Recent publications in the school


In the spotlight

Portia paper highlighted

The Journal of Experimental Biology have highlighted Dr Fiona Cross and Emeritus Professor Robert Jackson's recent *Portia* paper in their "Outside JEB" feature: *Portia (proto-)counts on numerical competency*.


Events

New Zealand Plant Conservation Network Conference & John Child Bryophyte and Lichen Workshop 2017 - Hokitika

14-21 November - Registration is OPEN.

The conference consists of talks, workshops, & fieldtrips covering all things botanical from plant ecology & conservation, community restoration projects through to taxonomic updates. This year we will also be running a botanical art exhibition. Please visit out website for all the finer details. We are looking forward to seeing you all in Hokitika.
Statistical Ecology & Environmental Monitoring conference

Early bird registration is still open for the Statistical Ecology and Environmental Monitoring conference 2017 and ends on 30 September.

The conference will be held in Queenstown, New Zealand from December 6-8, 2017. It aims to bring together statisticians and ecologists so that both groups can share their research and learn from each other.

We have an exciting list of keynote and invited speakers:

**Keynote:**
Prof. Alan Gelfand (Duke University)
Prof. Anthony Ives (University of Wisconsin)

**Honorary:**
Prof. George Seber (University of Auckland)

**Invited:**
Prof. Marti Anderson (Massey University)
Prof. Corey Bradshaw (Flinders Adelaide)
Prof. Jennifer Hoeting (Colorado State University)
Assoc. Prof. Mevin Hooten (Colorado State University)
Assoc. Prof. Margie Mayfield (University of Queensland)
Assoc. Prof. Daniel Stouffer (University of Canterbury)
Dr. Len Thomas (University of St Andrews)

See the website [www.stats.otago.ac.nz/conferences/seem2017](http://www.stats.otago.ac.nz/conferences/seem2017) for more information.

We look forward to seeing you in Queenstown!

Microbiologist Siouxsie Wiles speaking in Christchurch

Microbiologist Siouxsie Wiles will be talking about antibiotic resistance on:
**Wednesday 20 September, 6.00pm at Scorpio Books (120 Hereford Street, Christchurch), chaired by James Dann.**

Siouxsie is an award-winning scientist and a great science communicator; she has won, for example, the Prime Minister’s Science Media Communication Prize and the Royal Society of New Zealand Callaghan Medal.

[https://www.facebook.com/events/1760474470646802/](https://www.facebook.com/events/1760474470646802/)

BIC Biomedical Symposium

**Monday 18th September**

BIC, in collaboration with the University of Otago, Christchurch School of Medicine are holding a half-day symposium that will bring together leading researchers in the biomedical sciences (the application of the biological sciences, especially biochemistry, molecular biology and genetics, to the understanding, treatment and prevention of human disease).

The programme will be led by Professor Mark Hampton and Associate Professor Renwick Dobson. The programme includes the following talks/speakers:

- Glutamate Racemase from *Mycobacterium tuberculosis* is a new target for antituberculosis drug design
  **Professor Kurt Krause**, Director of the Webster Centre for Infectious Diseases, Biochemistry Department, School of Biomedical Sciences, University of Otago
- Metagenomic discovery of new natural products from free living and symbiotic bacteria, **Dr Jeremy Owen**, School of Biological Sciences, Victoria University of Wellington
- **Dr Kristin Brown**, Cancer Therapeutics Program, Peter MacCallum Cancer Centre, Melbourne
- **Dr Andrew Cox**, Organogenesis & Cancer Program, Peter MacCallum Cancer Centre, Melbourne
- The Ecology of Bacterial Individuality - Understanding Bacteria One Cell at a Time, **Dr Mitja Remus-Emsermann**, School of Biological Sciences and Biomolecular Interaction Centre, University of Canterbury
- **Dr Antonia Miller**, Protein Science and Engineering, Callaghan Innovation

More speakers will be announced soon. We are also keen to run a poster competition, so please indicate when you register if you would like to display a recent research poster.

Registration is free and we welcome anyone who would like to attend, so feel free to pass this email on. Afternoon tea will be provided. The symposium will run from 12.30pm - 5.20pm followed by drinks at the nearby Pegasus Arms Hotel.

Please visit the BIC website to register for catering purposes [http://www.canterbury.ac.nz/bic/events/](http://www.canterbury.ac.nz/bic/events/)

### MapNet

**2nd and 3rd November 2017**
Palmerston North - registration now open

The MapNet2017 conference committee is happy to announce that the registration is now open and we are calling for abstracts addressing key themes about genomics, bioinformatics, quantitative genetics and conservation genetics. This MapNet conference presents an opportunity for sharing ideas, new innovations and technologies and experience in the field of genomics throughout New Zealand.

For all the key information about the conference, including registration, abstract submission, themes and key dates please visit the MapNet2017 website: [http://scienceevents.co.nz/mapnet](http://scienceevents.co.nz/mapnet)

### Scholarships

#### UC Summer Research Scholarships

The online student application form and lists of projects are now live on the Summer Research Scholarships website. Check out Biological Sciences and Biomolecular Interaction Centre projects here: [http://www.canterbury.ac.nz/summer-school/summer-scholarships/](http://www.canterbury.ac.nz/summer-school/summer-scholarships/)

**The deadline for students to apply is the 29th of September.**

Please make sure they you are eligible. Eligibility criteria is listed on the same website.

#### Henry Kelsey Scholarship

The **Henry Kelsey Scholarship** is for PhD research into muscular function: [http://www.universitiesnz.ac.nz/scholarships/henrykelsey](http://www.universitiesnz.ac.nz/scholarships/henrykelsey)

The Muscular Dystrophy Association is keen to attract as many applications as possible for this worthwhile scholarship. The closing date for is 1 October.
PhD Scholarships in Alpine Evolutionary Ecology in Australia

Application deadline for international students is August 31 and for Australian and New Zealand residents is October 31

Project Areas in Brief:

* **Multi-trait plasticity in an Australian alpine herb in response to warming – epigenetic and ecophysiological underpinnings.** Supervisors Profs Adrienne Nicotra, Loeske Kruuk (ANU) and A. Prof Christina Richards (Uni South Florida, USA).

* The adaptive potential of woody plants in the Australian Alps. Supervisors: Dr Susanna Venn & Prof Adrienne Nicotra (ANU) and Prof Ary Hoffmann (Uni Melb).

Suitable applicants need to be highly motivated with strong academic and research backgrounds; skills in plant evolutionary ecology, environmental physiology and/or ecological and evolutionary genetics are required. Demonstrated ability to conduct fieldwork, and independent research experience are highly desirable. Interested students must apply for admission and scholarship online at ANU.

Successful applicants will receive scholarship stipend, tuition fee waiver, research funds including computer and travel grants. Full details.

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Postgraduate news

New Zealand Natural Sciences recruiting new editors

NZNS is a UC student-run, online, open access journal that publishes research on all aspects of natural sciences in New Zealand and Antarctica ([https://sites.google.com/site/nznaturalsciences/](https://sites.google.com/site/nznaturalsciences/)). It continues in sequence from its predecessor, Mauri Ora, which was first published in 1973! Several former student editors from over the years are now well-known academics and researchers in SBS and across New Zealand; hence, there is strong tradition and value in contributing to the survival of our journal. The current student editors, Katie Collins and Brandon Goeller, are searching for two new student editors to continue this tradition by managing journal submissions, overseeing external peer-review, and formatting and publishing accepted manuscripts. Please e-mail us at nzns@canterbury.ac.nz to discuss keeping this valuable and still-relevant body of research and knowledge alive!

SOAR Advisors: New postgrad peer advisory team is ready to help

The SOAR advisory team is here to provide postgraduate students with confidential advice on research related queries. These 10 peer advisors from different disciplines offer a broad range of skills in qualitative and quantitative research such as human ethics approval, report writing, statistical analysis (SPSS, Statistica, NVivo, etc.), conference presentation, publication, and much more. Students can contact the SOAR Advisors to make an appointment for advice and assistance in their areas of expertise ([http://www.canterbury.ac.nz/postgraduate/phd-and-doctoral-study/soar-advisors/](http://www.canterbury.ac.nz/postgraduate/phd-and-doctoral-study/soar-advisors/)). For more information or interest in engaging with the SOAR Advisors, you can contact Brandon Goeller, who represents Biology within SOAR (brandon.goeller@pg.canterbury.ac.nz).
Vacancies

Captive breeding centre
Looking for someone for a 10 week contract to work at the captive breeding centre

All bias included, this would be an awesome fixed-term (10 week) summer position working with a stellar crew on a fab species. Check it out! - Tammy Steeves

Fixed-term (10 week) position with the kaki recovery programme (captive team)

The kaki recovery programme in Twizel is looking for someone to fill a seasonal position for 10 weeks during the 2017/18 breeding season. The role will start on the 2nd November 2017 and finish on the 10th of January 2018. The position will be based with the captive management programme, which is a 7 day per week, 365 day per year operation. This position will predominantly be rostered to work Tuesday-Saturday, with variations at times when necessary. Some work on public holidays will be required, as the Christmas/New Year period can be very busy.

The role is focused around assisting with the work of the captive breeding centre and will include:

- Daily cleaning of chick brooders
- Food preparation
- Monitoring health of captive adults, juveniles and chicks
- Assisting with banding juvenile kaki
- Routine maintenance of aviaries and facilities

We are looking for someone with the following qualities:

- A high level of attention to detail
- An interest in captive rearing for conservation purposes
- A strong work ethic, and ready to get stuck in to less than glamourous tasks!
- A full drivers' license
- A growsafe certificate would be an advantage

There is a possibility of accommodation on site, this may be very basic (possibly a caravan adjacent to a shared staff house with kitchen and bathroom facilities).

If you are interested in this position, please send a CV and cover letter to lbrown@doc.govt.nz before the 19th September.

Callaghan Internship

Use of Drones to analyse pasture: Application closes: 20th October
New Zealand Agriseeds Ltd specialises in the research, production, and marketing of superior pastures for New Zealand farmers. Agriseeds & Callaghan Innovation are offering an R&D experience grant for the summer of 2017/18 to study the use of Drones to analyse ryegrass breeding plots.

Clover persistence traits: Application closes 20th October
New Zealand Agriseeds Ltd specialises in the research, production, and marketing of superior pastures for New Zealand farmers. Agriseeds and Callaghan Innovation are offering, an R&D experience grant for the summer of 2017/18 to study clover persistence traits.
Full-time fellowships with Smithsonian NMNH – Washington, DC

Applications are now being accepted through the Smithsonian Institution Fellowship Program for full-time resident fellowships at the National Museum of Natural History. As part of the resident academic community, Smithsonian fellows conduct independent research and collaborate with over 500 renowned scientists and scholars. Fellows have access to the world’s largest natural and cultural history collections, including 145 million specimens, and state-of-the-art analytical equipment. Research must engage Smithsonian collections and facilities.

**Application deadline:** 1 December 2017

For more information about the fellowships, how to apply, qualifications, and stipend/tenure, please read this [announcement](https://www.si.edu/fellowships).

**Postdoc opportunity: John Innes Centre, United Kingdom**

**Application closes:** 14th September

The BBSRC Brassica Rapeseed and Vegetable Optimisation (BRAVO) project ([https://www.jic.ac.uk/bravo/](https://www.jic.ac.uk/bravo/)) brings together UK plant scientists and industries representing horticultural and oilseed Brassica crops to increase robustness in crop performance, combating environmental change.

Flowering time, inflorescence architecture, flower, fruit and seed characteristics are controlled by environmentally responsive gene networks with many shared components. The BRAVO programme aims to exploit natural variation within oilseed rape and vegetable brassicas to understand the gene networks controlling flowering time and study how these networks affect key developmental stages from vegetative growth to seed production. Understanding different traits requires an integrated view of gene networks across development in different tissues and how these are affected by environmental cues, especially temperature. [Full details/Apply](https://www.jic.ac.uk/bravo/).

**Lecturer in Climate Change and the Environment - 4 posts**

Grantham Institute - Climate Change and the Environment, Faculty of Natural Sciences

**Salary:** £47,910 to £53,400 per annum  **Campus:** South Kensington Campus

**Closing date:** 21 September 2017 (Midnight BST)

The Grantham Institute is seeking applications for four lectureships, starting in the 2017-18 academic year. The positions are open to those working at key disciplinary interfaces relating to the understanding of, and responses to, climate and environmental change, within the broad fields of Engineering, Science, Medicine and Business. We also welcome applications from those with expertise in energy modelling and integrated assessment models. During the initial three-years, the lectureships will be based at the Grantham Institute, before formally transferring to an appropriate academic Department at Imperial.

Appointees will be expected to broaden the College’s research capabilities, complementing our existing strengths. They will build on a successful programme of engagement and development at the Institute, working to inform decision-making in business and policy, and drive forward research and collaborations across the areas of climate and environmental change.

These lectureships represent a significant investment in climate change and environmental research by the Institute, and aligns with the College’s strategy for investment in multidisciplinary research around four interconnected global challenges: Discovery and the natural world; Engineering novel solutions; Health and well-being; and Leading the data revolution. Further details can be found in the [College Strategy 2015-2020](https://www.imperial.ac.uk/about/campus-strategy-strategic-plan/).

The successful candidates will have a good honours degree and a doctorate that demonstrate their effectiveness at working at a disciplinary interface of the climate change/environment debate. They will also be expected to demonstrate a strong research record, including a growing international reputation for research and innovation in an area of climate or environmental activity within the College’s remit, which is commensurate with their career stage. The successful candidates will have a broad knowledge of global climate and environmental issues and an awareness of relevant government and business interests, preferentially having provided advice on such areas to stakeholders in government and business. Evidence of
attracting research funding and/or bids for other financial support, or an equivalent measure of impact, together with experience of planning and undertaking effective collaboration with external partners, are also essential.

The successful candidates will have excellent interpersonal, verbal and written communication skills, with the ability to convey ideas and concepts clearly and effectively to a range of audiences through a variety of methods and media. They will also have experience of teaching excellence at undergraduate and/or postgraduate level, and be able to demonstrate strong leadership potential. For informal discussions about these positions, please contact the co-directors of the Grantham Institute (Professors’ Joanna Haigh, j.haigh@imperial.ac.uk; or Martin Siegert, m.siegert@imperial.ac.uk).

Postdoc position, plant water relations, UC Davis

Job Description: A postdoctoral position in the UC Davis lab of Ken Shackel (department of Plant Sciences) is available to cooperate in the development of a micro-tensiomenter for continuous in-situ measurement of water potential in grape vines and other woody perennial crops under field conditions.

Qualifications: A PhD is required. Applicants should have familiarity with the fields of plant water relations, xylem anatomy/hydraulics, and the physical principles of the measurement of water potential in plants or soils, and either have a demonstrated expertise in one or more of these fields, or a strong background in physics or engineering. The successful candidate should be able to work independently, read the literature critically, and be highly motivated and productive. Applicants with a proven record of publications in peer-reviewed journals and strong verbal and written communication skills will be preferred.

Compensation: $48,216/yr + Benefits

Term: Full term, one-year commitment with two-year expectation, contingent upon continued satisfactory individual productivity and cooperation with other team members.

Start: ASAP

How to apply: Submit a letter of application, indicating your specific background and experience relevant to the job description, curriculum vitae, and the names and emails/contact information of three references, to Ken Shackel at kashackel@ucdavis.edu.

What song is that?

What would I do without your smart mouth?

408: Jaws all on the floor like Pam and Tommy just burst in the door.

Answer: The real Slim Shady by Eminem

Guessed by: Penny

Classified

Local honey for sale

1 kg $10, 500 g $5. 2017 season, multi-floral Ilam garden honey in plastic pottles. Soft granulated. I will deliver to the School of Biological Sciences or arrange pickup/delivery elsewhere. Harry Taylor, email: harry.taylor@canterbury.ac.nz; ph/txt:  021 292 5319

Wanted: Data Science Summer Projects

The first cohort of MADS of students (MSc. in Applied Data Science) are looking for projects to work on over the summer. They will have training in data wrangling, analysis, management, ethics and big data. The project is worth 45 points (DATA601, EFTS for SBS), and will typically be run between November and February. There are ~40 students who need to be placed on either industry or academic projects. They will be assessed based upon a write-up, peer-assessment and a presentation of their results.

If you have a suitable project, then please email the details to james.williams@canterbury.ac.nz
Looking for part time/full time work

I am a University of Otago graduate who completed a BSc (Hons) with First class majoring in Anatomy. My degree also included papers physiology, neuroscience and microbiology. I am looking for positions available as a lab demonstrator, assistant research fellow or anything else - contact me at 0276340637 or davidtimajo@gmail.com

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...and now for something completely different

Scratch Post - Simon’s Cat

Thought for the week

"Each flower is a soul opening out to nature."
- Gerald De Nerval

Contact details

If you have items of news or interest that you would like included in this newsletter, contact the admin office before noon on Friday at BIOLAdminSharedMailbox or phone ext 95200.