**Benefits to U Otago from IODP and ICDP Membership**

The following is a selection of benefits to Otago from IODP/ICDP membership in recent years, contributed by those who have benefited. It is not yet a comprehensive list because we rely on those who have participated in IODP/ICDP events to contribute.

***This comprises the first systematic report of this nature to the Division of Sciences, who will co-ordinate IOPD/ICDP membership at Otago from 2016.***

A list of additional benefits in the preceding year will be provided to the Division by May 31 every year and used to update this document.

***Note: A publication list is needed. Christina Riesselman is presently co-ordinating this.***

**Benefits to Otago’s PBRF profile**

- IODP participation leads to external research funding: e.g., Claudine Stirling (Chemistry) is leading a ~$800k Marsden that may draw on sedimentary material obtained from the IODP archives; Christina Riesselman (Geology / Marine Science) holds a Marsden Fast-Start based on participation in IODP Exp. 318; Catherine Beltran (Chemistry / Marine Science) holds an NZARI grant that depends on IODP legacy material from Leg 177, Leg 188, and Exp. 318.

- Andrew Gorman is a member of the IODP Site Characterization panel and Virginia Toy is a member of the IODP Science Committee. Both memberships yield experience, scientific and industry networking opportunities (e.g. Toy attended Austr. Earth Science Conference 2014 and Petroleum Exploration Soc. Aus/Austr. Soc. Econ. Geol Conference 2015 with their support), and thus have PBRF and other funding stream benefits

- Membership allows us to drive the future of the science: Christina Riesselman is a co-proponent (with colleagues from Victoria, GNS, NIWA, and international institutions) on IODP proposal 894-APL, proposing to drill two Southern Ocean sites in conjunction with an expedition projected to sail in 2018. Future expeditions in this area are directly aligned with the 2014 Antarctic Horizons scan (Kennicutt et al 2014 - *Nature*) which will result in multiple Nature-Science type publications that we need to be involved in.

- ICDP supports the Alpine Fault - Deep Fault Drilling Project (DFDP), for which Virginia Toy is one of three Principal Investigators. They provided US$1.35M toward the costs of the phase of DFDP undertaken from Aug 2014 – Jan 2015, plus significant technical and logistical support. This is in addition to Marsden funding of NZ$1M.

- Participation yields high-profile publications, for example Virginia Toy is coauthor on 4 papers in *Science* [ERA = A\*, ISI = 33.587] in 2013 from JFAST, plus a swath of other papers and numerous conference contributions. Virginia Toy is also co-author on 5 papers in international journals from DFDP so far, including four in *Geology* [ERA = A\*, ISI =4.660]*.*

- Christian Ohneiser and others are still requesting samples from the repository for multiple projects that result in high-profile publications (e.g. Miocene CCD evolution, published in *Nature Communications* in 2015).

**Benefits to students in the Division of Sciences**

- While onboard the *JOIDES Resolution* Chris Moy taught 2-3 sedimentology lectures from the ship. It was “great for teaching and outreach”.

- IODP provides hands-on opportunities for Otago undergraduates. ANZIC marine geology master class has supported 5 Otago undergrads in the last three years across the departments of Geology, Chemistry, and Marine Science. Four of these have continued into postgrad study at Otago (L. Van Haastricht to MSc w/ Gorman and Ohneiser; B. Taylor-Silva to Honours with Riesselman; E. Perkins to MSc with Gorman; H. Love to MSc with Prior)

- IODP samples and data are used to teach labs at multiple levels (e.g. EAOS 111 *Seafloor Sediments*; MARI 431 *Quantifying sea ice extent and productivity changes using diatom flora in marine sediment cores*)

- Otago PhD student John Rolison (Chemistry) is currently sailing on IODP Exp 361 as an inorganic geochemist (30 January–31 March 2016).

**Benefits to Otago’s research environment**

- We have had 4 PhD students (Christian Ohneiser, Kirsty Tinto, Martin Jutzeler, John Rolison) and 2 staff (Virginia Toy, Chris Moy) sail on IODP expeditions in the last 6 years. Joining an expedition science party always leads to ongoing involvement in collaborative research and significant enhancement of publication records. IODP enforces strict requirements for publication by participants, so publications HAVE to result! David Prior was on an IODP cruise many years ago and could provide independent verification of the benefits to one's career.

- Recent appointee to Otago, Dr. Christina Riesselman, notes “Otago’s membership was a key consideration for me when I moved down here.  Maintaining access to IODP cruise opportunities and samples is fundamental to the program I’m trying to build.”

- From 2017 onwards the *JOIDES Resolution* will spend two years or more in the Southern Ocean, including drilling the Hikurangi Margin in FY2018. In the past this proximity has resulted in additional positions for NZ scientists either as local specialists or observers (which are also scientists). We may again see a greater share of seats (beds) available to our researchers, including opportunities for Otago staff and PhD students.

- ICDP have taken 2 New Zealanders/year, including Virginia Toy and Chris Moy, on training courses in Germany, which they cover all expenses for. They also pay for Virginia Toy to travel to Potsdam for their 5-year planning meeting/science conferences in November 2012 and Nov 2016. At this year’s meeting she will be taking a role in their management group.

- Membership of these consortia gives us rights to send participants on 'expeditions' = drilling projects, during which most expenses are covered by the programs, and sometimes provides access to 'post-cruise' research funds - e.g. Toy received ~$21k for post-JFAST research (plus a further AU$20k via collaborations), plus support to attend the 2nd post-cruise meeting in Santa Cruz.

- Media interest in these operations is also usually high - e.g. Virginia Toy was interviewed about JFAST on TV1 and TV3, Channel9, in the ODT, on National Radio, plus international groups (e.g. Science Online in Melbourne).... and Phase 1 of the Alpine Fault Drilling Project received attention by the ODT, the Christchurch Press,  by 'Close-Up' (TVNZ), etc... This can only enhance Otago's research profile nationally and internationally.