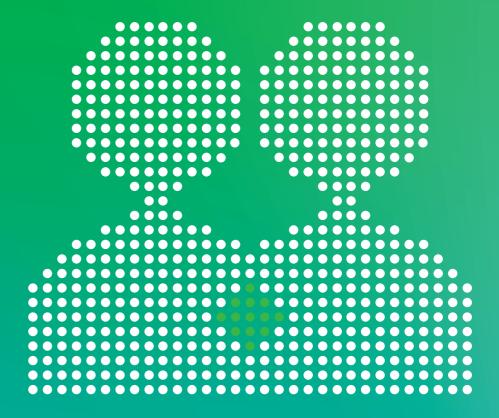
# EMBL Australia Partner Laboratory Network

2019 Highlights





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# About EMBL Australia



EMBL Australia is a life science network that supports ambitious research projects and provides access to infrastructure and training to early-career Australian scientists.

Australia is an associate member of the <u>European Molecular Biology</u> <u>Laboratory</u> (EMBL) — Europe's flagship life sciences institution.

The associate membership gives Australia the opportunity to internationalise our life sciences research, introduce the world's best young researchers to new networks and tools here in Australia, and develop highly competitive research teams networked across the nation, with Europe and Asia.

Supported by the <u>National</u>
<u>Collaborative Research Infrastructure</u>
<u>Strategy</u> (NCRIS) program, an
Australian Government initiative,
EMBL Australia is at the cutting edge
of life sciences research in Australia.

EMBL Australia has:

- a <u>Partner Laboratory Network</u>
   (PLN) consisting of 16 research
   groups led by outstanding
   early-career researchers at nodes
   in Victoria, South Australia,
   New South Wales, Queensland
   and the ACT
- a nationwide reach through <u>student training programs</u>, including a PhD course, postgraduate symposium, travel grants and PhD program
- a national resource, EMBL <u>Australia Bioinformatics</u>
   <u>Resource</u> (EMBL-ABR), that
   provides bioinformatics support
   to Australian life science
   researchers.\*
- access to <u>international linkages</u>
   through EMBL and the European
   Bioinformatics Institute
   (EMBL-EBI).

Australia became the first associate member of the EMBL in early 2008. Launched in 2010, the EMBL Australia Partner Laboratory Network set out to take full advantage of this unique affiliation, with the goal of strengthening the nation's global position in life sciences research.

The EMBL Australia PLN is hosted at the South Australian Health and Medical Research Institute (SAHMRI), University of New South Wales (UNSW), Australian National University (ANU), the Garvan Institute of Medical Research, QIMR Berghofer Medical Research Institute (QIMR Berghofer) and Monash University (Monash). The EMBL Australia Secretariat is hosted by the Monash Biomedicine Discovery Institute.

The EMBL Australia Council oversees and guides the activities of EMBL Australia, including both its Partner Laboratory Network and its bioinformatics resource. The Partner Laboratory Network also has a Steering Committee, which is composed of senior representatives of each institution that form part of the network and is chaired by EMBL Australia's Scientific Head, Professor James Whisstock.



### EMBL-ABR to Australian BioCommons

In October 2019, EMBL-ABR transformed into the <u>Australian BioCommons</u>, a new project to build digital capability to enhance Australian research by providing access to tools, methods and training for researchers in environmental, agricultural and biomedical science.

We welcome the announcement that it was funded by <u>Bioplatforms</u>
<u>Australia</u>, through NCRIS, to 2023. In June 2019, the Australian BioCommons signed a collaborative agreement with <u>ELIXIR</u>, indicative of the value of the EMBL Australia relationship.

EMBL-ABR was formed in collaboration with EMBL-EBI and has been a significant initiative under Australia's associate membership to EMBL. EMBL will continue to support the Australian BioCommons in its mission to serve the Australian bioinformatics community.

# Research Groups



In 2019, EMBL Australia consisted of 16 research groups at six institutes across Australia.

With the freedom to drive their own ambitious research projects, EMBL Australia group leaders are exceptional and innovative researchers who apply novel approaches and techniques to complex scientific problems. They ask challenging research questions and publish in high-impact journals.



\$15.4M

External funding grants\*



16

**Group leaders** 



06

Research institutions



56

Researchers



49

Students (PhD, Master & Hons)

<sup>\*</sup>Includes the entire amount of individual and collaborating grants for projects active in 2019

# Partner Laboratory Network

#### Adelaide





**David Lynn** Immunity and genomics



**Ville-Petteri Mäkinen** Systems epidemiology



**Pirjo Apaja**Organelles
and trafficking

#### Canberra





**Barry Thompson** Epithelial biology



**Eduardo Eyras** Computational RNA biology

#### Brisbane





**Michelle Boyle** Malaria mechanisms



#### Sydney





**Yann Gambin**Single molecule science



**Maté Biro** Immune response



**Richard Morris** Systems theory





Robert Weatheritt RNA biology

#### Melbourne





**Prof James Whisstock** Scientific Head



Max Cryle Antibiotics and bacterial infections



**Chen Davidovich** Chromatin biology



**Edwina McGlinn** Skeletal development



**Senthil Arumugam** Cellular physiology



**Mikaël Martino** Bone regeneration



**Harald Janovjak** Synthetic biology

84

Publications in 2019, including journal articles, reports, reviews, letters and book chapters.

•

View all 2019 Publications



Cover of *Nature Reviews Genetics* (impact factor of 43.704), featuring a publication by Dr Robert Weatheritt and his colleagues.

## Transcriptomic convergence in autism spectrum disorders

Heredity has a major role in autism spectrum disorder (ASD), which affects an estimated 350,000 Australians, and yet the underlying genetic causes are only defined for a fairly small subset of cases.

Dr Robert Weatheritt and his colleagues reviewed how recent transcriptomic analyses, or the patterns of how the DNA is expressed, is transforming our understanding of ASD and revealing distinct signatures that may help the development of more targeted therapeutic strategies.

The article featured on the cover of respected journal <u>Nature Reviews</u> Genetics (pictured).

#### High hopes for futuristic tissuehealing method

An international team of scientists, led by EMBL Australia group leader Associate Professor Mikaël Martino, has cleared the way for the use of growth factors to promote tissue repair by improving the delivery system of the molecules, busting cancer side effects and potentially slashing costs.

The breakthrough has the potential to improve the lives of countless patients and reduce the burden on healthcare systems around the world. Hosted at the Australian Regenerative Medicine Institute, Monash University, A/Prof Martino and his team published their findings in the prestigious journal Nature Biomedical Engineering.

In 2019, A/Prof Martino also filed a provisional patent application for cytokine or growth factor fusion proteins.

# Powerful 3D-printed microscope makes disease diagnosis more accessible

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A 3D-printed microscope created by Dr Yann Gambin and his colleagues has the potential to make rapid disease screening and diagnosis simpler — and it's free for anyone to download and use

The researchers at UNSW's Single Molecule Science made the powerful technology widely available, shared the full 3D-printing instructions, analysis and optical design details in a paper in open-access journal Nature Communications. "Our intention is that researchers who have never done single-molecule fluorescence detection before can download the files, print the scaffolding, put the three little optical elements in, and start working with the microscope." Dr Gambin said. The compact plug-and-play microscope – called AttoBright — has the power to detect molecules associated with diseases like Parkinson's disease and tuberculosis and, for a mere fraction of the cost of a traditional instrument, any research laboratory can tap into its superior sensitivity.

# Research Excellence Snapshot (continued)



### Max Cryle to lead Victorian node of new ARC research centre

Associate Professor Max Cryle will lead the Victorian node of the new \$35 million Australian Research Council (ARC) Centre of Excellence for innovations in Peptide and Protein Science (CIPPS).

Led by Professor David Craik from the University of Queensland, CIPPS integrates a team of worldleading researchers into a cohesive, multidisciplinary program that will strengthen Australia's international profile at the forefront of peptide and protein research.

The Victorian team at Monash University will identify and characterise novel peptides from microbes, along with the biosynthetic pathways that produce them.

# Revealing key mechanisms of vital enzyme complex

Polycomb repressive complex 2 (PRC2) is an enzyme complex with wide reach, found in multicellular organisms — from plants and flies to humans — and is essential to the development and livelihood of the whole organism. Mutations in genes coding for PRC2 subunits, or their overexpression, are associated with most types of cancer, making the enzyme complex of considerable interest to cancer clinicians and researchers.

In a major development for the field, Associate Professor Chen Davidovich — who has studied the way PRC2 is regulated by RNA for close to a decade — and his team revealed exactly what happens at the site where PRC2 interacts with RNA, the immediate product of genes.

The findings were published in prestigious journal <u>Nature Structural</u> & Molecular Biology.

### Group leader promoted to Professor

David Lynn, based at SAHMRI, was promoted to full Professor by Flinders University, effective 1 January 2019.

Prof Lynn was also the invited national plenary speaker at the 48th Annual Meeting of the Australian and New Zealand Society of Immunology, in Adelaide, and the Joint 30th International Conference on Genome Informatics and Australian Bioinformatics and Computational Biology Society Annual Conference in Sydney.

## Novel mechanism may help quest for new antibiotics

Associate Professor Max Cryle and his team have revealed a novel mechanism in glycopeptide antibiotics (GPA) biosynthesis – used as last-resort drugs to counter lifethreatening multi-drug resistant bacteria – that may help in the development of new antibiotics to battle the ever-evolving 'superbugs'.

Their findings were published in <u>Chemical Science</u>.

### Study shines light on mysteries of 'unusual' antibiotic

Understanding the machinery of GPAs is vital in the quest to tweak them to develop new antibiotics.

A study led by A/Prof Cryle shines a light on the mysteries of an unusual antibiotic, which has great implications for the development of new antibiotics.

The research, published in <u>Nature Communications</u>, investigated the biosynthesis of kistamicin, an unusual GPA in both its structure and antiviral activity.

#### New ways of tackling bacteria

In a separate study, researchers led by A/Prof Cryle solved a 20-year riddle of how a crucial step in the biosynthesis of last-resort antibiotics occurs. The research — published in *Proceedings of the National Academy of Sciences of the United States of America* (PNAS) — points to a new way of tackling bacteria by potentially redesigning the antibiotics by altering the peptide assembly involved.

# Research Excellence Snapshot (continued)



#### Cracking the Hox code

Associate Professor Edwina McGlinn and her team are one step closer to unravelling the mystery of how the human body navigates movement with astonishing success, displaying locomotor actions that are fluid and coordinated.

Their research, published in <u>Cell</u> <u>Reports</u>, identifies a novel role for Hox genes (a family of transcription factors that are fundamental regulators of neural development) in proprioception, the awareness of relative body position and force required for fluid movement.

# New system to discover protective factors for the central nervous system

Associate Professor Pirjo Apaja and her team have developed a new system to find substances that change the response of a type of glial cell in the central nervous system to protect against potentially deadly disorders, such as neurodegenerative Parkinson's disease, autoimmune disease. multiple sclerosis or brain ischemia. The new astrocyte stress reactivity responder system was developed to discover modulators for protective astrocyte functions against toxic neuroinflammation, stressors and diseases of the nervous system.

The Apaja group performed a largescale analysis of protein networks and the functional pathways associated with the stress reactivity and presented some of these results at various conferences in Australia and Spain.

#### Largest oral glucose tolerance test has implications for diagnosis of diabetes

In the largest time-series, metabolomics study of oral glucose tolerance test in the world, Associate Professor Ville-Petteri Mäkinen and his collaborators demonstrated how baseline insulin resistance has a profound impact on systemic metabolic response, regardless of circulating glucose or diabetes status.

The research, published in <u>BMC</u> <u>Medicine</u>, has implications on the concept and diagnostics of diabetes in human populations and highlights the necessity of diabetes diagnostics and clinical care beyond glucose management.

# Optogenetics Australia launched to unite researchers using innovative method of controlling cells using light

Dr Harald Janovjak initiated a research network called Optogenetics Australia to unite and foster collaboration between researchers involved in the relatively young and rapidly growing field of optogenetics. Optogenetics is a multi-disciplinary technique that involves the use of lights to control neurons and other cell types that have been genetically targeted to express light-sensitive ion channels, as well as light-sensitive enzymes or transcription factors.

Dr Janovjak, based at the Australian Regenerative Medicine Institute at Monash University, said the precise technology can be harnessed to answer fundamental questions in nearly all fields of biology, including in drug discovery and even in space research. Optogenetics Australia fosters exchange and collaboration by connecting research groups working in the field and organising an annual hands-on workshop, with 50 attendees in its inaugural year.

# Research Excellence Snapshot (continued)



## The effects of space travel on the body

Dr Janovjak was also awarded funding from CSIRO's Space Technology Future Science Platform for a joint project with Dr Andrew Laslett to study the effects of microgravity — or weightlessness — on human cells during space travel missions.

Using a random positioning machine that simulates different gravity conditions and pluripotent stem cells, they will look at the effects of microgravity on many different cell types in real time, starting with bone-growing cells called osteoblasts.

They hope the results will reveal not only the effect of weightlessness on humans during space travel and missions, but will also apply to patients during long-term bed rest or during sarcopenia (the degenerative loss of skeletal muscle mass, quality, and strength associated with ageing).

The researchers are also interested in using synthetic biology as a tool to turn on cellular signals in the body to help augment the body during space travel.

## Making the wonders of scientific discovery accessible to all

Dr Richard Morris presented at the Interactive Science Expo, hosted by the EMBL Australia Node in Single Molecule Science, at the University of New South Wales in November.

The free public event shared the wonders of scientific discovery with people with hearing or vision impairment through interactive exhibits, tactile models and handson activities.



Dr Richard Morris presents alongside an Auslan interpreter. Image: Stephen Blake.



Spiral Galaxy in deep space

# Grant Success for Group Leaders



#### Prof David Lynn

#### **SAHMRI** and Flinders University

Awarded a National Health and Medical Research Council (NHMRC) Ideas Grant to explore how gut bacteria alters immune responses to agonistic immunotherapies and use those findings to design microbiotatargeted therapies to augment their activity, improving both the safety and efficacy of cancer treatment.

#### A/Prof Chen Davidovich

#### Monash University

Awarded an NHMRC Ideas Grant to investigate how a key protein complex (PRC2), which modifies proteins in the immediate vicinity of genes in order to keep these genes in an 'off state' in healthy cells and is often dysregulated in disease, is regulated by another protein, called LCOR.

#### Dr Michelle Boyle

#### QIMR Berghofer

Awarded an NHMRC Ideas Grant to investigate the activation of a specific cell involved in vaccine efficacy (the T-follicular helper cell) in malaria using human clinical samples, with the aim of manipulating the cell subset to improve human malaria vaccines.

#### Dr Maté Biro

#### University of New South Wales

Received an NHMRC Ideas Grant to harness a discovered direct communication mechanism, which enables killer T cells that recognise a tumour cell to recruit distant T cell populations, to improve T cell infiltration of solid tumours.

#### Dr Senthil Arumugam

#### Monash University

Co-awarded an NHMRC Ideas Grant. As chief investigator on a project titled 'The HIV capsid is a functional scaffold that directs bidirectional cargo transport', he will aim to better understand how transport inside cells works and have a new angle for targeting HIV.

#### Dr Harald Janovjak

#### Monash University

Received an NHMRC Ideas Grant to develop a new light-based strategy to increase the number and activity of beta cells in isolation and animal models, with the aim of developing a new method to protect beta cells and prevent diabetes.

Dr Janovjak was also awarded an ARC Discovery Project Grant for research that will expand our ability to manipulate nerve cell function with high specificity and without side effects. The interdisciplinary project aims to develop new synthetic biology methods to study the circuits that govern brain function by, for the first time, utilising engineered plant receptors.

#### A/Prof Mikaël Martino

#### Monash University

Received an NHMRC Investigator Grant to develop new regenerative strategies. He aims to reveal how the immune system influences the repair and regeneration of different tissues and organs, such as the heart and the lung.

#### Dr Robert Weatheritt

#### Garvan Institute of Medical Research

Co-awarded an ARC Discovery Project with A/Prof Irina Voineagu (from UNSW Sydney) to investigate the biogenesis and function of circular RNAs in the brain.

# New Group Leaders





### **Prof Barry Thompson**

Barry commenced in March 2019 and established his lab at the John Curtin School of Medical Research at the Australian National University, Canberra.

The Thompson Group aims to understand the control of tissue growth and form, with a focus on exploring how cells construct epithelial tissues during development and how epithelial tumours can arise.

7

Read more about

Prof Barry Thompson



### Dr Eduardo Eyras

Eduardo commenced in March 2019 and established his lab at the John Curtin School of Medical Research at the Australian National University, Canberra.

The Eyras Group is working to understand the biology of RNA and cancer using computational methods.

▼

Read more about Dr Eduardo Eyras



### Dr Senthil Arumugam

Senthil commenced in October 2019 and established his lab at the Monash Biomedicine Discovery Institute at Monash University, Clayton.

The Arumugam Group is interested in how complex properties arise out of molecules and their interactions, with a primary focus on endosomal trafficking at the level of single cells and in the context of intercellular communications in development.

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<u>Read more about</u> <u>Dr Senthil Arumugam</u>

# Strenthening International Linkages



#### Public event: 'Funding Science, Funding Futures: European Approaches'

The EMBL Australia PLN Secretariat hosted a visit from Director-General Jean-Eric Paquet, Research and Innovation, European Commission at Monash University on July 24th, followed by a public event at the National Gallery of Victoria with EMBL Australia Scientific Head Prof James Whisstock and ABC broadcaster Bernie Hobbs.

Ms Hobbs hosted an insightful conversation between D-G Paquet (who oversees a staggering €77 billion in the program Horizon 2020, the world's largest research and innovation investment) and Prof Whisstock on 'Funding Science,

Funding Futures: European Approaches'.

The discussion focused on current European and Australian funding models of research, and future collaborations between Europe and Australia.

### EMBL alumni in Australia event, Brisbane

EMBL alumni living in Australia, together with their colleagues and networks, gathered at QIMR Berghofer Medical Research Institute in Brisbane on Monday, 2 September, for a day of science talks, discussions and networking.

The program included discussions on EMBL's site objectives, resources, and opportunities.

EMBL Australia Scientific Head Prof James Whisstock spoke about his research and presented an overview of EMBL Australia's Partner Laboratory Network research groups and student programs.

A number of PLN Group Leaders, including, David Lynn, Yann Gambin, Michelle Boyle, Edwina McGlinn and Maté Biro, presented their research as part of the program.



Meeting at Monash University (L-R): EMBL Australia Scientific Head Prof James Whisstock, Monash University Provost and Senior Vice-President Professor Marc Parlange, Director-General Jean-Eric Paquet, Monash Biomedicine Discovery Institute Director Prof John Carroll and Senior Vice-Provost and Vice-Provost (Research) Professor Rebekah Brown.



L-R: Anne Ephrussi, Rob Parton, David Lynn, Yann Gambin, Sarah Withey, Hannah Leeson, Mate Biro, Frank Gannon, Melissa Little, Michelle Boyle and Edwina McGlinn.

# Strenthening International Linkages (continued)



#### Science by the sea: EMBL Partnership Conference

Researchers from around the world — including a group from our Partner Laboratory Network — gathered by the sea in sunny Barcelona for the 3rd EMBL Partnership Conference, which aimed to foster collaboration within the wider EMBL network.

The conference, titled 'Perspectives in Translational Medicine', was held at EMBL Barcelona from 25 to 27 September and brought together EMBL partner institutes operating in the field of molecular medicine to enable the exchange of expertise and the initiation of

new collaborations and research networks.

EMBL Australia group leaders David Lynn, Pirjo Apaja and Ville Petteri-Mäkinen attended the conference and presented their work to around 200 participants from across Europe and Australia



Participants at the 3rd EMBL Partnership Conference. Image: Christine Panagiotidis.

### Collaboration is key at EMBL Australia's biennial Research Week

The 2019 Research Week was a closed, informal meeting to strengthen communication and collaboration across the Partner Laboratory Network and to develop our strategic plan for the next few years.

The three-day event was held at the Crowne Plaza, Hawkesbury Valley, NSW from 28 to 31 October 2019.

It commenced with a two-day Scientific Summit, where PhD students and postdocs from our PLN research groups presented their work in a friendly and supportive, cross-disciplinary environment.

A one-day Strategic Workshop provided an opportunity for the EMBL Australia leadership team and senior stakeholders to identify and discuss stakeholders' issues and opportunities.



Members of the EMBL Australia Partner Laboratory Network came together to share their exciting research projects, providing valuable experience for younger members and creating opportunities for collaboration across the network. Image: Morris McLennan.

# Student Programs

continue overleaf



To identify and develop future scientific leaders, EMBL Australia attracts Australia's best students by offering a number of highly sought-after programs.



\$54K

Awarded in student travel grants



744

Applicants for 2019 PhD Course



112

PhD students attended EAPS



52

Scientists presented to students at EMBL Australia programs

# Student Programs (continued)







#### The 6th EMBL Australia PhD Course

24 June – 5 July 2019, University of Tasmania, Hobart

Modelled on EMBL's predoc course, the two-week annual program offers sixty 1st or 2nd-year PhD students symposium-style presentations and workshops from Australian and international speakers.

Sixty PhD students attended the hugely popular annual EMBL Australia PhD Course, this year held at the University of Tasmania.

The course covered a wide range of topics — from epigenetics and bioinformatics to translational and clinical sciences, and exposed students to the latest ideas in molecular biology — and received fantastic feedback from attendees.

"There is not a single better way I could have spent these two weeks of my PhD and I would 110% recommend ALL eligible PhD candidates apply for the future EMBL Australia PhD course — you will not be disappointed!"

PhD student Isabelle Capell-Hattam

The program included practical workshops on basic R-programming, bioinformatics, data-driven subgrouping, genetics, molecular biology and imaging techniques.

Students visited Bonorong Wildlife Sanctuary and the Australian Antarctic Division and Institute for Marine and Antarctic Studies (where they drove snow rovers and participated in a virtual reality tour of penguin colonies) and participated in three-minute thesis presentations, a poster session and networking events.







- 01 Students listen to a workshop at Bonorong Wildlife Sanctuary.
- 02 PhD Course participants enjoyed a combination of lectures, hands-on workshops, excursions, panel discussions, poster presentations and networking opportunities over the course of two weeks
- 03 Mary Mansilla was awarded first place for her poster, and Frank Olivier won first prize in the three- minute thesis competition.

# Student Programs (continued)



#### Partnership PhD Program

EMBL Australia group leaders offer scholarships to outstanding students, who receive additional career, research and monetary support during their doctoral studies.

Alexandra-Madelaine Tichy, a recipient of an EMBL Australia Partnership PhD Scholarship, receives additional career, research and monetary support during her PhD placement at EMBL Australia's Janovjak Laboratory.

Her position as an EMBL Australia PhD Student gives her the opportunity to network and collaborate with other EMBL Australia lab members, and also with other group leaders.

"Through the scholarship, I've developed great connections within EMBL Australia and the wider research community. This has been particularly helpful for me living and working in a new country," said Alexandra.

EMBL Australia's Partnership PhD Program attracts high-quality international students to EMBL Australia groups and develops students into future scientific leaders.

Scholarship placement students have access to exceptional scientific mentorship and the wider EMBL Australia research community. They also receive an additional \$5,000 per year, have the opportunity to attend the PhD Symposium at EMBL Heidelberg and can apply for further travel grants to visit international EMBL workshops or conferences.



| Alexandra-Madelaine Tichy



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#### 2019 EMBL Australia Postgraduate Symposium: From Models to Systems

An annual student-developed symposium for honours, masters and PhD students provides an opportunity for students to learn from world-leading researchers, network and present their work.

The 6th annual EMBL Australia Postgraduate Symposium (EAPS) was held at the Peter MacCallum Cancer Centre and the Victorian Comprehensive Cancer Centre in Melbourne from 27 to 29 November.

More than 110 delegates from all across Australia participated and 84 students delivered oral and poster presentations during the symposium.

The theme of the three-day meeting was: 'From Models to Systems — deciphering biological complexity' and the program covered a wide variety of topics spanning development and regeneration, molecular and cellular biology, computational and systems biology, ecology and environmental sciences, immunology and cancer, as well as translational science and drug discovery.

Prominent scientists delivered inspiring presentations — including a keynote address by Professor Christine Wells — and shared their personal career journeys and insights. Attendees also enjoyed sharing their own research and networking with like-minded students



Our thanks to the EAPS 2019 organising committee: Kenji Fujihara, Cabriel Hauswirth, Aimee Davidson, Caitlin Romanis, Celine Santiago, HuanTing Ong, Margaret Mouat, Sean So, Yasmin Alshoubaki, Alexandra-Madelaine Tichy, Cerard Pernes, Valentina Poltavets, Emma Gail and Joey Man.

# Student Programs (continued)



#### **Travel grants**

Supporting PhD students to take a short course, attend a conference or work collaboratively alongside some of the world's best researchers at EMBL's facilities in Germany, Italy, France, Spain or the UK.

"Attending the Non-Coding Genome meeting at EMBL Heidelberg allowed me to form networks within this field of research and, as this is quite a new area of study in the innate immune system, this will be massively helpful in the future."

PhD student Ebony Monson

Twenty Australian PhD students had the opportunity to train at one of EMBL's six European facilities, go to a conference or take a short course thanks to EMBL Australia travel grants.

The \$2000 grants assisted students in attending the 20th EMBL PhD Symposium in Heidelberg, Germany, a course or conference run by EMBL, or the opportunity to work with EMBL researchers at EMBL Heidelberg (Germany), EMBL Hamburg

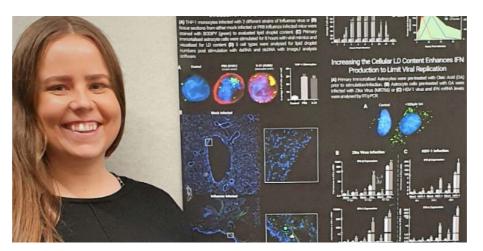
(Germany), EMBL Grenoble (France), EMBL-EBI Hinxton (UK), EMBL Rome (Italy) or EMBL Barcelona (Spain).

Ebony Monson, a second-year PhD student in the Helbig Lab at La Trobe University, used her travel grant to attend the EMBO - EMBL Non-Coding Genome Symposium at Heidelberg in October.

Following this, she presented work generated in her PhD project

— which examines the role lipid droplets have in an antiviral response
— at the 7th Annual Meeting of the International Cytokine and Interferon Society (ICIS) in Vienna.

Ms Monson said she found both events extremely beneficial to both her research and career development.



A \$2000 travel grant helped PhD student Ebony Monson fund her travel to Europe and opened up new networks, potential collaborations and a whole lot of ideas for the future direction of her novel research.

### Stay updated with EMBL Australia's PLN news through:

Our quarterly newsletter: <u>Subscribe here</u>

Online: emblaustralia.org







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FMBI Australia is supported by:



EMBL Australia PLN is hosted at the South Australian Health and Medical Research Institute, University of New South Wales, Australian National University, Garvan Institute of Medical Research, QIMR Berghofer Medical Research Institute and Monash University. The EMBL Australia Secretariat is hosted by the Monash Biomedicine Discovery Institute (BDI).

