# Antarctica New Zealand Science Update (45) July 2009

1. **Research Endowment Fund:** Antarctica New Zealand has awarded $50,000 to Gateway Antarctica, University of Canterbury to assist them to set up a Research Endowment Fund. This follows our decision in May 2008 to financially assist Victoria University of Wellington to establish an Antarctic research endowment fund. This has grown significantly since, and now regularly funds early career participation at SCAR meetings, Antarctic research and international collaboration. Antarctica New Zealand received proposals from three universities, but Gateway Antarctica's proposal was the most compelling. The Endowment Fund will be managed through the University of Canterbury Foundation and aims for a total capital sum of $1 million. For enquires about the fund contact Professor Bryan Storey.

2. **Request for Proposals:** Antarctica New Zealand and the Foundation for Research, Science and Technology (FRST) received 3 submissions on the Request for Proposals (RFP) document. Antarctica New Zealand and FRST are incorporating the feedback and will release the revised RFP by the end of July. The FRST portal for submitting proposals will be opened at the end of July.

3. **Antarctic Metadata**: Ceisha Poirot has now finished her 18 month contract collecting NZ Antarctic metadata. Her work includes: 850 metadata records compiled and entered onto the Antarctic Master Directory which describe all NZ Antarctic data collected over the past 50 years through over 100 event supported; All data and/or sample locations identified - ~ 200 of the entries have direct web links to the data or samples; All Publications in the NZ Antarctic bibliography linked to each metadata record where appropriate, as these often hold much of the data; Appropriate national data and sample repositories identified; Comprehensive list of all metadata records compiled highlighting those records where the data and/or samples are NOT easily accessible (e.g. stored in office/on personal computer/in garage). Out of 30 SCAR nations, New Zealand is now the third highest contributor to the Antarctic Master Directory behind Australia and the US.

   Benefits already gained include: international scientists contacting New Zealand Antarctic scientists to make collaborations based on their data collected; New Zealand Antarctic scientists identifying samples and data relevant to their work that they had not previously known about; Valuable data and samples saved from destruction. We are now developing a science data policy to ensure the safekeeping of future data and samples collected through the New Zealand Antarctic programme. To view NZ Antarctic metadata records go to: http://gcmd.nasa.gov/KeywordSearch/Home.do?Portal=amd_nz&MetadataType=0. Thanks to Ceisha for her great work on this and to all of you who helped with her investigations.

4. The **Annual Antarctic Conference** hosted by the University of Auckland earlier this month was a great success with a record 160 delegates attending. The conference workbook can be found at: http://www.antarcticanz.govt.nz/article/6973.html#10429. A summary of the APECS workshop 'Taking your research further- communicating science to the wider public' can be found at: http://apecs.arcticportal.org/index.php?option=com_content&view=article&id=344:apecs-panel-discussion-in-auckland-a-success&catid=21:news&Itemid=69 . Many thanks to all of you who made the conference such a success.

5. Shulamit is heading off tomorrow to the **SCAR Biology Symposium** in Sapporo, Japan to give an oral presentation entitled 'The Latitudinal Gradient Project – A Model for Antarctic-Wide Gradient Studies'. She will also be attending to her duties as the Secretary of the SCAR biology programme – Evolution and Biodiversity in the Antarctic. Shulamit will be back in the office on August 17th. Approximately 15 NZ Antarctic biologists will also be attending the symposium.

6. The **APECS July 2009 newsletter** can be downloaded from: http://apecs.arcticportal.org/images/stories/newsletters/apecs_july2009_newsletter.pdf

7. The latest edition of the **SCAR Newsletter** is now available to view on the SCAR website at: http://www.scar.org/news/newsletters/issues2009/jun09.html

8. **Call for Nominations - The Martha T. Muse Prize for Science and Policy in Antarctica:** The "Martha T. Muse Prize for Science and Policy in Antarctica" is a US$ 100,000 unrestricted award presented to an individual in the fields of Antarctic science or policy that has demonstrated potential for sustained and significant contributions that will enhance the understanding and/or preservation of Antarctica. The Prize is inspired by Martha T. Muse's passion for Antarctica and is intended to be a legacy of the International Polar Year 2007-2008. The prize-winner can be from any country and work in any field of Antarctic science or policy. The goal is to provide recognition of the important work being done by the individual and to call attention to the significance of understanding Antarctica in a time of change. A web site with further details, including the process of nomination and selection of the Prize recipients is available at www.museprize.org. The Prize is awarded by the Tinker Foundation and administered by the Scientific Committee on Antarctic Research (SCAR).

**Publications submitted to Ant NZ this month:**

Atkins, C.B., Dunbar, G.B.
Aeolian sediment flux from sea ice into Southern McMurdo Sound, Antarctica.
Global and planetary change 2009.
doi:10.1016/j.gloplacha.2009.04.006

Babalola, O.O., Kirby, B.M., Le Roes-Hill, M., Cook, A.E., Cary, S.C., Burton, S.G., Cowan, D.A.
Phylogenetic analysis of actinobacterial populations associated with Antarctic Dry Valley mineral soils.
Environmental microbiology 1(3):566–576 2009.
doi:10.1111/j.1462-2920.2008.01809.x

Bradshaw, J.D., Gutjahr, M., Weaver, S.D., Bassett, K.N.
Cambrian intra-oceanic arc accretion to the austral Gondwana margin: constraints on the location of proto-New Zealand.
Australian journal of earth sciences 56:587-594 2009.
doi: 10.1080/08120090902806339

Cannone, N., Seppelt, R.D.
A preliminary floristic classification of southern and northern Victoria Land vegetation, continental Antarctica.
Antarctic science 20: 553-562 2008.
doi:10.1017/S0954102008001454

Cockrem, J.F., Barrett, D.P., Candy, E.J., Potter, M.A.
Corticosterone responses in birds: Individual variation and repeatability in Adelie penguins (Pygoscelis adeliae) and other species, and the use of power analysis to determine sample sizes.
General and comparative endocrinology 163: 158–168 2009.

Dempsey, D.E.
Observations and modelling of platelet ice in McMurdo Sound, Antarctica.
MSC., Dunedin University of Otago, 2009.

Jago, J.B., Cooper, R.A.

A Glyptagnostus stolidotus trilobite fauna from the Cambrian of northern Victoria Land, Antarctica.
New Zealand journal of geology and geophysics 48: 661-681 2005.

Jago, J.B., Cooper, R.A.
Middle Cambrian trilobites from Reilly Ridge, northern Victoria Land, Antarctica.
AAP memoir 34: 473-487 2007.

Murphy, D.J., Aso, T., Fritts, D.C., Hibbins, R.E., McDonald, A.J., Riggin, D.M., Tsutsumi, M., Vincent, R.A., George, S.E.
Source regions for Antarctic MLT non-migrating semidiurnal tides.
Geophysical research letters 36: L09805 2009.
doi:10.1029/2008GL037064

Seppelt, R.D., Nimis, P.L., Castello, M.
The genus Sarcogyne (Acarosporaceae) in Antarctica.
Lichenologist 30: 249-258 1998.

Soo, R.M., Wood, S.A., Grzymski, J.J., McDonald, I.R., Cary, S.C.
Microbial biodiversity of thermophilic communities in hot mineral soils of Tramway Ridge, Mount Erebus, Antarctica.
Environmental microbiology 11(3):715-728 2009.
doi:10.1111/j.1462-2920.2009.01859.x

Sutherland, D.L.
Microbial mat communities in response to recent changes in the physiochemical environment of the meltwater ponds on the McMurdo Ice Shelf, Antarctica.
Polar biology 32:1023-1032 2009.
doi: 10.1007/s00300-009-0601-x

Wilson, G.S., Tinto, K.J.
Calibration values for gravity base stations, McMurdo Station and Scott Base, Ross Island, Antarctica.
Antarctic science 2009.
doi:10.1017/S0954102009001977