

Grant Report on Attendance of the AGU Fall Meeting, December 2015

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Summary

The BSG kindly awarded a travel grant of £845 to support my attendance at the AGU Fall Meeting in San Francisco, from the 14th-18th December 2015. I presented the main findings of my PhD research, including the results of a 2013 field trip to California that was also generously supported by the BSG. This was my first AGU meeting, and it was therefore a fantastic opportunity to meet other geomorphologists, in particular the SW USA research community. The conference gave me a very valuable chance to network with other geomorphologists and establish new collaborations, gain a broad overview of current research, receive useful feedback about my own work, and develop ideas for the next steps in my career.

Presentations

I delivered a poster presentation, "Glacial-interglacial climate changes recorded by debris flow grain size, eastern Sierra Nevada, California", in session EP33B, "Connecting landscape processes and the sedimentary record". This presented the main results of my PhD, specifically that the grain size distributions of debris flow fans in the SW USA record a sensitive signal of climate changes over the last ~120 ka. This work also included results from my 2015 *Earth Surface Processes and Landforms* paper, "Dating alluvial fan surfaces in Owens Valley, California, using weathering fractures in boulders". I received a lot of positive and constructive feedback about this work, which will be very helpful for improving publications I have in review and in preparation, and planning future projects. It was also a great opportunity to communicate the results of my research, and work sponsored by the BSG.

I was also a co-author on the oral presentation, "Grain size trends reveal alluvial fan sensitivity to late Pleistocene climate change", delivered by Alex Whittaker in session EP33E, "Mass extraction and grain size fractionation in sediment routing systems". This work formed one of my PhD chapters, and is currently in review for publication, making this another excellent opportunity to communicate the results of my PhD to a broader audience. Both of these presentations attracted considerable positive interest from geomorphologists who had not seen my research before.

Sessions Attended

This was a particularly important time for me to attend AGU, while finalising my PhD and planning my future research directions in a postdoc and beyond. Attending the diverse AGU sessions on geomorphology, sedimentology, tectonics and climate was therefore extremely useful. Highlights included presentations by Taylor Schildgen (session T12B) about the response of landsliding to climate changes in the Argentinian Andes; Ajay Limaye (session EP43C) about autogenic terrace formation; Colin Stark (session EP51D) about the seismic signals of very large landslides; and Vamsi Ganti's 'Sharp Lecture' about delta mechanics. I attended a total of 18 sessions, on a range of topics in geomorphology, sedimentology, tectonics, natural hazards, and climate change. I found these sessions extremely informative, and the long poster sessions in particular allowed me to have many useful conversations with other researchers. I also attended the 'Young Geomorphologists' meeting on Tuesday 15th December, which was a great chance to meet other young geomorphologists.

Additional Outcomes

Without the support of the BSG, it would have been impossible for me to attend AGU. This grant also made it possible for me to visit Caltech in Pasadena the week before AGU, where I presented my PhD results in a 1-hour long 'Geoclub' seminar and met with a number of professors, postdocs and PhD students. I also presented my AGU poster at the 'Gilbert Club' spin-off meeting at the UC Berkeley campus during the weekend after AGU. I strongly acknowledged the support of the BSG at these opportunities.

Use of BSG Funds

I was awarded a total of £845, which completely covered the cost of my return flights between London and California (amounting to £753) and contributed towards the cost of my accommodation in San Francisco (amounting to £404); receipts are attached. I paid for my subsistence and registration expenses myself. I would not have been able to attend AGU without this support, so I appreciate this grant very much – thank you!