International Collaboration in Antarctic Research

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The Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC) has been a key institution in the delivery of Australia's high latitude climate and ecosystem science since 1991.

A key to the success of the ACE CRC has been the strength of our partnerships with national and international institutions, and our ability to bring together capability from different partners to tackle complex, multi-disciplinary questions that no one institution alone can tackle.

Collaboration across institutional boundaries requires both leadership and resources. Often collaborating institutions have different business and funding models, especially when funded by different national governments. They may compete for resources and have different stakeholders, and be driven by institutional and national agendas. It is therefore imperative that the mechanisms we put in place to connect different institutions recognise and respect the differences, and carve out a niche where collaboration can flourish.

Australian institutions are becoming increasingly specialised, and I suspect this is also true of institutions in Japan. This is partly due to challenges with funding and operational costs, and partly a result of more strategic management in many institutions. Hence we are moving further away from a paradigm where institutions 'own' all of the capability they need, to a global innovation environment where multi-disciplinary or inter-disciplinary research can only be achieved by drawing on expertise and resources from different institutions. Antarctic science is difficult, remote, complex and expensive. It is best achieved through collaboration and requires careful, long-term planning with trusted partners.

The ACE CRC draws on capability from 7 core partners and 13 institutional partners from around the world, including the National Institute of Polar Research (NIPR) and the Institute for Low Temperature Science (ILTS) in Japan, to address strategic science questions that are important to the future of humanity. I will talk about some specific examples of collaborations that have delivered outstanding scientific results, particularly where institutional links have enhanced access to research infrastructure and logistics.

I will also highlight how an increase in funding to any one of the partners would not deliver the same benefit because the capability profile of individual institutions is not sufficiently elastic. Nor should it be - efficiencies and value are driven by facilitating collaboration rather than duplicating capability across the system.

I will present the future aspirations of the ACE CRC which is now funded to June 2019, and the context within which the Australian Antarctic program currently operates, including opportunities for closer collaboration with our partners in Japan.