awis
Association for Women in the Sciences • NZ

newsletter

Issue 4 December 2009

The Sweet Side of Carbon

*Dr **Jacqueline Beggs** of the University of Auckland has been researching the ecology of honeydew and 'sugar-based' forest ecosystems. Jacqueline shares some magic moments of her fascinating research.*

Jacqueline collecting honeydew up a beech tree and the close-up of a drop of honeydew.
Photo: Landcare Research

Sticky droplets of sugar gum my hair together into a worse bad hair day than usual. My boots are covered in slimy black mould and my limbs are achingly overstretched from climbing into the canopy of a beech tree. So ends another day in the quest to unravel the mysteries of honeydew – a sugary substance that is excreted by scale insects and presented at the end of a long waxy anal thread. In this case the honeydew is produced by scale insects endemic to New Zealand, and they infest the trunks and branches of beech trees in such extraordinary numbers that it appears as if the trees are coated in a myriad of tiny fairy lights. After two years of climbing up and down trees and measuring the 24-hour honeydew production rate, we estimate an annual resource of approximately 3500 kg dry weight sugar per hectare. That's a heap of sugar and it represents a bonanza of freely available carbon to a range of organisms; kaka, bellbirds, geckos, insects, yeasts and a range of other microbes all feast on the honeydew. South Island honeydew beech forests are characterized by the scent of fermenting honeydew and a coating of black sooty mould on any surface that the honeydew splashes onto.

I was first intrigued by honeydew when studying kaka. These parrots would tank up on honeydew for several hours at the beginning and end of most days, except for late summer when introduced wasps would increase to such high numbers that they removed virtually all the honeydew resource. None left for kaka, but also none left for the other native forest inhabitants. So started decades of research unraveling the ecological intricacies of the system (in between research on wasp control and raising a family).

Since I joined the University of Auckland in 2003 as a lecturer in entomology and ecology there has been a new burst of activity on honeydew systems as colleagues and students have been drawn into the sticky web. Research has revealed previously unknown microbial symbionts, yeasts usually associated with wine fermentation, changes in litter decomposition rates, and the discovery of a range of biotic interactions associated with kanuka infested by a different endemic species of scale insect. I don't get to climb trees as much as I used to, but the trade-off is supervising enthusiastic students and learning even more about the systems. And not the same excuse for those bad hair days…

A wasp collecting honeydew from a beech tree.
Photo: Bob Brown

The Awa Book of New Zealand Science

Photo: Robert Cross

***Rebecca Priestley** is a science historian and a postgraduate student at the University of Canterbury, Physics and Astronomy. Rebecca's book 'The Awa Book of New Zealand Science' won the Royal Society of New Zealand's 2009 Science Book Prize. Searching for fascinating stories of endeavour and discoveries for popular science writing, Rebecca found that "the best stories, the ones that really conveyed the excitement of science and the thrill of discovery, were written not by journalists or biographers, but by the scientists themselves". Here, she takes us through her own story of science book writing endeavour.*

When Mary Varnham, publisher at Awa Press, asked if I would compile an anthology of writings about New Zealand science the answer was always going to be 'yes'. Some of my favourite books are science anthologies, including John Carey's *Faber Book of Science* and Timothy Ferris's *World Treasury of Physics, Astronomy and Mathematics*. Both are great books, but only two of our scientists – Ernest Rutherford and Maurice Wilkins – warrant a mention, and then only a brief one.

I started with a few firm ideas about what I wanted to include in the anthology. Alan Wilson's story about using DNA to trace all humans back to a common ancestor – 'mitochondrial Eve' – had me riveted. The science that led Ernest Rutherford, Maurice Wilkins and Alan MacDiarmid to win Nobel Prizes had to feature. So did the pioneering work of some of our early and colourful geologists and naturalists, such as Ernst Dieffenbach, Walter Buller and Leonard Cockayne. But as I continued with my research, poring over hundred-year-old books, trawling through back issues of academic journals, reading conference papers and talking to some of today's scientists I discovered hundreds of fascinating stories of endeavour and discovery that were not only neglected in international anthologies, they were simply not known to most New Zealanders.

But, as I was to find, the fact that interesting birds and rocks had been discovered, radioactivity investigated, and conductive polymers developed was no guarantee that anyone had written an engrossing story about it. My challenge, then, was to find writing that was both intensely interesting and easily accessible. While it was clear that being a good scientist was no guarantee of being a good writer, as my research progressed I found that the best stories, the ones that really conveyed the excitement of science and the thrill of discovery, were written not by journalists or biographers, but by the scientists themselves. When Beatrice Hill Tinsley, the brilliant Yale astronomy professor raised in New Plymouth, told her sister, 'If ever you thought scientists were unemotional impersonal eggheads, change your mind!' she could have spoken for all the scientists I chose for the book. I was not prepared for the ferocious passion, often crossing the line into obsession, with which many of them wrote about their work. Joan Wiffen recalled her 'intense excitement' at finding her first fossil bone a few months after starting her Hawke's Bay dinosaur hunt. MacDiarmid remembered the 'burning curiosity' with which he devoured his first chemistry textbook as a young boy. And nineteenth-century Austrian naturalist Andreas Reischek, describing the moment he saw the stuffed specimen of a stitchbird in the Canterbury Museum, resolved 'to seek him out, or die in the attempt'.

The finished work, *The Awa Book of New Zealand Science*, contains fifty pieces of writing, from Maori Studies head Peter Adds' description of the ocean voyages of the Maori, to Peter Bland's 1981 poem about nineteenth-century farmer and naturalist Herbert Guthrie-Smith, to Karen Pollard's story of her team's recent discovery of a planet beyond our own solar system. Copies are available in good bookshops or from Awa Press at www.awapress.com!

AWIS subscriptions

To become a member or renew your subscription visit http://www.awis.org.nz/
or contact Membership Secretary Malina Storer at membsec.awis@gmail.com

AWIS listserver (free!)

A low volume forum for announcements and discussions relevant to women in science.
To join, visit http://lists.otago.ac.nz/listinfo/awis-list

From rural Canterbury to international recognition

*Dr **Susan Gardiner** is a Principal Scientist at Plant & Food Research Limited (PFR), leading the 'Mapping and Markers Team' at their Palmerston North Research Centre. Her research team develops technologies that assist breeders of horticultural crops to create new varieties with the attributes that the consumer prefers, and that will sell for premium prices in international markets. Although focused on New Zealand's needs, Sue's research has led her into international collaborations that have recently been acknowledged by the American Society for Horticultural Science.*

Sue with the clock she was awarded in St Louis, plus the book "Genetics and Genomics of Rosaceae" she recently co-edited. Photo: Tony Corbett, PFR.

I grew up on the family sheep farm near Waiau in North Canterbury and, as it was just a bit far in those days to attend school in the township, I received my education until the age of 10 from the Correspondence School - tutored with my two younger brothers by my mother. This meant that as soon as I had finished my daily lessons – normally this took me until morning 'smoko' - I could take part in farm activities with my father. I have never been one for taking longer than necessary for routine activities! I lived on a succession of ponies, and my father taught me to break in Sally's foals during my school holidays as a teenager.

Attendance at St Margaret's College in Christchurch gave me my first taste of leadership, as I was appointed Head of the Boarders in my final year. I obtained my undergraduate education and PhD in Biochemistry at Otago University in Dunedin, where I was particularly inspired by George Petersen's enthusiastic lectures on DNA.

My two-year post-doctoral appointment with Klaus Hahlbrock in Freiburg, Germany was my first international experience and I was able to participate in pioneering molecular biology elucidating the mechanism of differential regulation of the enzymes of phenylpropanoid biosynthesis in a parsley cell culture system irradiated with UV light. After another post-doc at Lincoln College, I joined the Plant Physiology Division of the Department of Scientific and Industrial Research (DSIR) in Palmerston North in 1980 as a Scientist. I spent my first years in the group led by Grattan Roughan and Roger Slack, elucidating the pathways of chloroplast glycerolipid biosynthesis. Roger, of course, was well known as one of the developers of the Hatch-Slack (C4) pathway of photosynthesis and remains a good friend.

A later key period focused on developing techniques for distinguishing varieties of pasture grasses and legumes, using SDS-gel electrophoretic banding profiles of seed proteins. This work was in partnership with Margot Forde, whom I regard as a key mentor in my development as a scientist. Margot's enthusiasm for the application of science matched mine and she taught me, by example, much about writing manuscripts – there were many joint publications.

I initiated my first work in gene mapping with apple in 1990 and this continues to this day, and has moved through the organisational changes, being first with DSIR and then HortResearch, and since 2008 in PFR. I am proud to have 'grown' my own team, by my own efforts, rather than having been appointed to a team leader position. My very international team of Scientists (permanent and visiting), Research Associates, Technicians, post-graduate and undergraduate students is a constantly changing group, centred on key permanent staff. We focus on unravelling the genetic architecture of traits that are important in the development of new varieties for New Zealand horticultural industries. We have now expanded from apple to include kiwifruit, peach, pear, apricot, raspberries, hops and blueberries. PhD students have brought projects on pomegranate and rhododendron.

I have developed an extensive network of international collaborators in Rosaceae genomics and it was fun to invite them all to the 3rd International Rosaceae Genomics Conference that we held in Napier, in 2006. In 2008, I completed a two-year term as Chair of the International Rosaceae Genomics Initiative and was invited to join the international consortium sequencing the apple genome. At the moment, we are excited to be in the final stages of writing the paper describing this achievement. In September, I travelled to St Louis, Missouri, USA, where I was presented with the award of 'Outstanding International Horticulturalist'. Although this was definitely a career highlight, I derive my greatest satisfaction from seeing my team's marker technologies being used assist the breeding of the new fruit varieties that will enhance industry profitability.

The new AWIS website is now live! Please visit http://www.awis.org.nz/

Mentoring our young scientists

*Dr **Heather Meikle** is a secondary school science teacher at Palmerston North Girls' High School. Heather was recently awarded a Royal Society Science and Technology Medal for her work. She enjoys encouraging and mentoring students to create opportunities in science and to help them face any challenges they may encounter along the way.*

Having completed a BScAg (Hons) degree at the University of British Columbia, Vancouver, Canada I followed my passions for sheep and wool to New Zealand. At Massey University working with Dr George Wickham and the late Professor A. L. Rae on my PhD, I investigated the inheritance of fleece and follicle characteristics of Merino versus Romney sheep. I also started my teaching career with Dip Ag and degree students teaching genetics, wool science, sheep production and meat science. A stint at Lincoln University followed where my research was focussed on strength testing wool and teaching wool technology to a variety of students. After a year as a general manager of a woollen manufacturing company I entered secondary teaching at Palmerston North Girls' High School (PNGHS). As a science/biology teacher and coordinator of the Gifted and Talented programme, I get to work with outstanding young women as they begin their science studies.

Creative thinking is one of the key features of the PNGHS Extension programme and also of CREST. CREST = Creativity in Science and Technology. This is an international programme administered by the Royal Society of New Zealand www.crest.org.nz. Students learn time management, higher order thinking and creative problem solving skills. Based on the technology model, CREST encourages students to keep a record of their research and to use scientific methodology accurately. Mentoring is critical to CREST.

Mentorships change lives – both the mentee and the mentor gain from the experience. Young scientists learn that research can be challenging, that setbacks occur but that persistence and hard work pay off. Sophie Zhang a recent PNGHS Gold CREST recipient is now studying at Columbia University. Personally, mentorships have been critical to my scientific teaching career and I am fortunate to have and to have had excellent mentors.

Seeking new science opportunities for students, I became involved in a range of regional, national and international endeavours including the Manawatu Science and Technology Fair, NZ International Biology Olympiad (NZIBO) and ScienceOlympiaNZ (SONZ). This year has been extraordinary! I was a team leader for the NZIBO team to Japan, on a scholarship from PNGHS I attended the World Conference on Gifted and Talented Education in Vancouver and participated in a robotics day after winning a VEX robot from Massey University's School of Engineering.

During the recent pre competition part of the International Biology Olympiad trip to Japan, the team visited Universal Studios. I realised that Jurassic Park involved not just interesting reptiles but a dreaded roller coaster. A team member said, "Sometimes you just have to face the challenge and do it anyway". Science is exciting and through my involvement with young scientists I continue to learn and have the most amazing adventures.

From the Editor

A very warm welcome to our December issue of the newsletter. We have great contributions, again! I am always impressed by the diversity of scientific interests women are involved in. All the stories are different; however, equally strong passion for science emerges from each scientist, whether she is describing her career, her research or mentoring others when they face their first challenges in science. No wonder that such commitments have earned these women both national and international recognitions and awards. Thank you all.

This issue of the AWIS newsletter is smaller in size (easier to download). We hope to adopt a similar trend in the new year and have more frequent but smaller size editions. I hope the next year and the new editorial team brings more fresh ideas and changes to the newsletter; also, I hope we have more of your feedback influencing its format and content.

At the end of the year I would like to thank everyone who supported the newsletter in so many different ways. Special thanks to Liz Carpenter for her continuous support and never ending, optimism and dedication to AWIS. It is great to have Diane Dinnis involved in the production of the newsletter and I invite others, interested to be a part of the newsletter editorial team, to join the team in the new year. If interested, please contact either Diane or myself.

Finally, don't forget that you can now renew your membership online (www.awis.org.nz) and check out the latest branch news and events.

Season's greetings!
Slavica Pavlinic

Researching effects of medical conditions on sex lives

*Dr **Helen Conaglen** (The Psychology Centre) recently won a KuDos award for her research on the effects of medical conditions on sex lives. Helen tells us more about her awarded research and her future research plans.*

My doctoral work examined aspects of sexual desire, and one of the factors contributing to a lack of desire for individuals is the presence of a medical condition in one partner. My clinical psychology training made it possible to work with people experiencing problems with their sex lives, so these two aspects of my work enabled a broader approach to the research. In addition, my husband who is an endocrinologist, deals with people with various medical conditions affecting their sex lives too, so there were synergies between the medical and psychological approach that lent strength to the study designs and work carried out. The work was really a series of studies that is building on some basic ideas about couples.

Because sex is usually a partnered event, people whose partners have a desire level influenced by their medical condition are affected too, so part of the post-doctoral work was to investigate a particular medical condition that impacts desire in a major way (hypogonadism, or the presence of low levels of sex hormones in individuals) on the individuals with the medical conditions, *and* their partners. Investigating couples and being able to show the impact on them of the medical issues, was a step forward for the partners and couples in general, as in research done previously, partners were often overlooked by those treating the symptoms of the patient alone.

Another more recent research project also involved participation of women examining how their partners' medical conditions impacted their sex lives. The study called the Partners' Preference Study was a world first study that looked at the impact on women of their partner developing erectile dysfunction (ED) or problems with erections. We also asked the women, and which type of medication for ED, they preferred the men to use. Most previous work investigated men only, or included their partners only if they presented at the clinic conducting the study with the men who had ED. We have published several papers relating to these projects and presented the work at a number of international meetings.

The work is really ongoing – I intend to keep investigating these kinds of medical/ psychosexual issues, and it should be possible to design future studies as trans-Tasman endeavours. There are other areas that need work of this kind too – the effects on couples' sexual experiences of one partner having various types of cancer is a further interest, and whether psychological interventions can enhance medical treatments for premature ejaculation or sexual desire are other areas of investigation.

I was very surprised to be nominated for the KuDos award, and even more surprised to gain an award, since the work I have done has not been from a large research group, and has been conducted by a small group of people dedicated to the idea that *this science is very important to people's lives*. My collaborators have been many and varied through the hospital and of course the studies could not happen without the help of all the participants. I am always very surprised at how willing people are to participate and try to help others with similar problems overcome sexual difficulties in their lives.

Funding, too, is very important for this work and I have been fortunate to have had the support of the New Zealand Foundation for Research Science and Technology for the post-doctoral work, and Waikato Clinical School for several small projects in this series, beyondblue (an Australian organisation that funds research and education related to depression), and companies, from deer velvet manufacturers to international pharmaceutical companies.

I am currently working in an academic post at Deakin University in Melbourne, Australia, where I hope to be able to set up future studies examining couples issues.

I am a New Zealander and John and I moved to Hamilton with our family 23 years ago. I studied for my PhD and Clinical Psychology qualifications at Waikato University and have been in clinical practice and carrying out research since 2000. During that time I have been based at The Psychology Centre in Hamilton.

From the National Convenor

Over the past few months, the National Executive has been busy with the many inevitable field and conference trips which form part of science life at this time of year.

However, branding has continued to be a focus after the successful launch of our new look website. As we enter 2010, AWIS will be making itself more visible around the country, with standardised imagery that we hope will help us build awareness with our key audiences and attract new, and lapsed, members to the association.

In addition, as a nominating organisation for the New Horizons for Women Trust, we were asked to nominate any of members interested in being involved as a trustee. **Maryanne Baker**, a PhD candidate at The University of Auckland, expressed her interest and has subsequently been nominated by us. We wish her luck and hope that AWIS can become more involved with the Trust through this relationship.

As ever, we take our direction from our members, so if there are any activities you would like to see us undertake in the new year, drop us a line. Keep an eye out for our posters, and if you'd like some flyers to distribute round your institution, do let us know.

Merry Christmas, and good luck for 2010.

Emma Timewell

AWIS Branch news

AWIS Auckland

Emma Timewell, National Convenor

The Auckland branch of AWIS held a networking evening in October, hosted by Plant & Food Research at their Mt Albert site. **Philippa Stevens**, Plant & Food's GM Science (Bioprotection), gave a talk entitled *From Science Technician to General Manager*. There were about 20 attendees who enjoyed wine and nibbles late into the evening.

In the 2010, the Auckland branch will be asking members to join a working group to help organise events and share ideas. If you are interested in joining the group (probably limited to about 5 people), email awis.auckland@gmail.com.

AWIS Waikato

Liz Carpenter, Convenor (liz.carpenter@agresearch.co.nz)

The Waikato AWIS Branch met for a Wine & Cheese & Pizza evening in late November at one member's home (thanks Cilla & family!). We had a good mix of people and enjoyed the social time together. One member is setting out to start a PhD, while another is half-way through and expecting her first baby in a few months, and a third member is nearing the end of her PhD, just married and thinking 'what next'? And there were a few mid-career scientists also. So, we had a fabulous discussion about science careers, family, juggling skills (also known as work/life balance) and what a science career means to us. The evening summed up a lot of what AWIS means to me – a chance to share experiences, ask questions, learn from others and have a good time together.

Next year we're planning another mini-conference. A tentative date is April 21st (a Wednesday). All offers to assist with the planning, or volunteers to speak at this Waikato AWIS gathering will be well received.

AWIS Christchurch

Fiona Carswell, Convenor
(CarswellF@landcareresearch.co.nz)

Christchurh AWIS Branch members will be meeting in 2010. Any suggestions for an event please contact Fiona Carswell.

SCANZ Conference report

*Thanks to Dr **Belinda Bray**, Lecture in Science Communication, University of Auckland, for providing this report.*

The Science Communicators Association of New Zealand's (SCANZ) annual conference was held from 8-10 November in Palmerston North. The conference was kindly hosted by Massey University and the local council, participants benefited from generous hospitality and free food which is always a fantastic way to make people feel welcome.

The programme this year was focussed on media – the stories behind the news and the line-up of speakers was impressive. From an ex-CBS vice-president, to representatives from our own national media – *Unlimited* magazine, *Awa Press* and *Natural History New Zealand*. Many of these speakers focussed on story, the importance of having a human element to the science being portrayed. The current decline of science representation within mass media was discussed, digested, debated and defined. As yet there are no clear solutions but it is on the lips of everyone within this community.

Attendees were from a wide range of backgrounds and experiences, which made for lively debate. Several agencies sent representatives from their communications departments, local government was vocal and of course there were plenty of academics. One of the true strengths of this conference, as is so often the case, were the morning teas and lunches. Networking was fast and furious with emails being exchanged across all sectors. Plans were hatched and a new respect for the variety of challenges and the range of people involved was gained. It was a real meeting of interested minds, from scientists to journalists to professional communicators.

SCANZ 2010 is currently in the planning, location yet to be confirmed. I can recommend the event for all those with an interest in the science/society interface whatever their job title or description.

Announcements

Mentors needed for female students at the University of Auckland

The Faculty of Science at The University of Auckland is looking to pilot a mentor programme for female students in mathematics, statistics, physics and computer science, areas where women remain underrepresented. Beginning in February 2010 we are hoping to be able to connect students with professional women in a range of careers through email. Unlike other mentoring projects, this network will only be online, this means our mentors can be from anywhere and be doing anything.

The aim of the network is to support female students in areas where they sometimes lack immediate peer support. Female students in computer science subjects continue to be under-represented and as many of us know, it is often difficult to compete in such a one-dimensional world. We would like to offer these students a view through the trees to the opportunities that lie beyond University while continuing to support them in the work that they are currently undertaking.

The mentor network is currently looking for possible mentors. Without experienced women prepared to support these girls, this project won't get off the ground. Can you help? All that is required is a one to two hour commitment per week over the course of three months. All communications will be conducted by email and so will be flexible around your workload. We are putting together full communication and support guidelines so you will be fully aware of the commitment and limitations before signing on to the programme.

We would really appreciate your help in getting this project started. Please email Pieta Brown (pieta.brown@auckland.ac.nz) if you would like to get involved. We would also ask that you distribute this information to your own network of contacts and ask them if they would consider taking part in this opportunity.

*Thanks to Dr **Belinda Bray**, Lecture in Science Communication, University of Auckland, for this announcement.*

Prime Minister's Science Prizes

Nominations are now open for the Prime Minister's Science Prizes. Nomination forms can be downloaded from http://www.pmscienceprizes.org.nz/

The Government of New Zealand introduced The Prime Minister's Science Prizes in 2009 as a way of raising the profile and prestige of science among New Zealanders. The Prime Minister's Science Prizes are awarded to:

The Prime Minister's Science Prize – An individual or team who has made an outstanding discovery or achievement in science that has had a significant impact on New Zealand.

The Prime Minister's MacDiarmid Emerging Scientist Prize – A scientist, within 5 years of completing a PhD, who is carrying out leading edge science.

The Prime Minister's Science Teacher Prize – A science teacher for outstanding achievement in teaching Science.

The Prime Minister's Future Scientist Prize – A secondary school student for outstanding achievement in carrying out a practical and innovative research or technology project.

The Prime Minister's Science Media Communication Prize – An individual to further develop their knowledge of science media communication.

NZ's largest science blog network

The Science Media Centre has launched Sciblogs, a network of science blogs covering everything from clinical health to climate change at www.sciblogs.co.nz Sciblogs debuts with 26 bloggers, including scientists from universities, Crown Research Institutes and private research organisations. It will be the largest online hub for science-related content relevant to New Zealanders and act as a forum of discussion on the important issues facing society.

Syndicating their work through Sciblogs are well-established bloggers like Open Parachute's Dr Ken Perrott, MacDoctor's Dr Jim McVeagh, Hot Topic's Gareth Renowden and Dr **Alison Campbell**, the founder of BioBlog.

Newcomers joining the line-up include University of Otago marine ecologist and 2008 MacDiarmid Young Scientist of the Year Dr **Rebecca McLeod**, Victoria University climate scientist Dr Andy Reisinger and theoretical physicist Dr Shaun Hendy, who is deputy director of the MacDiarmid Institute for Advanced Materials and Nanotechnology.

Sciblogs brings the best science bloggers together in one place to form the largest local online community dedicated to science. Sciblog contributors have full editorial and creative control of their blogs and new Scibloggers will be added over time.

AWIS Waikato mini-conference 2010

AWIS Waikato branch are planning a mini-conference for 21 April; please check on the website for updates.

If you would like to get involved please contact Liz Carpenter (liz.carpenter@agresearch.co.nz) .

Congratulations

Congratulations to Dr **Heather Meikle**, Palmerston North Girls' High School for her award of a Royal Society's New Zealand Science and Technology Medals for 2009. Her teaching and contributions to regional and national science programmes have increased awareness and appreciation of science among pupils and the public and have stimulated many young people to follow science-based studies.

Congratulations to Associate Professor **Leanne Woodward** from the University of Canterbury, who was one of five New Zealand researchers, recently awarded a prestigious James Cook Research Fellowships to undertake concentrated work in their fields of expertise for two years. The fellowships are administered by the Royal Society of New Zealand on behalf of the Government and are awarded to "forward thinking" researchers who will make a significant contribution to New Zealand's knowledge base. They allow researchers to concentrate on their chosen research for two years without the additional burden of administrative and teaching duties. Associate Professor **Woodward** will be researching 'Neural and social pathways leading to neurodevelopmental risk'.

Congratulations to Professor **Philippa Gander** (Massey University), internationally renowned sleep researcher, who has been elected as a Fellow of the Royal Society of New Zealand.

Congratulations to **Tina Makereti** from the Kapiti Coast and **Katie Henderson** from Auckland, the two winners of the Royal Society of New Zealand Manhire Prize for Creative Writing. **Tina Makereti** was awarded the non-fiction prize and **Katie Henderson** winning the fiction category. The theme of this year's competition was 'the place of human beings in the universe' and was chosen to coincide with the 2009 International Year of Astronomy.

The Minister of Agriculture has appointed Dr **Kathryn Bicknell** and Dr David Scobie to the National Animal Welfare Advisory Committee. The Minister also reappointed Mr Hilton Collier and Mrs **Jennifer Prattley** for a second term. The Minister of Agriculture has also reappointed Ms **Allison Dodds** and Dr Dave Morgan for a second term to the National Animal Ethics Advisory Committee (NAEAC). Congratulations to all on these ministerial appointments.

AWIS member **Jessica R. Van Leeuwen** (maiden **Deane**) was awarded at the Annual PhD students conference day for her talk 'The Enigmatic Function of the Disappearing Rauber's Layer'. The inaugural PhD student conference day was held in the Department of Biological Sciences, Waikato University, on 9 December 2009.
Congratulations Jess!

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New members

A warm welcome to the following new AWIS members:

Auckland
Maryanne C Baker
Mitali Purohit
Gianna Tsang
Mel Collings

Hamilton/Waikato
Mhairi Sutherland

Wellington
Seetha Lakshmi Lalitha
Kimberley Maxwell

Christchurch/ Canterbury
Stella Belliss
Tennille Mares
Lucia Alonso-Gonzalez

We currently have 144 members.