Professor Carolyn Mountford is a co-inventor of the diagnostic protocol to monitor women at high risk for breast cancer identifying metabolic deregulations in their breast tissue that precede tumour growth. These pre-invasive stages are not apparent by current imaging modalities. The same technology is shown to identify changes to the brain associated with learning, memory, Post Traumatic Stress Disorder (PTSD) and injury from blast and impact. Her team are under contract to the USA and Australian military to develop this approach to improve the health of soldiers.

Prior to her appointment at TRI in February 2015, Professor Mountford held appointments at Harvard Medical School where she was Professor of Radiology and Director of the Centre for Clinical Spectroscopy at the Brigham and Women's Hospital; and recently at the University of Newcastle where she was the Professor of Radiology and Director of the Centre for MR in Health.

Professor Mountford brings to TRI a long and established interaction with the diagnostic imaging industry. Her team has been a worldwide development site for Siemens since 1999. She has led multidisciplinary programs interfacing these teams with industry; translating the technology; and making it available worldwide. This approach led to the award of an NHMRC grant for a Clinical Centre of Excellence.

Professor Mountford has received numerous national and international awards while developing the new diagnostic technology over several decades. This required determination and commitment, facing a community that did not see the long-term potential of the research. Supporting the desire to see that Australia receive significant long-term economic benefits from the magnetic resonance technology, she was awarded The Graham Coupland Medal from the Royal Australasian College of Surgeons; the Inaugural Pioneer of Hope Award from the NSW Cancer Council; and a Partner in Excellence Award from the Brigham and Women’s Hospital at Harvard Medical School.

Professor Ian Frazer is a clinician scientist, trained as a clinical immunologist in Scotland. As a professor at the University of Queensland, he leads a research group working at TRI in Brisbane, Australia on the immunobiology of epithelial cancers. He is recognised as co-inventor of the technology enabling the HPV vaccines, currently used worldwide to help prevent cervical cancer. He heads a biotechnology company, Admedus Vaccines, working on new vaccine technologies, and is a board member of several companies and not for profit organisations. He is current president of the Australian Academy of Health and Medical Sciences, and a member of the Commonwealth Science Council.

He was recognised as Australian of the Year in 2006. He was recipient of the Prime Ministers Prize for Science, and of the Balzan Prize, in 2008, and was elected Fellow of the Royal Society of London in 2012. He was appointed Companion of the Order of Australia in the Queen's Birthday Honours list in 2013.

Alison Kitson is the Dean of Nursing and Head of School for the School of Nursing at the University of Adelaide.

Before coming to Australia, Alison had a long and successful career in executive leadership, education and research in the United Kingdom. Alison holds many honorary positions internationally and has published extensively on the subject of implementing evidence into practice.

Her contribution to nursing is recognised through having been awarded many prestigious accolades including the Florence Nightingale Leadership Award in 2004; Distinguished Graduate of the Year from the University of Ulster in 2002, a Florence Nightingale Travel Award in 1999 and a Fellowship of the RCN in 1991.

2009 was the year Alison became a Fellow of the American Academy of Nursing for her work on standards of nursing care and getting evidence into practice. In 2013 she was awarded an Honorary Doctorate from the University of Malmo in Sweden for her contribution to nursing scholarship and leadership.

Professor Hamish Scott did his PhD (1992) and first post-doc at the Women's and Children's Hospital and the University of Adelaide. During these 7 years he led the discovery of genes for 3 rare human diseases. After 11 more years, with the persistence of Professor John Hopwood and others in academia and industry, this resulted in either FDA approved therapy (2003) or clinical trials of novel therapies for these diseases.

In 1995, Hamish moved to the University of Geneva Medical School in Switzerland. His focus was, and remains, the application of genetic and genomic technologies to understand diseases processes to improve diagnoses and treatment. He led international collaborations in identification of human genes causing Down syndrome and rare forms of genetic deafness and autoimmunity (e.g. arthritis and multiple sclerosis). This continues to have profound effects on our understanding of basic biology of Down syndrome, hearing and the immune system and lead to new therapeutic strategies in these and related diseases. This was also the start of his interest in cancer and leukemia as children with Down syndrome have a low incidence of solid tumours and a high incidence of leukemia. This is also when he started to work on familial predisposition to leukemia.

Hamish relocated to the Walter and Eliza Hall Institute of Medical Research (WEHI) in Melbourne in 2000 as the Inaugural Nossal Leadership Fellow. He was appointed as a National Health and Medical Research Council (NHMRC) senior research fellow in 2001. His laboratory identified 2 additional deafness genes and described the role of a gene in reprogramming the DNA of an “adult” cell from “normal” to become a gamete (sperm or oocyte). He also described a cause of familial predisposition to leukemia.

Since returning to Adelaide in January 2008 he has been Deputy and then Head of the Department of Molecular Pathology at SA Pathology, He is an inaugural member of the Centre for Cancer Biology an Affiliate Professor in both the Schools of Medicine and Molecular and Biomedical Science at the University of Adelaide and an Adjunct Professor in the School of Pharmacy and Medical Sciences in the Division of Health Sciences of the University of South Australia. He is an NHMRC principal research fellow and a Founding Fellow of the Faculty of Science (FFSc) of the Royal College of Pathologists of Australasia (RCPA). He recently led the identification of mutations in a gene in rare families and patients that predisposed them to acute myeloid leukemia (AML), infectious diseases and lymphoedema. He has helped develop and introduce new technologies and tests for improved treatment (personalized medicine) and is a Joint Director of the ACRF Cancer Genome Facility established at SA Pathology. In these roles he has been central to introducing both somatic and germline genotyping using next generation sequencing to SA Pathology at a panel, exome and whole genome level. Hamish had his own genome sequenced at the beginning of 2014 and learnt why he gets “man flu” and maybe why his mother died early 2014 from an unknown infection.

Christiana Cheng is a Research Associate at the Rick Hansen Institute in Vancouver, Canada, where she manages the Access to Care and Timing (ACT) Project. The ACT project is a research study aimed to 1) understand the processes of health care delivery for persons sustaining a traumatic spinal cord injury (tSCI); 2) evaluate the impact of timing and location of care on patient and system outcomes using a computer simulation model of the tSCI care continuum; and 3) develop a national action plan with stakeholders from across the care continuum to implement changes. Evidence generated from the project will help inform care hopefully leading to improved patient flow and service access for spinal cord injury care. The ACT Project started in Canada and is expanding internationally including Australia.

Christiana obtained her PhD in 2007 from the Department of Biological Sciences in Simon Fraser University and had received a post-doctoral fellowship from Natural Sciences and Engineering Research Council of Canada.

MS Madonna King
Award-winning journalist, commentator and author
Brisbane Times columnist

Madonna King - @madonnaking - is an award-winning journalist, commentator and author. A weekly columnist with Brisbane Times, she has authored six books, including the biographies of federal treasurer Joe Hockey and the wonderful Professor Ian Frazer.

Madonna has 25 years’ experience across newspapers, radio and television, and is the former host of ABC Radio’s morning current affairs program. She now writes for the Sydney Morning Herald’s Good Weekend Magazine and travels the nation facilitating conferences, emceeing and speaking.

Educated at the University of Queensland, and with a diploma in company directorships, Madonna also sits on two not-for-profit boards. She has daily debating practice with her husband and two young daughters.