Promotions

2016 has been a successful year for academic staff promotions in the Department.

- Marlène Villeneuve and Kari Bassett were promoted to Senior Lecturer Above the Bar,
- Tom Wilson and Ben Kennedy to Associate Professor, and
- Andy Nicol progression within Professorial rank.

CONGRATULATIONS!

Decant News

The decant to Rutherford for staff and students on the 3rd and 4th floor of von Haast is on track. Rebekah, Janet and John are moving Monday 12th December. Please be patient with email and phone replies as we will most likely be offline from this afternoon until Tuesday morning.

Thank you to everyone for all the hard work, it’s not an ideal time of year on top of everything else that is going on! But we are all in this together, everyone still seems to be smiling and we will make the most of our new home in Rutherford.

A very big thank you to Rob for all the work he has done (always with a smile, even though at times it must seem like herding cats) and will continue to do with this move over the summer!!!! You’re a star Rob!

A few important things:

- 1st Move – Monday 12th December (Rebekah, Janet, John to Rutherford, Anekant to Von Haast 103)
- 2nd Move – Monday 9th January onwards (staff and students on level 3 and 4 von Haast)
- Non fixed furniture in offices need to either have a ‘Hold’ sticker if you don’t want it or a green label with your new office number on it.
- Please go over and look at your new office and if possible provide Rob with a plan of how you would like your new office set up.
- Everything else should be boxed up and labelled ready for the move from 9th Jan.
- Valuables or anything you think you will need urgently in January it would be best to take home, or keep separate and labelled accordingly
New Papers Published

- The following is a link for a paper that was accepted for publication in Earth-Science Reviews (Darren Gravley). [http://authors.elsevier.com/a/1ToMU2weQTZ~Q](http://authors.elsevier.com/a/1ToMU2weQTZ~Q)

- Two new papers that just came out in Journal of Quaternary Science. (Josh, Mark, and Darren)

Geology in the News

Many of our staff have been out in the field since the November 14th Earthquake – check out some of the links and articles below!


Presentations on the Kaikoura earthquakes have been uploaded to the following location - K:\Andy Nicol\Kaikoura Earthquake. Feel free to distribute and use with appropriate acknowledgements. (Andy Nicol)
UC Geologists key contributors to the scientific response following the M7.8 Kaikoura Earthquake and ongoing aftershock sequence

Jarg Pettinga, Andy Nicol and Clark Fenton – Department of Geological Sciences

Since 14 November a large team of staff and postgraduate students from the Department of Geological Sciences have been working long hours to support the science response to the massive Kaikoura Earthquake. Our team has focussed on capturing fault ground rupture data from the epicentral region in north Culverden basin, west and north of Waiau township, as well as in the upper catchment area of the Leader River and near Charwell along the Inland Kaikoura Road.

While in the first few days after the earthquake we were undertaking field reconnaissance, that quickly moved on to detailed GPS surveying of the fault rupture locations and fault offsets. Even now three weeks after the earthquake we continue to locate new fault ruptures in more remote parts of the region. To date more than 70-80 km of fault ground ruptures have been documented by our team.

While the impact of the main M7.8 Kaikoura Earthquake and subsequent many moderate to large magnitude aftershocks has had a devastating impact on communities such as Waiau and Kaikoura as well as the regional infrastructure – especially the roading network, we are also seeing the severity of impact on the farmers in the region. On-farm facilities such as woolsheds and water supply pipe network are posing ongoing challenges for farmers. Our field mapping data will be an important part of the recovery strategy and decision-making over the coming months.

Scientifically we are generating a vast new database which will underpin future research both in terms of earthquake hazard assessment as well as a better understanding of the geologically driven landscape evolution of the NE South Island plate boundary zone. Already it is clear that this event is of global significance, the sheer scale and complexity of fault rupture, the impacts on our natural environment and the crustal dynamics involved will mean a lasting legacy of new insights into the geological and seismological processes in active tectonic regions straddling obliquely collisional plate boundaries.

Multiple fault ruptures north of Waiau township  (Photo: Kate Pedley)
The "Woodchester Wall" fault rupture scarp in the Upper Leader area  (Photo: Kate Pedley)

Oblique reverse left lateral ground rupture of the Leader Fault Zone.  (Photo: Kate Pedley)
Geological Sciences Postgraduate Sam Davidson recently participated in NIWA marine survey off east coast region of North Island and Marlborough

MSc student Sam Davidson was invited to participate in a NIWA led marine geological survey and sampling cruise across the Australia-Pacific plate boundary subduction zone offshore east coast North Island. For cruise leader Dr Phil Barnes (NIWA) this was planned primarily as a paleoseismic survey to establish evidence of very large pre-historic earthquake triggered turbidity sediment flows into the various continental slope basins which are numerous along the margin (refer figure).

Oblique view DEM of the Hikurangi Subduction Margin, east coast North Island. Image courtesy of Dr Joshu Mountjoy NIWA. Note the numerous elongate sedimentary depressions (basins) along the margin continental slope.

As well as seismic reflection surveying and swath bathymetry mapping of the seabed geomorphology, a key aim of the cruise onboard RV Tangaroa was to retrieve sediment samples and sub-seabed sediment cores.

The cruise successfully completed the survey and sampling targets and were still at sea when the Kaikoura Earthquake struck on 14th November. This presented an opportunity to divert course and collect new seismic reflection and swath seafloor bathymetry data across the co-seismically ruptured Needles Fault offshore from Cape Campbell south, and also to core and sample sediments in the Hikurangi Channel near Cook Strait, further revealing the presence of a newly deposited turbidity flow deposit there.

Sam Davidson will continue on working with NIWA researchers as part of his MSc thesis project, investigating the structural development of the deformation front along the edge of the subduction zone Australia-Pacific plate interface offshore Poverty Bay to East Cape.

Jarg Pettinga
Geological Sciences

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IMPORTANT DATES

Von Haast Farewell – Thursday 15th December – 3 – 5pm, 1st Floor Lab

Graduation – Congratulations to our students graduating on Friday 16th December!

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ADMIN OVER THE HOLIDAYS

New Phone Numbers

- Rebekah – 94384 (Rutherford 310)
- Janet – 94383 (Rutherford 310)
- John – 94364 (Rutherford 321B)

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Leave Dates

- Rebekah – Away Weds 21st Dec – Mon 16th Jan
- Janet – Away Weds 21st Dec – Thurs 12th Jan
- John – Thursday 22nd Dec – 4th Jan and Weds 11th – Mon 23rd Jan

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Mail – Mail will continue to be delivered to Von Haast until Tues 20th Dec then it will be held at the mailroom until Mon 16th Jan. After the 16th Jan mail for Academic staff and Postgrads will be delivered to the drop box in Rutherford.

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Merry Christmas and Safe and Happy Holidays!!!