agenda

Te Komiti Rangahau o Unitec | Unitec Research Committee

Date:	**2024-05-09**
Scheduled Start:	1300h
Scheduled End:	1500h
Location:	Microsoft Teams

SECTION 1 NGĀ KUPU ARATAKI | PRELIMINARIES

1. Karakia Tīmatanga | Opening Prayer
2. Mihi Whakatau | Welcome from the Chair
3. Membership
4. Terms of Reference

SECTION 2 STANDING ITEMS

1. Ngā Whakapāha | Attendance, Apologies & Quorate Status
2. Pitopito Kōrero o Ngā Hui | Minutes of the Previous Meetings
3. Mahia Atu | Matters Arising

SECTION 3 MEA HEI WHAKAAE | ITEMS TO APPROVE

N/A

SECTION 4 WHAKAWHITI KŌRERO | ITEMS FOR DISCUSSION

1. IT Policy Changes Impacting on Research
2. Science System Advisory Group: Submissions Sought for Phase 1

SECTION 5 NGĀ TUKUNGA | ITEMS TO RECEIVE

1. 2023 ECR Contestable Funding Final Reports
    a) Dr Sarah Wells

SECTION 6 KUPU WHAKAMUTUNGA | CLOSING

1. Ētahi Kaupapa Anō | Any Other Business
2. Komiti Self-Assessment
3. Karakia Whakamutunga | Closing Karakia

SECTION 1 NGĀ KUPU ARATAKI | PRELIMINARIES

Item 1.1 Karakia Tīmatanga | Opening Prayer

KARAKIA TĪMATANGA	**OPENING PRAYER**
Manawa mai te mauri nuku	*Embrace the power of the earth*
Manawa mai te mauri rangi	*Embrace the power of the sky*
Ko te mauri kai au	*The power I have*
He mauri tipua	*Is mystical*
Ka pakaru mai te pō	*And shatters all darkness*
Tau mai te mauri	*Cometh the light*
Haumi ē, Hui ē, Tāiki ē!	*Join it, gather it, it is done!*

Item 1.2 Mihi Whakatau | Welcome from the Chair

Item 1.3 Te Komiti Rangahau o Unitec Membership

Hadley Brown (Chair)	Nominee of Director Research & Enterprise
Daisy Bentley-Gray (Emerging)	Nominee of Director, Pacific Success
Tanya White (Early Career)	Nominee of Director, Māori Success
Dr Helen Gremillion (Professor)	Healthcare and Social Practice
Dr Yusef Patel (Early Career)	Architecture
Kambiz Borna	Building Construction
Dr Lian Wu (Associate Professor)	Healthcare and Social Practice
Dr Hamid Sharifzadeh (Professor)	Computing and Information Technology
Dr Leon Tan (Associate Professor)	Creative Industries
Dr Kristie Cameron (Associate Professor/ Early Career)	Environmental & Animal Sciences
Khaled Ibrahim	Applied Business
Vacant	Bridgepoint
Dr Norasieh Md Amin (Subject Librarian)	Library
Irene Wu (Acting Student Rep)	Nominee of Student Council
Arun Deo (Research Advisor)	Tūāpapa Rangahau
In attendance: Brenda Massey (Acting Secretary)	Tūāpapa Rangahau

Item 1.4 Te Komiti Rangahau o Unitec Terms of Reference

The powers and functions of Te Komiti Rangahau o Unitec (URC) shall be to:

a. Foster the conduct of research, and support the achievement of Unitec's strategic research, enterprise and innovation priorities.

b. Propose and advise on strategic directions and priorities for research, enterprise, and innovation.

c. Provide expert advice on institutional policy.

d. Develop protocols and guidelines and make recommendations in relation to the conduct of research, enterprise, and innovation.

e. Oversee the Grants Advisory Committee and the reporting of funded projects.

f. Encourage and enhance the development of the research, enterprise, and innovation culture along with student and staff research capability, with emphasis on the development of Māori and Pacific research capability.

g. Oversee the monitoring of research outputs and research reporting.

h. Foster Māori and Pacific, transdisciplinary, collaborative and externally engaged research, enterprise, and innovation.

SECTION 2 STANDING ITEMS

Section 2.1 Ngā Whakapāha | Attendance, Apologies & Quorate Status

RECOMMENDATION
That the committee accepts the apologies of today's meeting.

Section 2.2 Pitopito Kōrero o Ngā Hui | Minutes of the Previous Meetings

refer to pg5

RECOMMENDATION
That the committee approves the minutes of the meeting of 2024-04-11.

Section 2.3 Mahia Atu | Matters Arising

refer to pg12

SECTION 3 MEI HEI WHAKAAE | ITEMS TO APPROVE

N/A

SECTION 4 WHAKAWHITI KŌRERO | ITEMS FOR DISCUSSION

Section 4.1 IT Policy Changes Impacting on Research

refer to pg13

Section 4.2 Science System Advisory Group: Submissions Sought for Phase 1

refer to pg34

SECTION 5 NGĀ TUKUNGA | ITEMS TO RECEIVE

Section 5.1 2023 ECR Contestable Funding Final Reports

refer to pg39

a) Dr Sarah Wells *pg40*

SECTION 6 KUPU WHAKAMUTUNGA | CLOSING

Section 6.1 Ētahi Kaupapa Anō | Any Other Business

Section 6.2 Komiti Self-Assessment

refer to pg49

Section 6.3 Karakia Whakamutunga | Closing Karakia

TE KARAKIA WHAKAMUTUNGA	**CLOSING PRAYER**
Ka wehe atu tātou	*We are departing*
I raro i te rangimārie	*Peacefully*
Te harikoa	*Joyfully*
Me te manawanui	*And resolute*
Haumi ē, Hui ē, Tāiki ē!	*We are united, progressing forward!*

minutes

Te Komiti Rangahau o Unitec | Unitec Research Committee

Date:	2024-04-11
Scheduled Start:	1300h
Scheduled End:	1500h
Location:	Microsoft Teams

MEETING OPENED: 1300h

SECTION 1 – NGĀ KUPU ARATAKI | PRELIMINARIES

Item 1.1 Karakia Tīmatanga | Opening Prayer

Item 1.2 Mihi Whakatau | Welcome from the Chair

The Chair warmly welcomed members of the committee to the meeting.

SECTION 2 – STANDING ITEMS

Item 2.1 Ngā Whakapāha | Attendance, Apologies & Quorate Status

Members Present

1. Marcus Williams (Chair)
2. Helen Gremillion
3. Rokosiga Morrison (proxy for Daisy Bentley-Gray)
4. Kambiz Borna
5. Hamid Sharifzadeh
6. Lian Wu
7. Kristie Cameron
8. Laura Sawyer (proxy for Nora Md Amin)
9. Arun Deo (until 2pm)
10. Khaled Ibrahim
11. Tanya White

Total members represented: 11 members

Apologies

1. Nora Md Amin

2. Yusef Patel
3. Leon Tan
4. Daisy Bentley-Gray

Total apologies: 4 members

Absent

1. Carly Van Winkel

Total absent: 1 member

MOTION

That the committee accepts the apologies for today's meeting.

Moved: Helen Gremillion
Seconded: Hamid Sharifzadeh

MOTION CARRIED

Quorate Status

A minimum of seven representatives is required; the meeting was quorate.

Hunga Mahi | Staff in Attendance

1. Brenda Massey, Acting Secretary
2. Hadley Brown, Tūāpapa Rangahau

Item 2.2 Pitopito Kōrero o Ngā Hui | Minutes of Previous Meeting

MOTION

That the committee approves the minutes of the 2024-03-14 meeting as a true and accurate record.

Moved: Kristie Cameron
Seconded: Khaled Ibrahim

MOTION CARRIED

Item 2.3 Mahia Atu | Matters Arising

The chair warmly welcomed proxy committee members Laura Sawyer (for Nora Md Amin) and Rokosiga Morrison (for Daisy Bentley-Gray), and Hadley Brown from Tūāpapa Rangahau. Hadley will be chairing committee meetings going forward in order to support Marcus Williams who has reduced his Unitec FTE. Marcus Williams may attend future meetings, or parts of future meetings, if and as required.

Agenda Item(s)	Action	Responsible	Outcome
5.1	Review and update the Conference Seed Funding Guidelines to ensure it is clear that the funding is intended to help host conferences, but that it is expected that the seed funding will be recovered after the conference, if it is successful, and that the point of contact to assist convenors to prepare seed funding applications and business cases is Gregor Steinhorn.	Brenda Massey/ Marcus Williams	Complete

	Ask Research Partner Penny Thomson to table the Conference Seed Funding memo and updated guidelines at the next Research Leaders Hui.	Brenda Massey	Complete

SECTION 3 – MEA HEI WHAKAAE | ITEMS TO APPROVE

There were no items to approve this month.

SECTION 4 - WHAKAWHITI KŌRERO | ITEMS FOR DISCUSSION

There were no items scheduled for discussion.

SECTION 5 - NGĀ TUKUNGA | ITEMS TO RECEIVE

Section 5.1 University and Science Advisory Groups and PBRF Quality Evaluation 2026 Cancellation

A University Advisory Group (UAG) and a Science System Advisory Group (SSAG) have been set up, both chaired by Sir Professor Peter Gluckman. The UAG will provide advice on funding policy settings, including funding mechanisms (e.g., Endeavour and Marsden funding) and the PBRF. As a consequence, the PBRF Quality Evaluation (QE) 2026 will not take place.

A summary of the committee's ruminations, exploratory questions and discussion is as follows:

- The committee expressed concern that the ITP, PTE and wānanga sectors are not represented in the membership of either group.
- The establishment of the two advisory groups and the cancellation of the 2026 PBRF QE puts into question the work undertaken by the PBRF Sector Reference Group (SRG) and the feedback received as part of the public consultation on the 2026 PBRF QE.
- For the moment, PBRF funding will continue to be allocated to TEOs based on 2018 results, which is positive for Unitec. This funding will enable Tūāpapa Rangahau to continue to lobby for a robust research budget to deliver its various research support products.
- The SSAG will proceed in several phases with submissions sought during each phase. It is understood that both Te Pūkenga and Unitec/MIT will make submissions at the appropriate time.
- It would be concerning if the PBRF is discontinued for the ITP sector but not for the university sector. There could perhaps be a risk of this happening if there is no ITP representation on the advisory groups.
- It was posited that if a comprehensive review of science and innovation funding is occurring, that the way that vocational education research is funded would not be considered. If it was to be considered, then the question of "is PBRF the right type of process" would presumably be in the Terms of Reference (ToR). Some believe that the PBRF is not a suitable funding mechanism for vocational education providers, and a funding mechanism that is targeted specifically towards vocational education would be more appropriate.
- It was queried whether, had Te Pūkenga remained intact, it would perhaps have been more difficult for the ITP sector to be excluded from the discussion table.
- The Rangahau Research Forum passionately believes that the best of our research provides huge value for the communities and industries that we work alongside and from the

communities our students are drawn from. Where is that value being addressed in the review?

- It is shocking that 95% of PBRF funding is allocated to the university sector. The SSAG's ToR ask, "how can we strengthen and grow commercialisation pathways" and ITPs have strong connections with industry, yet there is no ITP representation on the UAG or SSAG. We could do what we do even better if we had a bigger slice of the PBRF. In addition, the PBRF review was a real opportunity to increase the presence of industry and community partnership in Unitec's PBRF portfolios, which in turn could have increased our performance.
- Arun Deo is part of the PBRF Managers Forum who met regularly throughout the SRG consultation. The cancellation of the PBRF seems to have taken the university sector as much by surprise as it did us. This seems to suggest that the agenda for change isn't being driven by the universities, rather it is a directive of the new government.
- Concern was expressed about the approach the government is taking to science and research in general. Several initiatives have already been cancelled, e.g., some funding schemes, the plan to turn Wellington into a 'science city' and the Te Ara Paerangi – Future Pathways science system reforms. Spending on science and research was supposed to increase in line with other OECD countries.
- It was queried, with the PBRF funding continuing based on our 2018 results, is this good news or not? What was our research performance likely to have been in 2026 compared to 2018? Would we be in a better position or not? Marcus Williams stated that what has been announced will give Unitec a few more years of relatively good revenue, at least compared to the rest of our sector. Unitec has had to contend with a massive and ongoing period of disruption, and we have lost many experienced and highly ranked researchers. However, restructures and redundancies have also hit the university sector and Unitec has had some new academics join bringing externally funded grants with them (a Marsden and two Catalysts for example). If the PBRF had run in 2026, the share of funding allocated through the QE measure to Te Pūkenga would have been fixed at 90% of the proportion allocated through the 2018 QE to ITPs until 2030 unless the level of research quality measured through the 2026 QE had indicated a higher share was warranted. Now with the PBRF being indefinitely postponed we don't know if this will still be the case, however in the meantime at least we do have the knowledge that we will have some guaranteed revenue until a new funding system is organised.
- The committee acknowledged the work of the PBRF Review Panel and the PBRF SRG who undertook such enormous pieces of work. It seems their work and recommendations are quite contrary to what we are speculating is happening here. It would be good to see a statement from the SRG about what is being proposed by the new advisory groups.
- It was questioned whether the status quo requiring staff with a 0.2FTE research time allocation to produce at least two QA outputs per year will remain. The Chair responded that Unitec has a relatively low bar around the production of research outputs which exists in order to ensure compliance around offering degrees. There is a higher bar for those who wish to have a greater chunk of resource. Those basic precepts won't change. In fact, the PBRF isn't referenced in the guidance for Unitec researchers. Instead, words are used such as "a person is performing at a level 'of a national assessment process'".
- It was acknowledged that New Zealand does need to do better in terms of commercialising its science. We invest quite a lot, and the return is not great. In addition, our science research and innovation funding ecology is labyrinthian and overlaps a lot. There is a need for rationalising it. It doesn't change the concerns around the focus or lack thereof on the type of research we valiantly do under very difficult circumstances. We could add a lot more value to society if we were better resourced.
- New Zealand has a huge problem in that there's not enough jobs for our domestic and international PhD graduates. A lot of graduates have to move abroad for work. New

Zealand's environment is not giving everyone who wants to produce research and work in research the space to do so. The government needs to do more in this space if it wants to invest in people.

- The sector is very dependent on government investment in research, as industry isn't generally investing in research in New Zealand. Most businesses in New Zealand are small to medium enterprises that aren't necessarily in a position to invest in R&D. For example, our manufacturing industries are very small compared to some of the bigger economies. How we solve that problem is part of the bigger picture the advisory groups have been tasked with addressing.

The Chair thanked the committee for their ideas and valuable thoughts and reflected that this would be a useful discussion to share with Prof Martin Carroll, DCE Academic.

Action: Brenda Massey to draft a memo summarising the committee's feedback as above for Marcus Williams to send to Martin Carroll.

Section 5.2 2023 ECR Contestable Funding Final Reports

The committee received final reports from three of the five recipients of 2023 Early Career Researcher (ECR) Funding.

Dr Mary Yan: the committee commended Mary on her very structured approach to research. Her aims, research design and deliverables are all framed in a way that makes them highly achievable. It is great to see Mary strategically collaborating with organisations that are better resourced than our own, enabling her to do this work. Mary makes modest requests for small amounts of money, but they are for significant projects resulting in publication in quality journals and Mary is building up a valuable portfolio for herself as a non-teaching academic. Mary has helped to carve the non-degree teaching research path and is an exemplarily exemplar of this.

Dr Caralyn Kemp: the committee congratulated Caralyn on getting as far as she has under difficult circumstances and encouraged her to continue. The committee is keen to encourage research with a long-term focus, and commended Caralyn on the ongoing nature of her project.

It was noted that Caralyn was unsure whether she will present/discuss her research with the local board. It is incredibly important that she pursues this, and the committee urges Caralyn to press hard here. Our educational claim in this space is our partnership with community and industry. The most important part of what Caralyn's doing is what she's doing with community/industry, in this case it's local body authorities. If Caralyn needs help in this space, she should reach out to her research partner. The committee acknowledges that external engagement is difficult, but it's so important.

Caralyn and Kristie Cameron both presented at the CANZ conference a couple of weeks ago. Caralyn received a lot of interest from the industry people who were at the conference. It will be important that Caralyn connects with those CANZ networks she made. Their buy-in will add motivation and credibility when it comes time to talk to the local board.

Our ECRs should be encouraged, if circumstances change and different community or industry partners present themselves, to pursue these. If Caralyn isn't receiving buy-in from the local board, but another stakeholder is showing interest, then that should be progressed. Flexible thinking is required! Look at the focus of the groups that have shown an interest, and then present or position your information in a different way for them.

It is exciting to see student involvement in the project (four undergraduate students were involved).

Madhu Sudan: the committee was disappointed that the report was not submitted on the template that was provided. The other two projects haven't been completed yet either, but the final report template provides provocations for researchers to present the reasons behind this. Other prompts in the final report template have also not been responded to as a consequence. Madhu will need to be requested to submit a final report using the appropriate template at a later date.

The committee was unclear as to why the grant was so underspent. Again, provision of this information is prompted in the correct reporting template. The underspend has been lost from research, as budgets do not carry over from one year to the next. The underspend on this project could have supported other projects. It is unclear how the project will be completed without this funding, and as no internal funding has been sought in 2024.

Committee member Hamid Sharifzadeh is involved in Madhu's project and provided some additional context for the committee. Madhu is a very active, hardworking, and ambitious researcher. He is wrangling research collaborators from across the globe (including China and the US), bringing these teams together to progress the project. He is also working across schools, including with the School of Computing. It is a challenging space, particularly as Madhu is also working in Mercy Radiology and as a Senior Lecturer in Medical Imaging, as well as trying to develop an application for Catalyst/HRC funding, which again requires substantial input from international collaborators.

In the context of the ambition that Madhu's taken on (commendable as it is), in the future he might need to be more realistic on what can be achieved within a 12-month period. He should perhaps think about applying for funding of a capacity that could help take some of the workload burden off him, either by removing some teaching responsibility or by employing a higher level of support. Rather than a research assistant, a research associate could help wrangle the international partners and/or assist with some of the higher-level things Madhu's trying to do.

Action: Brenda Massey to draft letters to the three report writers thanking and acknowledging them for their reports and mahi and encapsulating the committee's feedback as above.

Action: Brenda Massey to liaise with the PIs of the other two 2023 ECR funded projects to obtain their final reports.

SECTION 6 - KUPU WHAKAMUTUNGA | CLOSING

Section 6.1 Ētahi Kaupapa Anō | Any Other Business

Tanya White said a mihi to Tūāpapa Rangahau for their support of kaupapa Māori and applied research at Unitec to do with the taiao and wāhi tapu at Te Noho Kotahitanga Marae, namely Te Puna, Te Wai Unuroa O Wairaka and the pā harakeke. The late Mel Galbraith discovered that īnanga (whitebait) are present from the intersection at Te Auaunga (Oakley Creek) to the top of the puna. We also know that tuna (eel) will leave the puna, swim down Te Auaunga into the Waitemata then spawn somewhere around Tonga. Their mokopuna later, somehow, find their way back to te puna. This is just one example of our applied research and the ways in which we enact tikanga in our methodology and our methods of data collection.

Our work as teachers and researchers has a similar ripple effect. Our students leave Unitec and then deliver value back into the communities that they come from.

Section 6.2 Komiti Self-Assessment

An opportunity was given for the committee to reflect on their self-assessment provocations. The committee is reminded that feedback on any aspect of the committee's operation can be emailed to the Chair or the Secretary at any time (in confidence if requested).

Section 6.3 Karakia Whakamutunga | Closing Karakia

MEETING CLOSED: 1415 h

SUMMARY OF ACTIONS

Agenda Item(s)	Action	Responsible	Outcome
5.1	Draft a memo summarising the committee's feedback on the cancellation of the PBRF 2026 QE and the establishment of the University and Science Advisory Groups for Marcus Williams to send to Martin Carroll.	Brenda Massey / Marcus Williams	
5.2	Draft letters to the three 2023 ECR funding report writers thanking and acknowledging them for their reports and mahi and encapsulating the committee's feedback on them. Liaise with the PIs of the other two 2023 ECR funded projects to obtain their final reports.	Brenda Massey / Marcus Williams Brenda Massey	

MATTERS ARISING

Agenda Item(s)	Action	Responsible	Outcome
5.1	Draft a memo summarising the committee's feedback on the cancellation of the PBRF 2026 QE and the establishment of the University and Science Advisory Groups for Marcus Williams to send to Martin Carroll.	Brenda Massey / Marcus Williams	Complete
5.2	Draft letters to the three 2023 ECR funding report writers thanking and acknowledging them for their reports and mahi and encapsulating the committee's feedback on them. Liaise with the PIs of the other two 2023 ECR funded projects to obtain their final reports.	Brenda Massey / Marcus Williams Brenda Massey	Complete In progress

Unitec New Zealand Limited

Meeting of Te Komiti Rangahau o Unitec | Unitec Research Committee

Date of Meeting: 9 May 2024

Title	IT policy changes impacting on research
Provided by:	A/P Leon Tan, School of Creative Industries
For:	**FEEDBACK/DISCUSSION**

Recommendation

That the committee provides feedback to IT / Te Komiti Mātauranga (Academic Committee) on recent IT policy changes impacting negatively on research activities.

Purpose

The purpose of this paper is to provide information to the committee on recent changes to IT policy that are impacting negatively on research activities and to ascertain whether these changes are impacting on Schools other than Creative Industries.

Information/Background

Research active staff have previously enjoyed admin rights enabling staff to install and utilize "non-standard" software for research purposes as necessary. Such software is used to generate creative outputs and/or to message and share information with national and international research collaborators.

Recent changes to IT policy, however, have resulted in the total removal of admin rights. This has meant that it is no longer possible for staff to install or update such software without applying for support to do so *in every single instance*.

Information technologies are intended to be enabling rather than disabling of the core functions of teaching, learning and applied research.

According to Unitec's Electronic Devices and Systems Policy, at least one purpose of providing staff access to electronic devices and systems is to:

- Foster collaboration and communities of practice in teaching, learning and research - internally, nationally, and internationally.

Are these changes impacting on Schools other than Creative Industries?

While it can be appreciated that the previously open security settings needed some tightening to improve security / eliminate vulnerabilities, recent changes have swung too far in the direction of shutting down research collaborations dependent on non-standard software.

Would the URC consider providing feedback to IT and/or Academic Committee to reiterate the importance of IT policies and processes *supporting Unitec core activities, including research*, in this case to ensure any future policy continues to enable the fostering of collaboration and communities of practice in teaching, learning and research nationally and internationally?

Attachments

- Unitec's Electronic Devices and Systems Policy

Electronic Devices and Systems Policy

Table of Contents

1. Purpose, Scope and Responsibilities

1.1 Policy Purpose

Unitec provides and manages electronic systems and devices for staff and students to undertake work and study related tasks. This policy ensures that Unitec operates a secure, minimal risk information technology environment, while enabling all authorised users' access to those approved electronic devices and systems.

The policy supports Unitec's strategic plan by:

- Achieving business and systems excellence.
- Supporting innovation in teaching and learning strategy.
- Enhancing the student experience.
- Meeting the needs of our communities (regional and national).
- Avoiding risks inherent in the use of electronic devices and systems, including:
    - Inappropriate or illegal use of information.
    - Loss of information.
    - Sharing of information with parties the author did not intend.
    - Risks associated with unauthorised access.
    - Exposure of the network to computer viruses & malware.

The purpose of providing staff and student's access to electronic devices and systems is to:

- Foster collaboration and communities of practice in teaching, learning and research - internally, nationally and internationally.
- Facilitate communication between Unitec campuses.
- Minimise the use of paper as a means of communication and engagement.
- Encourage collaboration.
- Provide a cost-effective and speedy means of communication for the Unitec community.
- Enable access to information and resources that staff and students need to complete their work or study.

1.2 Policy Application and Scope

- This policy applies to all users (including staff, students, contractors and guests) of all electronic Unitec devices and systems.
- Additionally, all users using non-Unitec electronic devices connecting to Unitec's wireless network are subject to this policy (*refer also to* Mobile Policy Device).

1.3 Responsibilities

Role	Responsibilities
IMS Operations General Manager	• Provide written approval for installation of software and games for educational use on Unitec electronic devices and systems • Authorises generic user accounts in consultation with the relevant Head of Department • Authorises in consultation with the relevant Head of Department automatic forwarding of emails addressed to a staff Unitec email address to a personal external email address when appropriate • Authorises extension of access to an account that is to be closed • Ensuring compliance with legislation.
IMS Services	• Manage all technical aspects of access to and control of Unitec's electronic devices and systems, including creating user accounts and back-up of user accounts • Coordinates and arranges relevant software licenses • Allocates email accounts • Registers internet domain names associated with Unitec • Closing, suspending and deleting of user accounts with appropriate authorisation
Unitec Users	• Abide by the provisions set out in this policy and any associated processes and guidelines • Use the devices and systems provided by Unitec in a professional and ethical manner while undertaking Unitec related activities. • Protect your account from unauthorised use by not sharing log in information with others

1.4 Compliance requirements

The use of all Unitec's electronic devices and systems must be in accordance with this policy, and any associated procedures/guidelines, to ensure the rights (in law) of all users, and reduce Unitec's exposure to risk.

2. Policy Statement(s) and Strategy

2.1 Allocating user accounts

Information Management Services shall be responsible for the allocation of all user and email accounts;

- All students shall receive a user account (with a unique account identifier) at the commencement of their course of studies.
- All other users shall receive a user account (with a unique account identifier) upon the request and authorisation of their manager.
- Only authorised users may use and /or access Unitec's electronic devices and systems.
- All users receiving a user account must keep their password confidential. Under no circumstances whatsoever may they disclose this password to another staff member, student or other individual or body.
- The creation of Generic User Accounts (e.g. 'facultytemp' as opposed 'jsmith') must be authorised by the IMS Operations General Manager and the relevant Head of Department.
- Email addresses shall follow a standard Unitec convention defined by Information Management Services and approved by the Chief Executive.
- Information Management Services will be responsible for the registration of any internet domain names associated with Unitec.
- Emails addressed to a staff Unitec email address are not to be automatically forwarded to a personal external email account without the direct authorisation of the IMS Operations General Manager and the Head of Department concerned.

2.2 Monitoring and auditing use

All information managed over Unitec's electronic devices and systems is subject to scrutiny and management by Unitec. Unitec reserves the right, in its absolute discretion to:

- Manage, analyse, limit or bar any information using Unitec's electronic devices and systems, where this information breaches policy or law.
- Block any data flow that may cause, performance or security issues or any other adverse risks to Unitec's electronic devices or systems.
- Monitor the use of Unitec electronic devices and systems and the information held within Unitec user accounts for the following purposes:
    - To investigate activities where the Chief Executive, or his or her delegate, has authorised an investigation into a breach of any Unitec policy, statute or NZ law.

- To audit this or other Unitec policies or statutes.
- To ensure the security of Unitec's electronic devices and systems and protect them from risk.
- To meet operational maintenance requirements e.g. problem resolution, system management, capacity planning, mail delivery breakdowns.
- Manage the costs associated with use of email and internet access.
- Restrict user access to the internet and to websites on the basis of content.
- To limit hours of internet connection time, the use of internet bandwidth and the quantity of data able to be transferred by applying volume-based and/or throughput-based policies; and to introduce a charging system for the use of any Unitec electronic device or system.

- As part of a monitoring process, Unitec may review records of individual internet usage, including information about particular sites accessed by individuals.
- A Unitec manager may, and only with the written authorisation from their immediate manager and the Executive Director, Organisational Development or the IMS Operations General Manager, access the content of a user account to ensure that any urgent and essential business needs of Unitec are met.

2.3 Provision and use of electronic devices and systems

- Electronic devices and systems provided by Unitec are provided for: business purposes, and primarily to support its teaching, research, outreach and administrative services.
- Unitec retains ownership of Unitec provided electronic devices and systems (including all information sent, received or captured within such systems) at all times.
- Information Management Services shall manage all technical aspects of access to and control of Unitec's electronic devices and systems, including the creation of User Accounts, the back-up of user accounts as part of the regular information technology back-up management processes and the application of this policy to Unitec's electronic devices and systems.

2.4 Software, hardware, licenses

- Software, including games, shall only be installed onto Unitec's electronic devices and systems with the prior approval of the IMS Operations General Manager.
- All approved software installed must be a legal copy and must be for business and/or educational use only.
- All approved games installed must be used for educational purposes only.
- All software licenses must be coordinated and arranged through Information Management Services.

2.5 Closing user accounts

Access to a Unitec user account shall cease upon the occurrence of the first of the following events:

- When employment with Unitec ceases.
- Ninety days after a student's last Unitec class ends.
- At the conclusion of a contract.
- As and when the Chief Executive, or his or her delegate, otherwise approves the cessation of the account.
- The IMS Operations General Manager and the relevant Head of Department can, in exceptional circumstances, approve continued access to a user account beyond any event that would normally cease access.
- A Unitec staff member or contractor's immediate Unitec manager shall be responsible for ensuring that:
    - Information Management Services is notified of the request to cease access to the Unitec user account in question (use the Employee Clearance Form), and
    - Information held in the user's account is appropriately managed and stored, in line with any approved Unitec records classification scheme and all relevant retention and disposal requirements.
    - a request for an account to be suspended without deletion be submitted.
- Once a user's access to their Unitec user account has ceased, emails or other documents held in the user's account must not be forwarded by any person to a personal email address, unless approval from the IMS Operations General Manager and the users immediate manager (for staff) or the relevant Head of Department (for students) has been provided.
- User account data will be deleted (if appropriate) within a maximum of 2 months from the date of account closure.
- A user is responsible for transferring all personal emails or personal documents to their own personal electronic devices or systems, prior to the cessation of their Unitec user account.

2.6 Acceptable and unacceptable use of Unitec electronic devices and systems

- Use of Unitec's electronic devices and systems must fall within the boundaries of normal and appropriate practice and New Zealand law.
- Access to external chat rooms, blogs or other similar services is allowed as long as such use:
    - Furthers the quality of teaching, learning and research, and / or

- Enables the discovery of new ways of using resources to enhance teaching, learning and research and /or
- Promotes staff and student development.

2.6.1 Personal use

Reasonable and occasional use of Unitec's electronic devices and systems for personal use is acceptable in some circumstances. Such use must not:

- Interfere unduly with Unitec's information technology systems.
- Be for personal gain (except as permitted by any other Unitec policies).
- Conflict with the user's employment obligations.
- Promote business, political, religious or any personal views in a manner that appears to have the endorsement of Unitec.
- Burden Unitec with incremental costs.
- Conflict in any way with Unitec policies or be contrary to any applicable law.

2.6.2 Illegal Activity

Use of Unitec's electronic devices and systems *must* not be used in any illegal activity, including, but not limited to sending or receiving:

- Objectionable materials in terms of the Films, Video and Publications Classification Act 1993.
- Defamatory or illegal material.
- unauthorised confidential or commercially sensitive material.
- Offensive, harassing or discriminatory material under the meaning of the Human Rights Act 1993 or the Harassment Act 1997;
- Material that breaches others' right to privacy and confidentiality. Personal information in emails must be treated in accordance with the Privacy Act 1993 and Unitec's Privacy of Information Policy;
- Material that can be considered harmful to Unitec or members of the Unitec community;
- Material that create or distributes unsolicited emails (Spam) that are sent to students; people external to Unitec or external organisations that contravenes the *Unsolicited Electronic Messages Act, 2007* or subsequent legislation

2.6.3 Unacceptable User Conduct

Use of Unitec's electronic devices and systems *must* not be used to:

- Attempt to subvert or actually subvert network security.
- Intentionally introduce, distribute, propagate or create viruses.
- Take part in any activity involving plagiarism or cheating.
- Take part in any commercial or personal profit activities without direct authorisation by the appropriate Head of Department or other manager.

- Directly or indirectly, compromise Unitec's information technology service.
- Misrepresent personal views as being the views of Unitec.
- Cause costs to be incurred by any person or organisation (including Unitec) without the consent of that person or organization.
- Gamble online.
- Access pornography, sexist, racist or offensive content.

Additionally users *must* not:

- Intentionally damage Unitec equipment
- Without authority, read, delete, copy, modify or send an email from within another users' email account
- With dishonest intent, modify any email with a view to disguising its origin, including date and authorship, or the original message;

3. Breaches of Policy

- If there are reasonable grounds to suspect that a person has breached this policy, an investigation will be carried out under either:
    - The Student Disciplinary Statute (for students), or
    - The Disciplinary Policy (for staff), and
    - Any other Unitec policy that may be in force from time to time, or as provided for under any other contractual arrangements that may be applicable.
- Subject to the outcome of any investigation, such action as is permitted under the Disciplinary Policy (for staff), Student Disciplinary Statute (for students), and any other Unitec policy that may be in force from time to time, or contractual arrangements, may be taken.
- Whether or not disciplinary action is taken, a student who is found after appropriate inquiry to have misused Unitec's email and/or internet facilities may have their access to such facilities withdrawn for a period to be decided by the relevant Head of Department/Manager and the IMS Operations General Manager.
- Unitec reserves the right to suspend the access of any user to the email and/or internet facilities where it is believed on reasonable grounds that that user is breaching or has breached this policy. Such suspension may continue until such time as the matter has been dealt with to the satisfaction of Unitec, and will be managed in accordance with the provisions of the Disciplinary Policy (for staff), and the Student Disciplinary Statute (for students).
- Where, following completion of an investigation, Unitec reasonably concludes that a user has breached the requirements of this policy, Unitec may terminate that user's access to Unitec's system/network.
- Where there is reasonable cause to believe that any New Zealand law has been contravened, law enforcement agencies may be advised.

4. Appendices

4.1 Definitions

Term	Definition means...
Users	Students, staff, contractors, sub-contractors of Unitec or any other person authorised to use Unitec's electronic devices and systems.
Electronic devices and systems	Email, internet, mobile devices and any other information technology software or hardware controlled or owned by Unitec, including Unitec's networks and the services provided via these facilities.
Private devices	Mobile devices and any other information technology software or hardware, owned by students and authorised by Unitec through Information Management Services (IMS) to use Unitec's electronic devices and systems.
Email	Transmission of messages over communications networks, including internal and external emails. For the purposes of this policy, the word 'email' includes 'text messaging' and any other electronic message.
Internet	Global network connecting computers for the exchange of data, information, news and opinions.
Reasonable use	Use that does not impact negatively on: • Ability of the staff member to fulfil their employment duties; or • Ability of the student to carry out their work and/or studies effectively and efficiently; or • Other users.
User account	Security software enabling users to access Unitec's electronic devices and systems. This software provides users with unique (and in certain limited instances, generic (i.e. group- based) identifiers. **Note:** Different access rights are accorded the User Account, depending on the role of the user.

5. Reference Documents

5.1 Compliance with legislation

The Electronic Devices and Systems Policy adheres to the following legislation:

- Public Records Act 2005
- Privacy Act 1993
- Official Information Act 1982

5.2 Compliance with international agreements

5.2.1 Compliance with government policies and guidelines

This policy takes into account the following government policies and guidelines:

5.2.2 Compliance with Unitec corporate policies

Unitec's Electronic Devices and Systems policy, processes and activities will be conducted in accordance with Unitec's corporate policies as well as with standards of behavior specified and/or implied by Unitec's:

- Code of Conduct
- Guidelines for the Use of Email
- Mobile Devices Policy
- Intellectual Property Policy
- Records Management Policy
- Privacy of Information Policy & Procedures

6. Document Management and Control Details

6.1 Document Details

Version:	1.2	**Issue Date this Version:**	16 October 2014
This Version Approved by:	Leadership Team	**Date of Approval:**	15 October 2014
Policy Owner:	IMS Operations General Manager	**Policy Sponsor:**	Executive Director, Organisational Development
Date of Next Review:	15 October 2016		
Date first version issued:	6 May 2009	**Original Approval Body:**	Leadership Team

6.2 Amendment History

Version	Issue Date	Reason for Revision	Approved by
1.2	16 October 2014	Restructure, reformat and minor review of document content	General Manager, Information Management Services
1.1	17 August 2012	Changed policy owner to reflect change in position titles resulting from recent IT Restructure; changed reference to ITSC to IMS (new name for IT).	Leadership Team
1	6 May 2009	This policy supersedes the Communications Systems Policy Amendments (date and substance)	

Unitec New Zealand Limited

Meeting of Te Komiti Rangahau o Unitec | Unitec Research Committee

Date of Meeting: 9 May 2024

Title	Emerging Researcher Start Up Fund
Provided by:	A/P Marcus Williams, Director Research & Enterprise
For:	**FEEDBACK**

Recommendation

That the committee receives and provides feedback on the application form and guidelines for the Emerging Researcher Start Up Fund.

Purpose

The Emerging Researcher Start Up Fund aims to provide modest financial support to Emerging Researchers at Unitec on a more agile basis than the annual Early Career Researcher contestable funding round. This is a new category of funding, with Emerging Researchers being defined differently to Early Career Researchers (please refer to the Emerging Researcher Start Up Fund Guidelines, attached). This is an opportunity for discussion of this product and input from the committee.

Key Points

- The maximum grant from the Emerging Researcher Start Up Fund will be $500.
- Funding is only available to Emerging Researchers, as defined in the guidelines of the fund.
- Applications can be made anytime.
- If funding is approved, a simple agreement will be drafted containing agreed milestones and requiring a single report on outcomes at the end of the project.
- Applications will be assessed on an 'as received' basis by the Director Research & Enterprise.

Attachments

- Emerging Researcher Start Up Fund Application Form
- Emerging Researcher Start Up Fund Guidelines

-

Contributors

- A/P Marcus Williams, Director Research and Enterprise
- Penny Thomson, Research Partner

- Gregor Steinhorn, Research Partner Enterprise
- Hadley Brown, Research Contract Specialist, Research Partner ECR

Emerging Researcher Project Start-up Fund
Application

Please refer to the New Researcher Project Start-up Fund Guidelines for full details about the eligibility, rationale, criteria and process of the scheme.

Project Summary

1. Project Title:

NAME PROJECT LEADER	SCHOOL	POSITION TITLE	EMERGING RESEARCHER?	ORCID NUMBER
			YES/NO	

** All Unitec researchers should have an ORCID number. You can register here https://orcid.org/*

I am an Emerging Researcher according to the definition in the guidelines for this fund	**Yes/No**

Research team	**Name**	**School**	**New Researcher**
Team member			Yes / No
Team member			Yes / No
Team member			Yes / No
Research student member (optional)			

Project Mentor (must be Unitec researcher)	**School**

Research Partner	

External Industry or Community Group Partner (Optional)	

2. Description of project – *This fund is intended to help you get started on something you are interested in which can result in some new discoveries, knowledge that is interesting to a discipline or a profession, or can resolve a real world problem, however detailed or specific. Tell us what that project is and what or how the outcome of it may serve as above. (max 300 words)*

3. What each team member will do? – *Please explain briefly*

4. Project milestones – *To help you with your project, please set some operational timelines. Change the pre-set operational activities if needed*

Emerging Researcher Project Start-up Fund
Application

Operational activity	Finish date
First phase of the project	
Second phase of the project	
Third phase of the project	
Analysing the data	
Preparing project report	
Writing paper	
Approaching the potential publisher	
Getting help with the writing	
Editing and proof-reading the paper	

5. **Expected outputs (publications, dissemination, events, presentation to a public group – be specific):** *This is likely to be your first research output. Consider some of the more accessible research output types, e.g. oral presentation (non-conference) or ePress publication. Talk to your Research Partner. All team members must be co-authors.*

Output type	Date

6. **Will writing support be required?**

Yes ☐ No ☐

7. **Budget (expand as necessary):**

What do you need ?	($)	Why do you need it?

Emerging Researcher Project Start-up Fund
Application

TOTAL COST OF PROJECT (up to $500 NZD)		

Declarations

Declaration (Project Leader)

I declare that to the best of my knowledge the information I have provided is true and correct; that ethical approval will be sought and obtained prior to the commencement of the research, if required; and that I hold an FTE position at Unitec of 0.2 or more.

I acknowledge that Tūāpapa Rangahau will be monitoring my progress on the project and the expenditure of my grant if I am allocated funding.
I have attached my Individual Research Plan.

Signed: _____ Dated: _____

Declaration (Project Leader's Line Manager)
I have read and support this application and, if funded, will ensure that adequate time is given to complete the research and that there are no impediments to the successful completion of the project.

Signed: _____ Dated: _____

Email your completed, fully signed Application Form to Hadley Brown hbrown@unitec.ac.nz.

Applications will be considered promptly as they are received.

Supporting documents attached:

☐ Evidence of ethical approval, if applicable

☐ Individual Research Plan

Emerging Researcher
Project Start-up Fund Guidelines

Rationale
Unitec has set the KPI that all degree programmes will be green lit in the Research Productivity Traffic Light and there are a number of initiatives in play to help achieve this. The New Researcher Project Start-up (NRPS) Fund will add to this suite of tools, providing a modest budget (up to $500) to initiate new research projects for any research eligible staff member at Unitec.

While the fund is available to all Unitec researchers who meet the criteria, the focus is on supporting groups of new researchers to team up with an experienced researcher, in order to complete research that as a group they have a passion to combine their different skill sets to realise. The proposed project must provide a pathway for New Researchers to become Research Active and a proposal must be able to demonstrate how this will be achieved. Unitec's benchmark for Research Active, is where a staff member produces one publicly disseminated research output per year, or two across a two-year period.

Eligibility Criteria

An emerging researcher at Unitec is a person who:

- *Meets the inclusion criteria for the Research Productivity Traffic Light or has been accepted onto the Non-Degree Teaching Research Track.*
- *Has an approved Individual Research Plan which identifies clear effort toward a recognised research output within the next 12 months.*
- *Is a named member of a Research Group in an approved School Research Plan.*
- *Has an ORCID number.*

Applicants must be:

- *a permanent full time Unitec employee or*
- *a permanent part-time Unitec employee or*
- *on a fixed term contract of two years or more*

and is (2) employed on an **FTE of 0.2** or more and (3) teaches 0.2 FTE or more on any course in a degree level programme and/or supervises on a postgraduate programme with a research component. *Note there are exceptions for non-degree teaching research staff, please contact the Research Office for details.

The applicant's project must aim at:

- moving red/amber lit staff to green in the Research Productivity Traffic Light

and/or

- giving New Researchers their first opportunity at lead research with a view towards leading more significant funded, collaborative projects and building a research portfolio that can be nationally recognised.

It is recommended that applications are developed in relationship with the relevant Research Partner. Project research collaborators would usually include two or more staff who need outputs to go Research Active, applications with more NRs as research team members will be favored. An experienced researcher must be directly involved in the project as an adviser or mentor; they may or may not be a direct collaborator/co-author. Projects must have a basic timeline toward publication or dissemination of other recognized research output(s) which include the new researcher team members as co-authors.

Projects which involve a research student in the research with view to co-authoring is not essential but will be favoured and the project must have an applied research focus in alignment with an industry or community organisation.

Project summary

1. Project title
2. Name of Project Leader (NR-Y/N)
3. Name of Research Team Members (NRs – Y/N)
4. Name of Research Student Member (Optional, but desired)
5. Name of Project Mentor
6. Name of Network Research Partner
7. Name of External Industry or Community Group Partner (Optional, but desired)
8. Description of project
9. What each team member will do?
10. Project milestones – operational timelines
11. Expected outputs (publications, dissemination, events, presentation to a public group)
12. Will writing support be required? Y/N
13. Budget

Process

Proposals will be assessed within 10 working days from the date of submission. Contracts will take the form of an agreement with the terms detailed in an email cc'd to the Project Lead, Research Partner and Research Leader.

NB - some aspects of expenditure are required to undergo executive scrutiny with respect to budget constraints, such as recruitment, travel and capex. Tūāpapa Rangahau will handle this.

Unitec New Zealand Limited

Meeting of Te Komiti Rangahau o Unitec | Unitec Research Committee

Date of Meeting: 9 May 2024

Title	Science System Advisory Group: Submissions Sought for Phase 1
Provided by:	Prof Hamid Sharifzadeh, School of Computing, Electrical and Applied Technology
For:	**DISCUSSION**

Recommendations

- That the committee notes the membership and fields of experience of the newly appointed Science System Advisory Group (SSAG).
- That the committee provides feedback on Phase 1 for the SSAG for submission to Te Pūkenga, who are coordinating a response from our sector.

Purpose

The purpose of this paper is to update the committee on the membership of the SSAG and to present the questions for submission for Phase 1 for the SSAG. The committee's feedback will be used to inform Te Pūkenga's collective response to Phase 1.

Information/Background

The Ministry of Business, Innovation and Employment (MBIE) has established a new SSAG to provide advice on how to improve the effectiveness and impact of the science sector in New Zealand. The Group will deliver two reports on the system, with the first due end of June, and the second end of October. It will build on the first part's advice and provide final recommendations on longer-term changes.

The SSAG members have been appointed and have begun discussing their work programme. A total of nine members including the Chair, Professor Sir Peter Gluckman, will form the Advisory Group. The members and their fields of experience are:

- Professor Sir Peter Gluckman, Chair of the Advisory Group, Former Prime Minister's Chief Science Advisor, New Zealand; Health research.
- Professor Tracey McIntosh, Professor of Indigenous Studies, University of Auckland, Chief Science Advisor for the Ministry of Social Development. Te Ao Māori expertise; sociology
- Dr Barb Hayden, Science advisor, NIWA; Marine biology.

- Dr William Rolleston, Co-founder of biotechnology company South Pacific Sera Limited; Biotechnology.
- Dr Hermann Hauser, Entrepreneur and venture capitalist. Innovation and technology systems; Physics.
- Professor Mark Ferguson, Board chair SoilSteam International and Member of the European Commission's High Level Expert Group on Horizon Europe. Science and research systems; Molecular cell and developmental biology.
- Mr Michael Ahie. Director of Zespri Group Limited Chair of Spring Sheep Milk Co. and Chair of the Plant Market Access Council (PMAC); Business.
- Professor Hamish Spencer, Sesquicentennial Distinguished Professor, Department of Zoology, University of Otago; Evolutionary genetics.
- Ms Nadia Levin, CEO and Managing Director of Research Australia, non-executive board Director Northern Sydney Local Health District, non-executive board Director New Zealanders for Health Research; Health research.

More information, including full bios of each member, is available on MBIE's website: Science System Advisory Group members.

The SSAG will proceed in several phases with submissions sought during each phase. Phase 1 submissions will consider high-level sectoral questions that consider the role of science and innovation in New Zealand to inform the interim report. Phase 2 will focus on operational details (e.g., funding tools and mechanisms, workforce, infrastructure etc.), broader aspects of the science and innovation system and the many elements of the science and innovation system not specifically addressed here.

MBIE is now seeking public submissions for Phase 1 for the SSAG. **Submissions for Phase 1 will close at 11.59pm, Friday 17 May 2024.** A collective response from Te Pūkenga is being organised at three levels of influence to maximise impact. Consequently, Jamie Smiler, National Director of Research - Te Pūkenga, strongly encourages dialogue amongst the Unitec research community.

Key Points

Submission questions: Phase 1

Phase 1 consists of broad high-level questions regarding the shape of the science, innovation and technology system that will inform subsequent phases. It is not intended that we consider operational or fiscal detail at this stage and there are many other issues not considered at this stage. Where possible it may be useful to distinguish short-term issues from longer-term desired outcomes.

Question set 1 – The Science, Innovation and Technology System.

1. What future should be envisaged for a publicly supported science, innovation and technology systems?

2. What are the opportunities, challenges and barriers that need to be addressed to build a more thriving research, science, innovation, and technology system that delivers positive sustainable growth and prosperity for New Zealand? This might include specific comment on the following topics:

    a. How can they drive innovation and accelerate the shift towards a knowledge-based, diversified economy?
    b. How can they contribute to developing innovative solutions to emerging challenges such as climate change, biodiversity loss, and societal health?
    c. How should they adapt to, and make good of opportunities provided by, a rapidly evolving global research landscape?
    d. How can the Government's effectiveness be enhanced using scientific data, knowledge, and new technologies?

3. What principles should underpin the design of a science, innovation, and technology system for New Zealand, given its demographic composition and distinctive cultural makeup, its geographical position, and its social, environmental and economic futures? This might include specific comment on the following:

    a. Where are the major structural barriers to greater efficiency, effectiveness, and impact?
    b. What are the barriers between publicly funded research entities (especially universities and Crown Research Institutes (CRI)), and in turn how can we facilitate closer partnerships between them, the private sector, government agencies and communities including hāpori Māori?
    c. How should the science, innovation, and technology system embrace and reflect the growing diversity of culture and peoples in New Zealand and the contributions of Māori as reflected in the Treaty/te Tiriti?
    d. What are some important factors for the government to consider as criteria when prioritising investment in research appropriate for New Zealand's size and characteristics?
    e. How can New Zealand better leverage its small domestic, science, innovation, and technology system to be more effective?
    f. What future are we envisaging for the science, innovation, and technology system in New Zealand?

Question set 2 – Public Research Organisations.

4. What is the role of public research organisations such as Crown Research Institutes (CRIs) in the New Zealand context? In answering this question, you might consider:

    a. How should the functions of government research organisations including the current CRIs be organised, governed, and managed into the future?
    b. Are public research organisations too isolated from higher education?
    c. To what extent should public research organisations be public good facing versus private good facing? Should these roles be separate?
    d. How should public research organisations manage intellectual property?

5. Does New Zealand need an advanced technology organisation doing applied and developmental research? If so, how would it be structured, governed, and organised? How would the private sector be engaged?

Question set 3 – The Innovation System

6. Does New Zealand have appropriate mechanisms to develop the innovation pipeline, attract global partners and funding?

    a. Does New Zealand need a revised approach to promote innovation?
    b. How can we use innovation and technology to make New Zealand's economy more competitive?
    c. If an innovation-focused policy and promotional organisation is needed, what would its core functions be?
    d. How should Callaghan Innovation and other publicly funded industrial and commercial innovation support mechanisms evolve? For example, New Zealand Growth Capital Partners (NZGCP), incubators, accelerators and similar (excluding tax incentives).

Question set 4 – Contestable Research

7. What is an optimal structure for managing mission-led and contestable research?
   In answering this question consider:

    a. Should the Ministry of Business, Innovation and Employment and its policy functions be more clearly separated from contestable funding decisions?
    b. Does New Zealand need to rationalise its research funding mechanisms?
    c. At what levels should prioritisation of research and research investment occur and on what basis?
    d. How should investment into Māori research priorities be determined?
    e. How should research involving the study of or the application of mātauranga Māori be managed and funded?
    f. What should a Pacific research strategy consist of?
    g. In what areas should New Zealand develop in depth research expertise over the next two decades?
    h. How could the system better coordinate research across priority areas?
    i. How should high intellectual risk, high innovation research applications be identified and supported?
    j. How should the balance of research investment extend across from the humanities, social sciences, health sciences life sciences, physical sciences and earth sciences?
    k. What checks and balances should be in place to ensure effective and efficient science?

Question set 5 – Government's Research Needs.

8. How should the government's own research needs be identified and addressed? How should such research be quality assured?

Guidance on making a submission can be found here: https://ssag.org.nz/submit/#submit

Please note that submissions will be publicly released.

Next Steps

The committee's feedback will be collated to inform Te Pūkenga's submission.

Contributors

- Brenda Massey, Tūāpapa Rangahau
- Hadley Brown, Tūāpapa Rangahau

Unitec New Zealand Limited

Meeting of Te Komiti Rangahau o Unitec | Unitec Research Committee

Date of Meeting: 9 May 2024

Title	2023 Early Career Researcher (ECR) Funding Final Report
Provided by:	Brenda Massey, Senior Grants Advisor
For:	**REVIEW**

Recommendation

That the committee receives a final report from Dr Sarah Wells, recipient of 2023 Early Career Researcher (ECR) Funding.

Purpose

The purpose of this paper is to report to the committee concerning the outcomes and expenditure of Dr Sarah Wells' 2023 ECR funded project.

Information/Background

The ECR Fund provides annual, contestable funding to emerging and established early career researchers at Unitec in order to develop their capability, capacity and career progression as a Principal Investigator on a high quality, externally partnered, applied research project that meets the evaluation criteria. Provision of one progress report and one final report is required as part of the accountability requirements of the fund.

Attachment

- 2023 ECR Final Report – Dr Sarah Wells

2023 UNITEC EARLY CAREER RESEARCHER FUND Final Report

Email your completed report to bmassey@unitec.ac.nz before **5pm on Friday, 26 April 2024.** Instructions in red italics may be removed before submission.

Researcher:	Dr Sarah Wells
Project Title:	A genomic investigation of hybridisation in *Naultinus* geckos.
Amount of Grant:	$10,494

Executive Summary

Summarise the highlights of your project, including findings, achievements, and conclusions.

As originally intended, this project is still ongoing (see milestones below) as its timeline does not fit well into Unitec's end-of-year deadlines.

The main highlights of the project thus far are the strong connections with tangata whenua and community conservation groups that this project has generated. I have formed close connections with many local hapū and kaitiaki from certain hapū in the Bay of Islands. These people have given me access to their land and have been coming out into the field with me. I will continue to nurture these relationships in the coming years.

Initial fieldwork has been completed, but more samples are necessary.

Background

Summarise the background to the project, the need for it and why it was important.

Species hybridisation is a natural phenomenon that can occur at the boundaries (contact zone) between the ranges of two or more species (Mallet 2005). However, the effects of hybridisation on the fitness (the ability to survive and produce offspring) of hybrid individuals is varied. In plants, and some animals, this can lead to "hybrid vigour" in which hybrids are more fit than their parental species. However, hybrid animals can also exhibit reduced fitness (outbreeding depression) and suffer from either reduced survival or reproductive output and, at the extreme, sterility (reviewed in Hewitt 1988, Burke and Arnold 2001). This is particularly concerning for species that are already at risk or have small population sizes as this can exacerbate further population size declines.

In order to understand how hybridisation affects fitness, its effects on the genome of the hybrid must be known. However, the exact genetic consequences of hybridisation are not well understood. Using new sequencing technologies, hybrid genomes can now be scanned to detect outlier clusters of highly differentiated loci that are "islands of divergence" involved in local adaptation, while gene flow homogenises the rest of the genome (Nosil et al. 2009, Cruickshank and Hahn 2014, Harrison and Larson 2016). Islands of divergence are of particular interest in hybridisation studies because they are likely to be under selection and may be involved in maintaining reproductive isolation and in turn affect the fitness of hybrids (Bay and Ruegg 2017, Abbott et al. 2016, Harrison and Larson 2016).

Hybridisation has significant implications for species conservation management (Wayne and Shaffer 2016). In New Zealand, many reptiles suffer from small populations and are classified as "At Risk" or "Declining" due to the combined effects of habitat loss and the introduction of

mammalian predators. Consequently, a common tool in conservation management has been to reintroduce native reptiles to newly pest-free offshore islands from which they had been previously been extirpated. Where these islands exist near the contact zones between two species, it is imperative to know which species are being translocated (Colella et al. 2018). Translocation of hybridised individuals should be avoided to avert the possible detrimental effects on fitness that could further reduce the size of an already small founding population. Selection will naturally regulate deleterious hybridization through the reduced survival or reproduction of hybrid individuals (Mallet 2005), and in large populations this regulation has little effect on population size. However, in a small, isolated island population, selection against hybrids can result in a significant proportion of the population not contributing genes to next generation, thereby reducing population sizes. This effect can be exacerbated if outbreeding depression manifests in the F2 rather than F1 generation i.e. after the hybrid has produced progeny (Edmands 1999).

Northland is the centre of diversity of the endemic green geckos where three species of *Naultinus* occur. The ranges of these species overlap (van Winkel et al. 2018), but little is known about the exact location of contact zones between species, and whether, and how commonly, these species hybridise in the wild. This knowledge gap means species boundaries are difficult to delineate, and therefore applying appropriate management strategies to these endemic geckos is problematic. Purported hybrids have been anecdotally identified in the contact zone between *N. grayii* and *N. elegans* in the Bay of Islands. These "hybrids" were identified based on morphological features such as apparent *N. grayii* body forms with *N. elegans* blue, instead of *N. grayii* orange, mouths. However, it is unclear whether this characteristic is indicative of hybridisation, or whether it has arisen separately in each species. Understanding and locating potential hybrid zones is important as local iwi and community conservation groups in the Bay of Islands area are planning on translocating *N. grayii* to islands in the Bay of Islands. Being able to identify pure *N. grayii* individuals and avoid hybrids when sourcing animals for the founding populations is essential to ensure the individuals being translocated are the desired species and exhibit the fullest genetic potential.

Aims and Objectives

List the aims and objectives of the project and note if they changed during the project.

The primary aim of this study is to determine species boundaries and identify a potential hybrid zone in *Naultinus* around the Bay of Islands area. This is because there are community conservation groups wanting to source *N. grayii* for re-introduction on islands in the Bay of Islands. Therefore, there is an urgency to provide information on where potential hybrid zones are located, so they can be avoided.

To date, there have been no studies investigating hybridisation genomics in any New Zealand lizard species, thus this study will provide a huge leap forward in our understanding of species hybridisation in New Zealand lizards. Indeed, there are few studies investigating genomic hybridisation on generally in New Zealand (Shepherd et al. 2022). Most of our knowledge on hybridisation derives from studies in plants (reviewed in Morgan-Richards et al. 2009) and insects such as stick insects (McKey 2019, Morgan-Richards et al. 2016). Fitness et al. (2012) investigated hybridisation between two populations of *Woodworthia maculata* geckos in Wellington. However, this study a) did not investigate interspecific hybridisation, which has considerably different impacts owing to its potential to result in reduced fitness effects or selection against hybrids, and b) did not use genomics.

Our study will shed light onto the genomic mechanisms of hybridisation and the influence this may have on fitness (survival and reproductive success). Delineation of hybrid zones will aid conservation groups and the Department of Conservation in Northland avoid including hybrids when translocating animals for founding or supplementation of new island populations. This is critical because translocating hybrids that have lower fitness than non-hybrids could result in a founding population that has reproductive issues such as reduced reproductive success, or sterility. The results will also enable more effective conservation management of each species because they will confirm species identifications around the Northland area, and also evaluate levels of genetic diversity of these populations. For example, our study can help identify suitable non-hybrid genetically diverse individuals/populations for translocation to provide a re-introduced founder population that has the greatest degree of genetic diversity to be able to adapt to environmental challenges in the future.

On a broader international scale, this study will be one of the first to investigate hybridisation using genomics in a lizard species, with most studies to date having used single mitochondrial or nuclear markers. A genome-wide investigation allows a much more fine-scale assessment of the effects and signatures of hybridisation. In addition, most international studies on reptiles have focused on the detection and characterisation of hybrid zones to aid in conservation (e.g. Pinto et al. 2019, Caeiro-Dias et al. 2021) and less on the effects of hybridisation on selection within the genome (but see Bock et al. 2021). Therefore, our study will also be a significant addition to the international literature on hybridisation in reptiles.

Methodology

Summarise the overall approach taken and why this approach was chosen over other options considered.

Sites around the Bay of Islands known to have *N. grayii* and *N. elegans* present near their boundaries were selected for preliminary investigation to determine the location of the contact zones based on morphology of individuals and DNA sampling (sites in Haruru Falls, Paihia, Opua, Russell Forest, and Rawhiti). These were chosen as they are a) sites that have known *Naultinus* records and therefore represent the best chance of sampling the above-mentioned species, and/or b) are locations where it is purported that two species occur together and are therefore key to our understanding of how the species interact. This fieldwork was conducted over the summer of 2023 and I successfully identified the location of the contact zone in the southern region of the Bay of Islands. One change in the methodology was made during the field season. We were unable to implement transects due to inaccessibility of large portions on the Bay of Islands region, particularly in the south. Instead we ensured that we sampled all over the region where sites were accessible. Again, we did not find enough geckos to be able to choose equal numbers of males and females proposed in the initial methodology. However, roughly equal numbers of males and females were found regardless.

Animals were found by spotlighting at night. Geckos were extracted from the tree by hand. Mensural (12 morphological measurements such as snout-to-vent length, tail length, toe length, head length and width) were taken using a ruler and calipers and meristic measurements (scale counts) from photographs taken, animals sexed morphologically, and a small tail tip sample for DNA analysis was collected using sharp scissors. All geckos will be processed where they were found and released back into the same branch of the tree where they were caught. We caught 10 *Naultinus* geckos (an average of one gecko per night of fieldwork), as well as a couple of samples of *Dactylocnemis* for the second part of this project.

Samples were brought back to the Applied Molecular Solutions lab at Unitec, where DNA from the tail tip samples will be extracted using QIAGEN DNEasy blood and tissue kits. This has not been conducted

yet because of the need to collect more samples. Sample quality will be verified using a fluorimeter before being sent to AgResearch in Invermay for genotyping-by-sequencing.

Project Milestones

Translate the Project Milestones from your approved application into the table below and state what is completed, in progress, or ceased (will no longer complete). If these differ from those anticipated in your original application, please provide an explanation for the variation. Where the proposed achievement or milestone is yet to take place, please provide a proposed timeline for completion in the revised due date column.

Achievement	**Agreed Date due**	**Status** (Completed, in progress or ceased)	**Revised Due Date** (if still in progress)
Permits granted and iwi approval given	April 2023	Initial is completed, but still currently seeking further approvals from more hapū after extending out the field range.	Ongoing
Fieldwork completed (conducted over the 2023 summer season from October 2023 to January 2024)	January 2024	Completed but more samples needed.	Feb 2025
DNA extractions completed and samples sent for sequencing	April 2024	This will be postponed until all samples have been collected, although a couple of trial extractions are currently being run.	April 2025
Morphological analysis completed	September 2024	This deadline has not been reached yet, but again, this needs to be postponed until we have all samples. However, measurements from sampled geckos have been collected.	September 2025
Population genomic analysis completed	January 2025	This deadline has not been reached yet, but again, this needs to be postponed until we have all samples. It	January 2026

		is necessary that all samples be sent for sequencing together.	
Manuscript drafted and submitted for publication	March 2025	This deadline has not been reached yet, but again, this needs to be postponed until we have all samples	March 2026
Estimated completion date	March 2025	This deadline has not been reached yet, but again, this needs to be postponed until we have all samples	March 2026

Outcomes/findings

Explain the end result of your research. Did you achieve against the aims and objectives set? Depending on the project, it might include research results, findings, evaluation results, data, etc. If the project created something tangible like software, an artwork or a piece of equipment, describe it or include a photo. Where your reported outcomes differ from those proposed in your original funding application, please outline the reasons for the variation.

Few projects (particularly with both field and lab components) can fit into a one year timeframe dictated by this grant. Thus, the original timelines submitted here always extended beyond the one year deadline for this grant making it difficult to comment on the outcomes/findings of this project.

However, the fieldwork season was successful in that we identified the location of the contact zones between the two species. We now know that they overlap in their distributions, and we have samples to analyse, although more are needed. The other major success of this project is the close connections formed with local hapū, conservation groups, and local landowners who have all generously helped with fieldwork, logistics or land access with this project. I have formed close ties with many local hapū, and many kaitiaki have been enthusiastic about coming into the field with us to search for geckos. I will continue to develop these relationships in the future.

Impact

Indicate who/what has benefitted (or will benefit) from this research. What form do these benefits take and why are they important?

As stated above, the major benefit here is the collaboration with tangata whenua and local conservation community group Project Island Song who have been instrumental in aiding the logistics and putting me into contact with local landowners. These relationships benefit both parties. Project Island Song in particular will benefit from this research as they need to know which species of geckos are found where so they can identify appropriate sites to source geckos for translocations back to the motu of the Bay of Islands. I have also been approached by other community conservation groups wishing us to work together to find geckos on their properties, which has benefits both for their knowledge of the native

species and their abundance on their managed land, as well as providing further possible sites for my project.

By working together with local tangata whenua, my project has promoted kaitiakitanga, mahi kotahitanga, and ngākau mahaki which are three core principles of Unitec's strategy.

Conclusions

Briefly summarise any conclusions that can be drawn from the research.

None yet, aside from those mentioned above.

Next steps and Ongoing Research Possibilities

Detail what your intended next steps are for this research, speaking to any future steps you had planned in your approved application (e.g. phase 2 of the project, seeking external funding and growing external partnerships etc). Consider the future implications of your project and how you or others can build on it. What future plans do you have for research in this area? What work needs to be undertaken to realise these plans? Are there ongoing possibilities for other stakeholders? What opportunities are there for further industry partnership and external funding? What external, industry, community, iwi partners are you working with?

Due to the small number of samples collected, and the need to perform the sequencing in one large batch, I will need to conduct more fieldwork next season to increase the sample size to the intended 20-30 geckos. We are also adding more sites in the north and west of the Bay of Islands to tie in with some sites requested by Project Island Song.

I will continue to nurture and develop partnerships with local hapū. We will perform another field season with these new sites added in the spring-summer of 2024, with lab analysis of these samples then performed in early 2025.

Recommendations (optional)

List any specific recommendations for the teaching, learning, or research communities.

1.1 Publications and dissemination

Detail below the status of the research outputs planned and state whether they are completed, in progress or ceased in the table below (using the outputs table from your Terms & Conditions funding agreement). If these differ from those anticipated in your original application, please provide an explanation for the variation. Where the proposed publication etc is yet to take place, please provide a timeline for future publications in the Revised Due Date column. Detail concerns you may have had with predatory or vanity publishing, if any. Include internal dissemination activities (eg participation in Unitec's Research Symposium). In addition, provide details of any dissemination back to community, iwi or related external groups.

Output type	**Agreed Date due**	**Status** (Completed, in progress or ceased)	**Revised Due Date** (if still in progress)

This study: one or two peer-reviewed journal articles (journals such as *Conservation Genetics*, *Journal of Heredity*, or *New Zealand journal of Ecology*).	March 2025	Postponed until second field season is completed.	March 2026
As part of the longer-term study, we anticipate further publications focussing on our broader-scale objectives in journals such as *Molecular Ecology, Global Ecology and Conservation,* and *Scientific Reports*.	2025 and beyond	N/A	2026 and beyond
Conference oral presentation (e.g., New Zealand Ecological Society conference)	December 2024	Will be postponed until second field season is completed.	December 2025
Unitec Research Symposium oral presentation	December 2024	This is not being held this year	N/A
Hui presentation at Te Rawhiti marae, Bay of Islands	January 2025	Will be postponed until second field season is completed.	January 2026

Financial Reconciliation

- *Comment on the final status of your project's budget, including the reason for any underspend or overspend if applicable (NB: it is not anticipated that you would have overspent your budget).*
- *If your expenditure does not match the final income and expenditure statement produced by PeopleSoft, provide an explanation for the discrepancy.*

Item	Amount Approved	Actual spend in PeopleSoft ($)
Travel (fuel and accommodation)	$5,000	6,871
Materials/consumables	$514	473
Sequencing	$4,980	4,080
Total	**$10,494**	**$11,424**

Note: final amount is greater than allocated amount because the PI agreed to pay extra towards accommodation costs, and will be paying the difference. This was agreed with the Research Office at the time of booking.

References (if applicable)

List any references to the work of others you have cited. Provide URLs for any materials available on the web.

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Appendixes (optional)

Include any appendixes that readers will find helpful to understand the work described or the results.

Reminders:

- You must ensure publications and research outputs are entered in ROMS as they occur.
- Please keep in mind that in addition to Tūāpapa Rangahau and the Unitec Research Committee, your report may be viewed by members of the ELT, Heads of Schools and/or external stakeholders. Please also note your research may also be highlighted in the Annual Unitec Research Report and/or in Unitec's research blog.
- Any problems or issues that you would prefer not to highlight in this report can be discussed, in confidence if requested, with the Director Research and Enterprise and/or with Brenda Massey, Senior Grants Advisor.

Te Komiti Rangahau o Unitec | Unitec Research Committee Self-Assessment

Purpose: NZQA requires the Committees of Unitec's Academic Board to provide evidence of self-assessment.

Te Komiti Rangahau o Unitec Self-Assessment Provocations

- Can we improve the way the committee is run?
- Is time well managed?
- Are issues under discussion well-handled and resolved?
- Are the agenda and minutes well handled?
- Are the perspectives of committee members respected and heard?
- Are actions completed and accounted for?
- Were there matters raised and dealt with in the meeting that were particularly helpful or unhelpful?
- Does the committee oversee and ensure compliance within its mandate?
- Does the committee show foresight and proactively engage in continuous improvement?
- Does the committee review and improve the relevant policies, guidelines and regulations?