

## Jodi McKay

Minister for Commerce  
Minister for Tourism  
Minister for the Hunter  
Minister for Science and Medical Research



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### **NSW Young Tall Poppies a cut above the rest**

'Interstellar explorers', 'time travellers' and 'brain mappers' were among the NSW Young Tall Poppy 2009 Science Award recipients announced last night.

Minister for Science and Medical Research Jodi McKay said the Awards recognise our up-and-coming stars in this important field.

"Last night's winners will go on to help promote further study and careers in science for students across NSW," Ms McKay said.

"They are our best and brightest young scientific achievers."

Ms McKay said it is imperative that we nurture the next generation of NSW scientists so that they may help us manage future global challenges and opportunities, such as climate change and renewable energy.

"Among the award recipients are researchers exploring interstellar space environments, archaeologists using bone evidence to better understand how early humans lived and neuroscientists studying complex mental activity in an effort to prevent dementia," Ms McKay said.

"Other award winners include scientists doing breakthrough research in areas that will improve treatment for cardiovascular disease and provide cheaper and more effective solar cells."

In the next 12 months the 16 NSW-based Young Tall Poppy recipients, including the two overall winners, will visit schools across the State to talk to students about science and the diverse range of career opportunities available in the sector.

"The NSW Government recognises the importance of investing in these brilliant young minds being trained right here in NSW universities," Ms McKay said.

"Previous NSW winners include Bryan Gaensler, one of our leading minds in astronomy, and Kathy Belov, the People's Choice winner at this year's Eureka Awards for her research to cure a tumour disease threatening the Tasmanian Devil.

"No doubt these latest winners will generate future ideas and make an important contribution to science at a national and international level."

## **2009 New South Wales Young Tall Poppies of the Year**

### **Dr Michael Valenzuela, University of New South Wales Regenerative Neuroscience**

Michael's work has shown that complex mental activity seems to protect the memory centre of our brain, the hippocampus, possibly reducing the likelihood of developing dementia and Alzheimer's later in life

### **Dr Kira Westaway, Macquarie University Geochronology and Quaternary Science**

Kira uses bone evidence at archaeological sites to reconstruct and date the environments experienced by early humans to provide archaeologists with a better understanding of how our early ancestors lived and died.

## **2009 NSW Young Tall Poppy Science Award Winners**

### **Dr Scott Byrne, University of Sydney Skin Cancer and the Immune System**

The focus of Scott's research is on how sunlight suppresses the immune system, allowing cancers to develop.

### **Dr Marcus Cole, University of New South Wales Organometallic Chemistry**

Marcus conducts his research into two fields of molecular science: the methods for hydrogen storage for fuel/energy applications, and the discovery of applications for, and isolation of, heavy metals such as uranium

### **Dr Donna Green, University of New South Wales Climate Change Impacts and Risk**

Donna's research on climate impacts in Northern Australia is focused on remote indigenous communities.

### **Dr Mary Kavurma, University of New South Wales Atherosclerosis and Cardiovascular Disease**

Mary's work is focused on understanding abnormal cell growth in arteries which is a major factor in the blockages during cardiovascular disease.

### **Dr Joshua Madin, Macquarie University Coral Reef Ecology and Biomechanics**

Joshua's research looks at how storms and the waves they generate shape coral reef communities on the Great Barrier Reef.

### **Dr Penny Martens, University of New South Wales Biomaterials and Tissue Engineering**

Penny develops polymers (plastics) that can be used to replace worn out, or defective body parts. Specifically, she looks at a class of polymers called hydrogels which are very similar to soft contact lenses.

**Dr Matthew McCabe, University of New South Wales  
Hydrology**

Matthew uses measurements from space based satellites, observations from ground-based instrumentation and modeling techniques to describe Earth's hydrological cycle.

**Associate Professor Philip Morgan, University of Newcastle and Hunter Medical  
Research Institute  
Obesity Prevention and Treatment**

Philip's research focuses on the development and evaluation of programs to prevent and treat obesity across different settings and populations.

**Dr Maria Nowotny, University of Western Sydney  
Photocatalytic Water Purification**

Maria's work involves engineering and developing an efficient photocatalytic material for solar-driven water purification.

**Associate Professor Sebastien Perrier, University of Sydney  
Macromolecular and Supramolecular Engineering**

Sebastien's research aims to develop techniques that provide structure and functionality control over polymers and enable the production of innovative polymeric materials with improved properties

**Dr James Rabeau, Macquarie University  
Physics, Quantum, Optical and Materials**

James' research covers the fabrication, measurement and applications of nano-diamonds. These nano-diamonds can be used in a wide range of applications in science and technology such as encryption.

**Dr Julie Redfern, ANZAC Research Institute, Sydney  
Cardiovascular disease prevention**

Julie's research aims to help patients who survive a heart event but who do not participate in an existing prevention program.

**Dr Timothy Schmidt, University of Sydney  
Molecular Spectroscopy**

Timothy studies how molecules interact with light to provide a better understanding of various environments from interstellar space to new types of solar cells.

**Dr David Warton, University of New South Wales  
Ecological Statistics**

David harnesses new technologies to develop methods of data analysis to understand the biological world including new methods for allometry, used by scientists globally in projects as diverse as primate evolution, and plant physiology.