Overseas Research Visit Fund

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Prior to my second PhD field season in January 2018, I received funding from the NERC E^3 DTP Overseas Research Visit Fund to visit Sernageomin (Servicio Nacional de Geología y Minería), the Chilean Geological Service. For my PhD, I am investigating the Holocene eruptive history and magmatic evolution of Volcán Quetrupillán, located in the Southern Volcanic Zone of Chile. In the past, Quetrupillán has been overlooked as a potential source of hazard due to the high frequency of volcanic activity at neighbouring Volcán Villarrica, and as such, very few scientific studies have been conducted at Quetrupillán.

I spent a week in the Sernageomin office in Santiago, working with members of the Red Nacional de Vigilancia Volcánica (National Network of Volcanic Surveillance). I was able to learn exactly what work Chilean scientists have previously done at Quetrupillán, highlighting the importance of my investigations to fill in the large gaps in our knowledge of this very interesting and potentially very hazardous volcano.

Sernageomin have recently begun a project to study the Pre-Holocene history of Quetrupillán, and as a result of my visit, we have formed a collaboration between our works. While conducting my own fieldwork on Quetrupillán, as well as collecting Holocene rock samples for my studies, I also collected Pre-Holocene samples that I have given to Sernageomin to support their investigations. In return, they also took some of my Holocene samples to argon date for me, providing me with important data as to the age of the numerous eruptions of Quetrupillán. Sernageomin's long-term aim is to construct a detailed geological map of the volcano, which my PhD project will contribute towards.

Members of the Sernageomin team asked me to give a presentation about what I have done so far during my PhD, and what I hope to do next. Having only started Spanish classes when I began my PhD, I was very proud that I was able to give a full scientific presentation about my work at Quetrupillán, all in Spanish!

At the summit of Quetrupillán, with the glacier infilling the summit crater in the foreground and Volcán Lanín in the background.