Report on conference Runninghot! 2010

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Runninghot! 2010 was the third in the Runninghot! Series of conferences organised jointly by He Waka Tāngata and the Oxygen Group and supported by the Ministry for Research Science and Technology (MoRST). The conference built on the momentum established by the 2006 and 2008 events, and focused on realising the value of research for New Zealand. The conference agenda addressed the different forms of value that can be derived from current research, and to identify practical ways of enhancing and realising the benefits of future research in New Zealand.

The specific objectives that we, the conference organisers, set ourselves were to:

- engage with varied perspectives on the different forms of value generated by research;
- explore the benefits across the continuum from basic to applied research;
- discuss how commercialisation should best influence New Zealand's research activities;
- identify innovative ways of conducting research to enhance its value;
- understand how research informs and frames evidence-based policy.

These objectives were explored in four thematic strands:

Imagining value

The opening sessions of the conference teased out different understanding of the value that our research produces. While the theme of the conference, 'realising the value of research', is timely given the current national focus on the economic value that research can create, and recent and pending changes to funding in the research sector, it is also a theme which is common to researchers regardless of institutional or disciplinary affiliation. As researchers we should be questioning the value of our research, whether economic, social or environmental, or simply in expanding knowledge and pushing the boundaries in our chosen field. This was the theme taken up by our first

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international keynote speaker Professor Nigel Thrift, internationally renowned geographer and VC at the University of Warwick, UK.

Creating value

The next sessions showcased exciting research being undertaken by talented researchers in different disciplines, sectors and institutions. From nanotechnology to the spatial organisation of DNA; from the social and ethical issues around of organ donation to Mau Moko; the second theme of the conference explored stories of excitement and inspiration around research in New Zealand. Our second international keynote Dr Catherine Mohr, of Intuitive Surgical Inc., gave an inspiring talk around her experience as the lead researcher in a technology company which designs and builds surgical robots, allowing surgeons to do ever more complex surgeries through tiny incisions, thus reducing the risk of infections, and decreasing the post-operative recovery time.

Transforming value

This process of transforming basic research to a commercial success story was taken up by Dr Ray Avery (Medicine Mondiale) and Professor Peter Shepherd (Maurice Wilkins Centre, University of Auckland). They described very different approaches to the transformation of value to product realisation - Peter Shepherd's experience of starting spinout companies from ideas lurking in his laboratory, contrasting markedly with Ray Avery's approach of observation first and product design to follow. Our third international keynote speaker Professor Stuart Cunningham (Professor of media and communications, Queensland University of Technology and director of the Australian Research Council's Centre of Excellence for Creative Industries and Innovation), explored this theme of transforming value by bringing together the skills of humanities, arts and social scientist together with physical scientists, technologists, engineers and manufacturers to add value, improving the social understanding/acceptance and form "creative industries". How do we move from a parallel universe where these disciplines talk past each other due to different approaches and methodologies, to a convergent universe? We need to change research

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behaviour, change funding and the reward structures to promote interdisciplinary and commercial activities, assess the broader impact of the research, make collaboration between research and industry/policy/community an intrinsic part of the project.

Enhancing value

The final sessions of the conference identified lessons learned, and identified challenges and opportunities confronting the next generation of researchers and research leaders.

The research sector is in a state of transition. The amalgamation of MoRST and FRST and the formation of the Ministry of Science and Innovation (MSI) along with the CRI taskforce will certainly initiate some changes in the funding and focus of future research. Several sessions at the conference focussed around the future of research in New Zealand. One session specifically addressed leadership, with talks from former/current leaders including Helen Anderson (former CE of MoRST), Bryan Gould (chair of the board of FRST) and Richard Bedford (Pro-VC Research of AUT, and Professor of population studies at University of Waikato) and an emerging leader Professor Juliet Gerrard (Co-Director of the biomolecular Interaction Centre and Deputy chair of the Marsden Council). These leaders discussed how we could develop young researchers and empower them to be future leaders in the research sector.

How will we be doing research in 2050? Can we use the unique environment and culture in New Zealand to our advantage? What will be the major challenges? Shaun Hendy (IRL) discussed some of his research around understanding the value and significance of networks. The highest value and productive research come from the largest cities or networks. The Oxygen group and He waka Tangata are linked in with many New Zealand networks such as BRCSS (Building Research Capability in the Social Sciences), which has built a new network of researchers utilising the access grid technology and developing interdisciplinary and inter-institution engagement and new research initiatives. Also the Stratus group at Auckland University and the Ozone group at Otago University and the Maori association of social science (MASS). Young researchers do recognise the value of networking and collaborating, but there have been significant limitations and barriers to this with the competitive research funding structure over the last 10 years in New Zealand. Can we break down these funding and technological barriers to collaborating in the future?

Another challenge for the future, touched on by Vic Arcus (Univ. Waikato, Agresearch), will be the terabytes, or even petabytes, of data that need to be stored, searched and made sense of. Data will no longer be the limiting factor. How can we make data open access? Tracey McIntosh (Univ. Auckland) challenged us to think cross-culturally, both social science \leftrightarrow physical science and breaking down the subject silos, but also pakeha \leftrightarrow maori. We should be redistributing the benefits of research to address social justice and broaden the research culture to include those that don't have access to it today. We need to invest in knowl-edge pathways, investing in education of our current and future generations so we can increase the potential.

We will certainly be doing research differently in 2050 compared to today, are we, and the funding mechanisms, flexible and imaginative enough to develop new research areas that probably haven't been thought of yet, many of which will probably result from basic research?

Uniqueness of Runninghot!

Runninghot! is a consciously multidisciplinary conference. The theme for Runninghot! 2006 was 'Science in New Zealand' and Runninghot! 2008 was 'Interconnection: NZ Science in the 21st Century'. Runninghot! has typically attracted researchers from disciplines in the sciences and social sciences. This year we also endeavoured to broaden our reach further, and design a conference we hoped would connect emerging and established researchers from the sciences, humanities and creative arts with leaders from the government, business and community sectors. Our slate of speakers - including one of our keynotes, Professor Stuart Cunningham - were from beyond the physical and social sciences that the Oxygen group and He waka Tangata represent, as were a number of our conference participants. Indigenous research and researchers were also given a more prominent place than in previous Runninghot! conferences to embrace the value of research in indigenous issues and groups.

This is also not a passive conference where you come to just listen. There is a mix of inspiring speakers and forums for interacting, exchanging ideas, meeting researchers from different backgrounds, developing collaborations with people you would never expect to have anything in common. This is a 'national tearoom' where you start up a conversation with anyone and everyone because you are interested in their perspective. For this reason the format of the conference is critical to the success of Runninghot! More so than is the case for other conferences, this conference relies upon innovative formats - provocations, Round-the-tables, Hotspots - which bring participants together in active and focused contexts, sustain energy levels, and require people to tackle issues from different disciplinary, epistemological and methodological points of view. These smaller forums also provide the participants of the conference opportunities to interact directly with the speakers. The international keynote speakers Nigel Thrift, Catherine Mohr and Stuart Cunningham were very engaged throughout the conference and participated in the general discussions and social events.

Due to the nature of the sessions and the variety of formats it is also essential to keep linking back to previous sessions and show the connections. Radio New Zealand's (RNZ) Bryan Crump, who fronts RNZ's 'Nights' programme, undertook this role. He interviewed several of the speakers on the stage after their talks and drew out the substantive issues that were being debated. He has also provided considerable publicity for the ideas and themes of Runninghot! and its speakers by broadcasting several of the sessions on his 'Nights' program: on 8th and 30th November 2010. Video's of the keynote speakers have been uploaded on to youtube and we also maintained a Twitter account and Facebook group. Twitter and Facebook forms of e-media are becoming increasingly common features of conferences to get immediate reaction of the events and they were embraced by several of the conference participants.

It is difficult to quantify the success of any conference. We believe our greatest success would be that conference delegates take away a fresh positive way of thinking about their research, and the state of research in New Zealand: that they have developed new potential collaborations, and they have



Participants at Runninghot! 2010.

found a voice and an audience. Feedback solicited via Twitter, Facebook, formal feedback forms and blogs leads us to conclude that the Runninghot! conference series achieves this. Below is the feedback from Nigel Thrift – from his blog in the chronicle of higher education.

Sometimes you have to go a long way to find something new – but it's worth it. I was in New Zealand last week for four days and one of my tasks was to present a keynote address to the Runninghot! Conference. The conference was organised by two groups of early and mid-stage career researchers, the Oxygen Group and He Waka Tāngata, with the explicit aim of mixing together the sciences, social sciences, and arts and humanities together productively and fostering dialogue between them. I know – we've all heard that ambition before. But what was remarkable about this conference is that it was working. People from very different backgrounds mingled together quite happily without the usual tensions and petty snobberies that can typify attempts to bring different branches of knowledge together, all in the name of producing more innovative work.

Why did Runninghot! work when so many like-minded enterprises fail? I think there are two main reasons. One, and the most important, was that it was organised by early and mid-career researchers who are less likely to have hang-ups and more likely to be interested in things because they're interested in things. They have maximum enthusiasm and minimum cynicism. Second, at the same time, the conference had high-level backup. Not only was the Ministry of Research Science and Technology involved from the start, but ministers turned up. Heads of research funding bodies turned up too. All kinds of sponsors were attracted. It was clear that the researchers' ideas were being taken very seriously indeed.

It's called investing in the future, but I wonder how often we really do it. Of course, the naysayers will say these were special conditions. New Zealand is a smaller community. Perhaps it has less disciplinary hang-ups. But I think Runninghot! could be a kind of model. Let early and mid-stage career researchers really take over an event but give them high level backing. That way lie new connections and the beginnings of real inter-disciplinary efforts, which do not even have to think of themselves as such.

More, please.

Nigel Thrift

Future of Runninghot!

With the dissolution of MoRST the Oxygen Group and He waka Tängata will no longer exist in their current form. Have these groups of young/mid career researchers, working at the coal face, been a useful experiment and a valuable resource for MoRST? Can they contribute to the shaping of the new ministry, MSI? What will be the future of the Runninghot! conferences? We announced at the end of the Runninghot! 2010 conference that there would be a Runninghot! 2012 as we believe it is an important conference for researchers from different disciplines to interact and broaden their networks.

Web links

We made extensive use of digital technologies this year. The majority of our planning meetings were held on the BRCSS Access Grid. We also invested considerable time and effort in constructing a digital environment for Runninghot! Content was posted live during the conference, and after the event, on our:

- website (http://www.runninghot.org.nz/);
- Facebook page (http://www.facebook.com/group. php?gid=371608404150)
- Twitter account (hashtag: #rh2010)
- Youtube promotion video http://www.youtube.com/watc h?v=Zs3gD0rnxGQ&feature=channel
- Nigel Thrift keynote http://www.youtube.com/ watch?v=S8KqDfapipI

- Interview of Nigel Thrift by Bryan Crump http://www. youtube.com/watch?v=6G2yCbeefNA&NR=1
- Catherine Mohr keynote http://www.youtube.com/ watch?v=8B2Yh1hZH5Y
- Stuart Cunningham keynote http://www.youtube.com/ watch?v=0sqSod3RA8U
- Blogs Nigel Thrifts blog in the chronicle of higher education – http://chronicle.com/blogs/worldwise/ runninghot-new-zealand-meeting-shows-how-to-fosterdialogue-between-disciplines/27564



He Waka Tāngata

The Oxygen Group is a **forum of bright younger scientists** who are among the emerging leaders in New Zealand's science sector. Helen Anderson set up the group in 2005 to help hear the voices, and to tap into the experience, of younger scientists. The group is made up of scientists with a range of expertise from CRIs, universities and private business.

The role of the Group is to advise MoRST on:

- emergent science and technology trends;
- how these trends might impact on the future of science in New Zealand; and
- how younger scientists can be more actively engaged in mapping the future of science in New Zealand and take a more active ownership and leadership of future science directions.

This advice will:

- be unique in that it complements existing streams of advice available to MoRST by involving young leading scientists in the exploration of strategic issues for science in New Zealand; and
- draw on the creative connections that the Group will develop across a diversity of scientific networks, both within New Zealand and internationally.

This group builds on our successful Oxygen Group established in 2005 as a cross-science-sector initiative designed to better connect us with younger scientists.

He Waka Tāngata was created in early 2007. Its purposes are to:

- promote public understanding of the integrity and diversity of social science knowledge;
- stimulate debate on the contribution of social science knowledge to New Zealand society;
- identify opportunities for and support the communication of social science knowledge to diverse audiences;
- foster dialogue between emerging and mid-career social scientists and government policy advisors on the experience and direction of science policy in New Zealand.