The New Zealand Association of Scientists Awards for 2011

The Marsden, Shorland and Research Medals and the Science Communicator Award were presented by the Hon Dr Wayne Mapp Minister of Science and Innovation, on Thursday, 9 November 2011, at a ceremony at Turnbull House, Wellington.

Dr Mapp briefly addressed the audience, noting that his first public address as then Minister of Research, Science and Technology was at the Association’s Awards 3 years ago. Now, as Minister of Science and Innovation and a retiring MP, he was effectively giving his last public address at this year’s ceremony.

**Marsden Medal**

The Marsden Medal is awarded for a lifetime of outstanding service to the cause or profession of science, in recognition of service rendered to the cause or profession of science in the widest connotation of the phrase. The recipient for 2011 is Professor Geoffrey B. Jameson in recognition of his sustained record of leadership and service to New Zealand science and his outstanding contribution to the chemical sciences.

Professor Jameson is a member of the Institute of Fundamental Sciences at Massey University and has provided a leadership role in the development of capability in synchrotron science and access to the Australian Synchrotron for the New Zealand science community. His continuing service to the facility is having positive outcomes for many areas of science in New Zealand.

As Director of Massey University’s Centre for Structural Biology, he has provided leadership in a range of areas from materials science to understanding fundamental enzymatic processes. His leading of the bid for the high-field 700-MHz NMR spectrometer provided the Centre with the best NMR facility in New Zealand for the benefit of the country’s scientific research community in structural biology and metabolomics.

Professor Jameson’s reputation in the technique of X-ray crystallography, especially his ability to solve very difficult problems, has meant he is extensively called upon for assistance by the chemical community both in New Zealand and overseas. Furthermore, his own research contributions are wide-ranging and widely cited, and his approach has led to important new insights into chemical and biological systems.
Professor Jameson is Massey University Professor of Structural Chemistry and Biology; Director of the Centre for Structural Biology (Chemistry and Biophysics group); awarded the Massey University Research Medal (2010).

Shorland Medal

The Shorland Medal is awarded in recognition of major and continued contribution to basic or applied research that has added significantly to scientific understanding or resulted in significant benefits to society.

The recipient for 2011 is Professor Harjinder Singh, co-Director of the Riddet Institute, Massey University. Professor Singh has demonstrated distinguished scholarship and intellectual leadership in food science and technology, especially in relation to milk products.

His research has had a major international impact on both the dairy industry and the general scientific community. Over 200 papers have been published with his research, and in addition he has successfully mentored over 60 research students and postdoctoral fellows. Not only is his research very highly cited, but he has served on editorial boards of journals and on external agencies, has helped obtain research grants of over $43 million, and has been awarded several patents.

Professor Singh is a Fellow of Royal Society of New Zealand, Fellow of the International Academy of Food Science and Technology, Fellow of the New Zealand Institute of Food Science and Technology. He has been awarded the William C. Haines Dairy Science Award (California Dairy Research Foundation); Marshall Rhodia International Dairy Science Award (American Dairy Science Association) and the Massey University Individual and Team Research Medals (2006).

Research Medal

The Research Medal of the New Zealand Association of Scientists is awarded for outstanding fundamental or applied research in the physical, natural or social sciences published by a scientist under the age of 40, during the year of the award or the preceding three calendar years. The recipient for 2010 is Alexei Drummond, Associate Professor of Bioinformatics in the Department of Computer Science of the University of Auckland. His research interests are centred around probabilistic models of molecular evolution and population genetics.

Professor Drummond’s work on the Bayesian phylogenetic analysis programme is very highly regarded. Both his research and his software implementation are now widely used, with incredibly high citation rates. He publishes prolifically in a broad range of prestigious journals and has many collaborators. Being invited to participate in the Woods Hole workshop on molecular evolution is evidence of international recognition of his achievements.

His work has also led to successful commercial enterprises.

Science Communicator Award

The Science Communicator Award is made to a practising scientist for excellence in communicating science to the general public in any area of science or technology.

The recipient for 2011 is Dr Mark Quigley, Senior Lecturer in Active Tectonics and Geomorphology in the Department of Geological Sciences at the University of Canterbury.

From the morning of 4 September 2010 when Cantabrians were awoken before dawn by the violent shaking of the ground beneath them, Dr Quigley has been at the forefront of science communication about the forces at work beneath the Canterbury plains.

From the beginning of the event, Dr Quigley was handling media interviews across print and broadcast media in such an engaging way that he became the go-to scientist for independent commentary on the science-related aspects of the earthquakes. Notably, he was instrumental in allaying fears generated by pseudoscientific earthquake predictions.

Throughout, Dr Quigley has maintained a blog, where he writes about his research, contributes extensively when called on by the media, and participates in public lectures and presentations that have been greatly appreciated by the people of Canterbury. He has a holistic understanding of current best thinking about the earthquakes which he was able to communicate to a general audience. He is a great asset to natural hazards research in New Zealand and to science communication in general.