

Antarctica New Zealand Science Update (46) August 2009

1. **2009 FRST/Antarctica New Zealand bidding round:** FRST has opened the portal for proposal development and submission. You can find all of the documentation for this round at: <http://www.frst.govt.nz/funding/research/antarctica>
2. Shulamit has just returned from the **Xth SCAR Biology Symposium** that was held in Sapporo, Japan. There was a strong delegation of 17 New Zealanders, most of whom presented results from their work supported by Antarctica New Zealand. The level of all presentations was very high and Shulamit was especially impressed by the excellent presentations given by the 6 New Zealand students: Angela McGaughran (Massey University); Nicholas Demetras (University of Waikato), Crystal Lenky (University of Canterbury), Lisa Bryant, Eileen Koh, and Meghannah Rajanahally (Victoria University of Wellington) – congratulations to them all!! The New Zealand programme certainly had a very high visibility at the event and many constructive discussions with other scientists were had by all. Shulamit also received good feedback on her presentation about using the Latitudinal Gradient Project as a model for extending such a study across the whole of Antarctica.
3. **Australian Antarctic Research receives a \$20m boost** - go to: <http://www.aad.gov.au/default.asp?casid=36705&source=17&rank=3>. Australia has already shown interest in increasing its collaborations with the New Zealand Antarctic programme in the future, and Antarctica New Zealand will be working towards forging these connections.

This month we'd like to introduce two 'focus' items that will appear each month:

4. **Data Focus:** As reported in last month's update, metadata on all science supported by the NZ Antarctic programme is now available on the Antarctic Master Directory through here: http://gcmd.nasa.gov/KeywordSearch/Home.do?Portal=amd_nz&MetadataType=0. If you receive enquiries prompted from the entries in the Antarctic Master Directory – please let Shulamit know so that this information can be used to show interest that has been generated from these entries.
5. **SCAR Focus:** The Scientific Committee on Antarctic Research (SCAR) is often mentioned in these updates, but do you know what its role actually is? SCAR is charged with initiating, developing and coordinating high quality international scientific research in the Antarctic region. SCAR does not fund science *per se*, but is an important organisation that brings the international community together and offers a way to structure the international scientific effort in Antarctica. To find out more – go to <http://www.scar.org/>. In particular SCAR has 5 scientific research programmes that cover most of the disciplines of Antarctic research:
 - a. [Antarctic Climate Evolution](#) (ACE)
 - b. [Subglacial Antarctic Lake Environments](#) (SALE)
 - c. [Evolution and Biodiversity in the Antarctic](#) (EBA)
 - d. [Antarctica and the Global Climate System](#) (AGCS)
 - e. [Interhemispheric Conjugacy Effects in Solar-Terrestrial and Aeronomy Research](#) (ICESTAR)

Great opportunities for collaboration and exchange of ideas are offered through these programmes, and New Zealand Antarctic researchers contribute to each of these. In future Science Updates we will provide more information on these programmes and show how you can get involved in them. Meanwhile – click on the links above and find out more.....

6. **Six Antarctic projects offered as part of the University of Canterbury Scholarship Scheme.** See details below on the relevant projects and go to <http://www.canterbury.ac.nz/scholarships/ss/summerscholarship.shtml> for more information on the scholarship scheme.
- a. Climate history in Antarctic snow-analysis of ice radar data from Ross Island - <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1686.pdf>
 - b. Flow speed of ice streams and glacier tongues in the western Ross Sea region <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1687.pdf>
 - c. The cumulative impacts of Antarctic site visitation <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1688.pdf>
 - d. Flow features of the Darwin-Hatherton Glacial System, Antarctica <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1697.pdf>
 - e. Neutrino astrophysics using the IceCube detector at the South Pole - Improved modelling of the Ice Properties <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1728.pdf>
 - f. The Politics of Antarctica <http://www.canterbury.ac.nz/scholarships/ss/SSProjects/1754.pdf>
7. The **Association for Polar Early Career Scientists August 2009 newsletter** can be downloaded from: at http://apecs.arcticportal.org/index.php?option=com_content&view=article&id=435:apecs-august-newsletter&catid=22:highlights&Itemid=70

Publications Submitted to Ant NZ this month:

Gordon, S., Balks, M.R.

The Latitudinal Gradient Project (LGP): summary of progress to date and proposed activities.

In: Antarctica: A Keystone in a Changing World – Online Proceedings of the 10th ISAES X. Cooper, A.K. Raymond, C.R. (eds). Washington DC: US Geological Survey, 2007.

USGS Open-File Report 2007-1047, Extended abstract 192.

Hunter, M.W., Dykstra, R., Lim, M.H., Haskell, T.G., Callaghan, P.T.

Using earth's field NMR to study brine content in Antarctic sea ice: comparison with salinity and temperature estimates.

Applied magnetic resonance 2009.

doi:10.1007/s00723-009-0003-9

MacDonell, S.

Meltwater generation and drainage system development on an Antarctic cold-based glacier.

PhD University of Otago, 2008.

Wait, B.R., Nokes, R., Webster-Brown, J.G.

Freeze-thaw dynamics and the implications for stratification and brine geochemistry in meltwater ponds on the McMurdo Ice Shelf, Antarctica.

Antarctic science 21: 243-254 2009.

doi: 10.1017/S0954102006000563