Recent publications in the school


In the spotlight

**I AM HOPE – Gumboot day, 8th April**

In 2018, in Aotearoa 137 young people died by suicide and it is estimated another 3500 attempted to take their own lives. While Government agencies are doing their best some kids are stuck waiting up to six months to receive the counselling they so urgently need. Having depression is like walking through mud every day.

**I Am Hope and so are you**

I Am Hope is the youth and community focused support group run by The Key to Life Charitable Trust, started by Mike King. For the last three years Key to Life have been promoting positive attitudinal societal change in schools and communities up and down the country, and funding private care and counselling for young people stuck-in-the-mud on waiting lists.

The School of Biological Sciences did their part and put on a morning tea, provided by our very own Nicole and contributed $73. Thank you to everybody who took part and donated.
Gumboot wearing biologists

“If it weren’t for your gumboots”
**Funding success**

**Ian Dickie** ($255k) and **Jason Tylianakis** ($220k), have had 2019 funds confirmed for their continued involvement as PIs in projects in the Bioprotection Research Centre of Excellence.

**Tammy Steeves**, has received funding to support projects costs ($13k) from the Department of Conservation for a project entitled “Informing management through understanding Robust Grasshopper population genomics”.

**Ashley Garrill**, who with collaborator Volker Nock (Elec Eng) has received funding through an MBIE subcontract from Landcare Research, to support a project entitled “Beyond myrtle rust: Towards ecosystem resilience”. Total funding (Oct 2018 – Sept 2023): $232,175

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**Recent PhD oral exam completed**

**Keum-Ah Lee**, had her oral exam on Friday 29th March. Her thesis title is ‘Seed Priming of Italian Ryegrass (Lolium Multiflorum L.) with Exogenous Amino Acids: Enhanced Tolerance to Salinity Stress During Germination and Early Seedling Growth’. It has been a pleasure to get to know Keum-Ah over the time she was here at UC and it was enormously thrilling to hear her find out she was successful with her oral exam. Congratulations Keum-Ah!

![Photo of Keum-Ah Lee and her examiners](image-url)

Pictured: Dr Jim Morton, Keum-Ah, Dr Youngnam Kim (Keum-Ah’s husband), Associate Professor Hazel Chapman (Oral Convenor) and Associate Professor David Leung (Senior Supervisor)
Events

2019 Winter School in Mathematical & Computational Biology

1-5 July: Early bird registration NOW OPEN

Full poster

A premier bioinformatics training event in Australia, the sixteenth annual Winter School in Mathematical & Computational Biology will be held 1-5 July 2019 at the Institute for Molecular Science, The University of Queensland, St Lucia. Early bird registration for Winter School now open.


Note that last year we reached the capacity of 280 of our venue, so be sure to register early to ensure your place.

Key Dates

Online registration
- Early bird – from now to Sunday 10 June 2019
- Normal – 11 June to 24 June 2019

Student travel scholarships
- Applications open on 13 May 2019
- Applications close on 31 May 2019

The series of winter schools is designed to introduce bioinformatics, mathematical and computational biology to advanced undergraduate and postgraduate students, postdoctoral researchers and others working in the fields of biology, mathematics, statistics, computer science, information technology, complex systems analysis, and chemical and medical sciences and engineering.

Themes

* Next generation sequencing & bioinformatics
* Long read bioinformatics and applications
* Data science and machine learning for bioinformatics
* Getting started with bioinformatics software

Featured speakers

-- Nicholas Loman, University of Birmingham, UK
-- Nicola Armstrong, Murdoch University
-- Joshua Ho, The University of Hong Kong
-- Nicole Cloonan, University of Auckland
-- Jue Ruan, Chinese Academy of Agricultural Sciences, China
-- Jessica Mar, The University of Queensland
-- Martin Smith, Garvan Institute of Medical Research
-- Maren Westermann, Max Kelsen
-- Denis Bauer, CSIRO

Speakers at Winter School are chosen as great presenters and world leaders in their field. For the complete list of speakers and presentation titles, visit website.

Workshop

A Genomics Virtual Laboratory training workshop (limited places of 36 only) will be run during the Winter School on Wednesday 3rd July. The workshop was fully subscribed in days last year, so register early to avoid disappointment.
Feedback from previous Winter Schools
“I would strongly encourage all biologists even without any mathematical background to attend the Winter School.”
“Fantastic speakers.” “Great networking opportunities.”
“It takes special talent to pull off a conference people actually enjoy attending and it was thanks to some of the more charismatic orators, that I was able to enjoy the Winter School so much.”
“Gave me the confidence I need to talk to other people and bioinformaticians about the analysis of my NGS data. Thanks.”

2019 Rutherford Memorial Lecture
Dame Ottoline Leyser will travel to New Zealand in May to give the 2019 Rutherford Memorial Lecture on her area of expertise: how plants adjust their growth and development to suit their environmental conditions.

In particular, Dame Ottoline studies how plants change the number of branch shoots they produce depending on factors such as nutrient supply and damage to the main shoot. She is particularly interested in the roles and mechanisms of action of plant hormones such as auxin. One of her discoveries — the auxin receptor — has helped to explain how hormone signals shape the response of a plant to its environment. Dame Ottoline was awarded a CBE in 2009 in recognition of her pioneering work in plant science.

2019 Rutherford Memorial Lecture: 'Thinking like a vegetable: how plants decide what to do'
CHRISTCHURCH | Monday 13 May, St Margaret’s College, Charles Luney Auditorium - Register for Christchurch
WELLINGTON | Tuesday 14 May, Te Papa Soundings Theatre - Register for Wellington
HASTINGS | Wednesday 15 May Lindisfarne College, Performing Arts Centre - Register for Hastings
AUCKLAND | Thursday 16 May, Auckland Museum, Events Centre - Register for Auckland
The 2019 New Zealand Rutherford Memorial Lecture is proudly presented by Royal Society Te Apārangi in partnership with The Royal Society, London, and with thanks to Auckland Museum Institute.

Awards

Applications close: 14th April

You can apply for more than one award if you are eligible, but only one award will be offered to a person. Applications shouldn’t take too long, and when you finish and submit it you will get an email acknowledging it.

Full details
Laboratory Technician position at the University of Auckland

A Laboratory Technician in Plant Molecular Biology is sought to participate as part of a team at the School of Biological Sciences at the University of Auckland to investigate nitrogen use efficiency and symbiotic nitrogen fixation. The project involves growing plants in sterile conditions and processing samples for multiple analyses including gene expression analysis. In addition, this position will perform general lab management duties such as maintaining a safe and functional laboratory environment and training students.

**Required Qualifications / Competencies**

Bachelor’s Degree in Biological Sciences or related field.

Substantial experience working in a laboratory environment performing basic tasks in molecular biology (including DNA/RNA extraction and purification, PCR, sterile technique). Ability to work independently, under the general guidance of the project supervisors. Demonstrated high level of attention to detail and responsible and safe work practices.

Interest and ability to mentor undergraduate and graduate students.

Ability to work effectively with faculty, staff and students as part of a team.

Effective written and verbal communication skills.

**Preferred Qualifications / Competencies**

Demonstrated experience in executing a series of experiments in the context of a supervised project. This includes the ability to follow and adapt established protocols, troubleshoot experiments and work independently.

Experience in plant molecular biology.

Experience growing plants in sterile conditions.

**Position duration**: One year.

**Salary**: Would be determined based on competencies, in accordance with the University of Auckland general staff pay rate recommendations.

**Deadline**: 19th of April 2019.

**Contact**: Dr Nijat Imin at nijat.imin@auckland.ac.nz.

Position as Associate Senior Lecturer in Molecular Ecology

**Applications close: 12th May**, Uppsala, Sweden

The subject area encompasses molecular ecology with a focus on the dynamics, ecology, and diversity of insects, their interactions with other organisms, how they are affected by environmental and climatic change, and how they themselves affect ecosystem functions and services.

Candidates must hold a PhD or have equivalent academic qualifications. Priority will be given to candidates who have received a PhD or equivalent qualifications no longer than five years before the application deadline.

[Full details](#)
Postdoctoral Researcher in Quantitative Ecology

Application closes: 15th April

The Morton Arboretum invites applications for a two year postdoctoral researcher to work on an NSF-supported project focused on quantifying species’ geographic range shifts and population sizes using multiple data types. The successful applicant will join an international team of researchers with expertise in mathematics/statistics, ecology, biogeography, and population genetics. The postdoctoral researcher will collaborate with the project team to develop and implement quantitative methods to make inference about range shifts since the last Ice Age by integrating datasets which have different characteristics and spatial and temporal resolution (environmental, paleoecological, and genetic data).

Full details

Three Postdocs, One PhD-student in agroecology theoretical ecology Sweden

Positions open in our team at the Swedish University of Agricultural Sciences in Uppsala Sweden.

Applications close: 12th April
Postdoc in theoretical ecology to explore ecosystem functioning in dynamic food webs.

Applications close: 29th March
Postdoc on population and food web ecology for sustainable crop protection.

Applications close: 24th April
Postdoc in modelling plant-environment interactions, with a focus on perennial crops,

Applications close: 12th April
PhD-student on crop production adaptations to climate change.

Postgraduate news

Call for submissions: Student Conference Travel Fund (Tranche 1)

Postgraduate students: If you are planning on attending a conference/workshop this year, you may be eligible for an SBS student travel award. SBS offer travel support for postgraduate students for travel to a conference/workshop of up to $500 per person. A total of $5,000 is available over 2 rounds: $3,000 ($1,500 per round) is earmarked as a general fund to support travel and is not tied to students whom have necessarily published; and $2,000 is tied to support students who have published their work (incentive to publish). Students are only allowed to apply once per year. Award priority will also be given to those whom have not previously received support.

The application form and further information can be accessed in the Postgraduate section of the SBS webpages on LEARN.

The closing date for the first tranche of awards closes on May 1 and applications will be assessed by the Research and Facilities Committee.

Please submit all applications by email to Matthew Stott.
PhD studentship on the forests of the Brunei peat domes

Review of applications will begin: 15th April

Young and research-intensive, Nanyang Technological University (NTU Singapore) is ranked 12th globally. It is also placed 1st among the world’s best young universities. The Asian School of the Environment (ASE) invites applications for a fully funded 4 year PhD studentship based at NTU to work with Prof. David Wardle at NTU and Dr. Alex Cobb of the Singapore-MIT Alliance for Research and Technology (SMART) on the ecology of tropical peat forests in Brunei.

Full details

Postgraduate conference presentation opportunity - NZ Arb

Abstracts close: 19th April

On behalf of the New Zealand Arboricultural Association (NZ Arb), I am writing to make you aware of an opportunity for postgraduate researchers to present at our upcoming conference in Napier, in November of this year.

We are seeking student speakers to take part in a new initiative for this year’s conference proceedings.

This is an excellent opportunity for young research scientists to gain experience in public speaking and to engage with the New Zealand arboricultural industry.

Full details

What movie is that?

You…..BEASTS! But I’m not beaten yet. You’ve won the battle, but I’m about the win the wardrobe. My spotty puppy coat is in plain sight and leaving tracks.

442: My father used to say that if we ever had the money you have, we would eat steak and ice cream three times everyday!

Answer: Pollyanna (1960)
Guessed by: Noboby

Classified

Interested in private tutoring for BIOL 2009?

Some students currently taking the Biological Data Analysis course BIOL209 have asked if there is anyone who would be prepared to do some private tutoring work with them, covering R and basic stats concepts. We can put you in touch with students who want tutoring, and you would then work out an arrangement between yourselves.

Contact: Dave Kelly

Paid statistical help/Civil Engineering Department

My experiment is focusing on measuring the methane production from anaerobic batch test under different treatment conditions. Each treatment was done in triplicate. After I get the results I run a common model using nonlinear –SPSS to calculate the methane production rate (mmole/d)). Now for each treatment condition I have three readings for the methane production rate.
The statistical consultant at Maths Department advised me to use (mixed – linear repeated measurement). Am wondering if there is someone could help me in this stage.

Contact: Ethar Al-essa, PhD Candidate, Department of Civil and Natural Resources Engineering

**Personal tutoring for undergraduate Biology students**

I have studied subjects like cell and molecular biology, biochemistry, bio statistics, genetics and I also have specialization in marine biology and have worked with Cawthron Research Institute on marine algae.

Contact: Pallav Kaur; View CV

**Tutor wanted**

Tutor wanted in Biology and Chemistry, ideally Biochemistry.

For 19 year old student who has just commenced studying Pre Health at ARA who has missed a chunk of schooling at Year 13. Perhaps three hours a week. Looking to move onto Food Technology after completing Pre Health.

Please contact Alex Bekhor or Biology office for further information.

**Looking for work**

I am looking for a fixed-term full-time job and I am very flexible over what the role could entail. I am happy to assist in whatever role a research team or department may need; whether that is to work in a laboratory as a research assistant or technician; or in an office environment as a data-entry or administrative person.

I have experience in cell culturing, CRISPR-Cas9, DNA/RNA/protein extraction, PCR, gel electrophoresis, and other research techniques. I am fascinated with science and am a quick and eager learner. I have also worked in customer service for over 8 years so have excellent oral and written communication skills.

My current Master’s thesis is on using CRISPR-Cas9 to perform whole genome screens on head and cancer cell lines under microenvironment stress. I will be completing my degree at the end of February/the beginning of March.

I am moving to Japan in August and hence is why I am only looking for a fixed term role until June-August.

Saumya Bhatta, 027-769-5241
Saumya131993@hotmail.com - View CV

**Editor/proofreader available**

Experienced editor/proofreader available online for essays, dissertations, theses and for postgraduates’ papers and publications. Specialist help for students whose first language in not English (ESL). University of Auckland approved proofreader.

Virginia Gray, BSc. (Canterbury), Dip.Edit.
Pennell.edit@gmail.com
027 419 1046

**Local honey for sale**

Harry’s 2018 honey is finally here! 1 kg $10, 500 g $5. 2017 season, multi-floral Ilam garden honey in plastic pots. 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
Proofreading and Editing Services
Let me help you produce writing that is clear, error-free and consistent.
Joan Gladwyn, BSc, MSc, CPhys, DipEdit
joan@properwords.co.nz (+64) 21 213 6511

and now for something completely different...

Dilbert: How to avoid listening to others

20 Signs That You’re A Crazy Cat Parent

How to Pick a Career (That Actually Fits You)

Thought for the week

Making one person smile can change the world – maybe not the whole world, but their world.

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.