



MONASH  
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SCIENCE

# SCIENCE AWARDS 2021

# Welcome

2021 has been another challenging year for the University, perhaps even more testing than 2020. The Faculty of Science Awards are a testimony to the outstanding achievements of staff and students who have overcome the many challenges of the global COVID-19 pandemic, the intermittent lockdowns, and the huge disruption to how we normally operate. I have been deeply impressed by the innovation and commitment of staff, and these Awards are a celebration of your collective achievements, and outstanding work and study through these tough times. We are a vibrant, dynamic, and passionate learning community - made so with the dedication of our staff and students.

**Thank you and congratulations!**

Professor Jordan Nash  
Dean, Faculty of Science

# Science Faculty Awards

## 01/ Research Excellence by an Early Career Researcher

The Award recognises research excellence by early career researchers who are within five years of the start of their research careers.

**The Winner is:**  
**Dr Jeremy J. Barr,**  
**School of Biological Sciences**

Dr Jeremy J. Barr is an exceptional young scientist with a stellar track record for his career stage. At just 9-years post-PhD, he leads a 14-member research group and has published pioneering work in the field of phage therapy. Jeremy is the most cited phage researcher in the country (SciVal; Topic T.2784 – Phage Therapy; citations from 2015 to >2020 in Australia) having published high-impact papers in leading journals, including *Nature Microbiology* and *PNAS*. His work has already saved the life of one patient, and his recent discoveries are likely to soon save many more.

Jeremy has secured almost \$2 million in competitive funding from the NHMRC, ARC (including a highly competitive DECRA Fellowship) and Ramaciotti Foundation. Jeremy has won several prestigious early career researcher and teaching awards, and equally impressive are the awards that his PhD students continue to win, demonstrating his leadership and mentorship.

[Watch Jeremy's acceptance speech here.](#)

**Commendations go to:**  
**Dr Kamila Kochan**  
**Dr Victoria Blair**

## 02/ Faculty of Science Award for Research Impact (Economic and Social Impact)

This Award recognises excellence by researchers who have achieved, or are currently achieving, outstanding economic and/or societal impacts.

**The Winner is:**  
**Dr Reid Tingley,**  
**School of Biological Sciences**

Reid is an ecologist and Lecturer in the School of Biological Sciences. Reid applies his skills in quantitative ecology and environmental DNA (eDNA) sampling – the detection of DNA shed by organisms into the environment – to real-world conservation problems, helping stakeholders make evidence-based, cost-effective decisions on how to manage biodiversity in the face of environmental change. His work on eDNA sampling has delivered economic and social benefits for NGOs, government, industry and communities across a range of applications, including biosecurity, urban waterway health, and the impacts of the 2019/2020 Black Summer bushfires.

[Watch Reid's acceptance speech here.](#)

## 03/ Faculty of Science Award for Excellence in Postgraduate Research Supervision

This Award recognises research supervisors who have undertaken exceptional and unique supervision practices to benefit and enrich the experiences of their research students.

**The Winner is:**  
**Professor Roslyn Gleadow,**  
**School of Biological Sciences**

Ros has supervised 25 PhD students and five Master's students to completion as primary supervisor (22 at Monash). She uses the excitement of conducting research on real-world problems related to food security and climate change to motivate students to undertake rigorous science and complete their projects, ensuring that each student is given every opportunity to reach their full potential, including helping them find postdoctoral work. In addition to conducting intellectually rigorous research, her students hone skills in project management, critical thinking, teamwork and communication.

[Watch Roslyn's acceptance speech here.](#)

## 04/ Faculty of Science Award for Outstanding Contributions by a Graduate Research Student to the Life of the Faculty/School Community

This Award celebrates outstanding contribution/s to the life of the Faculty of Science/ School community, by individuals or teams of graduate research students within the Faculty of Science, that are above and beyond their own research and the expectations of a postgraduate student.

**The Winners are:**  
**2020 School of Biological Sciences  
Postgraduate Committee (Ms Emma  
Ramsay, Mr Samuel Cheers, Ms Emily  
McKalgo, Ms Javiera Oliveras Rojas, Ms  
Amy Luan)**

[Watch their acceptance speech here.](#)

## 05/ Norris Family Award for Outstanding Author Contribution by a Graduate Research Student to a published 'Quality' Scholarly Research Output

This Award recognises outstanding contribution/s to the life of the Faculty of Science/ School community, by individuals or teams of graduate research students within the Faculty of Science, that are above and beyond their own research and the expectations of a postgraduate student.

**The Winner is:  
Ms Isobel Romero-Shaw,  
School of Physics and Astronomy**

Publication title:  
"GW190521: Orbital eccentricity and signatures of  
dynamical formation in a binary black hole merger"

Journal:  
*Astrophysical Journal Letters*

Isobel's unique interpretation of the gravitational-wave event GW190521, caused by the collision of the two heaviest black holes ever observed, received significant worldwide attention including from several popular science communication outlets. Importantly, the event now has its own Wikipedia page, that includes a section on the discovery by Isobel.

[Watch Isobel's acceptance speech here.](#)

## 06/ Mollie Holman Doctoral Medal for Science

The Mollie Holman Medal was established in 1998 and is named after the late pioneering physiologist, Emeritus Professor Mollie Holman AO, in honour of her significant contributions to science and education. Each year, a maximum of 10 medals are awarded to doctoral students, who have fulfilled their degree requirements and presented their faculty's best thesis of the year.

**The Winner is:  
Dr Rachel Leihy,  
School of Biological Sciences**

Thesis title:  
"Variation in Antarctic biodiversity across space  
and time"

[Watch Rachel's acceptance speech here.](#)

## 07/ Vice-Chancellor's Commendation for Thesis Excellence

The Vice-Chancellor's Commendation for thesis excellence was established to recognise and reward outstanding doctoral and research master's thesis excellence. Each year, a maximum of five commendations are awarded to doctoral and/or research masters students, who have fulfilled their degree requirements and presented as outstanding contributors to research by their faculty.

**The Winner is:  
Dr Colm Talbot,  
School of Physics and Astronomy**

Thesis title:  
"Astrophysics of Binary Black Holes at the Dawn  
of Gravitational-Wave Astronomy"

[Watch Colm's acceptance speech here.](#)

## 08/ Dean's Honours List

This Award celebrates the achievements of our top students.

**The awardees are:**

**Jared Ali Abidi**

**Faraidoon Alimi**

**Chang Hoong Chek**

**Lawrence Dong Rui Chen**

**Alexander Paul Collins**

**Guy Henry Davis**

**Marc Alexander Robert Distel**

**Oscar Calvin James Eden**

**Jemma Kate Gullick**

**Emma-Jane Gust**

**Thomas Liam Hilder**

**Samuel Ian William Inskip**

**Nikita Keeghan**

**Mason Chuen-Lai Lam**

**Vladimir Mikho**

**Preet Jignesh Patel**

**Blake Carl Russell Preusker**

**India Rose Wright**

**Yuanyuan Zhao**

**Jonathan Zuk**

09/

### Dean's Excellence in Teaching Award

This Award recognises and celebrates outstanding contributions to the Faculty of Science teaching programs made by individuals or teams. Awardees have demonstrated outstanding approaches to teaching and/or the support of learning that influences, motivates and inspires students, excellent development of curricula, resources or services reflecting a command of the field, high quality evaluation of practises that lead to improvements in teaching and learning, and influential innovation, leadership or scholarship that shifts the dial on teaching, learning or the student experience.

**The Winners are:**

**Tom Hiscox, Callum Vidor, Kelly Merrin, Benjamin Seyer, Wai Leng Lee, Hock Siew (Patrick) Tan, Voon-Ching Lim, Richard Burke, Richard Reina, Keang Peng Song, Rosie Mackay, Jacqueline Trebilco, Lila Azouz, Brenton Marshall, Christopher Wilson, Shirley Davy-Perfumo**

The first-year biology team consists of a large group of dedicated multidisciplinary educators focussed on enhancing the student learning experience and maximising student outcomes. Our re-development of the first-year biology curriculum involved the implementation of a flipped-classroom pedagogy, where theoretical content is delivered online, allowing face-to-face workshops to be used for the application of knowledge to novel problems and scenarios. We developed an innovative approach to engage our students during the rapid transition to online learning through the implementation of our podcast style online workshops. The podcast style workshops help to foster a sense of community in the online learning environment and build a rapport with a large student cohort. Analysis of the effectiveness of the redeveloped first-year curriculum demonstrated improved student performance in summative assessments and greater student engagement with the teaching staff and the learning content.

[Watch their acceptance speech here.](#)

**Commendation goes to:  
Dr Ben Henley**

10/

### Dean's Award for Innovation in Learning and Teaching

This new Award recognises outstanding innovation driven by technologies or curriculum which improves student engagement, teaching, learning or assessment. Nomination is open to all academic staff, professional staff and teaching associates of the Faculty of Science. Awardees have demonstrated outstanding approaches to teaching and learning through curriculum or technological innovation, development of curricular, resources or services, evaluation practises that bring around positive change, and innovation, leadership or scholarship.

**The Winners are:**

**Associate Professor Alistair Evans,  
School of Biological Sciences**

**Dr David Hocking,  
School of Biological Sciences**

Al is a biologist and palaeontologist with an expertise in 3D imaging of teeth and skeletons, and David is a biologist working on the function and evolution of marine mammals. With the inability to teach in the lab for the last two years, the team developed a large collection of online 3D and 4D interactive biological models that students can use whenever and wherever they are. The interactive models show the detailed 3D structure of bones and teeth, and 4D dynamics of bone and tooth movement and interaction. Their teaching materials are being used in five units with over 1400 students, and were enthusiastically received as a viable and inspirational alternative to in-person teaching materials. Al and David will continue to implement these 3D and 4D models into the future for all teaching modes, and have used them for public outreach through museums and primary school virtual incursions.

[Watch their acceptance speech here.](#)

**Commendation goes to:**

**Indigenous Science (Angela Ziebell, David Turner, Andrew Giles, Jessica Walsh, Krystal De Napoli, Joseph Tye, Jamil Tye, Jasmina Lazendic-Galloway, Nigel Tapper)**

11/

### Dean's Citation for Outstanding Contribution to Student Learning

This Award recognises and celebrates outstanding contributions to the Faculty of Science teaching programs made by early career academics or professional staff, as individuals or teams.

**The Winner is:**

**Dr Hendrika Duivenvoorden,  
School of Biological Sciences**

Hendrika is an education-focussed assistant lecturer within the School of Biological Sciences. Over the past two years she has pioneered outstanding transformations to the curricula and resources for second-year Genetics, developing them to be more engaging, authentic and interactive for students. This has invigorated student satisfaction with laboratories, workshops and assessments. Further, Hendrika's initiative and proficiency with eAssessment online assessment design has been influential University-wide.

[Watch Hendrika's acceptance speech here.](#)

**Commendation goes to:  
Dr Adam Kessler**

## 12/ Faculty of Science Student Impact Awards

These Awards recognise students for efforts beyond academic achievement by contributing to supporting their fellow students.

The Academic Culture Award recognises a student's special efforts to create programs to support fellow students academically or collaborated with staff to improve/design curriculum assessment.

### The Winner is: Jenisi Kelderman

Jenisi is a current chemistry honours student completing the Advanced – Research science degree where she also majored in biochemistry. With a strong passion for research and community engagement, Jenisi not only excelled academically, earning her the Dean's List Award and obtaining a co-first author publication in 2021, but she also has strong involvement in the academic culture of the Faculty. Jenisi is a student representative on the Science Board of Studies and the Undergraduate Learning and Teaching Committee where she is one of two student contributors in the development of the upcoming scientific communication and impact unit, SCI1000. Moreover, she is a senior mentor in the Advanced – Research peer group where she helps younger students to succeed.

[Watch Jenisi's acceptance speech here.](#)

The Young Science Leader Award recognises students who have actively participated or promoted social inclusion initiatives including social justice, enterprise and efforts towards charitable or not-for-profit groups.

### The Winners are: Rebecca Walters

Rebecca is studying a Bachelor of Science/Global Studies. As a Youth Leader and Coordinator within the Jane Goodall Institute National Youth Leadership Council, Rebecca collaborated on designing national environmental and social justice campaigns. Rebecca co-developed and secured a grant for a virtual educational nature immersion project to increase accessibility to the natural environment. Rebecca represented Australia and delivered a keynote presentation at the JGI Asia-Pacific Youth Summit, contributed to an interactive audio e-book on threatened species for a children's conservation book, and facilitated educational sustainability workshops for young people.

Through the Green Steps program, Rebecca reviewed a community ownership component of a 5.4MW solar farm for the Yarra Ranges Council. She has supported equitable participation in STEM as an In2Science Mentor, Access Monash Mentor, and at SEAMS. She has also contributed to the Monash Science community as a Science Future Leader, Science Ambassador, Science Peer Mentor, and Biological Society General Representative.

Rebecca aspires to work towards gender-responsive and socially-inclusive climate resilience.

[Watch Rebecca's acceptance speech here.](#)

### Kade Berman

Kade aims to devote his leadership to challenge social biases through the promotion of kindness, respect and the championing of people's rights. He believes that leadership intertwined with social advocacy is a powerful vehicle to solve global issues. Through COVID-19 and lockdowns, he has created and co-created two charities. 'Health-Care Packages' donated gift boxes to frontline workers. Leading 15 volunteers, the group delivered over 1500 gift-packages to over 10 hospitals. Kade has also assisted in co-creating a charity that makes sustainable masks, donating all profits to a charity working in rural mental health. He has volunteered with charities that work with people with disabilities and delivering food to the underprivileged. Kade is also involved with a research scholarship, working in the field of environmentalism in Antarctica, and has also volunteered with them.

[Watch Kade's acceptance speech here.](#)

The Science Communication Award recognises superb science communication for the purposes of meaningfully integrating science in society, including via cultivating science-based blogs, impactful micro-blogging, vodcasts or other social media, or developing impactful science communication workshops, events, resources and or communities of practice.

### The Winner is: Jack J. O'Connor

Jack is the Head of Let's Torque, a public speaking competition by the Royal Society of Victoria for undergraduate students in Melbourne. Entrants deliver a presentation on a STEM idea and explain how it will solve a problem facing Australia from economic, environmental and social wealth dimensions.

Jack has also consulted on the Marine Mammal Foundation's citizen science programs and developed education trails for the Pūkaha National Wildlife Centre in New Zealand.

He has undertaken wildlife photography advocacy and is the Student Representative on the School of Biological Sciences Education Committee. He has filmed Eastern Quolls for the ABC documentary 'Quoll Farm', commissioned artworks as a 'PowerPoint Artist' for the Melbourne Museum, Schmidt Ocean Institute etc., and this year, co-published his first book; *The Secret Life of Conservationists*.

[Watch Jack's acceptance speech here.](#)

## 13/ Award for Exceptional Service to the Faculty of Science

This Award recognises and celebrates exceptional service provided by individuals or teams to advance the Faculty of Science vision.

The Winner is:  
The Education Team  
(Associate Professor Chris Thompson, Dr Susie Ho, Mr Jean-Francois Ravat, Ms Barbara Macfarlan, Dr Ruth Reef, Associate Professor Kelli Tuck, Professor Richard Reina, Dr Scott Findlay and Associate Professor Burkard Polster).

[Watch the acceptance speech here.](#)

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