

# AUSTRALIA JAPAN EMERGING RESEARCH LEADERS EXCHANGE PROGRAM

Visit to Japan, 21 November-2 December 2016

Photo	Researcher Details	Overview
<b>Technologies for the promotion of healthy ageing and wellbeing</b>		
	<b>Amanda Wilson, Dr.</b> Senior Lecturer, Nursing and Midwifery, The University of Newcastle	Amanda's PhD involved the development of a pioneering research e-health tool to assess the quality of health reporting in the Australian media including new developments in cancer treatments, diagnostic tools and complementary /alternative medicines. Her expertise is in the fields of communication, health literacy and framing of benefits and risks.
	<b>Nola Ries, Dr.</b> Senior Lecturer and Deputy Dean (Research), School of Law, The University of Newcastle	My research interests concern the legal, ethical and social aspects of science and technology. My work has focused on: governance of biomedical research. I am interested in comparative study with Japan to investigate different governance and regulatory models and the socio-cultural influences on stakeholder perceptions of how new technologies should be developed, used and regulated. My current research priority area concerns health and ageing.
<b>New materials, biotechnology, nanotechnology</b>		
	<b>Grant Webber</b> Associate Professor, Chemical Engineering, School of Engineering, The University of Newcastle	My research uses engineered surfaces and interfaces to control material properties. By combining the disciplines of chemical engineering and physical chemistry my research aims to solve real-world problems through the application of fundamental science. One example is stimulus-responsive polymer thin-film coatings. These coatings change their structure at a molecular level in response to external stimuli such as solution pH, temperature or salt concentration.
	<b>Nicolas Taylor</b> ARC Future Fellow Associate Professor, School of Chemistry and Biochemistry, The University of Western Australia	Nic's lab seeks gain a comprehensive understanding of how metabolites, proteins and lipids within plant cells respond to extremes of temperature and salt exposure. He hopes to increase the yield of wheat in both optimal and sub optimal growing regions by applying this knowledge to future breeding programs. He is particularly well known for his pioneering work in the development of peptide selective reaction monitoring (SRM) mass spectrometry approaches to quantify proteins in plants and development of a SRM toolbox for plant biologists.
<b>Emerging power systems in the changing environment and the needs of the power system transition process</b>		
	<b>Fengji Luo, Dr.</b> Postdoctoral Research Associate, Faculty of Engineering and Information Technology, The University of Sydney	I am working in developing sustainable and smart solutions for the next-generation power systems. My research interests mainly include renewable energy, power demand side management, and computational intelligence and its applications in smart grid. I also work on introducing advanced computing and informatics technologies to solve the power grid problems.
	<b>Xiaolin Wang, Dr.</b> Senior Lecturer, School of Engineering and ICT University of Tasmania	Dr. Wang enjoys a strong record in research fields including renewable energy application, thermodynamics of power and cooling systems, and energy storage and conversion. His research interest focuses on optimising the efficiency and overcoming challenges relating to energy transfer and conversion. His current research interest covers 1. Emerging power system, 2. Energy storage and conversion, 3. Thermodynamics of cooling and power systems, 4. Adsorption engineering,
<b>Capturing the benefits of ICT</b>		
	<b>Hee-Jeong Choi, Dr.</b> Director of Urban Informatics Research Lab, Senior Lecturer, Queensland University of Technology	She developed a new conceptual approach to urban sustainability that recognises 'play' as the core of transformative interactions in cities as complex techno-social networks. She builds on this concept to explore how various forms of digital and playful experiences are designed, developed, and integrated in different cultural contexts, and creates such experiences for liveable and equitable urban futures. Her current research explores designing novel technologies and services for care across three inter-related themes: social entrepreneurship; self-care and mutual aid; and co-creative urban transformation.
	<b>Seok-Hee Hong</b> ARC Future Fellow Professor, School of IT The University of Sydney	<u>Algorithmics for Massive Complex Network Visualization</u> Network Visualization research aims to produce human-readable pictures of relational data. Using visualization, we can capture the benefits of data mining in domains. My research in Graph Drawing Algorithms aims to develop fast and effective methods that produce automatic visualizations of complex network data.