

Academy awards for science teachers

When Gungahlin College in the ACT opened its doors last year, staff took it as an opportunity to set some interesting initiatives in place, including an advanced science program.

Driven by teacher Liam Kirwan, who has been a dedicated science teacher since graduating with honours in physical organic chemistry from the Australian National University (ANU), the school's Science Honours Program offers the opportunity for high flying students to take on extra-curricular work, visit sites where actual scientific work is being done and access leading scientists through a visiting speakers program.

"These are really the kids who will become the scientific researchers of the future, giving them access to scientists at work broadens their horizons and gives the students contact with professionals who they will potentially be working with," Kirwan says.

A recent high flyer to visit and speak was Prof Mahananda (Nanda) Dasgupta, an experimental physicist at the Heavy Ion Accelerator Facility in the Department of Nuclear Physics of the ANU. She is an international leader in accelerator-based nuclear fusion and fission whose research has resulted in a fundamental change in the current understanding of these processes. She also is the recipient of the inaugural 2011 Georgina Sweet Australian Laureate, which gives you an idea of the calibre of people Gungahlin College's program attracts.

Mr Kirwan's efforts haven't gone unnoticed with the Australian Academy of Science in Canberra giving him a nod at its National



Left to right: Jacquie Cleary, Stuart Sluggett, Lisa Nelson, Helen Silvester, Madiyantika Varma, Andrea Collins, Meg Saunderson and Liam Kirwan. Picture Mark Graham, Australian Academy of Science

Science Teachers Awards in May along with six other top Australian science teachers.

At a three-day event, Science at the Shine Dome, winners from each state met with the country's top scientists to hear about cutting edge research, exchange ideas with interstate colleagues and participate in an interactive education workshop.

A stringent selection process means that the Fellowship of the Academy is made up of just under 450 of Australia's top scientists, distinguished in the physical and biological sciences and their applications. Election is subject to a searching appraisal of the

candidate's published works, including reference to leading scientific researchers around the world.

No more than two Fellows may be elected every three years on the basis of distinguished contributions to science by means other than personal research. A small number of distinguished foreign scientists with substantial connections to Australian science are elected as Corresponding Members.

"We know from previous years that the teachers enthusiastically share their new skills and knowledge with colleagues upon their return home," Academy President Prof Susanne Cory says.

Australian Academy of Science, Science Teacher Award Winners 2012

Liam Kirwan, Gungahlin College ACT

Mr Kirwan won his award for facilitating links between students and scientists in the CSIRO and the Australian National University by organising excursions and guest lectures. Kirwan is the Coordinator of the Science Honours Program at the college and facilitates extending high-achieving science students through extracurricular activities.

Jaqueline Cleary, Balgowlah Heights Public School NSW

Chair of the Science Committee, Ms Cleary organised a whole school science day where all classes participated in new and innovative science activities.

Andrea Collins, St Philips College NT

Head of science, Ms Collins incorporates recent developments into the classroom, including Pluto's downgrading to a dwarf planet, the official naming of the 112th element Copernicium in 2010, debate on stem cell research, the greenhouse effect and global warming.

Meg Saunderson, Darra State School Qld

Vice President of the Science Teachers' Association of Queensland and a Primary Connections Professional Learning Facilitator, Ms Saunderson has specialised in inquiry based teaching and learning.

Stuart Sluggett, Scotch College Junior School SA

Mr Sluggett coordinated the delivery of the Australian Curriculum: Science Through the use of Primary Connections Resources and coordinated a science fair with the focus on chemistry in 2011.

Helen Silvester, Mentone Girls' Grammar Vic

Head of Science, Ms Silvester has incorporated electronic media into the science curriculum by using NatureApp on the iPad for biology. She also organised external research opportunities at the Genetic Technology Access Centre and invited guests to the school.

Lisa Nelson, East Narrogin Primary School WA

Ms Nelson is a Science Leader employing hands-on philosophy to science learning and implementing the Primary Connections resources for teaching and learning.