
Genetic work	2000
Svalbard course	650
Field work Svalbard	900
Svalbard/Tromsø flights and shipping	3350
Svalbard/Tromsø Accommodation	2200
Miscellaneous	250
Total US\$	11600