

AMSI 20 BIOINFO SUMMER

A SYMPOSIUM IN BIOINFORMATICS

VIRTUAL CONFERENCE 30 NOV – 3 DEC 2020
HOSTED BY THE AUSTRALIAN NATIONAL UNIVERSITY



EVENT REPORT

Thank you to the following **AMSI BioInfoSummer 2020** sponsors:



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AMSI BioInfoSummer 2020

Virtual Symposium in Bioinformatics

The Australian National University |
30 November–3 December 2020

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FOREWORD

Bioinformatics is an exciting discipline analysing and simulating the structures and processes of biological systems. It is a constantly evolving field that offers researchers and students a wide breadth of opportunities. Since its first iteration in 2003, AMSI BioInfoSummer has brought together people from all disciplines to share current research and developments in bioinformatics. As one of AMSI's premier flagship events hosted each year around Australia, it forms part of the Securing Australia's Mathematical Workforce: 2016–2021 agreement between AMSI and the Department of Education, Skills and Employment.

“AMSI is at the forefront of the national STEM agenda working with schools, universities, industry, philanthropists, government and the community in shaping policy and skilling Australia for the future.

Since it began in 2003, this conference has brought together many of the nation's brightest minds to share emerging research and developments in bioinformatics while also providing a valuable forum for networking and connection, critical for future collaboration and innovation.”

**The Honourable Dan Tehan MP
Minister for Education (2018–2020)**

The four-day virtual program includes a combination of careers and diversity in STEM events, hands-on workshops and specialist lectures from international experts and Australia's top scientists. AMSI BioInfoSummer allows attendees to develop their bioinformatics skills, national networks and employability, and nurtures collaborations between the mathematics, statistics, biological and computational disciplines.

AMSI BioInfoSummer 2020 was jointly funded by the Australian Mathematical Sciences Institute and the Australian Government's Department of Education, Skills and Employment, with support from The Australian National University.

PROGRAM MANAGER'S REPORT



Angela Coughlin
AMSI

AMSI BioInfoSummer is Australia's leading annual national bioinformatics and computational biology training event for students and early-career researchers. In 2020 BioInfoSummer was run for the first time as an online conference, hosted by the Australian National University (ANU). ANU also hosted the first iteration of BioInfoSummer in 2003 so it was pleasing to see it return to where it all began—albeit this time in a virtual format due to the global COVID-19 pandemic.

The current pandemic shows that the cross-over between the mathematical and biomedical sciences has never been more important, demonstrated by the work of our eminent epidemiologists informing government policy through robust modelling. I trust this inspired and motivated our participants throughout the BioInfoSummer 2020 program.

The conference was officially opened with a video message from The Honourable Dan Tehan MP, Minister for Education (2018–2020), after a traditional Welcome to Country by Ngambri-Ngunnawal Elder Dr Matilda House.

Participants were welcomed by Professor Stephen Roberts, Interim Director of the ANU Mathematical Sciences Institute, and AMSI Interim Director Professor Asha Rao. Their opening addresses included an interesting overview of the history and growth of BioInfoSummer as well as tributes to Emeritus Professor Susan Wilson who sadly passed away earlier in the year. Sue, a pioneer for women in STEM, was instrumental in setting up that first BioInfoSummer event in 2003 and presented at many BioInfoSummer conferences. She is greatly missed throughout Australia's mathematical sciences community.

On hundred and seventy-six (176) students, researchers and professionals from 45 universities and research institutes (the broadest audience to date) participated from their homes and workplaces in a condensed four-day virtual conference program to develop their bioinformatics skills, national networks and employability. Once again women heavily featured in the program and among the participants. Participants networked and collaborated through Twitter, discussions in a dedicated Slack channel and at watch parties in states where small gatherings were permitted.

The ANU organising committee included representatives from the University of Canberra and the University of Western Australia and ensured that the scientific program was diverse and of high quality. Many areas of bioinformatics were covered by the 23 speakers (including 10 internationals) with major themes in single cell and transcriptomics, RNA biology, long read sequencing, biomedical optimisation and data science. The inclusion of two Indigenous genomics presentations as well as two diversity in STEM lectures discussing equity, inclusion

and allyship was well received by the audience. Morning conference presentations were followed by hands-on workshops including an introduction to analysing single cell RNA-seq data and long read, long reach bioinformatics.

Several program extras were held to complement the scientific program including an interactive careers advice panel and an inspiring public lecture from Associate Professor Maui Hudson (Te Kotahi Research Institute, The University of Waikato): *Indigenous Perspectives on Equity, Diversity, and Data Science in Genomics*. The Fast Forward ePoster presentations proved popular again this year with 16 students and early-career researchers taking up the challenge of sharing their research in under 90 seconds.

The move from a traditional face-to-face format to an online conference presented some challenges but also provided opportunities to reach a wider audience—allowing people unable to travel or juggling caring responsibilities to participate from home—and include a record number of international speakers in the program. A special thanks to the international speakers who got up extremely early or started up very late to present live to the BioInfoSummer participants. Overall, the first virtual BioInfoSummer conference was a success with overwhelmingly positive feedback from participants.



PARTICIPANT PROFILE



Anastassia Demeshko

The University of Queensland

Having completed an Honours project at the University of Oxford, Anastassia Demeshko's enthusiasm for understanding biological and health systems is immediately evident. Now pursuing a Master of Public Health degree at the University of Queensland to build upon her Bachelor of Biomedical Science qualification, Anastassia is passionate about fuelling her curiosities through science and mathematics.

"Having many interests, I am yet to finalise the exact direction of my career," said Anastassia. "I am currently exploring the potential of bioinformatics as part of a UQ summer research project, which led me to attending AMSI BioInfoSummer."

"There is an ever-increasing amount of biological data that is being collected and little understanding behind what it means," she elaborated. "This is where bioinformatics comes in, and specifically in the context of cancer, it can aid in developing our knowledge of the disease to find better treatment options. The aim of my summer research project is to mine cancer data to identify rules governing dynamic DNA changes, specifically the epigenetic events of DNA methylation."

Anastassia's general love for genetics and a past research project investigating cancer physicians' views on genomics in medicine inspired her to understand what goes on in the lab to generate a patient's genomic results.

"If you enjoy something (like maths), take a course, learn about it, and explore the options for how you can integrate it into your career. Following the conventional career pathways that we often hear about at school/in society can often limit you from pursuing something that can actually turn out pretty cool."

"I heard about the conference from my supervisor (Ariane Mora) for my summer research project who previously attended AMSI BioInfoSummer. I was motivated to attend the conference to get an understanding of the different avenues one can go down, when pursuing a career in bioinformatics. The registration scholarship was of great help (especially with being a student) and motivated me to participate in all the sessions throughout the week."

AMSI BioInfoSummer 2020 left this UQ Masters student with a clear impression of the rapid evolution of this field of science and its potential to alleviate medical problems.

"I definitely think I should get more involved in learning more about bioinformatics before it expands even more! AMSI BioInfoSummer provides you with both a practical and theoretical insight into the areas of bioinformatics that are key contributors to the field. Learning from

leading international researchers is eye-opening and inspiring, as you get to see the great potential of contributing to this field of research.”

“This was my first virtual conference,” Anastassia revealed. “My biggest positive was the ease at which we could attend all the sessions via Zoom around our daily schedule.”

Following AMSI BioInfoSummer 2020, where does Anastassia want the mathematical sciences to take her? Where does she see herself in ten years’ time? “Doing something that is meaningful, fuels my curiosity and challenges my abilities. 2020 taught me a lot about myself.”

PARTICIPANT PROFILE



Andy Tran

The University of Sydney

After attending AMSI BioInfoSummer 2017, Andy Tran decided to pursue a Master's degree in bioinformatics. The Bachelor of Science in Mathematics and Statistics graduate from the University of Sydney is now in his second postgraduate year, focusing on research in computationally predicting the outcome of a cell reprogramming experiment.

"This is important because performing cell reprogramming experiments can be expensive and time consuming, so being able to predict the outcome beforehand (with even a small degree accuracy) can save a lot of time and effort," said Andy. "This research could one day play a role in regenerative medicine for diabetes and Parkinson's disease."

An off-hand comment from a statistics lecturer at the University of Sydney kindled Andy's interest in applying mathematical skills in a biological context, an area of increasing demand for expertise.

What advice would Andy have given his younger self? "I would tell myself to take opportunities that come up, for example by attending AMSI events. I think this is especially important for mathematics students, as unlike other disciplines like engineering which lead to a concrete career path, maths students have a wealth of career choices to pick from. It is important for maths students to learn about what opportunities are out there."

Andy's motivation to attend AMSI BioInfoSummer 2020 is clear. "I wanted to learn more about what is happening in the field of bioinformatics. It's such a quickly evolving field that it really helps to attend these events to see what other research groups are doing. I first heard about it from the same stats lecturer!"

"I really enjoyed the opportunity to see how bioinformatics is used in other disciplines, such as plant bioinformatics or in agriculture," added Andy. "These aren't my research specialties so I didn't know much about them, but it was so great to see that people are tackling the world's biggest problems using bioinformatics. This year has forced me to become adaptable and to step out of my comfort zone."

I think such it's a great thing that AMSI provides scholarships to students and it's definitely sending a positive message that students are encouraged and rewarded by going to AMSI events."

Where does this talented postgraduate student see himself five years from now? "I would hope to continue going down the path of bioinformatics!"

PROGRAM

MONDAY 30 NOVEMBER

Day 1—Single Cell / Transcriptomics

Diversity in STEM lecture: *Addressing Equity and Inclusion in Bioinformatics*

TUESDAY 1 DECEMBER

Day 2—RNA Biology

Careers Session

WEDNESDAY 2 DECEMBER

Day 3—Long Read Sequencing

ePoster Session and Fast Forward talks

Public Lecture: *Indigenous Perspectives on Equity, Diversity, and Data Science in Genomics*

THURSDAY 3 DECEMBER

Day 4—Biomedical Optimisation / Data Science

ePoster Session and Fast Forward talks

Diversity in STEM lecture: *Diversity, Inclusion and Allyship in STEMM with QueersInScience*

SPEAKERS

INTERNATIONAL SPEAKERS

SPEAKER	TITLE	ORGANISATION
Dr Djork-Arné Clevert	Deep drug discovery	Bayer AG
Cecilia Deng	Long read sequencing in real-world applications	The New Zealand Institute for Plant and Food Research Limited
Dr Mirjana Efremova	Multi-omics data integration using manifolds	Barts Cancer Institute, Queen Mary University of London
Nazeefa Fatima	Addressing equity and inclusion in bioinformatics	Sweden's Computational Biology Organisation
Associate Professor Marc Friedländer	MicroRNAs in space, permafrost and single cells	Stockholm University/SciLifeLab
Dr Tomas Hron	Careers session	Institute of Molecular Genetics, Czech Academy of Sciences
Associate Professor Maui Hudson	Indigenous perspectives on equity, diversity, and data science in genomics	Te Kotahi Research Institute, The University of Waikato
Associate Professor Yuka W. Iwasaki	Regulation of non-coding genome: Transposable element silencing by PIWI-piRNAs	Keio University School of Medicine
Professor Katsutomo Okamura	Understanding post-transcriptional regulation of miRNA expression	Nara Institute of Science and Technology
Professor Kun Zhang	Single-cell multi-omics mapping of human organs	University of California



“I really enjoyed this years conference, and think it was well adapted to a virtual environment. The variety of talks and live presentations from overseas presenters was fantastic.”

Alice Johnstone
RMIT University

NATIONAL SPEAKERS

SPEAKER	TITLE	ORGANISATION
Matthew Coleman	Diversity, inclusion and allyship in STEM with QueersInScience	Murdoch Children's Research Institute
Dr Göknur Giner	Careers session	WEHI
Kyle Hemming	Careers session	University of Canberra
Dr Kylie James	Discrete immune and microbial niches of the human colon	Garvan Institute of Medical Research
Professor Benoit Lique	Bayesian meta-analysis models for Cross Cancer Genomic Investigation of pleiotropic effects with group structure	Macquarie University
Dr Davis McCarthy	Grand challenges in single-cell data science	St Vincent's Institute of Medical Research and Melbourne Integrative Genomics, The University of Melbourne
Distinguished Professor Kerrie Mengersen	Bayesian meta-analysis models for cross cancer genomic investigation of pleiotropic effects with group structure	Queensland University of Technology
Dr Mohammad Mirkhalaf	Personalized bioceramic scaffolds: stereolithography printing, mechanics and in-vivo testing	Biomaterials and Tissue Engineering Research Unit, The University of Sydney
Dr Cheng Soon Ong	Machine learning guided design for genomics	Machine Learning and Artificial Intelligence Future Science Platform, Data61, CSIRO
Dr Hardip Patel	National Centre for Indigenous Genomics	National Centre for Indigenous Genomics, ANU
Professor Magdalena Plebanski	Ethics in biomedical research	Biomedical and Health Innovation Enabling Capability Platform, RMIT University
Dr Jana Sperschneider	From long-read sequencing to understanding genome biology: my journey in plant-pathogen interactions	The Australian National University
Dr Klara Verbyla	Careers session	CSIRO

23 speakers

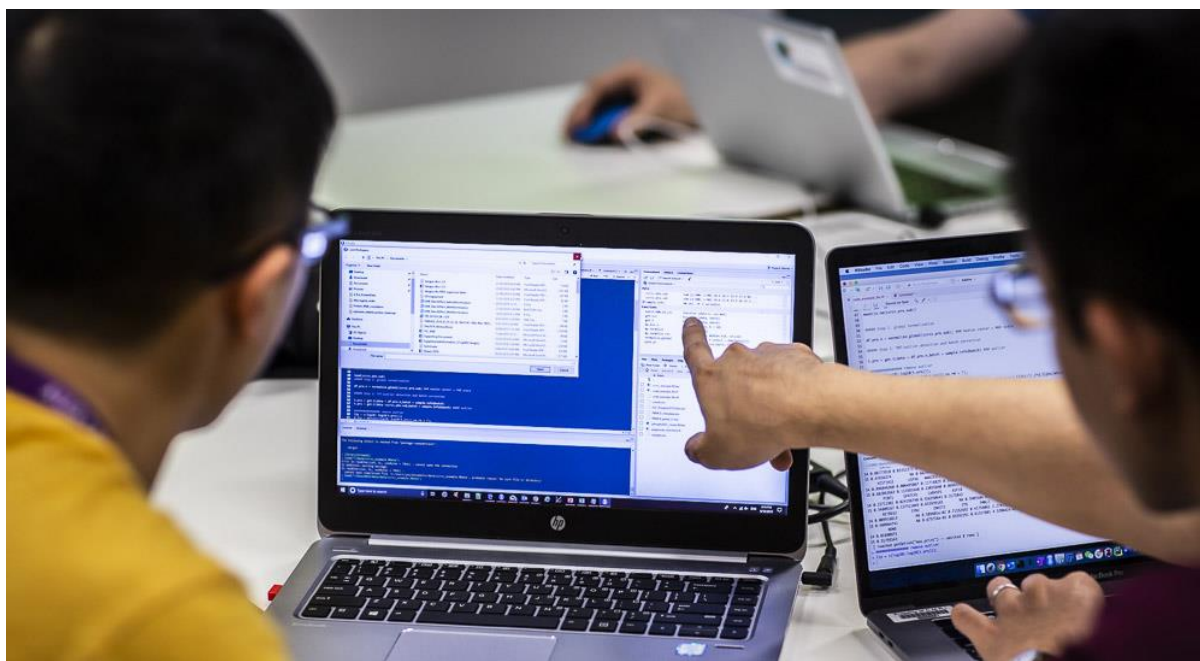
10 female speakers

"As someone who was very new to the field, the diversity of talks and workshops opened my eyes to the extensive research possibilities there were in bioinformatics and computational biology."

Ebony Watson
The University of Queensland

WORKSHOPS

TITLE	WORKSHOP PRESENTER
Dimension reduction and visualization of high dimensional single cell transcriptomics	Dr James Nichols, Biological Data Science Institute, ANU
A hands on introduction to analyzing single-cell RNA-seq data	Dr Christina Azodi, Ms Ruqian Lyu, Mr Jeffrey Pullin, St Vincent's Institute of Medical Research
Examining functionality and biogenesis pathways of small RNAs in animals	Dr Jean Wen & Dr Rippei Hayashi, John Curtin School of Medical Research, ANU
Long-read, long reach bioinformatics	Dr Benjamin Schwessinger, Research School of Biology, ANU



“I enjoyed the hands-on workshops. I'm planning to apply the pipelines and the tutorials from the workshops to my own datasets.”

**Huiwen Zheng
The University of Queensland**

“I really enjoyed the workshops, they were a great introduction into single-cell RNA analysis, small RNA analysis and genome construction. Prior to this, I didn't have any knowledge in any of these omics fields.”

Emily Armstrong, Deakin University

PARTICIPANT BREAKDOWN

UNIVERSITY/INSTITUTION	
ACEMS	1
Australian Catholic University	1
Australian National University	27
Baker Heart and Diabetes Institute	1
Barts Cancer Institute, England	1
Bayer AG	1
Burnet Institute	1
CSIRO / Data61	4
California State University, East Bay USA	1
Curtin University	4
Deakin University	1
Edith Cowan University	2
Flinders University	2
Institute of Molecular Genetics, Czech Academy of Science	1
Kangwon National University, South Korea	1
Keio University	1
Macquarie University	2
Monash University	11
Murdoch University	4
Murdoch Children's Research Institute	1
Nara Institute of Science and Technology, Japan	1
Pasteur Institute of Tunis, Tunisia	1
PT. Wilmar Benih Indonesia	1
Queensland University of Technology	9
RMIT University	8
St Vincent's Institute of Medical Research	3
Stockholm University/ SciLifeLab, Sweden	1
Sweden's Computational Biology Organisation	1
Swinburne University of Technology	1
The Garvan Institute of Medical Research	1
The Harry Perkins Institute of Medical Research	1
The New Zealand Institute for Plant and Food Research Limited	2
The University of Adelaide	5
The University of Melbourne	12
The University of New England	1

The University of New South Wales	5
The University of Queensland	13
The University of Sydney	8
The University of Western Australia	10
University of California at San Diego, USA	1
University of Canberra	3
University of South Australia	7
University of Tasmania	3
University of Technology Sydney	2
University of Waikato, New Zealand	1
Victoria University	3
WEHI	2
Western Sydney University	2

176 attendees

31 universities

14 research institutes

"I enjoyed hearing about the vast array of research in diverse fields that is going on and potential future advances."

Keeley O'Grady
Murdoch University

PARTICIPANT BREAKDOWN

GENDER		
Female	95	54%
Male	79	45%
Other	1	1%

RESIDENCY STATUS		
Australian Citizen	90	52%
Not an Australian Resident	20	11%
Permanent Resident	23	13%
Student Visa	34	19%
Work Visa	7	4%
Other	2	1%

ABORIGINAL AND TORRES STRAIT ISLANDER		
Yes	0	0%
No	175	99%
Undisclosed	1	1%

STATE/TERRITORY		
ACT	33	19%
NSW	21	12%
QLD	24	13%
SA	14	8%
TAS	3	2%
VIC	45	26%
WA	20	11%
International	16	9%

PARTICIPANT TYPE		
Academic	23	13%
Early-Career Researcher	32	18%
Honours	10	6%
Industry	2	1%
Masters	33	18%
PhD	60	34%
Other	1	1%
Research Institute	5	3%
Undergraduate	10	6%



54%

female attendees

“There is an incredible amount of sharing, learning and leveraging that can happen in events such as BioInfoSummer. The grant provided me the opportunity to know and meet new people who work in the same area.”

Mohsen Dorraki
The University of Adelaide

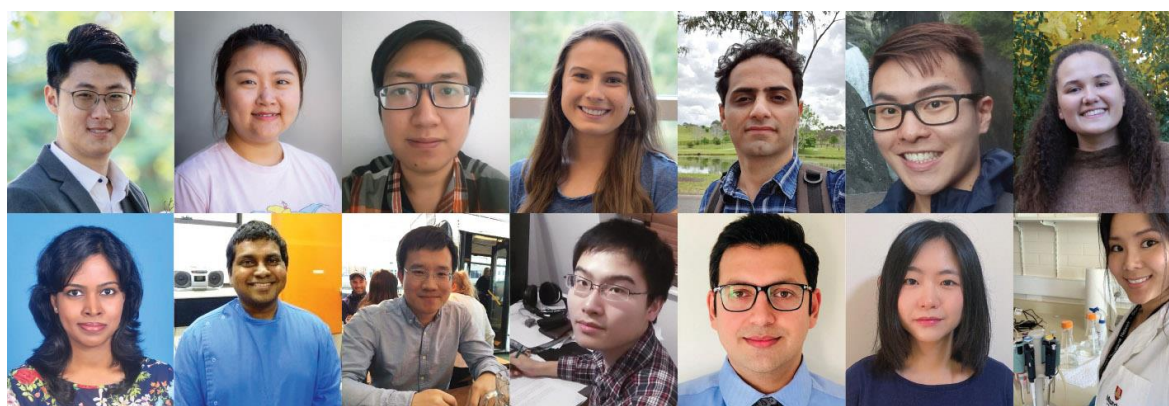
GRANTS

AMSI REGISTRATION SCHOLARSHIPS

AMSI Registration Scholarships support undergraduate and postgraduate students to build and extend their skills and professional networks by providing financial support to help them attend AMSI Higher Education Flagship programs.

In 2020, 16 students (seven female, nine male) from eight AMSI member universities were awarded AMSI scholarships:

- Ehsan Alvandi
Western Sydney University
- Larry Cai
The University of Queensland
- Anastassia Demeshko
The University of Queensland
- Malindrie Dharmaratne
The University of Queensland
- Jiahao Diao
University of Tasmania
- Mohsen Dorraki
The University of Adelaide
- River Huang
The University of Queensland
- Macsue Jacques
Victoria University
- Wenna Lee
Murdoch University
- Sasdekumar Loganathan
The University of Queensland
- Aditya Sethi
Australian National University
- Albert Christian Soewongsono
University of Tasmania
- Andy Tran
The University of Sydney
- Ebony Watson
The University of Queensland
- Jiajia Xu
Australian National University
- Huiwen Zheng
The University of Queensland



“The AMSI BioInfoSummer Registration Scholarship is a good initiative to help people like me at the start of their research journey be part of something that might otherwise have been out of reach.”

**Wenna Lee
Murdoch University**

PROGRAM EXTRAS

DIVERSITY IN STEM LECTURES

Two diversity in STEM lectures were featured in the conference program addressing equity and inclusion in bioinformatics, and diversity, inclusion and allyship in STEMM with QueersInScience. Research, science and innovation benefit from diverse backgrounds, perspectives and life experiences in the STEM community. These lectures discussed strategies for inclusion, support and empowerment and the road to more meaningful representation and allyship to ensure the mathematical sciences is open and welcoming to all.

“[I really enjoyed] the inclusion of additional speaker presentations on diversity, inclusion and ethics.”

Runa Lindblom
RMIT University

Two additional presentations discussing Indigenous genomics and the important of equity in research for health outcomes of the First Nations peoples of Australia and New Zealand were also featured in the 2020 conference program.

Matthew Coleman @GeneticsMatt · Dec 2, 2020

Fantastic talk on respectfully creating clinically-meaningful Indigenous reference genome(s) by Dr Hardip Patel from National Centre for Indigenous Genomics. A lack of data risks exclusion from benefits of genomic medicine for Indigenous Australians. [@DiscoverAMSI](#) [#BioInfoSummer](#).

The lack of equity in research

“The lack of Aboriginal genomic reference data contributed to a delay in the ability to confidently call the pathogenicity of the *MTOR* mutation.”

Baynam G, et al. 2015. A germline *MTOR* mutation in Aboriginal Australian siblings with intellectual disability, dysmorphism, macrocephaly, and small thoraces. *Am J Med Genet Part A*. 167A:1659–1667

Martin et al. Clinical use of current polygenic risk scores may exacerbate health disparities. *Nature Genetics*, 2019

The slide features a graph showing the increasing disparity in genomic research funding between European and non-European populations over time. The graph has two y-axes: the left axis represents 'Population' (0 to 100) and the right axis represents 'Funding (estimated \$B)' (0 to 10). The x-axis represents 'Year' (2000 to 2020). The legend indicates: Population (European, East Asian, South/Southeast Asian, African, Hispanic/Latino, Middle Eastern, Other, Unknown) and Funding (European, East Asian, South/Southeast Asian, African, Hispanic/Latino, Middle Eastern, Other, Unknown). The graph shows a significant increase in funding for European populations, while funding for non-European populations remains low and relatively flat.

CAREERS PANEL

A careers panel was held on Tuesday afternoon to showcase the variety of bioinformatics career opportunities available to mathematical sciences graduates. The interactive format allowed attendees to ask researchers questions about career pathways and opportunities within the field, and to get tips on how to present themselves to employers.

Panellists:

- Kyle Hemming, Researcher at the **Institute for Applied Ecology (IAE), University of Canberra**
- Dr Klara Verbyla, Research Director – Crops at **CSIRO**
- Dr Göknur Giner, Senior Postdoctoral Researcher at the **Walter and Eliza Hall Institute of Medical Research**
- Dr Tomas Hron, Researcher at the **Institute of Molecular Genetics, Czech Academy of Sciences, The Czech Republic**



ePOSTER SESSION

Participants had the opportunity to share their work with their peers by submitting an ePoster and delivering a Fast Forward talk. Sixteen student and early-career researchers submitted ePosters, with 14 of those also taking up the challenge of giving an engaging and dynamic 90-second talk on their research topic to encourage further one-on-one discussions during the break via Slack.

“I enjoyed presenting my ePoster and giving a Fast Forward talk. Condensing one and a half years’ worth of research work in just 90 seconds is both challenging and interesting.”

**Malindrie Dharmaratne
The University of Queensland**

A panel of judges selected two winners for best Fast Forward talk while conference attendee votes determined two winners for best ePoster.

BEST FAST FORWARD TALK

- **Ebony Watson, The University of Queensland**
Image-based predictive modelling for the characterisation of cellular senescence

- **Danielle Rudler, The Harry Perkins Institute of Medical Research**
Fidelity of translation initiation is required for coordinated respiratory complex assembly

BEST ePOSTER

- **Ebony Watson, The University of Queensland**
Image-based predictive modelling for the characterisation of cellular senescence
- **Siyuan Wang, The University of Queensland**
Contig-level assembly of the *Duboisia*

PUBLIC LECTURE



Associate Professor Maui Hudson from the Te Kotahi Research Institute at The University of Waikato delivered the virtual AMSI BioInfoSummer 2021 public lecture, *Indigenous Perspectives on Equity, Diversity and Data Science in Genomics* on Wednesday 2 December. Associate Professor Hudson discussed how genome-related technologies can contribute to improving global health equity and the importance of bridging the health divide to ensure that the lack of Indigenous genomic data does not adversely affect access to genome-related health services.

Finally, he shared examples of best practice and capacity-building initiatives from Aotearoa New Zealand. Open to the public and aimed at a non-specialist audience, this free event was attended by over 100 people live via Zoom and at watch parties hosted in Canberra and Perth. The lecture recording on AMSI's YouTube channel gained an additional 165 views.



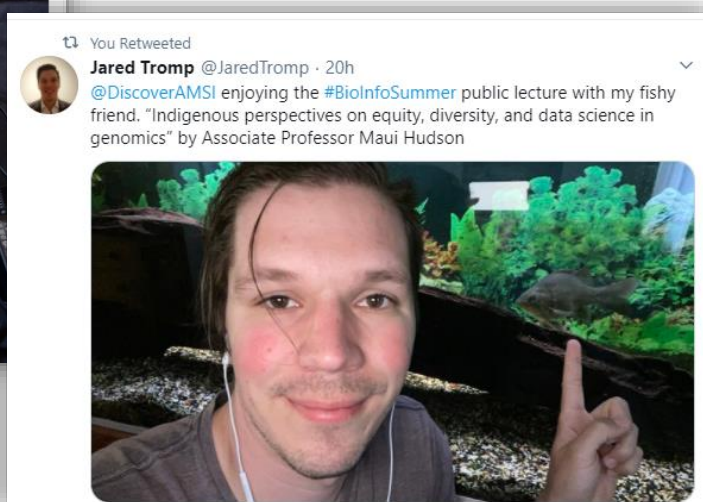
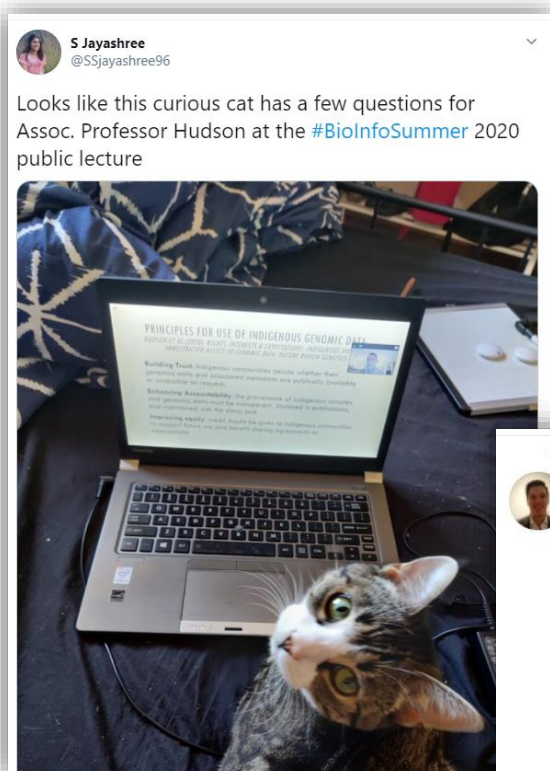
NETWORKING ACTIVITIES

Several initiatives were devised to facilitate remote networking, encourage interaction and allow participants to feel connected to the conference community despite being physically distant.

While the more relaxed COVID-19 restrictions in Canberra over the conference dates allowed ANU to host a small contingent of ACT participants on campus for in-person events, most registrants participated online from across Australia and overseas.

A dedicated conference Slack channel allowed participants to introduce themselves and meet their fellow bioinformatics enthusiasts, collaborate during workshops sessions and facilitated ongoing discussions during conference breaks and outside of program times. This helped to bridge the gap between the multiple time zones that attendees were participating from. Importantly it also linked participants with speakers and workshop facilitators so they could ask further questions or discuss research and career opportunities.

Twitter proved popular again this year with a flurry of posts from participants and speakers using #BioInfoSummer to share their experiences and conference takeaways, complementing the live tweeting from @DiscoverAMSI and @BioInfoSummer. Participants were encouraged to share their photos across the week with several under stay-at-home restrictions taking the opportunity to form their own conference ‘watch party’ with pets.



FEEDBACK

47%

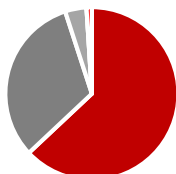
Forty-seven per cent of attendees at AMSI BioInfoSummer 2021 completed the online survey to provide their feedback and comments on the event.

8.2

In rating their overall experience at the event on a scale of 1 to 10, where 1 is poor and 10 is excellent, the respondents' average rating was 8.2

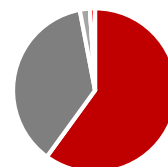
BIOINFOSUMMER WAS OF A HIGH STANDARD

Strongly Agree	63%
Agree	32%
Neutral	4%
Disagree	0%
Strongly Disagree	1%



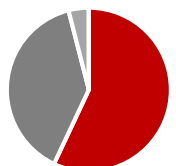
BIOINFOSUMMER WAS WELL-ORGANISED

Strongly Agree	60%
Agree	37%
Neutral	2%
Disagree	1%
Strongly Disagree	0%



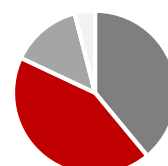
THE PRESENTATIONS WERE PROFESSIONAL AND ENGAGING

Strongly Agree	57%
Agree	39%
Neutral	4%
Disagree	0%
Strongly Disagree	0%



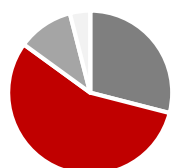
BIOINFOSUMMER WAS USEFUL FOR ME PROFESSIONALLY

Strongly Agree	39%
Agree	43%
Neutral	14%
Disagree	0%
Strongly Disagree	4%



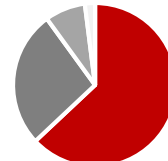
THE CONTENT PRESENTED WAS RELEVANT TO MY STUDY/PROFESSION

Strongly Agree	29%
Agree	56%
Neutral	11%
Disagree	4%
Strongly Disagree	0%



I WOULD RECOMMEND BIOINFOSUMMER TO OTHERS

Strongly Agree	63%
Agree	27%
Neutral	8%
Disagree	2%
Strongly Disagree	0%



"I discovered some research projects which are using similar methods I am working on. I am able to discuss the methods and learn from other researchers."

Jiajia Xu

The Australian National University

COMMITTEES

AMSI wishes to acknowledge the generous donation of time and scientific advice by the following committees—without their contribution this event would not have been a success:

STANDING COMMITTEE

- Matt Ritchie (Chair)
Walter and Eliza Hall Institute of Medical Research
- Nicola Armstrong
Murdoch University
- Tim Brown
Australian Mathematical Sciences Institute
- Mike Charleston
University of Tasmania
- Angela Coughlin (Secretary)
Australian Mathematical Sciences Institute
- Gary Glonek
The University of Adelaide
- Sebastian Kurscheid
Australian National University
- Ville-Petteri Makinen
South Australian Health and Medical Research Institute
- Jessica Mar
The University of Queensland
- Alicia Oshlack
Murdoch Children's Research Institute
- Ellis Patrick
The University of Sydney
- Chloe Pearce
Australian Mathematical Sciences Institute
- David Powell
Monash University
- Jean Yang
The University of Sydney

ORGANISING COMMITTEE

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Australian National University
- Terry Neeman
Biological Data Science Institute ANU
- Benjamin Schwessinger
Research School of Biology, ANU
- Susan Wagner
University of Canberra

AMSI **BIOINFO**SUMMER

A SYMPOSIUM IN BIOINFORMATICS



VIRTUAL CONFERENCE
PARTICIPATE **ONLINE** 30 NOV – 3 DEC 2020

THEMES

SINGLE CELL / TRANSCRIPTOMICS

RNA BIOLOGY

LONG READ SEQUENCING

BIOMEDICAL OPTIMISATION / DATA SCIENCE

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Australian Mathematical Sciences Institute

Research & Higher Education
Building 161 C/- The University of Melbourne
VIC 3010 Australia

events@amsi.org.au
www.amsi.org.au

