

We hope this finds you and your whānau well through this Omicron outbreak. The upcoming border changes will enable many to see loved ones and will give those of us in the tertiary sector the chance to welcome back international students later this year. We would also like to acknowledge the current invasion of Ukraine by Russia, and how that will be hugely worrisome for many of you that have roots in that corner of the world; our support and sympathies are with you and your families.

In this first issue of the year, we are delighted to share with you stories of your fellow alumni, introduce our new Board Chair and tell you of the opportunities that have come from our <u>new Research Programmes</u>, and external opportunities available to you. Once again we thank you for being part of our readership for this newsletter and invite anyone who is also interested in receiving our General Newsletter to <u>please let us know</u>.

News and Updates





<u>New MacDiarmid Institute Board Chair has</u> <u>extensive experience across both the science</u> <u>system and Te Aō Māori</u>

Long-time MacDiarmid Institute Board member <u>Hēmi Rolleston</u>, from Ngāti Whakaue, Te Arawa, Ngāi Te Rangi and Ngāti Ranginui, has been appointed as Chair of the <u>MacDiarmid Institute Board</u>. Mr Rolleston is currently <u>General Manager Māori Economy</u> <u>and Science Services</u> at <u>Scion</u>.

Dr Pauline Harris appointed as MacDiarmid Institute Deputy Director Māori

<u>Dr Pauline Harris</u> from Rongomaiwahine, Ngāti Rakaipaaka and Ngāti Kahungunu ki Wairoa, has taken on our newly established role of Deputy Director Māori. The role is a further signal of our pathway and commitment as an Institute to Te Ao Māori, with much more to come.









New Associate Investigator Dr Taniela Lolohea is using some of his MacDiarmid funding for Pasifika science projects. Now a lecturer in Chemistry at Auckland University of Technology (AUT), University of Auckland PhD graduate Dr Lolohea says the experiences of being one of very few Pasifika in science are behind his work to try and motivate younger generation of Māori and Pasifika students into the STEM fields.

Bridging the divide between theoretical and experimental physics

Fresh from a second year of working on COVID modelling with Associate Investigator <u>Professor Shaun Hendy</u>, <u>Dr Kannan</u> <u>Ridings</u> from Rongowhakaata is himself one of the MacDiarmid Institute's newest Associate Investigators, having recently taken up a lectureship in physics at the <u>University of</u> <u>Auckland</u>.

Physics Symposium in Honour of Joe Trodahl's 80th birthday (PSJT) rescheduled to 8–10 December 2022

You are invited to join for a lively program of physics across a wide range of topics, presented in our poster and oral sessions. A joint event celebrating some of the most recent advances in physics and the life work of <u>Professor Joe Trodahl.</u>

Science Advisory Panels

We commenced an online platform for regular engagement between technology companies and our scientists in the form of Science Advisory Panels. Each panel session hosts a company that is interested in pursuing research to overcome a technical challenge with commercial relevance. If you or your company is interested in being part of our Science Advisory Panel, please contact <u>Kevin</u> <u>Sheehy</u>.



Internships

As you probably know, we offer internships to our affiliated graduates so they can experience working on real industry problems. We have a comprehensive network of companies, startups, NGOs and government agencies. If your company or workplace wishes to host an internship, please <u>contact us</u>.

Recent media



Covid immunity testing could be coming to a pharmacy near you

Affiliated start-up, <u>Orbis Diagnostics</u> made the news with their plan to deploy their analysis tool at your local pharmacy. Starting as a twomonth pilot, people can take a blood test which will give them a read-out of how strong their immunity levels are on a scale of one to 10. Hear how the device works.



Associate Investigator <u>Associate Professor</u> <u>Franck Natali</u> from <u>Victoria University of</u> <u>Wellington</u> spoke with <u>RNZ's Dr Claire</u> <u>Concannon</u> about the <u>Breakthrough Energy</u> <u>Fellowship</u> enabling his team to continue their research towards reducing the energy cost of ammonia production.









If you have something newsworthy coming up (a paper about to be published, job-related announcement, or anything cool your company is working on) and you'd like some help obtaining media around it, please email <u>Vanessa</u> <u>Young</u> (ideally before the publication or announcement – we're used working with embargoed content).

Pandemic disruption to PhD research is bad for society and the economy – but there are solutions

Principal Investigator <u>Associate Professor</u> <u>Catherine Whitby</u> from <u>Massey University</u> recently wrote on the <u>growing concern</u> about the impact of COVID-19 on doctoral students. You can find the full article on <u>The</u> <u>Conversation</u> where she suggests some solutions for pandemic disrupted PhD research.

RNZ's Sci Fi/Sci Fact - Tinfoil hats in Sci-Fi books and movies

Co-Director and Principal Investigator, <u>Professor Justin Hodgkiss</u> from <u>Victoria</u> <u>University of Wellington</u> spoke with <u>RNZ</u> <u>Nights</u>' host <u>Bryan Crump</u> about Tinfoil hats in Sci-Fi books and movies "It's actually quite safe to fly in a plane through a lightning storm, inside the plane acts like a Faraday cage".

Technologies and methods used in a Biointerfaces lab

Principal Investigator <u>Associate Professor</u> Jenny Malmström from the <u>University of</u> <u>Auckland</u> did a podcast with <u>Biolin Scientific</u> about lab instrumentation and analysis methods to answer questions on what analytical instrumentation should one have in a biointerfaces lab? And which equipment should one prioritize to invest in if the funding available for new instrument purchase is limited?



Opportunities







The Ministry of Transport NZ Analytics and Modelling team are looking to fill several Senior Data Analyst level positions. Experience required in creative problemsolving of complex issues, and providing high quality insights from analytics and modelling. The application deadline is 5pm 30 March 2022. <u>Apply online here.</u>

Thinkstep-anz Junior Life Cycle Assessment Specialist

There are several positions in New Zealand and Australia available for applicants with 1 - 2 years' experience in Life Cycle Assessment and a relevant degree in engineering, environmental science, or a similar discipline. The application deadline is 5 April 2022. <u>Apply</u> <u>online here.</u>

Otago Museum – 2x Science Engagement Coordinator- 1x Pasifika and 1x Māori Otago Museum have two fixed term (1-2 years) fulltime Science Engagement Coordinator roles. They are seeking candidates for <u>1x Pasifika role</u> and <u>1x Māori</u> role. We understand the Museum is still taking applications. Please circulate this to anyone you think this might be of interest to and ask them to email <u>macd-admin@vuw.ac.nz</u> and we will pass their interest on to Otago Museum.





Postdoctoral Fellow (Synthetic Chemistry)

Massey University (School of Natural Sciences, Manawatū campus) is seeking a Postdoctoral Fellow to work on the design, synthesis, and evaluation of novel structures to inhibit enzymes that promote mutagenesis in several cancers, contributing to drug resistance, rapid disease development and poor survival prognosis. Applications close 3 April 2022, <u>see here for the requirements and</u> how to apply.

Humble Bee Bio R&D Scientist with Genetics & Bioinformatics Skills

HumbleBee Bio are seeking a R&D Scientist with a recently-acquired (less than 12 months) PhD in biochemistry, molecular biology, or material sciences, preferably related to recombinant protein expression, synthetic biology, or bio-based material sciences. Apply with your CV and a cover letter describing a little about yourself, your prior work, your career goals, and what makes you interested in joining Humble Bee Bio. Please send this to: info@humblebee.co.nz.

Liquium 2x Materials Scientists

Liquium are looking for two materials scientists who will be responsible for designing and developing catalyst materials for ammonia production and running experiments and trials with the new ammonia reactor. The new hires are expected to be involved across the whole ammonia production process and work collaboratively together. For further information or to apply, please email a CV and cover letter to franck.natali@befellows.org.

liquium

Humble Bee Bio





As you'll know from your time as a MacDiarmid student or early career researcher, we're always looking for volunteers to help with our educational outreach (<u>Regional</u> <u>Lecture Series</u>, events organised through our <u>museum partnerships</u>, and our <u>RNZ series</u> etc.) If outreach is your thing, and you'd like to stay involved with this, please <u>contact us</u>.

Catalyst: Seed funding January 2022 Call is now open

<u>The Royal Society Te Apārangi</u> awards Catalyst: Seeding to facilitate new small and medium pre-research strategic partnerships that cannot be supported through other means, and with a view to developing full collaborations that could be supported through Catalyst: Strategic over time. Applications to all programmes close: Thursday 14 April 2022, 5.00 pm (NZST).

Fulbright New Zealand Scholar Awards

New Zealand academics, artists or professionals are invited to apply for a Scholar Award to undertake research and/or lecture in the US. Awards valued at up to US\$37,500 are granted each year, towards three to five months of lecturing and/or research. Applicants must complete the official <u>online application</u> and upload all required supporting documents by the deadline of 1 October 2022.



Anything to share?

We'd love to celebrate your journey post-graduation. It helps us tell stories and paint pathways for secondary school students and others who are keen to see where science can lead them. If you would like to share with us your story or a recent discovery, achievement, media appearance etc. <u>Contact</u> <u>us!</u> We'll take care to only share where and how you'd like us to. As always, there are plenty of opportunities to stay connected with the MacDiarmid Institute whānau. So please stay in touch - we'd love to continue receiving feedback on this newsletter, and to hear if there's anything else MacDiarmid-related that you'd like to be kept up to date on. Please also forward this newsletter to other alumni you know.

If you are a MacDiarmid alumni and have been forwarded this email by someone else and would like to join our quarterly alumni newsletter mailing list (and also hear of opportunities in between newsletters, e.g. jobs, and updates on the Techweek events etc.), please <u>contact us</u>.

