Recent publications in the school


This is Delphine Marjoshi’s (MSc candidate) first journal publication.


PhD oral exam completed

Aude Thierry, had her oral exam on Friday 19 December. The title of her thesis is ‘Predation risk and the evolution of odors in island birds/ and. The exam took place via video link whilst UC was going through an internet outage so after a few hiccups the presentation was completed. Aude was in Auckland; her Senior Supervisor, Professor Jim Briskie stood by at UC and the Oral Examiner was connecting through from Massey University. No chance for a photo shoot. Congratulations Aude!
What film is this?

Last year I spent 322 days on the road, which means I had to spend 43 miserable days at home.

and now for something completely different...

The best ball boys in the world

Star Wars Parody - Paw Warz

Four hour vacation

Thought for the Week

My brother was French, Algerian, and of the Muslim religion. He was very proud of the name Ahmed Merabet, proud to represent the French police, and to defend the values of the [French] Republic: liberty, equality and fraternity.

Through his determination, he had just received his judicial police diploma and was shortly due to leave for work in the field. His colleagues describe him as a man of action who was passionate about his job.

Ahmed, a man of commitment, had the will to take care of his mother and his relatives following the death of his father 20 years ago. A pillar of the family, his responsibilities did not prevent him from being a caring son, a teasing brother, a generous uncle, and a loving companion.

Devastated by this barbaric act, we associate ourselves with the pain of the families of the victims.

I address myself now to all the racists, Islamophobes, and anti-Semites:

One must not confuse extremists with Muslims. Madness has neither color nor religion. I want to make another point: stop painting everybody with the same brush, stop burning mosques or synagogues. You are attacking people. It won't bring back our dead, and it won't appease our families.

Malek Merabet
(brother of Ahmed Merebet, slain police officer)
Happy Australian Day to all our Australian residents!

Recent publications in the school


This is Aliaa Idris' first publication and at first author. She is doing her PhD in CEMB with David Collings. Congratulations Aliaa!


PhD oral exam completed

Simona Kraberger, had her oral exam on Friday 23rd January. In attendance were her Senior Supervisor, Dr Arvind Varsani, the Oral Examiner, Professor Michael Pearson (University of Auckland) and Oral Organiser, Dr Sharyn Goldstien. Simona's thesis is entitled 'Towards understanding mastrevirus dynamics and the use of viral metagenomic approaches to identify novel gemini-like circular DNA viruses'. Congratulations Simona!
What film is this?

Sometimes it is the people no one imagines anything of who do the things that no one can imagine.

Issue 346: Last year I spent 322 days on the road, which means I had to spend 43 miserable days at home. Answer: Ryan Bingham (George Clooney) spoke this in 'Up in the Air' (2009). This was in honour of George receiving his Golden Globe Cecil B. DeMille lifetime achievement award. Guessed by: There were no George fans out there....

and now for something completely different...

Remembering Deirdre Barlow (aka Anne Kirkbride)

Translucent fish found alive deep under Antarctic ice

Why Rain Gives Off That Fresh, Earthy Smell

Dogs playing fetch

Thought for the Week

You're only one thought away from changing your life.

~ Dr Wayne Dyer
Recent publications in the school


PhD oral exam completed

Donna Sutherland had her PhD oral exam during the week of the 26th January via video link. Her thesis title is 'Enhancing the performance of wastewater microalgae through chemical and physical modifications in High Rate Algal Ponds'. Her Senior Supervisors were Professor Matthew Turnbull and Dr Paul Broady. Professor Jim Briskie was the Oral Organiser. Congratulations Donna!
In the spotlight

Postgraduate awarded best paper

Angus Lindsay's (PhD candidate) paper in the journal Pteridines won the best paper award for a first time author under the age of 40 from the International Society of Pteridinology. The Prize was 1000 Euros. The
title of the paper is: Measurement of changes in urinary neopterin and total neopterin in body builders using SCX HPLC Pteridines 2014:53-62

**Future quality and sustainability of New Zealand snapper investigated**

Improvements in the quality and sustainability of snapper, one of New Zealand’s most popular fish, are being investigated by University of Canterbury scientists.

The research by biological sciences researcher Dr Sarah Coxon will have implications for better commercial harvesting of New Zealand snapper. Read the full article at The Scoop.

*Speedier snapper linked to taste?* - also at Newstalk ZB.

**Most native freshwater species are threatened in New Zealand**

A University of Canterbury researcher says the majority of New Zealand’s native freshwater fish species are threatened or at risk of extinction.

Among those that are threatened, members of the galaxiid family, which include whitebait, are especially threatened or at risk.

Freshwater scientist Dr Simon Howard has investigated the survival of two threatened galaxiids, upland longjaw galaxias and bignose galaxias, in catchments of the Waitaki River which is the second largest river in New Zealand. Read the full article at The Scoop.

**Scientists investigating post-exercise cold water immersion**

After monitoring recovery interventions in the Crusaders Super 15 rugby camp last year, University of Canterbury scientists want to investigate if immediate post-exercise cold water immersion is the main contributing recovery factor.

Biological sciences researcher Associate Professor Steven Gieseg, PhD student Angus Lindsay and summer school student Sam Carr are observing the level of muscle damage and inflammation in fighters following mixed martial arts fights. Read the full article at The Voxy.
What film is this?

Will you follow me, one last time?

Issue 347: Sometimes it is the people no one imagines anything of who do the things that no one can imagine.
Answer: The Imitation Game (2014), yes I know far too recent!!
Guessed by: Noboby...

and now for something completely different...

Some Greek magic.... departed

Libby Lane: First female Church of England bishop consecrated

Saharan dust over the Mediterranean Sea

Photographer highlights New Zealand’s beauty on three-month camper trip

Thought for the Week

A Micropause is a small duration break taken frequently during periods of continuous computer use. A micropause should be taken every 5-10 minutes for between 5-15 seconds. By taking a micropause you will reduce eyestrain and release muscular tension.
Welcome to Semester One

I've been waiting and waiting for you all to return! The campus has been deserted without you (that's if you don't count the hundreds of hi-vis/helmet wearers...). At last the place can get back to being normal again. Lecturing academics will have their first lecture notes all ready for you on Learn. Hopefully you all turn up for the live lectures and get a buzz from your lecturers informing you of the in's and out's of science. Nothing can beat the lecture theatre, sitting next to that pretty girl/boy in row 9, third from the left and making history by scratching your name on the desk (did I write that...). Certainly beats listening to a lecture in your bedroom with your earphones on, no atmosphere there, just the smell of stale pizza. So, go on, challenge yourself and attend that 100-300 level course in person, make your lecturer proud!

Recent publications in the school


Postgraduate news

Welcoming our newest postgraduate students

(1 December - 1 February enrolments)

<p>| Jennifer Agaldo, PhD in Ecology |
| Nuwan Alexandrio de Silva, PhD in Biology |
| Kumilign Asmare Melesse, PhD in Biology |
| Della Bennet, MSc Part II in Biology |
| Bernat Bramon Mora, PhD in Ecology |
| Courtney Burn, MSc Part II in Biology |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree/Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fernando Cagua Bermudez</td>
<td>PhD in Ecology</td>
</tr>
<tr>
<td>Hannah Charan-Dixon</td>
<td>MSc Part II in Zoology</td>
</tr>
<tr>
<td>Sean Cross</td>
<td>MSc Part II in Biochemistry</td>
</tr>
<tr>
<td>Arohi Dhaneshwar</td>
<td>MSc Part II in Environmental Sciences</td>
</tr>
<tr>
<td>Jase Eden</td>
<td>Master of Water Resource Management</td>
</tr>
<tr>
<td>Natalie Forsdick</td>
<td>MSc Part II in Ecology</td>
</tr>
<tr>
<td>Brandon Goeller</td>
<td>PhD in Biology</td>
</tr>
<tr>
<td>Oliver Gooday</td>
<td>MSc Part II in Biology</td>
</tr>
<tr>
<td>Laura Grundy</td>
<td>MSc Part II in Biology</td>
</tr>
<tr>
<td>Anna Henderson</td>
<td>MSc Part II in Biology</td>
</tr>
<tr>
<td>Amy Hill</td>
<td>MSc Part II in Cellular &amp; Molecular Biology</td>
</tr>
<tr>
<td>Janelle Hosking</td>
<td>MSc Part II in Cellular &amp; Molecular Biology</td>
</tr>
<tr>
<td>Robin Hu</td>
<td>MSc Part II in Biochemistry</td>
</tr>
<tr>
<td>Julie Kim</td>
<td>MSc Part II in Biology</td>
</tr>
<tr>
<td>Tara McAllister</td>
<td>MSc in Waterways</td>
</tr>
<tr>
<td>Emma MacKenzie</td>
<td>MSc in Waterways</td>
</tr>
<tr>
<td>Maketalena Male</td>
<td>MSc Part II in Cellular &amp; Molecular Biology</td>
</tr>
<tr>
<td>Karen Middlemiss</td>
<td>PhD in Biology</td>
</tr>
<tr>
<td>Judith Nonis</td>
<td>MSc Part II in Microbiology</td>
</tr>
<tr>
<td>Alannah Rickerby</td>
<td>MSc Part II in Cellular &amp; Molecular Biology</td>
</tr>
<tr>
<td>Hayley Schoch</td>
<td>MSc Part II in Cellular &amp; Molecular Biology</td>
</tr>
<tr>
<td>Alfonso Siciliano</td>
<td>PhD in Ecology</td>
</tr>
<tr>
<td>Olivia Steel</td>
<td>MSc Part II in Biochemistry</td>
</tr>
<tr>
<td>Mehrnoush Tangestanigholami</td>
<td>PhD in Microbiology</td>
</tr>
<tr>
<td>David Thomas</td>
<td>MSc Part II in Ecology</td>
</tr>
<tr>
<td>Channell Thoms</td>
<td>MSc Part II in Environmental Sciences</td>
</tr>
<tr>
<td>Beth Vanderhaven</td>
<td>MSc Part II in Biology</td>
</tr>
<tr>
<td>Solomon Wante</td>
<td>PhD in Biotechnology</td>
</tr>
<tr>
<td>Biplang Yadok</td>
<td>PhD in Ecology</td>
</tr>
</tbody>
</table>

**What film is this?**

You don't want the bumper. Life doesn't give you bumpers.

**Issue 348: Will you follow me, one last time?**

**Answer:** Thorin Oakenshield speaks to his Company in *The Hobbit: The Battle of the Five Armies* (2014)

**Guessed by:** Would you believe, Bill did!
and now for something completely different...

Robot predicts Afghanistan to win the 2015 Cricket World Cup

Cat Tank Wars - Mission: Kibble

Remembering Lesley Gore
  You don't owe me
  It's my party

Commerce building, crane construction timelapse
  (includes moving ants!)

Thought for the Week

If your words are soft and sweet, they won't be as hard to swallow if you have to eat them. -Unknown
Recent publications in the school


---

**In the spotlight**

**Mount Foweraker**

We are really pleased to be able to let you know that the New Zealand Geographic Board has approved our proposal to name pt 1804 in Arthur's Pass National Park as Mount Foweraker. It is named after Charles Foweraker, lecturer and senior lecturer in Botany, and lecturer in charge of the first Forestry School at Canterbury College. The name became **official** on 26 February 2015.

We found out today that our proposal has been accepted and we now have a Mount Foweraker (1804 m) between Sudden Valley and Red Beach Stream (see **picture** – slightly to the right of centre in this photo), being one of the most visible mountains from Cass where Charles Foweraker spent much time teaching students and undertaking research. It is so exciting to have this name is finally confirmed and we look forward to seeing it on maps in the future. - David Norton and Laura Young

**Carbon dioxide can improve quality of wastewater**

A NIWA scientist undertaking doctoral biological research at the University of Canterbury has been exploring how carbon dioxide can improve the quality of wastewater.

Water quality in New Zealand is deteriorating due to increased nutrient loads from human activities, including urban and agricultural development. As a result there is a need for improved nutrient measures, particularly for nutrient removal from wastewater.

**Dr Donna Sutherland** (PhD candidate) says one option for better wastewater treatment and nutrient removal is the use of advanced wastewater treatment ponds that offer immediate solutions to nutrient mitigation. Read more at the **Voxy**.
Re-appointment to Marsden Fund Council

Mr Steven Joyce has announced the reappointment of **Professor Juliet Gerrard** as Chair of the Marsden Fund Council, Dr Ian Ferguson as Convenor of the Cellular, Molecular and Physiological Biology panel, and Professor Robert Hannah as Convenor of the Humanities panel.

The reappointments are for three-year terms from 1 March.

“I welcome the contribution these top researchers can make to New Zealand’s science and innovation system,” says Mr Joyce.

Plunging university roll 'just temporary down cycle'

Student numbers at the University of Canterbury continue to fall, with the 2014 enrolment the lowest in five years.

The student headcount has dropped more than 21 per cent since 2010, dropping from 18,783 that year to 14,725 in 2014.

Tertiary Education Union academic representative for the university, **Professor Jack Heinemann**, said student number projections for 2015 were encouraging.

"Historically the university has returned a surplus and this is just a temporary down cycle for us." Read the full article at [Stuff](http://www.stuff.co.nz).

---

### Postgraduate news

**Welcoming our newest postgraduate students**

(1 March enrolments)

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree/Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew Arnet, PGDipSc in Biology</td>
<td>Zane Lazare, MSc Part I in Ecology</td>
</tr>
<tr>
<td>Mariann Brennan, PGDipSc in Biology</td>
<td>Cameron MacDonald, MSc Part I in Biochemistry</td>
</tr>
<tr>
<td>Dave Brockerhoff, MSc Part I in Biology</td>
<td>Kristina Macdonald, BScHons in Environmental Sciences</td>
</tr>
<tr>
<td>Eduardo Burmeister, PGDipSc in Environmental Sciences</td>
<td>Isis Metcalfe, MSc Part I in Ecology</td>
</tr>
<tr>
<td>Hamish Cleland, PGDipSc in Biochemistry</td>
<td>Tess O'Malley, BSc Hons in Zoology</td>
</tr>
<tr>
<td>Darshana Darshika, PGDipSc in Biology</td>
<td>David Packer, PGDipSc in Biology</td>
</tr>
<tr>
<td>James Davies, MSc Part I in Biochemistry</td>
<td>Greg Parker, BSc Hons in Biochemistry</td>
</tr>
<tr>
<td>Elizabeth Dunn, PGDipSc in Biology</td>
<td>Hayden Petch, PGDipSc in Biology</td>
</tr>
<tr>
<td>Sam Elley, PGDipSc in Cellular &amp; Molecular Biology</td>
<td>Natalie Pilcher, MSc Part I in Zoology</td>
</tr>
<tr>
<td>Thomas Falconer, MSc Part I in Zoology</td>
<td>Jennifer Schori, MSc Part I in Ecology</td>
</tr>
<tr>
<td>Travis Foster, PhD in Biology</td>
<td>Nidhi Sharma, PGDipSc in Cellular &amp; Molecular Biology</td>
</tr>
</tbody>
</table>

---


What film is this?

I'm not Holly. I'm not Lula Mae, either. I don't know who I am! I'm like cat here, a couple of no-name slobs. We belong to nobody and nobody belongs to us. We don't even belong to each other.

Issue 349: You don't want the bumper. Life doesn't give you bumpers.

Answer: Boyhood (2014)

Guessed by: Nobody...

and now for something completely different...

Next time you complain about snow in Christchurch

Digging car out of snow, next task, the tool shed!

Survey reveals signs of tuatara recovery (w/ Video)

Bees form false memories, just like humans

In case you were'nt aware already

Study finds college first-years (in US) are turning away from conventional socializing

Bad kitty

(make sure you put the sound on just to hear the reaction!)

Pass the salt

Lion opens car door... wait for it

Thought for the Week

No river can return to its source, yet all rivers must have a beginning. - Proverb
Recent publications in the school


Welcome to ...

Ruby Robinson was born on Thursday 5th March. Esme (Postdoctoral Fellow) and Richard welcomed their beautiful baby girl to the world. Big sister Elsie must be over the moon as well!
Jeremy Keown had his oral exam on Tuesday 10th March under the watchful eyes of his Senior Supervisor, Dr Grant Pearce, Oral Examiner Professor Julian Eaten-Rye (University of Otago) and the Oral Organiser, Dr Arvind Varsani. Jeremy's thesis title is 'Rubisco's chiropractor: a study of higher plant Rubisco activase'. Congratulations Jeremy, you looked smart in your suit!
Anisha Dayaram had her oral exam on Tuesday 17th March. Her thesis title is 'Discovery of novel circular replication-associated protein encoding single-stranded DNA viruses in ecosystems using viral metagenomic approaches'. In attendance were her Dr Arvind Varsani (Senior Supervisor), Dr Andrew Geering (Oral Examiner, University of Queensland) and Dr Grant Pearce (Oral Organiser). Congratulations Anisha!

Pictured: Dr Arvind Varsani (Senior Supervisor), Anisha and Dr Andrew Geering (Oral Examiner)
In the spotlight

TY Danjuma Scholars Arrive at UC

In 2014 Retired General T.Y. Danjuma created two doctoral scholarships for Nigerian students to carry out PhD research with Associate Professor Hazel Chapman under the umbrella of the UC Nigerian Montane Forest project (NMFP).

Jennifer Agaldo and Biplang Yadok have now arrived at UC;- both of their projects have field work based in and around Ngel Nyaki forest, the NMFP field site and both are aimed at better understanding seed dispersal. Jen is investigating the role of ants in predation vs dispersal of small seeds and this balance in relation to forest restoration. Biplang is investigating the ecology and seed dispersal behaviour of the African pouched rat. This large rat may be an important disperser of large seeded species who have lost their traditional frugivore dispersers to hunting and habitat loss.

For more information on the scholars or the NMFP see the project website: www.afromontane.canterbury.ac.nz
Whitebait on the move in Canterbury

The Canterbury earthquakes devastated the lower reaches of the Heathcote River / Āpāwaho and its mouth at the Avon-Heathcote estuary.

After four years of recovery, one beneficiary may be whitebait. Adult whitebait lay their eggs in streamside vegetation in the area where saltwater mixes with fresh river water, says University of Canterbury doctoral researcher Shane Orchard.

Orchard’s PhD research, supervised by Professor David Schiel, investigates the vulnerability of coastal conservation areas to dynamic changes such as sea level rise. He is using earthquake effects to simulate the type of issues that might occur with climate change. Continue reading more at the Voxy.

Whitebait find new sites to lay eggs post Canterbury earthquakes - read at TVNZ news.

Darwin's Galapagos birds share rare taste for flowers - study

Scientists have for the first time discovered a general shift in diets across an entire group of animals while studying birds on the Galapagos islands that once helped inspire Charles Darwin's theory of evolution. Professor Dave Kelly was quoted in the Daily Mail talking this study.

Heart Life newsletter

Associate Professor Steven Gieseg was spotlighted in Heart Life (Autumn issue). Heart Life is a newsletter published by the Heart Foundation. Read the full article here.

What film is this?

You know, this is my table, man. I own it.

Issue 350: I'm not Holly. I'm not Lula Mae, either. I don't know who I am! I'm like cat here, a couple of no-name slobs. We belong to nobody and nobody belongs to us. We don't even belong to each other.
Answer: Breakfast at Tiffany's (1961). Spoken by the talented Audrey Hepburn (Holly Golightly (aka Lula Mae) to Paul Varjak (George Peppard)
Guessed by: Toni Wi and Jackie Healy
and now for something completely different...

Deans drops in as Grizz's gang reunite
(unfortunately the seminar was last week...)

King Richard III to Get Proper Burial 530 Years Later

Air Guitar with Bradley Cooper

Monica Lewinsky: The price of shame

In honour of National Puppy Day
(yesterday actually...)

Thought for the Week

A person often meets his destiny on the road he took to avoid it. - Jean de La Fontaine
There will be a graduation special newsletter next week.

Recent publications in the school


In the spotlight

Scientists keep quiet on controversial subjects fearing backlash from peers

Scientists and academics have a moral imperative to speak up on controversial issues, but are often failing to do so, a Canterbury University professor says.

Jack Heinemann was speaking at the sold-out New Zealand Association of Scientists annual conference in Wellington on Friday, where the theme was “Going Public: Scientists speaking out on difficult issues”. Read the full article at NZDoctor.

Freshwater habitats decimated by quakes

The effects of the 2010 and 2011 Christchurch earthquakes damaged 100 kilometres of the city's freshwater habitats, new research shows.

Little was known about how large earthquakes could affect freshwater habitats until University of Canterbury freshwater ecologist Professor Jon Harding began researching.

He worked with National Institute of Water and Atmospheric Research (Niwa) scientist Dr Phillip Jellyman to assess the effects of the repeated earthquakes on Christchurch's streams and rivers. Read the full article written by Sarah-Jane O'Connor (PhD graduate, 2013) in The Press.

Catch the video on this article at One News.

Lone Pine seedlings to mark the 100th Anzac Day

Three Turkish red pine seedlings from the original Lone Pine at Gallipoli will be planted around Christchurch on April 25 to commemorate the 100th Anzac Day anniversary later this month.

New Zealand Crown Research Institute Scion, based at the University of Canterbury, has seedlings grown for the 100th anniversary. The seedlings have been nurtured at Scion and the University of Canterbury's School of Biological Sciences glasshouse and Scion researcher Alan Leckie says the seedlings will become the most important trees in New Zealand in terms of their Anzac connections. Read full article at UC Communications.

Common pesticides linked to antibiotic resistance

Antibiotics and herbicides, as it turns out, don’t mix. At least that’s the conclusion of a study published today in mBio, the peer-reviewed journal of the American Society for Microbiology, which found that if someone is exposed to both herbicides and antibiotics at the same time, higher doses of antibiotics will likely be needed to kill the offending bacteria.
It’s the first study of the effect of herbicides on antibiotics, and its findings could have implications for antibiotics resistance. The growing risk of disease from antibiotic-resistant pathogens is a huge public health concern, one that was recently prioritized by both the World Health Organization and the US Centers for Disease Control.

According to Jack Heinemann, the study’s lead author, policy makers and researchers should look at multiple factors, not just over-use of antibiotics, in fighting antibiotics resistance. In addition, as more genetically modified crops are planted, use of herbicides is expected to increase. Read the full article at The Guardian by Amy Westervelt.

Hit the headlines at the Shanghai Daily, The Times of India, Sustainable Pulse, Huffington Post, Genetic Literacy Project, Maria Roadale - Huffington Post, Time Magazine, Civil Eats, Rodale News, Statesman Journal by Tracy Loew, Salon by Lindsay Abrams, NRDC blog by Carmen Cordova, Prison Planet, CommonDreams.org

Listen to Jack’s interview on Radio New Zealand.

And, for those with time on their hands check out the Meltwater Media list...

Claims Of GMO Yield Increases Don’t Hold Up

At a hearing of the House Agriculture Committee this week, opponents of mandatory labeling of GMO foods trotted out the now familiar argument that genetically engineered crops are the key to feeding Earth’s mushrooming population.

Take corn, one of the mostly widely grown GE crops around the world. A major new paper found that average yields of GE corn in the United States from 1986 to 2011 were slightly lower than corn yields over the same period in western Europe, where GE crops aren’t grown. The research was led by Jack Heinemann, a professor of genetics at the University of Canterbury in New Zealand.

Read the full article at the Environmental Working Group.

Canterbury scientist helping critically endangered kakī

A University of Canterbury scientist is investigating ways to ensure the survival and recovery of critically endangered kakī (black stilt) in the wild.

Dr Tammy Steeves is making recommendations to support the management of one of the world’s rarest birds, the kakī, which is a critically endangered endemic wading bird restricted to the Upper Waitaki Basin in the South Island. Read the full article at Yahoo.
What film is this?

If they can't start a meeting without you, well, that's a meeting worth going to, isn't it? And that's the only kind of meeting you should ever concern yourselves with.

Issue 351: You know, this is my table, man. I own it.
Answer: Spoken by Fast Eddie (Paul Newman) in The Hustler (1961)
Guessed by: Nobody...

and now for something completely different...

I had too many treasures to pick from so I added them all.... something for everybody!

- Rattlesnakes inspire search-and-rescue robot design
- Cattle growth hormone alters sexual behavior of fish
- Mini jet-boats are 'built for fun'

Don't read this link if you don't want to know who has won University Challenge NZ!

- Australian cricket legend Richie Benaud dies in Sydney hospice
  (check out the 35 years of cricket at the bottom of the article too)
- Pain relief: New Zealand's breakthrough in migraine treatment

TED talk: Dame Stephanie Shirley: Why do ambitious women have flat heads?

- Mime Through Time by SketchSHE
  (hopefully you can all relate!)
- Best dancer in New Zealand
  (just in case you missed it the first time...)
- Seth Brings Jon Snow to a Dinner Party - Late Night with Seth Meyers
  (for the GoT fans)
- “The best Best Man's speech ever!” - by Daniel Buccheri

Thought for the Week

Imagination is the true magic carpet - Normal Vincent Peale
Graduation special

Recent publications in the school


In the spotlight

'Weird' deep sea creature washes up in Dunedin

It's rarely seen, can grow up to eight metres long and swims vertically, but does it really bite off its own tail?

That is the question marine scientists are grappling with after an oarfish washed up on a salt marsh on the Aramoana Spit at the entrance of Otago Harbour on Thursday.

**University of Canterbury's Chris Glover,** from the School of Biological Sciences, believed there may have been confusion around the term autotomy - "a process where animals can cleave off parts of their bodies" without using their mouths. Read the full article at [Stuff](https://www.stuff.co.nz).

Researchers receive funding to help Kaikoura's fishery

Two University of Canterbury marine researchers have received about $100,000 of government funding over two years to collect information about the state of customary fisheries along the Kaikoura coastline.

**Drs Sharyn Goldstien and John Pirker** will create an innovative tertiary education programme in partnership with Te Rananga o Kaikoura and community partners including the Kaikoura District Council and community partners. Read the full article on the [Voxy](http://www.voxy.co.nz).

UC Me profiles

Both **Lara Sweetapple** (BSc graduate, 2014) and **Sophie Hale** (studying her BSc in Biological Sciences and Economics) have been profiled in the UC Me campaign which is featured on the homepage of [UC](http://www.canterbury.ac.nz). You can
also check Lara out when you pop to the airport looking larger than life on a huge billboard. The last Biology student to do so was Nixie Boddy (studying her PhD in Ecology).

---

**Graduation - Friday 17th April**

**Inspirational Alumni**

[Image: Pictured: Professor Matthew Turnbull (Head of School) and Shelley McMurtrie (UC Biological Sciences inspirational alumni)]

**Shelley McMurtrie** started EOS Ecology—an aquatic science and visual communication company—soon after graduating from UC.

**Dr Ian Stirling** was also given the honour of our latest inductee. His career as a research scientist for the Canadian Wildlife Service at Environment Canada spanned 37 years following his PhD studies at UC where he investigated population ecology of Weddell seals in Antarctica.

Check out their full profiles [here](#).
Doctor of Philosophy

IN PERSON

Anisha Dayaram in Microbiology
Discovery of novel circular replication-associated protein encoding single-stranded DNA viruses in ecosystems using viral metagenomic approaches

Simona Kraberger in Microbiology
Towards understanding mastrevirus dynamics and the use of viral metagenomic approaches to identify novel gemini-like circular DNA viruses

Angela Newton in Biochemistry
Flavour formation in ghee

Donna Sutherland in Environmental Sciences
Enhancing the performance of wastewater microalgae through chemical and physical modifications in high rate algal ponds

Akshita Wason in Biochemistry
Investigation of Lsm Proteins as Scaffolds in Bionanotechnology
COUNCIL CEREMONY

Aliyu Babale in Ecology
The interplay of habitat and seed size on the shift in species composition in a fragmented Afromontane forest landscape: implications for the management of forest restoration

Abishek Muralidhar in Ecology
Turgor regulation in species of Vaucheria (Xanthophyceae, Heterokontophyta) from habitats of contrasting salinities

Master of Science

<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ronan Broad</td>
<td>Biotechnology</td>
<td>First Class Honours</td>
</tr>
<tr>
<td>Ilina Cubrinovska</td>
<td>Evolution</td>
<td>Master of Science</td>
</tr>
<tr>
<td>Emma Dorsey</td>
<td>Biochemistry</td>
<td>Second Class Honours, Division 1</td>
</tr>
<tr>
<td>Letitia Gilmour</td>
<td>Biochemistry</td>
<td>First Class Honours</td>
</tr>
<tr>
<td>Delphine Marjoshi</td>
<td>Microbiology</td>
<td>First Class Honours</td>
</tr>
<tr>
<td>Mark Walker</td>
<td>Microbiology</td>
<td>Master of Science</td>
</tr>
<tr>
<td>Robyn White</td>
<td>Ecology</td>
<td>First Class Honours</td>
</tr>
</tbody>
</table>

Pictured: Professor Jack Heinemann, Delphine Marjoshi, Robyn White and Professor Jim Briskie

COUNCIL CEREMONY

Thomas Davison, Chemistry, First Class Honours - Congratulations Tom!
Samuel Mills, Biotechnology, Master of Science
Ashley Rabel, Zoology, Master of Science
Anish Shah, Biotechnology, Second Class Honours, Division 2
Miriam Wells, Microbiology, Master of Science

**Bachelor of Science with Honours**

<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serena Watkin</td>
<td>Biochemistry</td>
<td>First Class Honours</td>
</tr>
</tbody>
</table>

**Bachelor of Science in Biological Sciences / Biochemistry**

C. Philippa Edwards and Hilary Jacomb  

**Dr John Pirker, Lecturer**

<table>
<thead>
<tr>
<th>Name</th>
<th>Major</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jack E. Aitken</td>
<td>Brittany R. Bennenbroek</td>
<td>Simeon D. Booth</td>
</tr>
<tr>
<td>Mariann P. Brennan</td>
<td>David F. Brockerhoff</td>
<td>Hannah L. Campbell</td>
</tr>
<tr>
<td>Hamish S. Cleland</td>
<td>Rebekah L.I. Crake</td>
<td>Susannah R. Dunham</td>
</tr>
<tr>
<td>Catherine P. Edwards</td>
<td>William N. Finnis</td>
<td>Nicola P.C. Glenjarman</td>
</tr>
<tr>
<td>Samuel M. Houston</td>
<td>Bonnie J. Humphrey</td>
<td>Tamsyn B. Hutchings</td>
</tr>
<tr>
<td>Violet A. Lawson</td>
<td>Ang Li</td>
<td>Cameron A. MacDonald</td>
</tr>
<tr>
<td>Jessica C.V. Nugteren</td>
<td>Gregory J. Parker</td>
<td>Erika M. Paynter</td>
</tr>
<tr>
<td>Esperanza S. Pearl</td>
<td>Nikita B. Peters</td>
<td>Daniel J. Priest</td>
</tr>
<tr>
<td>Craig M. Sherriff</td>
<td>Elliot W. Smith</td>
<td>Jacob A. Somerton</td>
</tr>
<tr>
<td>Chelsea P. Swan</td>
<td>Brechtsje T. Tacoma</td>
<td>Helena E. Trollope</td>
</tr>
<tr>
<td>Oscar W.K. Vanhanen</td>
<td>Jonathan Wang</td>
<td>Serena A.J. Watkin</td>
</tr>
<tr>
<td>Kelly R. Whitau</td>
<td>Roshan G. Wijetillake</td>
<td>Thomas S. Wootton</td>
</tr>
<tr>
<td>Shelly K.Y. Wu</td>
<td>Melissa S. Zainey</td>
<td></td>
</tr>
</tbody>
</table>
### COUNCIL CEREMONY

<table>
<thead>
<tr>
<th>Jessica A. Griffin</th>
<th>Annie G. King</th>
<th>Joseph Lau Jian Le</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gemma L.H. Martin</td>
<td>Isis H. Metcalfe</td>
<td>Matthew Plowman-Holmes</td>
</tr>
<tr>
<td>Nelli Sibaeva</td>
<td>Arminda E. Wood</td>
<td></td>
</tr>
</tbody>
</table>

---

**Thought for Graduation Week**

**The Illustrated Guide To A Ph.D**
Welcome to Term 2

Recent publications in the school


In the spotlight

Early Career Fellow of the Ecological Society of America

Dr Daniel Stouffer has been named an Early Career Fellow of the Ecological Society of America. This honorary title is given to a select number of members to recognise and honour early career ESA members for their contributions and potential contributions to the discipline. Early Career Fellows are elected for five years from the year of selection (2015-2019).

Lottery Health Board funding success

Congratulations to Dr Ren Dobson and colleagues on a successful application to the Lottery Health Board for centrifuge equipment ($49,000).

BIOL 378 class under the ‘Big Totora’ at the Blue Duck Reserve near Kaikoura

What Do We Really Know About Roundup Weed Killer?

More on Professor Jack Heinemann's research, this time in an article at National Geographic.
Choked Christchurch waterways hit fish numbers

Still in the headline news.

A study of Christchurch waterways has found most are so choked with silt that only minimal numbers of eels, trout and whitebait are able to live there. Follow the story at Radio NZ on the UC and NIWA's study involving Jon Harding and Phil Jellyman.

Nepali community rallying for Kiwi support

Christchurch Nepalis are raising money to support their beleaguered country as aftershocks continue and the death toll from the devastating earthquake climbs.

On Monday the community began fundraising in earnest, helped by members of the University of Canterbury (UC) Student Volunteer Army (SVA) in collecting donations at Westfield Mall, Riccarton. Read full article at Stuff.

Fundraising page has been set up to gather donations.

Welcoming our newest postgraduate students

(1 April)

Radhika Mohandass, PhD in Biotechnology
Elle Soper, MSc Part II in Ecology

What film is this?

Your seats? Tyrone, this is a stolen car, mate.

Issue 352: If they can't start a meeting without you, well, that's a meeting worth going to, isn't it? And that's the only kind of meeting you should ever concern yourselves with.

Answer: Spoken by Buddy Ackerman (Kevin Spacey) in Swimming with Sharks, 1994.

Guessed by: Nobody...
and now for something completely different...

Real Kermit The Frog Discovered In Costa Rica

The unique connection

Celebrating Willie Nelson on his birthday

Thought for the Week

Being happy doesn’t mean that everything is perfect. It means that you’ve decided to look beyond the imperfections. - Unknown
Recent publications in the school

This is Laura’s first publication, and at first author, since she graduated with a MSc in Ecology (2012). Congratulations Laura!


This is Brandon’s first publication, and at first author. Brandon is presently doing his PhD in Biological Sciences. Congratulations!


Professor Angus McIntosh is team leader and senior supervisor to the above publishers. Must be something in the water!

In the spotlight

Brian Mason Trust

Applications in the School of Biological Sciences that were successful:

David Collings - $15,770
Bill Davison - $12,575
Jack Heinemann - $12,072
Jon Harding - $15,729

Congratulations to our successful colleagues.
Freshwater Ecology Research Assistant update

Hayley Devlin (nee Stoddart) married her beloved James on the 28th February. Thus her old email is no longer valid. If you need to get in touch with Hayley regarding any FERG matters please use her new email (hayley.devlin@canterbury.ac.nz). Here are a couple of images of the happy couple.

Successful continuation of Bioprotection CoRe

Another piece of good news for UC and SBS, with significant involvement of Professor Jason Tylianakis and Dr Paul Gardner – they were two of the nine Principal Investigator’s involved in writing the bid and will be heavily involved in its future success – so congratulations to Jason and Paul.
**Ocean sunfish an intriguing find**

A morning walk with the dog turned out to be an intriguing trip for a Timaru man when he stumbled upon an ocean sunfish.

Jim Flutey initially thought the dead sea creature left battered and bruised and on the rocky beach in Washdyke was a seal before closer inspection. Dr Chris Glover commented on the find. Read the article at [Stuff](https://www.stuff.co.nz). 

**Microbes found at bottom of ocean are our long-lost relatives**

SO THAT’S where they’ve been hiding. An entirely new group of organisms discovered at the bottom of the Arctic Ocean are our closest simple-celled relatives ever found.

Approximately 2 billion years ago, complex eukaryotic cells, which make up animals, plants and fungi, split from smaller, simpler cells called prokaryotes. Researchers have now identified our closest relatives from before this split. Associate Professor Ant Poole comments on this article. Read the full article at [New Scientist](https://www.newscientist.com). 

**Student successes in Goldstien group**

Oliver Gooday (Olly) has been awarded the Roland Stead 2015. Olly joins peers from his research group who over the past eight months have also been very successful in obtaining funds to further support their research or living costs.

Beth Vanderhaven and Hannah Charan-Dixon both headed to Tonga this week with support from The Sadie Balkind Scholarship administered by the Canterbury Branch of New Zealand Federation of Graduation Women Trust. Hannah was also awarded a field work grant from New Zealand Aid for this trip.

Della Bennet was awarded project support from the Australasian Seabird Group and Birds New Zealand Research Fund for her work based in Kaikoura.

Julie Kim, will be attending the New Zealand Marine Sciences Conference with the funding she obtained from the Canterbury Branch New Zealand Federation of Graduation Women.

Congratulations to all five students.
What film is this?

So, uh, you married old Norm son-of-a-Gunderson?

Issue 354: Your seats? Tyrone, this is a stolen car, mate.
Answer: Tyrone (Ade) says to Vinny (Robbie Gee) "I don't want that dog dribbling on my seats", to which Vinny replies "Your seats? Tyrone, this is a stolen car, mate". Snatch, 2000.
Guessed by: Steven Gieseg, with the assistance of Google.

and now for something completely different...

Jimmy Fallon & Jack Black Recreate "More Than Words" Music Video

Signage with issues

365 days: images of the year - 2014
Eruptions, comets and a see-through mouse all captured the imagination in 2014

Thought for the Week

A maiden at college, Miss Breeze,
Weighed down by B.A.s and Lit.D's,
Collapsed from the strain,
Said her doctor, "It's plain
You are killing yourself --- by degrees!"

In honour of Limerick day, yesterday.
For a moment there I was uploading MY exams into the thingee and completely forgot that there was a newsletter going out this week.

Recent publications in the school


This is Georgina’s second publication, but the first at first author, before the submission of her MSc. Congratulations George!


This is Seyedardalan’s first publication, and at first author, before the submission of his PhD. Congratulations Ardi!


PhD oral exam completed

Gloria Adjapong, had her oral exam on Friday 15th May. The title of Gloria's thesis is 'Characterisation of Candida species: A case study in three teaching hospitals in Ghana'. Her senior supervisor is Dr Ashley Garrill. Congratulations Gloria!

Pictured: Dr Marie Hale (Associate Supervisor), Dr Ashley Garrill (Senior Supervisor), Gloria, Dr Jan Schmid, Massey University (Oral Examiner) and Associate Professor Hazel Chapman (Oral Organiser)

In the spotlight

Dr Sharyn Goldstien - UC Teaching Award Winner 2015

Professor Jack Heinemann - UC Teaching Innovation Award Winner 2015
Fellowship of the Royal Society of New Zealand awardee

Professor David Schiel was awarded a Fellowship of the Royal Society of New Zealand, at a ceremony at the Canterbury Club on Wednesday 20th May. Professor Alison Downard of Chemistry was awarded at the same time. UC did well in getting two of the 12 new fellows appointed nationally in 2014.

Pictured: Stacie Lilley (MERG Research Assistant), Professor David Schiel and Dr Mike Hickford (MERG Research Associate)

2014 Research Report

The 2014 Research Report is now available to view online. The research report is a celebration of UC research, including research articles, a summary of research information for the University and a compilation of the research outputs produced by staff for a given calendar year. The theme for Research Report 2014 is Health and Well-being. Check out our very own Dr Daniel Stouffer on the front cover who looks rather different now :)

Facebook helps to identify rare plants

A rare coral-like parasitic plant discovered by New Zealand scientists on a remote mountain ridge in the Philippines has been named as one of the top 10 new species for 2015.

And they are hoping Facebook can help protect it and other plants like it in an unprotected part of the country threatened by illegal logging.
Husband and wife Pieter Pelser and Julie Barcelona, who both work at the University of Canterbury, and Danilo Tandang of the National Museum of the Philippines, last year discovered the plant Balanophora coralliformis. There are fewer than 50 individual plants known. Check out the full story at Three News.

Meet the world's top 10 new species

The global list is compiled annually by the International Institute for Species Exploration, at the State University of New York. It's a hotly contested honour, as the top 10 are chosen from nearly 18,000 new species described by scientists during the previous year.

And it's not just animals on the list. Dr Pieter Pelser and Dr Julie Barcelona, from the School of Biological Sciences at the University of Canterbury, described an unusual plant from the Philippines. Read the full story at Radio New Zealand.

Manufacturing the Global Food and Agricultural Crisis

Researchers at the University of Canterbury in New Zealand found that the GM strategy used in North American staple crop production is limiting yields and increasing pesticide use compared to non-GM farming in Western Europe. Led by Professor Jack Heinemann, the study's findings were published in the June 2013 edition of the International Journal of Agricultural Sustainability. Check out the full article at Counterpunch.

Seven “best brains” awarded postgraduate scholarships

Several young New Zealanders are heading offshore for their postgraduate study thanks to the William Georgetti Scholarships.

The scholarships were established by the late William Georgetti, a Hawkes Bay farmer, who wanted to create opportunities for the “best brains" to benefit from his bequest. The scholarships encourage postgraduate study and research in a field that is important to New Zealand’s social, cultural or economic development.

Lara Sweetapple from Christchurch will study towards a Master of Molecular Biosciences majoring in Molecular and Cellular Biology at the University of Heidelberg. Lara has a Bachelor of Science in Biochemistry from the University of Canterbury and attended Burnside High School. Lara is a talented dancer and volunteers for several organisations including native tree plant-outs for Kakariki Canterbury. For the full list of awardees, read here.
What film is this?

"Snakes. Why'd it have to be snakes?"

Issue 355: So, uh, you married old Norm son-of-a-Gunderson?
Answer: Fargo (1996)
Guessed by: Jon Hill

and now for something completely different...

Prince Harry meets Kenzie. Adored corgi to Lucy Moore, daughter of our Penny (both standing behind Kenzie!)

What Cats See...

Dachshund vs Crab Part Two - They Meet Again
Remembering the blues legend, B.B. King

**B. B. King - The Thrill Is Gone (Live at Montreux 1993)**

**Rock Me Baby - BB King/Eric Clapton/Buddy Guy/Jim Vaughn**

**B.B. King - Blues Boys Tune**

---

**Thought for the Week**

You can't sweep other people off their feet, if you can't be swept off your own. -Clarence Day (1874-1935)
Recent publications in the school


This is Elizabeth’s first, first-authored paper and first from her PhD completed last year. Congratulations!


In the spotlight

Fern Two certification

The Administration office has now achieved Fern Two certification of the UCEco Office Programme.

Pictured: Kate Nimmo (UC Sustainability), Penny Moore, Lyn de Groot and Nicki Judson
What film is this?

Please promise me never to wear black satin or pearls... or to be 36 years old.

Issue 356: "Snakes. Why'd it have to be snakes?"

Upon entering the Well of the Souls and peering down.
Sallah (John Rhys-Davies): Indy, why does the floor move?
Indiana (Harrison Ford): Give me your torch.
(Indy takes the torch and drops it in)
Indiana: Snakes. Why'd it have to be snakes?
Guessed by: Yinnon Dolev was first, followed by several others!

and now for something completely different...

Research on "real-world" farms gives a clearer picture of how pollination works

Male bats sing, dance and use pheromones to attract females

Cats and babies playing

Choose to smile

Thought for the Week

It's not necessarily the amount of time you spend at practice that counts; it's what you put into the practice. - Eric Lindros
Recent publications in the school


In the spotlight

**Funding success with MBIE**

**Drs Sharyn Goldstien, John Pirker** and **Mr Matt Walters** have received $55,000 through the MBIE 'Unlocking Curious Minds' funding round to develop science engagement with at-risk youth in the Kaikoura region.

This is an important development for the University and the School in connecting with our community. Significantly, it is a great endorsement of the hard work that Sharyn and John are doing in engaging with the Kaikoura community and Matt's work in coordinating our outreach activities.

**What film is this?**

By the authority vested in me by Kaiser William II, I pronounce you man and wife - Proceed with the execution.

Issue 357: Please promise me never to wear black satin or pearls... or to be 36 years old.

**Answer:** Spoken by Maxim de Winter (Laurence Olivier) in Rebecca (1940)

**Guessed by:** Nobody
and now for something completely different...

Remembering Christopher Lee
Gandalf vs Saruman - Fight Scene from The Fellowship of the Ring
Dracula
Scaramanga's Golden Gun
How to Avoid Your Neighbors

Internet Cat Videos Keep You Purring, Study Finds

And on that note, here is a cat video!

Thought for the Week

Several hundred congregants, some tearful, packed the Emanuel African American Episcopal Church for a service led by visiting clergy because the congregation's pastor was among those killed by a young white supremacist.

"But the Devil also entered. And the Devil was trying to take charge," he said.

"Thanks be to God, hallelujah, that the Devil cannot take control of your people. And the Devil cannot take control of your church."
Recent publications in the school


PhD oral exam completed

Angus Lindsay had his oral examination on Thursday 25th June. The title of his thesis is 'Acute and chronic individualized psychophysiological stress assessment of elite athletes through non invasive biochemical analysis'. His Senior Supervisor is Associate Professor Steven Gieseg. Congratulations Angus!

Pictured: Associate Professor Steven Gieseg, Angus, Associate Professor Michael Hamlin (Oral Examiner, Lincoln University), Professor Jim Briskie (Oral Organiser) and Mr Craig Galilee (Freeradical technician)

What film is this?

He chose you, honey! From all the women in the world to be the mother of his only living son!

Issue 358: By the authority vested in me by Kaiser William II, I pronounce you man and wife - Proceed with the execution.
Answer: The African Queen (1951) starring Humphrey Bogart and Katharine Hepburn.

Guessed by: Only slightly, Bill Davison
and now for something completely different...

Pups running for dinner, timelapse style

Highlanders fans in South rejoice

More excellent stories from the Highlanders win...

Highlanders arrive home after victory - video

Conrad Smith 'gutted' for the Hurricanes in heartbreaking Super Rugby finish

Thought for the Week

The butterfly counts not months but moments, and has time enough. -Rabindranath Tagore
Recent publications in the school


Robert Jackson’s photo made it to the front cover of this Issue. Congratulations Robert!


The American Arachnological Society announces a review in the Journal of Arachnology by Robert Jackson and Fiona Cross about the biology of two species of jumping spiders in the family Salticidae that feed preferentially on mosquitoes. One species, Evarcha culicivora, like an eight-legged vampire, is particularly drawn to female mosquitoes whose guts are filled with blood. Another species, Paracyrba wanlessi preferentially feeds on mosquito larvae lurking in pools of water inside bamboo.

Evarcha culicivora has a particular hankering for Anopheles mosquitoes – the very mosquitoes notorious for being malaria vectors. Evarcha culicivora and Anopheles are both found in Kenya and both are attracted to human odor (particularly the odor of dirty socks). Thus, this little spider is a predator that likes us and eats our enemies. By eating blood-filled mosquitoes, this spider also acquires a blood perfume that is attractive to members of the opposite sex.

These two spiders, in their own different ways, are highly specialized mosquito assassins. Like Arnold Schwarzenegger in the James Cameron movie The Terminator, these little specialist predators ignore any other insects that get in the way as they pursue their target victims – mosquitoes.

A review of Robert and Fiona’s publication also made it to the front page of the International Centre of Insect Physiology and Ecology, where they conduct their research.


PhD oral exam completed

Daisy Stainton, had her oral exam on Tuesday 7th July. The title of her thesis is 'Towards understanding the evolution of Banana bunchy top virus and the detection of associated badnaviruses'. Her senior supervisor is Dr Arvind Varsani. It has been an enormous and loud pleasure to get to know Daisy over the last five years. She is the last of the three amigos from the Varsani lab - Go Girl Power!

Pictured: Dr Arvind Varsani, Daisy, Dr Robin MacDiarmid (Oral Examiner, University of Auckland), Dr Pieter Pelser (Oral Exam Organiser)

In the spotlight

Spiders roped into war on malaria

International Centre of Insect Physiology and Ecology (Icipe) researchers said the discovery of the jumping spiders that prefers mosquitoes to any other prey was of exceptional interest and warrants further study.

The two spider species, Evarcha culicivora and Paracyrba wanlessi, are known to specifically target mosquitoes.
Professor Robert Jackson, one of the researchers at Icipe, said the two insect species feed preferentially on mosquitoes, making them the only predators that specialise in killing mosquitoes. Read the full article at the Daily Nation. [see publication above]

New school science project for Kaikoura

A science lecturer at the University of Canterbury has been granted $55,000 to set up a science programme in Kaikoura for those students who have been lost through the cracks of the education system.

Dr Sharyn Goldstien and associates Matt Walters and Dr John Pirker received $55,021 through the Ministry of Business, Innovation and Employment to set up a fun and educational science camp for students in Kaikoura. Sharyn says the project, called "breaking barriers and inspiring kaitiakitanga", will give youngsters a hands-on experience with science and technology. Read the full story at the Marlborough Express.

What film is this?

Love is too weak a word for what I feel - I luuurve you, you know, I loave you, I luff you, two F's, yes I have to invent, of course I - I do, don't you think I do?

Issue 359:
Answer: Minnie Castevet (Ruth Gordon) says to Rosemary Woodhouse (Mia Farrow), "He chose you, honey! From all the women in the world to be the mother of his only living son!" Rosemary's Baby (1968)

Guessed by: Noboby...

and now for something completely different...

Happy 60th, Disneyland! You've come a long way from Day One

New Horizons: Images reveal ice mountains on Pluto

Why we are teaching science wrong, and how to make it right

Thought for the Week

"Laughter is timeless, imagination has no age, and dreams are forever."

Walt Disney
Recent publications in the school


[http://elementascience.org/articles/63/tabs/article_info#sthash.DjmKkBae.dpuf](http://elementascience.org/articles/63/tabs/article_info#sthash.DjmKkBae.dpuf)


PhD oral exams completed

Congratulations!

23 July 2015 : Ardi with Dr David Leung and his external examiner Dr Mary Christey from Plant and Food
28 July: Denise Arroyo. External examiner was Prof Phil Bishop, Otago and Hazel Chapman

and lastly, but by no means least,

31 July: Rachel Harley, examiners were Louis Tremblay, Sally Gaw and Chris Glover. No photo opportunity available.

---

In the spotlight

Press Release: Mosquito Terminators and Vampire Spiders!
Our lovely Fiona Cross made it into The Guardian, with a photo credit to Robert Jackson
http://www.theguardian.com/global-development/2015/aug/05/mosquito-eating-vampire-spider-could-be-recruited-for-war-on-malaria

****

Congratulations to Fatemeh Ashari Ghomi, Matt Hutchinson, Olivia Burge, Richard White, Ayelen Tayagui, and Michael Bartlett for successfully obtaining SBS funds for their upcoming conference presentations. All the best at the respective conferences, which for many will be their first!

On behalf of the Research & Facilities Committee and the School
Second week of Term four already! More importantly it is only three months till Christmas!! The SBS 4th year exams finish this Friday and we will round out the event by having a lunch and combined Loud Shirt Day parade (see Events below). Do hope you enjoy this bumper issue. It is always great to see the high quality researchers out there plus a quality cat video :) 

Recent publications in the school


See article below under 'In the Spotlight'


Editor’s picks - How to get more from your confocal


---

**PhD oral exams completed**

**Kate Schimanski**, had her oral exam on the Wednesday 12th August. In attendance were her Supervisors, Drs Sharyn Goldstien (UC), Grant Hopkins and Oliver Floerl (both from Cawthron). The Oral Examiner was Professor Emma Johnston (University of NSW) and Dr Ashley Garrill chaired the exam. Kate’s thesis title is ‘The importance of selective filters on vessel biofouling invasion processes’. It has been a delight getting to know Kate over the past four years. Congratulations Kate!

Pictured: Dr Sharyn Goldstien and the lovely Kate
Izani Othman, had his oral exam on Thursday 20th August. His senior supervisor is Associate Professor Steven Gieseg. The oral examiner was Dr Judy Dehaan (The Baker IDI in Melbourne). Izani's thesis title is 'Low density lipoprotein induction of intracellular oxidants production'. Congratulations Izani!

Pictured: Mr Craig Galilee, Izani and Associate Professor Steven Gieseg (Senior Supervisor)
Welcome to the world

Freddie and Hannah Prebble (PhD candidate) are the proud parents of **Isobel Sophie** born 25th August weighing 3.4 kg (7lb 8oz). She is a delightful sister for Ollie. Congratulations to you both!

Alumni passing

**David Charles Catt** passed away on the 1st August. He obtained his Masters of Science with Distinction in Zoology in 1976. He returned to the United Kingdom and in 1978 became a Scientific Officer for the Department of Terrestrial Ecology at Brathens in Scotland (Banchory) where he stayed until he retired in 1996. He had many fond memories of his time in New Zealand and many firm friends.

In the spotlight

**Canterbury's whitebait and birds to win in Government funding boost**

Scientists attempting to turn around Christchurch’s declining whitebait population have netted a $126,000 boost to restore spawning habitats.
Associate Conservation Minister Nicky Wagner on Sunday unveiled two Canterbury projects to benefit from the Government's Community Conservation Partnership Fund.

The Whaka Inaka project was granted more than $126,000 to restore whitebait habitat in Christchurch which is going to be a collaboration of EOS ecology (Shelley McMurtrie – ex Biol student), Ngai Tahu and Dr Mike Hickford (MERG), while Braided River Aid received $33,000 to protect colony-nesting birds on Canterbury riverbeds. Read full article at Stuff.

**Science and Technology Fair**

More than 200 budding scientists from schools in Ashburton to Oamaru filled the Caroline Bay Hall with their exhibits for the annual Science and Technology Fair on Wednesday 9th September.

Across town at Timaru Girls' High School auditorium New Zealand's first Chinese language week was celebrated with a cultural performance. Check out all the photos at the Fair at The Timaru Herald. The winners can be viewed here.

Phoebe Argyle, Jessica Roche and Angus McIntosh went down to Timaru to be judges at the Central South Island Sanford Science Fair.

This did involve a very early start, but was a thoroughly rewarding and worthwhile experience! It was great to network with people, including quite a number of our graduates, involved in science in the central South Island area (e.g., ECAn, Dairy NZ, Ornithological Society etc). Angus was particularly heartened to meet somebody he had taught recently who was obviously doing a great job promoting biology as a primary school teacher.

Interestingly, although other universities provided prizes, we were the only university to send people to help with the judging, and talking to the young people (mostly school years 7-10) about their science projects was definitely the best part.

Thanks very much to Phoebe and Jessica for volunteering their time!

**Flora & Fauna of Norfolk Island**

James Russell, University of Auckland wrote a small post in National Geographic on the flora and fauna of Norfolk Island. In it he mentions the work of Professor Richard Holdaway and Margaret Christian about the bird life of the island.

**New pitcher plant species discovered in Luzon**

An unsuspecting insect could get easily lured into the red and stout pitcher found in the Sierra Madre mountains of Aurora, eastern Luzon.

The insect may be diving into its death.
The red meat-eating pitcher plant is a newly-discovered species called *Nepenthes barcelonae*.

University of Canterbury lecturer and hebarium curator **Pieter Pelser**, one of the authors of the paper on this discovery, told Rappler that they found this species during their fieldwork on Philippine *rafflesia*, a parasitic flower known for its pungent odor. Read full article at [Rappler](https://www.rappler.com).

**New map reveals spread of weeds around the world**

Australia, New Zealand and the Pacific Islands are the weediest places in the world for their size thanks to the influx of weeds from the northern hemisphere, according to new research.

The findings come from the first comprehensive analysis of the global movement of non-native plants published in the journal *Nature*.

If you walk around New Zealand, and you actually start counting the number of species that are native here, and those that are not native but naturalised, it's around 50/50," says Dr Pieter Pelser, a systematic botanist at the University of Canterbury in New Zealand, a co-author on the new study. Read more at [ABC Science](https://www.abc.net.au/science/articles/2023-01-25/new-map-reveals-spread-of-weeds-around-world/12947336).

**Whitebait subject of research**

University of Canterbury research biologists **Mark Yungnickel** and **Mike Hickford** have commenced a project to 'describe' the species catch composition in this year's whitebait runs. Read the full story at [Stuff](https://www.stuff.co.nz).

**Whitebait fishery: something must change** - Read another article from [Stuff](https://www.stuff.co.nz).

**Whitebaiters joined by researchers this season** - Read the story by Sarah-Jane O'connor at [Stuff](https://www.stuff.co.nz).

**The obstacles to food security worldwide**

**Professor Jack Heinemann** gets a mention in this article which you can read [The New Zealand Herald](https://www.nzherald.co.nz/dining/news/article.cfm?id=123456789).

The very phrase "feeding the world" conjures up the idea of grand centralised plans. But research shows that, in spite of industrial agriculture's most grandiose claims, ecological agriculture is the most viable way to feed us all.

The UN Food and Agriculture Organisation claims that to feed nine billion of us well in the year 2050, as people become more affluent, global agricultural production will need to increase by 70 per cent. Various critics dispute this claim.

**Leonardo Co's Digital Flora: the legacy of a passionate plant expert**

On 15 November 2010, botanist Leonardo L Co was shot and killed by the Philippine army while doing fieldwork on the island of Leyte.
Co was an outstanding and internationally acclaimed plant scientist and conservationist, with an enormous heart for the plants and people of the Philippines. His death left his family, colleagues, and friends in shock and disbelief, and a country without its most passionate and knowledgeable plant expert.

He also left behind an unfinished manuscript and over 11,000 photographs. Co had dedicated many years to an extraordinarily ambitious project: a first modern overview of all indigenous plants of the Philippines. His good friend, Julie Barcelona, her husband Pieter Pelser (both at the University of Canterbury, New Zealand) and Daniel Nickrent (Southern Illinois University, USA) have continued Co's work, to ensure that his incredible contribution to Botany – work that touched and changed thousands of lives – would continue and flourish. Read the full story at The Guardian - some delightful images.

Nearly 5 years after death, citizens keep botanist Leonard Co's work alive - Read more at GMA Network.

Many of the kiwi's unusual traits developed to allow it to survive at night, geneticists say

The shy, nocturnal kiwi may have once strutted around in daylight before being forced to take the night shift by bigger rivals, according to scientists who have mapped the bird's DNA.

A study by researchers in Australia and Germany, has found the kiwi picked up many of its unusual traits - nocturnality, a strong sense of smell and colour-blindness - shortly after arriving in New Zealand about 35 million years ago.

University of Canterbury senior lecturer Tammy Steeves said although it was worrying the study had to be done outside of New Zealand, it would be useful in understanding the lifestyle of the kiwi. Read the full story at SBS (Special Broadcasting Service, Australia).

New research finds Kiwi evolved to cope with nocturnal life - Read the story written by Sarah-Jane O'Connor at Stuff.

North Island Brown Kiwi Genome - Listen to the Radio New Zealand interview with Dr Tammy Steeves

Kiwi genome reveals nocturnal bird's colour blindness - Read the story at The News Hub.

Fulbright scholarship takes Canterbury student to Florida

University of Canterbury (UC) student Tom Swan is heading to the United States after being awarded a Fulbright scholarship to study mosquitoes.

Tom will spend a year as a visiting student researcher at the University of Florida's Medical Entomological Laboratory at Vero Beach near Orlando, Florida. Although quite well-travelled, Tom is excited and nervous about the trip, which has been made possible by a Fulbright Science and Innovation Award. Read the full article at UC Communications.
Early-career Fellowship award

Photo: Inaugural IPBES Young Fellows for Asia-Pacific at the UN University in Tokyo (Back row: Yasuo Takahashi - Japan, Aidin Niamir - Iran, Yuan Yuan Zhang - China, Sonali Ghosh - India; Front row: Felicia Lasmana - Indonesia, Amani Al-Assaf - Jordan, Catherine Febria - New Zealand).

Postdoctoral Research Fellow Catherine Febria was recently awarded an early-career fellowship on the UN Intergovernmental science-policy Panel on Biodiversity and Ecosystem Services (IPBES). IPBES is the first intergovernmental panel to synthesise the state of the world’s biodiversity and ecosystem services for policy-making through regional expert panels for the Americas, Europe, Africa, Central Asia and Asia-Pacific. Catherine is one of 120 scientists on Asia-Pacific author team and one of 4 scientists representing New Zealand. As a IPBES Young Fellow until 2018, she will also be part of the IPBES capacity building function to transfer knowledge and provide training to a younger generation of scientists in the IPBES & UN science-policy processes. Last week, Catherine attended the inaugural Asia-Pacific authors' meeting at the UN University in Tokyo and is pictured below with the inaugural Fellows. Catherine was awarded funding from MBIE’s Linking Science with Policy grant program. For more information about IPBES, visit: [http://www.ipbes.net/](http://www.ipbes.net/)

JS Watson Trust application outcome

Jennifer Schori (MSc candidate in Ecology, co-supervised by Dr Tammy Steeves (Biological Sciences) and Dr Tara Murray (Forestry) has been successful in her application to the J.S. Watson Trust and has been granted $5,000 for her project – the development of management protocols for the endangered native robust grasshopper. Congratulations Jennifer!
NZMS student GIA application outcome

**Paddy Gibson** (MSc candidate in Cellular & Molecular Biology, supervised by Professor Jack Heinemann) has been awarded a grant-in-aid of $900 towards attending the New Zealand Microbiological Society conference 2015 in Rotorua. Congratulations Paddy!

Herbicides and antibiotic resistance

The problem of antibiotic resistance is typically portrayed as a problem of overuse and overprescription. Over the past decade there’s been a surge in antibiotic use for both humans and livestock, and it’s this that’s seen as the primary explanation for why bacteria develop antibiotic resistance. But could there be other, environmental factors at play?

**Dr Brigitta Kurenbach** and **Prof Jack Heinemann** from the School of Biological Sciences at University of Canterbury have been researching the effects of using common garden weedkillers on bacteria. They’ve discovered that bacteria become more resistant to antibiotics in the presence of herbicides. Listen to the interview at Radio New Zealand.

Mosquito-hunting spiders could help deadly malaria

Mosquito-eating spiders from East Africa and Malaysia could become a new weapon in fighting malaria, researchers have said.

A species of spiders found only around Lake Victoria in East Africa, called *Evarcha culicivora*, is adapted to hunt female *Anopheles* mosquitoes that transmit malaria parasites. Read the full article on Fiona Cross’ and Robert Jackson’s research at Sci. Dev. Net.

Mosquito-eating vampire spider could be recruited for war on malaria - Read this wonderful article in The Guardian.

These blood-loving spiders could help fight malaria - Another read up in The Washington Post.

"Mosquito-assassin" spiders could help fight malaria - Read the full article at the CBS News.

Bloodthirsty spider is a friend to humans - Read the full story at The Columbian.
Postgraduate news

Welcoming our newest postgraduate students

9 March
Malea Zygadlo, MSc in Environmental Sciences

1 May
Sana Lehre, PhD in Biotechnology
Hannah Prebble, PhD in Biochemistry
Alibe Wasa, PhD in Microbiology

1 June
Chris Horne, PhD in Biochemistry

1 July
Phoebe Argyle, PhD in Environmental Sciences
Jo Carpenter, PhD in Ecology

1 September
Kevin Fraley, PhD in Biological Sciences
Justin Pomeranz, PhD in Ecology

What film is this?

What we got here is... failure to communicate.

and now for something completely different...

How quantum biology might explain life's biggest questions
Jameel Sadik "Jim" Al-Khalla OBE is a British theoretical physicist, author and broadcaster. He is currently Professor of Theoretical Physics and Chair in the Public Engagement in Science at the University of Surrey. He has hosted several BBC productions about science and is a frequent commentator about science in other British media.

Sardines, Anchovies and Other Fast-Growing Fish Species Vulnerable to Dramatic Population Plunges

How 16th century observations paved the way for Darwin's landmark study
Should Tasmanian Devils be returned to mainland Australia?

Rutgers alumni naturally bring walls to life

A Cat's Guide to Boxes

Thought for the day

You can't have your cake and eat it too - Proverb
Recent publications in the school


This is Richard's first publication and as first author before the submission of his PhD. Richard is completing his degree in Ecology with Professor Angus McIntosh.

PhD oral exams completed

Rachel van Heugten had her oral exam on Monday 21st September. The title of her thesis is 'Weta affairs: An investigation into the population structure and possible hybridisation of two tree weta species (Hemideina) in Canterbury'. Her Senior Supervisor is Dr Marie Hale. Congratulations Rachel!

Pictured: Associate Professor Mary Morgan-Richards (Oral Examiner, Massey University), Rachel, Dr Marie Hale (Senior Supervisor) and Dr Pieter Pelser (Oral Organiser)
Tuikolongahau Halafihi had his oral exam on Friday 25th September. The title of his thesis is 'Ecology and Biology of *Etelis coruscans* and *Pristipomoides filamentosus*: Case Study of the Tonga Deep-water Bottomfish Fishery'. His Senior Supervisor is Dr Sharyn Goldstein. Congratulations Hau!

Pictured: Dr Sharyn Goldstien (Senior Supervisor), Hau and Dr Stuart Hanchet (Oral Examiner, NIWA)

**Loud Shirt Day**

The school celebrated another successful Loud Shirt Day combined with the end of 4th year exam with a feast of pizza and lashings of ginger beer. We raised $210 which exceeded our target of $150. Big ups to all that contributed. All monies will be donated to the Hearing House to aid deaf children with cochlear implants and hearing aids.

The Loudest staff member was Gavin Tish and the Loudest student went to Brandon Goeller.
The scary thing is Gav still has this ensemble in his wardrobe...... I've just noticed those sandals Brandon....
The Hearing House is a charity for deaf children with cochlear implants and hearing aids. Their mission is to enable deaf or hearing-impaired children to listen and speak like their hearing peers. They aim to give deaf children with cochlear implants or hearing aids the ability to fulfil their potential and live an independent life in a hearing and speaking world. The Hearing House serves the needs of hundreds of hearing impaired children and their families from Kaitaia to Turangi.

In the spotlight

REVEALED: The horny vampire spider that kills its prey to get sex

Because these are no ordinary arachnids - they kill their prey to GET LAID. The "Dracula" of creepy crawlies specifically hunts blood-carrying mosquitos to make them smell more attractive to the opposite sex. Dubbed the "mosquito assassin", this ruthless predator is so determined to capture its victims that it has been likened to The Terminator.

The jumping spider, scientifically known as Evarcha Culicivora, has been studied extensively by researchers **Dr Fiona Cross** and **Professor Robert Jackson**. Read the new article at [The Daily Star](https://www.thedailystar.com.au).
Gardening: Workers vital for food security

September is Bee Month and it's great to see a groundswell of public awareness on the plight of the honeybee. Beehives are popping up in backyards and even schools are getting in on the action. Garden centres are helping by highlighting bee plants, and research is now available on bee-friendly trees for farms.

The research conducted by Professor Dave Kelly et. al. was mentioned in this article found at the New Zealand Herald. The research refers to this journal (Kelly, D., J.J. Ladley, A. W. Robertson, J. Edwards, and D. C. Smith. 1996. The birds and the bees. Nature 384:615).

Dannevirke: Mayor bids new citizens welcome

It was a special day for the 10 new citizens who took their oaths and affirmations of allegiance in Dannevirke, including Tony Joseph (PhD, 2012). Read the full article at Hawke's Bay Today. Congratulations Tony!

Tony undertook his PhD in Plant Biology with Professor Matthew Turnbull.

Study says humans didn't cause global banana virus spread

An Australian study revealed that Indian subcontinent is a major hub of the long-distance Banana bunchy top disease (BBTD) movements.

Dr. Arvind Varsani from the University of Canterbury led this study about the evolution and distribution of a major banana disease virus, with funding from the Masrden Fund of New Zealand. They wanted to know whether humans inadvertently spread the virus through moving banana plants around the planet for horticulture. Read the full article at Food World News.

New Zealand student gains 3rd place at prestigious European Union science competition

Timothy Logan, 17, is thrilled to have won third place and 3,500 Euros at the prestigious European Union Young Scientist Competition (EUCYS) in Milan, Italy.

A Year 13 student at Darfield High School in Canterbury, Tim was also the 2014 recipient of the Supreme Award at Realise the Dream and the Prime Minister's Future Scientist Prize. Read the full article at the Royal Society of New Zealand.

What film is this?

Norville Barnes, you don't know a thing about that woman. You don't know who she really is. Only a numbskull thinks he knows things about things he knows nothing about.

362: "What we got here is... failure to communicate" spoken by Captain, Road Prison 36 (Strother Martin), most likely to Luke (Paul Newman).
and now for something completely different...

X-Factor: Jasmine Leigh Morris sings Emeli Sande's Clown

Check out NASA on Mars news

England v Wales - Match Highlights & Tries

7 things you must do in Newcastle

Thought for the day

Sometimes in life you just have to choose the correct outfit for your legs.
Recent publications in the school


In the spotlight

Off the beaten track with Kennedy Warne

On a recent southern journey Kennedy Warne met paleoecologist Richard Holdaway at one of the most important and revealing fossil sites, Pyramid Valley, near the wine-growing area of Waipara in North Canterbury, to learn more about ancient Aotearoa as it was before humans arrived. Kennedy looks at the the life of the Cook Strait ferry Arahura. The ferry travelled 13 million kilometres in 32 years, the equivalent of 325 times around the world, and her noblest hour was when she responded to a mayday call from the sinking Mikhail Lermontov cruise liner in 1986. He also talks about the journalist Svetlana Alexievich who won the Nobel prize for literature. Here is an excerpt of her work is taken from "Voices From Chernobyl", which won the National Book Critics Circle Award.

Listen to his broadcast at Radio New Zealand.

What film is this?

Cinderella story. Outta nowhere. A former greenskeeper, now, about to become the Masters champion. It looks like a mirac... It's in the hole! It's in the hole! It's in the hole!

363: Norville Barnes, you don't know a thing about that woman. You don't know who she really is. Only a numbskull thinks he knows things about things he knows nothing about.

Answer: Spoken by Amy Archer (Jennifer Jason Leigh) to Norville Barnes (Tim Robbins) in The Hudsucker Proxy (1994)
and now for something completely different...

Top 10 best cat commercials

About that doomsday asteroid that was supposed to hit Earth...

France: What we thought in 2007 ahead of All Blacks Rugby World Cup quarterfinal

Thought for the day

According to my fitness tracker...
Recent publications in the school


This is Maketalena’s first publication before the submission of her MSc and at first author. Her Senior Supervisor is Dr Arvind Varsani. Congratulations Make!


PhD oral exams completed

**Amanda Klemmer** had her oral exam on Tuesday 13th October via video link. Amanda was in Maine; the Oral Examiner, Associate Professor Kevin Collier was in the Waikato and Professor Angus McIntosh (Senior Supervisor) and Associate Professor Hazel Chapman (Oral Organiser) were both in Christchurch. The title of Amanda's thesis is 'Unravelling the effects of multiple cross-ecosystem subsidies on food webs'. Another success story from the Freshwater Ecology Research Group. Congratulations Amanda!

![Image of Amanda Klemmer and others](image1.jpg)

**Helen Warburton** had her oral exam on the Tuesday 20th October. The title of Helen's thesis is 'The role of body size in predator-prey interactions and community structure'. Her Senior Supervisor is Professor Angus McIntosh. Congratulations Helen on a stirling effort!

![Image of Helen Warburton and others](image2.jpg)

**Pictured:** Professor Jim Briskie (Oral Organiser), Professor Angus McIntosh (Senior Supervisor), Helen and Dr Kevin Simon (Oral Examiner, University of Auckland)**
Amanda Greer had her oral exam on Thursday 22nd October via video link from Ireland. Her thesis title is 'Intraspecific variation in the foraging ecology and morphology of kea Nestor notabilis'. Her Senior Supervisor is Dr Ximena Nelson. It has been a huge delight to get to know you Amanda throughout the course of your degree. Congratulations Amanda!

Pictured: Dr Ximena Greer, Dr Colin O'Donnell (Department of Conservation), Dr Daniel Stouffer (Oral Organiser) and Dr Travis Horton (Associate Supervisor, Geology)
Welcome to the world

Stella Frances Febria Oabel
Born Sunday 11 Oct @ 9:54am
7lbs, 52 cm long
Welcomed happily by Mum (Catherine), Dad (Peter), big sister Emilia
**In the spotlight**

**Annual Biology Conference: Friday 23rd October**

The Annual Biology Conference (ABC) is a single day symposium, organised by the School of Biological Sciences, to provide an opportunity for postgraduate research students to present their findings to colleagues, peers and to the wider scientific community.

The communication of science and the presentation of research ideas and results are important skills to possess as an emerging scientist. The ABC allows students to develop public speaking skills and gain confidence and experience in delivering a presentation to a larger audience.
Overall winner talks: Kevin Chase

Allee effects determine whether invasive species establish

PhD 1st: Michael Bartlett

Seminal fluid proteins and speedy sperm: sperm competition in the chinook salmon (Oncorhynchus tshawytscha)
PhD 2nd: Eimear Egan
Inanga early life history: a bone of contention?

PhD 3rd: Phoebe Argyle
From dinoflagellate to dinner plate: toxic microalgae in the Pacific

MSc 1st: Della Bennet
Hutton’s shearwater foraging behaviour interpreted by time-depth logger data and stable isotope analysis
MSc 2nd: Oliver Gooday
A birds eye view: An assessment of non-invasive population estimates for New Zealand fur seal pups
(Arctocephalus forsteri)

MSc 3rd: Judith Nonis
Bacteriophage as a biocontrol tool for foodborne pathogens

BSc Hons/BSc: Matthew Hutchinson
The scaling up of coevolution in pollination networks beyond species pairs
Overall winner papers: **Simona Kraberger** (David Collings accepted her prize)
Four papers at first author, four as other author

Honourable mention: **Angus Lindsay** (X 5 first author), **Donna Sutherland** (X3, first author)

**PhD: Abishek Muralidhar** (David Collings accepted Abishek's prize)

PhD Honourable mention: Manmeet Kaur for a 2014 paper in Nanoscale

MSc: Nick Baker

BSc Hons: Kristina MacDonald

The ABC was proudly brought to you by the following sponsors: New Zealand Society of Plant Biologists, Biomolecular Interaction Centre, New Zealand Microbiological Society, The Royal Society of New Zealand, John Morris Scientific, Lab Supply, Ad Instruments and Macrogen.

College of Science Research Awards for 2015
The winner of the College of Science Excellence in Research Linkages Award 2015 is Professor Jon Harding of the School of Biological Science. Working with other UC colleagues and those from CRL Energy Ltd as well as Landcare and the University of Otago, Jon has led a team formed in 2004 aimed at improving management and environmental outcomes for the mining sector. This work, funded by MBIE, has been
guided with input from the regional councils, mining companies, and iwi advisory groups, and has produced improved environmental outcomes as a result of the research input. Congratulations Jon!

**Conference poster prize**

Nicole Wheeler, long suffering PhD student of Paul Gardner and Renwick Dobson was awarded the “Traditional Poster Prize” at the main Queenstown Molecular Biology 2015 conference for her presentation "profile-based comparison of Pseudomonas genome reveals signatures of pathogenicity". Nicole received a juicy cheque in exchange for her hard work.

**The genome of Thauera**

Students from a fourth year Genomics class at the University of Canterbury have sequenced the genome of Thauera, in collaboration with scientists from GNS science. Thauera is a bacterium isolated from the Taupo Volcanic Zone by Dr. Matt Stott and colleagues at GNS Science. The genome sequence reveals it to be a broadly useful new species with potential for use in synthesis of ‘green’ plastic compounds and for cleaning up environmental contamination.

The joint support of the Biomolecular Interaction Centre (BIC) and the School of Biological Sciences at the University of Canterbury has enabled BIC PIs Paul Gardner and Ant Poole to create the most hands-on genomics & bioinformatics course in the country, where the students go from project idea to completed genome in around 8 months. Until recently, this type of research was limited to large international consortia, but the UC students have now closed that gap.

The students drove the project from start to finish, deciding on a research question themselves. They then sourced biological material, undertook the genome sequencing and analysed the genome using state-of-the-art bioinformatics tools. BIC/Bluefern PhD scholarship recipient Sinan Umu played a key role in guiding the students through the intricacies of advanced computational analysis.
The students, Liz Dunn, Sam Elley, Hyunwoo Jun and Nellie Sibaeva, together with their UC and GNS Science colleagues, are now on track to submit their research results to an international, peer-reviewed journal.

Cheese roll fundraiser

Kat Melief recently had a fundraiser selling cheese rolls on behalf of her daughter, Paige. She was fundraising for a school camp and overall her class of 15 managed to raise over $2,000 and Paige sold the most by almost triple of the other kids! She would like to massively thank everybody who brought the rolls and their huge support!

What film is this?

Many times I'd felt alone, but until this afternoon I'd never felt completely lonely.

364: Cinderella story. Outta nowhere. A former greenskeeper, now, about to become the Masters champion. It looks like a mirac... It's in the hole! It's in the hole! It's in the hole!

Answer: Spoken by Carl Spackler (Bill Murray) in Caddyshack (1980)
and now for something completely different...

Zack the Golden Retriever and the ice cream man

Tooth Fairy may work overtime in the future

All Blacks wing Julian Savea has two chances in try of the year nominations

In case you want to follow them: https://twitter.com/AllBlacks

Thought for the day

Happiness is as a butterfly which, when pursued, is always beyond our grasp, but which if you will sit down quietly, may alight upon you.

Nathaniel Hawthorne
Recent publications in the school

This is Matthew Arnet’s first publication and at first author. Matthew is beginning Masters Part II next year with his senior supervisor, Dr Pieter Pelser. Congratulations Matthew!


This is Wafaa Hassan’s first publication before the submission of her PhD. Her senior supervisor is Dr Ashley Garrill. Congratulations Wafaa!


In the spotlight

UC research could offer NZ potato growers an edge

New Zealand potato growers could gain a new marketing edge thanks to a line of potatoes developed by University of Canterbury researchers.

UC Biotechnologists Dr David Leung and Dr Seyedardalan (Ardi) Ashrafzadeh have developed potato plants that are potentially resistant to cadmium, a highly toxic metal found in soil which is harmful to crops and can contribute to health issues in humans. Read the full story at Scoop.
**Brian Mason Trust success**

Congratulations to colleagues Dr Tammy Steeves and Stephanie Galla (PhD candidate), who have been successful in being awarded $14,061 from the Brian Mason Trust to support their project "A conservation genomic approach for maximising genetic diversity in a critically endangered New Zealand endemic bird".

Congratulations also to Dr Volker Nock (Elec Eng) and colleague Dr Ashley Garrill, who have been successful in being awarded $11,763 from the Brian Mason Trust to support their project "Networks in evolution: Capturing the complexities of early life using combinatorics and random graphs".

**National Heart Foundation success**

Congratulations to Associate Professor Steven Gieseg, who has been awarded travel funding from the National Heart Foundation of $3,500 to attend a meeting in Austria.

**Marsden Fund grants UC researchers over $4 million**

UC has secured grants for six research projects, totalling $4.1 million. The projects cover the disciplines of biological science, geology, electrical engineering, linguistics, and physics.

Professor Steve Weaver, UC Deputy Vice-Chancellor (Research) said it was excellent to see some of our top researchers recognised and getting the support they deserved.

UC Behavioural Ecologist Professor Jim Briskie’s project - Conserving small island populations of endangered New Zealand birds: can a ‘Swiss Family Robinson’ dilemma be avoided? - was awarded $805,000.

In biochemistry, Dr Renwick Dobson, who is also a Biomolecular Interaction Centre principal investigator, saw his project - How do bacteria scavenge sialic acids from their human host? - funded $770,000. Read the full story at UC Communications.

Congratulations also to Dr Ashley Garrill (AI on a Fast-Start grant with Volker Nock from Engineering) and Professor Jason Tylianakis (AI on a grant through VUW).

**Fulbright scholar to study pasture cleanup in New Zealand**

Driving thousands of miles to catch dung beetles in traps baited with pig droppings may not sound like glamorous work to most, but for entomology graduate student Matt Jones it is just another day in the field.

Jones is Washington State University’s newest recipient of a Fulbright Scholarship. The award will fund his ongoing doctoral research on what he calls nature’s “cleanup crew.”

During his Fulbright, Jones will attend the University of Canterbury in Christchurch, New Zealand and work at several research field stations nationwide. Read the full story at WSU News.
Thomas Hildebrand the first marine biologist at Ngai Tahu Seafood

Thomas Hildebrand is living his dream and giving back to his home town of Bluff.

Hildebrand is the first marine biologist to work for Ngai Tahu Seafood.

The 25-year-old University of Canterbury graduate started working for Ngai Tahu Seafood in March this year after completing his master's thesis in marine biology in 2014. Read Thomas' story at Stuff.

What film is this?

Mother, what's wrong with me?

365: Many times I'd felt alone, but until this afternoon I'd never felt completely lonely.

Answer: (voice over) John Dunbar (Kevin Costner) in Dances with Wolves (1990)

and now for something completely different...

In case you haven't seen the trailer yet...

Sir David Attenborough narrates Adele's Hello

Cat went to the neighbours to borrow a tiger plush toy

An ode to the quince

When I grow up I want to be an Astronaut

Thought for the day

"Don't let the choice that you didn't make weigh you down."
Written in 2015 by Eric Eisenberg --- Missouri
Recent publications in the school

This is Michael Bartlett’s first publication before the submission of his PhD. His Senior Supervisor is Dr Tammy Steeves. Congratulations Michael!


The latest edition of Methods in Ecology and Evolution 6(11) features the research of Amanda’s PhD, a Kea parrot (Nestor notabilis).

You might also want to check out Amanda’s blog on ‘Why accurate stable isotope discrimination factors are so important: A cautionary tale (involving kea)’, which features on the Met.Ecol.Evol. website.


This is Joshua Thia’s first publication and at first author since the submission of his MSc. He was co-supervised by Associate Professor Hazel Chapman, and Drs Marie Hale and Daniel B. Stouffer*. Congratulations Josh!

* Welcome back Daniel :)

---

PhD oral exam completed

[Image: Picture from Nigerian Montane Forest Project]

Charles Nsor had his oral exam on the 10th November via video link in Nigeria. The Oral Examiner, Dr Kevin Burns was in Wellington and both the Senior Supervisor, Associate Professor Hazel Chapman and the Oral Organiser, Professor Jim Briskie, were in Christchurch. All went well. Congratulations Charles on finally making it to your oral exam!
Farewell to arms

We farewelled, very informally, Dr Paul Broady at a "last day of marking" morning tea on Monday 9th November. Islay provided a delightful cake which included edible "algae" and a fitting speech celebrating Paul's milestone of 30 years teaching. Your cup tossing skills will be truly missed in the tearoom!

New additions to the school

Please welcome our Summer Scholarship 2015/2015 students to the school. They will be taking up various lab/field projects amongst our varied academics.

<table>
<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stacey</td>
<td>Testing the right riparian plant species for stream restoration projects: the role of leaf breakdown</td>
</tr>
<tr>
<td>Amanda</td>
<td>Development of a Bioassay for Angiotensinogen to Identify Women Prone to Pre-Eclampsia</td>
</tr>
<tr>
<td>Hannah</td>
<td>The response of New Zealand freshwater fishes to fine inorganic sediment</td>
</tr>
<tr>
<td>Michael</td>
<td>Mapping the ¼ and ½ TIM barrels</td>
</tr>
<tr>
<td>Maddie</td>
<td>Using conservation genomics to maximise the genetic diversity of threatened species</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>Finding the determinants of genetic disease in the human genome</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett</td>
<td>Jon Harding; Helen Warburton</td>
</tr>
<tr>
<td>Board</td>
<td>Ren Dobson</td>
</tr>
<tr>
<td>Currie</td>
<td>Jon Harding; Nicky Glenjarman</td>
</tr>
<tr>
<td>Currie</td>
<td>Jon Harding; Ren Dobson</td>
</tr>
<tr>
<td>Dowgray</td>
<td>Paul Gardner; Tammy Steeves</td>
</tr>
<tr>
<td>Dunn</td>
<td>Paul Gardner</td>
</tr>
</tbody>
</table>
In the spotlight

Cadmium-resistant potatoes for NZ growers

The potatoes, developed by UC Biotechnologists Dr David Leung and Dr Seyedardalan (Ardi) Ashrafzadeh from the University of Canterbury, could potentially be resistant to cadmium, a highly toxic metal found in soil which is harmful to crops and can contribute to health issues in humans. Read the full article at Rural News.

Brian Mason Trust success

Congratulations to Dr Marie Hale, who along with colleague Dr Hannah Buckley (Dept of Ecology, Lincoln University) has been successful in being awarded $9,753 from the Brian Mason Trust to support their project "Understanding the role of genetics in a declining taonga species – pingao"

SBS Post-graduate successes at the New Zealand Microbiology conference, Rotorua

Nicole Wheeler (PhD with Dr Paul Gardner) and Paddy Gibson (MSc with Professor Jack Heinemann) were two of the five finalists at the New Zealand Microbiology talk competition. Their talks were selected from 18 students who each delivered 3min lightning talks. The finalists then each gave a full 15min presentation.
Nicole was awarded the best student talk with her presentation of "Profile-based comparison of *Pseudomonas* genomes reveals signatures of pathogenicity". The prize is a trip to Boston to present her research at the American Society for Microbiology annual conference.

Honourable mention goes to Paddy for her talk on "Herbicide components and their effects on antibiotic resistance in *Salmonella enterica*.*

Well done to both. A fantastic effort!

**UC Professor wins Science Communicator award**

University of Canterbury Professor of Marine Science David Schiel has been awarded the New Zealand Science Communicator of the Year award by the New Zealand Association of Scientists in a ceremony in Wellington.

This year’s medal has gone jointly to Prof Schiel and Christopher Battershill (Professor and Chair of Coastal Science, University of Waikato). Read the full story at UC Communications.

**Top Bay marine ecologist honoured for Rena work** - Read full story at the Bay of Plenty Times.
New GM technology under fire

A leading scientist has labelled the latest genetic-modification technology approved in New Zealand “the snake oil of the 21st century”.

University of Canterbury professor molecular biology and genetics Professor Jack Heinemann is urging NZ authorities to think again about approving crops and products with genetically modified double-stranded RNA (dsRNA). Read the full story at Farmers Weekly News.

What film is this?

Excuse me, I think the word you're searching for is “Space Ranger”.

366: Mother, what's wrong with me? Spoken by Regan MacNeil (Linda Blair). To which her Mother replies: It's just like the doctor said. It's nerves, and that's all. You just take your pills and you'll be fine, really. Okay?

YEAH, RIGHT!!

Answer: The Exorcist (1973). Our Bill got this one and Penny. Bill even remembered the theme music. I am not responsible for any nightmares tonight...

and now for something completely different...

Newborns and cats

Let Me Out! - Simon's Cat
Thought for the day

"Stay positive always, even if you run out of reasons to be optimistic."
Kiplimo Chemirmir - Kenyan Warrior
The final newsletter for the year will be on Monday 21 December which will incorporate the graduation special/end of year roundup.

Recent publications in the school


PhD oral exam completed

Kat Donovan completed her oral exam on Tuesday 1st December. Her Senior Supervisor is Dr Ren Dobson. The title of Kat's thesis is 'Dancing to a different tune: adaptive evolution fine-tune protein dynamics'. Congratulations Kat!

Pictured: Dr David Ackerley (Oral Examiner, VUW), Kat and Dr Ren Dobson
(Photographer: Dr Ashley Garrill, Oral Organiser)

In the spotlight

Biological Sciences International Food Festival

This was held in the School Atrium on Friday 4th December.
Wow! I’d like to convey A BIG THANK YOU from everyone who attended (and filled their tummies to bursting) to all the amazing chefs (Travis Foster, United States; Alfonso Siciliano, Italy; Hannah Charan-Dixon, Fijian-Indian/New Zealand; Mehrnoush Tangestani Gholami, Iran; Stephanie Galla, United States; Aynsley Macnab, New Zealand; Yinnon Dolev, Israel; Wafaa Hassan, Iraq; Ilina Cubrinovska, who provided both Japanese and Macedonia food and Manuel Fernandes, Portugal)

What a magnificent way to spend a lunchtime and to glean an insight into these wonderful countries that our lovely students leave to study here!

The monies raised is still being calculated. Special thanks to Adam from UCSA for providing the fancy food warmers, to Dion who donated eggs for Mehrnoush dishes and to Kristina Macdonald’s family for the wonderful eggs provided for Yinnon dishes and to you all for supporting the event.
Mehrnoush and Wafaa, with their delights from Iran and Iraq
NZFSS & ASL joint conference 2015 success

23-26 November, held in Wellington

Eimear Egan, PhD candidate
NZ Journal of Marine & Freshwater Research Prize for Best Paper

Richard White, PhD candidate
Best Conservation Talk
Sadie Balkind Awardees

Amy Hill, MSc in Cellular & Molecular Biology with Professor Jack Heinemann; and Jennifer Schori, MSc in Biological Sciences with Dr Tammy Steeves and Dr Tara Murray in Forestry have been awarded the 2015 Sadie Balkind Award from the Canterbury Branch of the New Zealand Federation of Graduate Women. The award is for $2,500. Congratulations Amy and Jennifer!
New Zealand Ecological Society Conference success

Pictured: Kim Roberts, Anna Henderson, Olivia Burge, Marine Aubert, Dave Kelly and Kevin Chase
Absent: Jo Carpenter

Professor Dave Kelly's lab did really well at last week's NZ Ecological Society Annual Conference.

Anna Henderson (MSc) won a prize for one of the two best talks in the student day, and won the prize for the best student poster in the main conference.

Marine Aubert (PhD) took the second place prize for best student poster.

Olivia Burge (PhD) got one of five best-student-talk prizes from the main conference.

Considering there were 345 at the conference including probably >150 students that’s a pretty good haul for UC!
Promotion success

To Senior Lecturer Above Bar – Pieter Pelser
To Associate Professor – Ximena Nelson, David Leung, Daniel Stouffer and Ren Dobson
Progression within Associate Professor grade – Steven Gieseg
To Professor – Islay Marsden
Progression within Professor grade – Paula Jameson, Jack Heinemann, Jon Harding

Finally, a first for the School:

To Distinguished Professor – Dave Schiel
The status and title of Distinguished Professor is reserved for those Professors who clearly demonstrate
world-class academic leadership and achievements of the highest international standing over a decade or more. Currently the University has four Distinguished Professors, to which we now add David.

Postgraduate news

Welcoming our newest postgraduate students

1 October
Malyon Bimler, MSc in Ecology
Stephanie Galla, PhD in Biological Sciences

1 November
Serena Watkin, PhD in Biochemistry

New Postgraduate representatives

I am happy to inform that Melissa Broussard and Brandon Goeller are now the new heads of the Student Postgraduate Committee.
We are available at any time if you have any requests, concerns, or suggestions to improve the PG student experience in our school.

~ Jessica Roche ~

What film is this?

Well, ain't it a small world, spiritually speaking. Pete and Delmar just been baptized and saved. I guess I'm the only one that remains unaffiliated.

367: Excuse me, I think the word you're searching for is "Space Ranger".

Answer: Toy Story (1995) - Buzz (Tim Allen) speaking to Woody (Tom Hanks).
and now for something completely different...

Origami expert takes up weaving?
I'm attempting an origami snake!
This is what happens when your computer breaks.

Fish turn invisible to avoid predators

Biologists induce flatworms to grow heads and brains of other species

Fed Up - Simon's Sister's Dog with the RSPCA

Thought for the day

Postponing Christmas Dilbert style
Recent publications in the school


In the spotlight

College of Science Health & Safety Champion Award

The winner is Professor Bill Davison, School of Biological Sciences. Bill has made a significant contribution to Health & Safety in the School of Biological Sciences. As DSO from 2004 to 2014, he was central to the development of best practice in H&S since the formation of the School in 2004, implementing numerous initiatives to encourage engagement and promote best practice in Health & Safety. Bill has also been the University’s MPI Compliance Operator since 2001, supporting and advising students and staff on compliance for research projects, and when critical issues arise he has made himself available after hours and weekends, including during the aftermath of the earthquakes as one of the advisors on lab and chemical safety to the UC response team. Bill has championed health & safety for many years not only in the College but University wide. Congratulations and well done Bill.

Relocated 350kg crocodile swims 400km to return home in North Queensland

It took 400 kilometres and just under a month for a Queensland research team to realise that relocating far north Queensland problem crocodiles was never going to be an option.

Several years ago UQ School of Biological Sciences Professor Craig Franklin and his team translocated three saltwater crocodiles from a remote section of Wenlock River in the Steve Irwin Wildlife Reserve on the west coast of Cape York to various remote locations along the west coast. Read the full article at Stuff.

Professor Craig Franklin is one of our latest Inspirational Alumni (check out the Graduation section).
Fundraising highlights of the year

Pink Ribbon Morning Tea for Breast Cancer Awareness, $325

Loud Shirt Day for the Hearing House Appeal, $210
International Food Festival for Doctors without Borders, over $200
General staff Christmas lunch

On the 15th December the tearoom clan went out for a very enjoyable lunch to celebrate the spirit of Christmas. We ate, drank and laughed loudly. Secret Santa was a huge hoot, especially the Racing Royals!

Kōwhai Bush trapping protects rare birds

In Kōwhai Bush behind Kaikōura, predator trapping may rescue the largest population of native robins and riflemen in lowland Canterbury from localised extinction.

University of Canterbury Professor Jim Briskie said numbers of South Island robins-toutouwai and riflemen-tītīpounamu had fallen steadily since students first started monitoring nests in the reserve, 20 years ago. He is confident that 12 months of trapping will improve nesting success. Read the full story at Scoop.
SBS Quiz night

The last quiz night for the year was held on the 9th December over at the UC Club.

The quiz went really well! Many teams were formed on the spot in a very relaxed atmosphere. The Furgusson (1st) smashed it out, followed closely by the Geoducks (2nd). The Braindeers (3rd) received well-deserved spot prizes for their elaborated “Christmas decoration” fancy costumes.

Thanks to Melissa Broussard for offering homemade bread as one of the prize, smelt so nice.

The Braindeers
Everyone wins at the SPGC quiz, and the Nomads (last) were given some beautiful *dunce caps*… along with vegemite and white bread. Lucky them!

The quiz was punctuated by chocolate rains, and the evening ended up on a scary note with Brandon Goeller projecting the official Krampus trailer (2015): [https://www.youtube.com/watch?v=h6cVyoMH4QE](https://www.youtube.com/watch?v=h6cVyoMH4QE)

“He knows you have been bad or good”…so remember to be nice to each other!

**CAREX newsletter**

Check out the [December](#) edition of the [CAREX](#) newsletter and see what the team have been up to.

---

**Lecturing academics making it big this year!**

**In order of receiving award/accolades:**

![Lecturing academics](#)
Sharyn Goldstien and John Pirker, received about $100,000 of government funding over two years to collect information about the state of customary fisheries along the Kaikoura coastline.

Daniel Stouffer, was named an Early Career Fellow of the Ecological Society of America.

Ren Dobson, and colleagues were successful on an application to the Lottery Health Board for centrifuge equipment.

David Collings, Bill Davison, Jack Heinemann, Tammy Steeves, Ashley Garrill, Marie Hale and Jon Harding, had successful Brian Mason Trust applications.

Sharyn Goldstien, was a UC Teaching Award Winner 2015.

Jack Heinemann, was a UC Teaching Innovation Award Winner 2015.

David Schiel, was awarded a Fellowship of the Royal Society of New Zealand,

Sharyn Goldstien and John Pirker, received $55,000 through the MBIE 'Unlocking Curious Minds' funding
round to develop science engagement with at-risk youth in the Kaikoura region.

**Jon Harding**, was the winner of the College of Science Excellence in Research Linkages Award 2015.

**Steven Gieseg**, was awarded travel funding from the National Heart Foundation of $3,500 to attend a meeting in Austria.

**Jim Briskie, Ren Dobson, Ashley Garrill** and **Jason Tylianakis**, were successful with Marsden Funds/Fast-Start Grants.

**David Schiel**, was jointly awarded the New Zealand Science Communicator of the Year award by the New Zealand Association of Scientists.

**Pieter Pelser**, promoted to Senior Lecturer Above Bar.

**Ximena Nelson, David Leung, Daniel Stouffer** and **Ren Dobson**, promoted to Associate Professor.

**Steven Gieseg**, promoted to Progression within Associate Professor grade.

**Jim Briskie, Ren Dobson, Ashley Garrill** and **Jason Tylianakis**, were successful with Marsden Funds/Fast-Start Grants.

**David Schiel**, was jointly awarded the New Zealand Science Communicator of the Year award by the New Zealand Association of Scientists.

**Pieter Pelser**, promoted to Senior Lecturer Above Bar.

**Ximena Nelson, David Leung, Daniel Stouffer** and **Ren Dobson**, promoted to Associate Professor.

**Steven Gieseg**, promoted to Progression within Associate Professor grade.

**Islay Marsden**, promoted to Professor

**Paula Jameson, Jack Heinemann** and **Jon Harding**, promoted to Progression within Professor grade.

**David Schiel**, promoted to Distinguished Professor.

**Bill Davison**, 2015 winner of the College of Science Health and Safety Champion Award.

---

**General staff successes**

**Matt Walters**, along with Sharyn Goldstien and John Pirker, has received $55,000 through the MBIE 'Unlocking Curious Minds' funding round to develop science engagement with at-risk youth in the Kaikoura region.

**Lyn de Groot, Penny Moore** and **Nicki Judson**, awarded Fern Two Certification

---

**Student successes**

**Angus Lindsay's** paper in the journal Pteridines won the best paper award for a first time author under the age of 40 from the International Society of Pteridinology.

**Oliver Gooday**, was awarded the Roland Stead award 2015.

**Beth Vanderhaven** and **Hannah Charan-Dixon**, headed to Tonga with support from The Sadie Balkind Scholarship administered by the Canterbury Branch of New Zealand Federation of Graduation Women Trust. Hannah was also awarded a field work grant from New Zealand Aid for this trip.

**Della Bennet**, was awarded project support from the Australasian Seabird Group and Birds New Zealand
Research Fund for her work based in Kaikoura.

**Julie Kim**, attended the New Zealand Marine Sciences Conference with the funding she obtained from the Canterbury Branch New Zealand Federation of Graduation Women.

**Tom Swan** was awarded a Fulbright scholarship to study mosquitoes in Florida, United States.

**Jennifer Schori** has been successful in her application to the J.S. Watson Trust and has been granted $5,000 for her project.

**Paddy Gibson** was awarded a grant-in-aid of $900 towards attending the New Zealand Microbiological Society conference 2015 in Rotorua.

### Annual Biology Conference

![Image of two people holding a certificate]

**Overall winner talks: Kevin Chase**

Allee effects determine whether invasive species establish
PhD 1st: Michael Bartlett
Seminal fluid proteins and speedy sperm: sperm competition in the chinook salmon (*Oncorhynchus tshawytscha*)

PhD 2nd: Eimear Egan
Inanga early life history: a bone of contention?

PhD 3rd: Phoebe Argyle
From dinoflagellate to dinner plate: toxic microalgae in the Pacific
MSc 1st: Della Bennet
Hutton’s shearwater foraging behaviour interpreted by time-depth logger data and stable isotope analysis

MSc 2nd: Oliver Gooday
A birds eye view: An assessment of non-invasive population estimates for New Zealand fur seal pups
\( (Arctocephalus forsteri) \)

MSc 3rd: Judith Nonis
Bacteriophage as a biocontrol tool for foodborne pathogens
BSc Hons/BSc: Matthew Hutchinson
The scaling up of coevolution in pollination networks beyond species pairs

Overall winner papers: Simona Krabberger (David Collings accepted her prize)
Four papers at first author, four as other author
Honourable mention: Angus Lindsay (X 5 first author), Donna Sutherland (X3, first author)

PhD: Abishek Muralidhar (David Collings accepted Abishek’s prize)

PhD Honourable mention: Manmeet Kaur for a 2014 paper in Nanoscale

MSc: Nick Baker
BSc Hons: Kristina MacDonald


Nicole Wheeler, was awarded the "Traditional Poster Prize" at the main Queenstown Molecular Biology 2015 conference for her presentation.

Nicole Wheeler and Paddy Gibson were two of the five finalists at the New Zealand Microbiology talk competition.

Pictured: Nicole Wheeler and Paddy Gibson
Nicole was awarded the best student talk with her presentation of "Profile-based comparison of Pseudomonas genomes reveals signatures of pathogenicity". The prize is a trip to Boston to present her research at the American Society for Microbiology annual conference. Honourable mention goes to Paddy for her talk on "Herbicide components and their effects on antibiotic resistance in Salmonella enterica."

Amy Hill and Jennifer Schori, have been awarded the 2015 Sadie Balkind Award from the Canterbury Branch of the New Zealand Federation of Graduate Women. The award is for $2,500.

NZFSS & ASL joint conference 2015

Eimear Egan

NZ Journal of Marine & Freshwater Research Prize for Best Paper

Richard White

Best Conservation Talk, PhD
Channell Thoms, MSc candidate (with big hair) won Best Conservation Talk, MSc. Her talk was titled ‘Distribution and feeding trials of Kekewai, the native freshwater crayfish (Paranephrops zealandicus) in Canterbury’.

Tara McAllister, MSc candidate (with gold headgear) won Best Presentation.

Emma MacKenzie, MSc candidate (front row, long hair) won Best Applied Science Poster.
New Zealand Ecological Society Conference

Pictured: Kim Roberts, Anna Henderson, Olivia Burge, Marine Aubert, Dave Kelly and Kevin Chase Absent: Jo Carpenter

**Anna Henderson** won a prize for one of the two best talks in the student day, and won the prize for the best student poster in the main conference.

**Marine Aubert** took the second place prize for best student poster.

**Olivia Burge** got one of five best-student-talk prizes from the main conference.

---

**New additions to the School**

**Mattias Dehling**, Postdoctoral Fellow in the Stouffer Lab Group.

**Shawn Gerrity**, Research Assistant in the Marine Ecology Research Group.

**Craig van Dolleweerd**, Research Scientist with Callaghan Innovation.
Hatches, Matches and Dispatches

We go ga-ga

Ruby newly born with Elsie

Ruby Charlotte Leonard was born on Thursday 5th March. Esme (Postdoctoral Fellow) and Richard welcomed their beautiful baby girl to the world. Big sister Elsie must be over the moon as well!
Freddie and Hannah Prebble (PhD candidate) are the proud parents of **Isobel Sophie** born 25th August weighing 3.4 kg (7lb 8oz).

She is a delightful sister for Ollie.
Stella Frances Febria Oabel
Born Sunday 11 Oct @ 9:54am, 7lbs, 52 cm long
Welcomed happily by Mum (Catherine), Dad (Peter), big sister Emilia
We celebrate

Hayley Devlin (nee Stoddart) married her beloved James on the 28th February.

We remember

Dr Peter Meredith passed away on the 15 January. He worked as a research scientist with Ilam Potato Sciences. Peter wrote a book called ‘Cooking Potatoes’ in 1994. He was a regular in the tearoom for some years and used to run through the variety of potatoes with informative glee! “Any fool can grow potatoes but it takes a very clever fool to grow them at great profit.”

David Charles Catt passed away on the 1st August. He obtained his Masters of Science with Distinction in Zoology in 1976. He returned to the United Kingdom and in 1978 became a Scientific Officer for the Department of Terrestrial Ecology at Brathens in Scotland (Banchory) where he stayed until he retired in 1996. He had many fond memories of his time in New Zealand and many firm friends.

December graduation - 15th December

Inspirational Alumni

The School recognises alumni who have made outstanding professional achievements and who have had a positive impact on our community or society.

Professor Craig Franklin

Craig is Professor in Zoology and Depty Head in the School of Biological Sciences at the University of Queensland (UQ) and Executive Director of UQ Research Ethics. The focus of Craig's research is the investigation of the responses of organisms to changing environmental conditions including assessing and predicting the impact of human-induced environmental change.
Dr Sara Kross

As a conservation biologist, Sara is interested in forming landscapes and human-wildlife conflicts and was also a founding member of the Marlborough Falcon Conservation Trust. Her PhD research at UC focussed on the efficacy of reintroducing the threatened New Zealand Falcon (*Falco novaeseelandiae*) into the vineyards of Marlborough, New Zealand's largest wine region, as both a conservation scheme and as a source of natural pest control.
Dr Morgan Williams
Completed 10 years as New Zealand's second Parliamentary Commissioner for the Environment in 2007. Prior to this he held research and policy roles in agriculture and represented New Zealand research interests internationally, worked widely in the South Pacific and undertook his masters research in Antarctica. In 2004 Lincoln University awarded Morgan an honorary doctorate in Natural Resources.

Credit: NZCEL, Aukland University

Check out the full profiles here.

Doctor of Philosophy

Dr Sharyn Goldstien, Dr Tuikolongahau Halafihi and his wife **** Dr Kate Schimanski, Dr Sharyn Goldstien and Dr Tuikolongahau Halafihi
IN PERSON

Tuikolongahau Halafihi in Ecology
Ecology and Biology of *Etelis coruscans* and *Pristipomoides filamentosus*: Case Study of the Tonga deep-water bottomfish fishery

Jeremy Keown in Biochemistry
Rubisco's chiropractor: A study of higher plant Rubisco activase

Amanda Klemmer in Ecology
Unravelling the effects of multiple cross-ecosystem subsidies on food web

Angus Lindsay in Biochemistry
Acute and chronic individualized psychophysiological stress assessment of elite athletes through non invasive biochemical analysis

Kate Schimanski in Ecology
The importance of selective filters on vessel biofouling invasion processes

Daisy Stainton in Microbiology
Towards understanding the evolution of Banana bunchy top virus and the detection of associated badnaviruses

Helen Warburton in Ecology
The role of body size in predator-prey interactions and community structure

Dr David Collings and Dr Daisy Stainton ******************** Dr Amanda Klemmer, Professor Angus McIntosh
and Dr Helen Warburton
COUNCIL CEREMONY

Gloria Adjapong in Microbiology
Characterisation of *Candida* species: A case study in three teaching hospitals in Ghana

Tommaso Alestra in Ecology
Impacts of altered physical and biotic conditions in rocky intertidal systems: implications for the structure and functioning of complex macroalgal assemblages

Seyedardalan Ashrafzadeh in Plant Biology
Investigations into response of potato to cadmium with special emphasis on genotype and somaclonal variations

Ryan Catchpole in Cellular and Molecular Biology
Evolution Of The Unnecessary: Investigating How fMet Became Central In Bacterial Translation Initiation

Amanda Greer in Ecology
Intraspecific variation in the foraging ecology and morphology of kea *Nestor notabilis*

Rachel Harley in Zoology
Ion transport physiology and its interaction with trace element accumulation and toxicity in inanga (*Galaxias maculatus*)

Izani Othman in Biochemistry
Low density lipoprotein induction of intracellular oxidants production

Aude Thierry in Evolution
Predation risk and the evolution of odours in island birds
Hau's celebration with his Senior Supervisor, Dr Sharyn Goldstien, Jan McKenzie and Graeme Bull

Graduation celebrations with Tappe in attendance
Master of Science

Christina Terra Dumont

Leon Allen  Biological Sciences  Merit
Bryony Jane Andrews  Zoology  Master of Science
Sian Davies  Biochemistry  Second Class Honours, Division 2
Terra Dumont  Ecology  First Class Honours
Kokwai Fung  Microbiology  Master of Science
Anton Mather  Biochemistry  Second Class Honours, Division 1

COUNCIL CEREMONY
Nicholas Baker in Ecology, Distinction
Sophie Hunt in Ecology, First Class Honours
Edward Marks in Biochemistry, First Class Honours
Mamta Mehrotra in Microbiology, Masters only
Maggie Olsen in Ecology, First Class Honours
Liezl Thalwitzer in Plant Biology, First Class Honours
Kate Wootton in Biological Sciences, First Class Honours
Bachelor of Science with Honours

Nelli Sibaeva  Microbiology  First Class Honours

Bachelor of Science in Biological Sciences / Biochemistry

<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heaven Alem Kahsay</td>
<td>Scott M. Anderson</td>
<td>Bridget A. Armstrong</td>
</tr>
<tr>
<td>Nicholas D. Barnes</td>
<td>Stacey J. Barlett</td>
<td>Callum R. Bell</td>
</tr>
<tr>
<td>Amanda J. Board</td>
<td>Joseph D.T. Bond</td>
<td>Michael J. Currie</td>
</tr>
<tr>
<td>Alison A. Faulls</td>
<td>Claire E. Flynn</td>
<td>Kilali T.S.A. Gibson</td>
</tr>
<tr>
<td>Matthew C. Hutchinson</td>
<td>Pace M. Jenkins-Foreman</td>
<td>Daniel J. Houghton</td>
</tr>
<tr>
<td>Jeremy R. Keown</td>
<td>Jennifer M. King</td>
<td>Veronia L. Kinsman</td>
</tr>
<tr>
<td>Sarah E. Lilley</td>
<td>Sophie I. Logan</td>
<td>Melanie R. Looman</td>
</tr>
<tr>
<td>Hana M. Mauafu</td>
<td>Georgia J. McClintock</td>
<td>Hilary D. McCulloch</td>
</tr>
<tr>
<td>Megan S. McKay</td>
<td>Shweta P. Nand</td>
<td>Maddie J. Pascoe</td>
</tr>
<tr>
<td>Jasper J.P.L. Perry</td>
<td>Lauren R. Piket</td>
<td>Joshua S. Rushton</td>
</tr>
<tr>
<td>Lauren H. Scott</td>
<td>Heather L. Shearer</td>
<td>Belvina D.S.Y. Sim</td>
</tr>
<tr>
<td>Phoebe A. Siva</td>
<td>Renee R. Straker</td>
<td>Judith E. Thomson</td>
</tr>
<tr>
<td>Alexis Vette</td>
<td>Seamus B. Watson</td>
<td></td>
</tr>
</tbody>
</table>

Graduation celebrations

Quizzes to entertain you over the summer

Whose Line is It Anyway? A Quiz on Quotes from Famous Books

The Best Movie Quotes Quiz

Science quiz, test your knowledge

DNA quiz
368: Well, ain't it a small world, spiritually speaking. Pete and Delmar just been baptized and saved. I guess I'm the only one that remains unaffiliated.

Answer: O Brother, Where Art Thou? (2000), Ulysses Everett McGill (George Clooney)
Guessed by: Manfred (“far TOO easy”) and Alyssa Cirtwill

and now for something completely different...

The night before Catmas

Catnip - Simon's Cat (A Christmas Special!)

Spot the wannabee dreaming big

Close up of wannabee at the wheel!

(photo credits: A. Woods)
Thought for the Year

"Here's the thing - none of us get out of life alive. So be gallant, be great, be gracious, and be grateful for the opportunities that you have".
~ Jake Bailey

Editor's Notes

The Editor would like to thank those who contributed to the newsletter this year and what a year it has been. My personal favourites are always the precious babies who are welcomed to the world and the postgraduate environment here in the School. We are truly blessed to have some outstanding students amongst us. See you in 2016!!