

# National eResearch Newsletter – February 2020

#### Welcome to the February 2021 National eResearch Newsletter

AeRO is happy to announce that planning is ongoing for this year's eResearch conference and AeRO forum, with dates to be announced soon. The eResearch conference has also been accredited for the Business Events Grants scheme, which means that if your organisation is claiming the benefits from this grant program, they will be able to claim back some of the costs of attending.

AeRO members get discounts to eResearch conference, so if you would like any information on AeRO's programs, or how your organisation can become a member of AeRO, please contact Phil Gurney, phil@aero.edu.au, or check out membership details at http://aero.edu.au/join/

Phil Gurney, CEO

HeSANDA Infrastructure Development	Health Studies Australian National Data Asset Program: 17-Feb The ARDC's Health Studies Australian National Data Asset program is having an information session on 17 February 2021, 12:00 PM – 1:30 PM AEST about the Infrastructure Development stage of the program. Register for the session here: <u>https://www.eventbrite.com.au/e/information-session-hesanda-infrastructure-</u> <u>development-registration-133049547779?aff=erelexpmlt</u> .
AMA	Pawsey Hour "Ask.Me.Anything": Bioinformatics: 22-Feb Pawsey Supercomputing Centre invites you to join us for Pawsey Hour (Ask. Me. Anything). The AMA is an opportunity to join in a discussion with Pawsey expert staff and an online community of peers. February's topic is "Bioinformatics" so if you have any pressing questions please join the session: To learn about the Pawsey application process;

	<ul> <li>New researchers who want to know if Pawsey services are for them; and</li> <li>Current users who have specific questions about our infrastructure and expertise, or their research challenges (within the Pawsey context).</li> <li>Register here: <a href="https://pawsey.org.au/event/pawsey-hour-ask-me-anything-25/">https://pawsey.org.au/event/pawsey-hour-ask-me-anything-25/</a>.</li> </ul>
Monthly Tech Talks	Tech Talk 3: Virtual Desktop Infrastructure: 25 Feb         his talk will discuss the technical details of two established Virtual Desktop implementations, including design choices and problems encountered.         Speakers from Monash University and University of Melbourne. More details: <a href="http://tiny.cc/techtalk_2021">http://tiny.cc/techtalk_2021</a> .         Subscribe to the Tech Talk Mailing list for Tech Talk webinar Zoom links. Please Suggest topics and Vote on upcoming
	Tech Talk topics at <a href="https://poll.ly/#/LyD09I7dm">https://poll.ly/#/LyD09I7dm</a> . Tech Talks are a bi-monthly series, bringing eResearch Technical Specialists together to provide a forum for them to share experience and expertise relating to specific technical topics.
	<ul> <li>Bioinformatics at Scale and Australia's Next Generation of Supercomputers: 25-Feb</li> <li>As part of the Pawsey Supercomputing Centre's new bi-monthly "Supercomputing Series", you will hear from</li> <li>bioinformaticians, as they discuss possibilities of the new capabilities at the Centre.</li> <li>This event will also see the creation of a Community of Practice (CoP) where practitioners at scale can connect and</li> <li>discuss topics of interest, share best practices, and help answer each other's questions on bioinformatics and HPC.</li> </ul>
	To register, click here: https://pawsey.org.au/event/the-power-of-supercomputing-in-bioinformatics/.

Supercomputing in the New Norm Austing to COVID-19 and beyon www.asabar Schuret even of the Conference	Adapting to COVID-19: SC Asia 2021: 2-Mar Pawsey is co-organising SupercomputingAsia (SCA) 2021, an annual conference that encompasses an umbrella of notable supercomputing and allied events in Asia, taking place virtually from 2 to 4-Mar-21 The key objective of SupercomputingAsia conference is to promote a vibrant and relevant HPC ecosystem in Asia. Delegates will be able to gain access to visionary insights from thought leaders in academia and industry, optimum networking opportunities and the Supercomputing community in Asia. To virtually join SC Asia 2021, click here: <u>https://www.sc-asia.org/</u> .
Abstralian Data Quality Interest Group	<ul> <li>Data Quality Interest Group: 4-Mar</li> <li>The Australia/New Zealand Data Quality Interest Group (ANZ DQIG) provides a monthly forum for Australian/New</li> <li>Zealand researchers, data providers, repository operators and data consumers to discuss challenges and strategies for meeting data quality standards and procedures. The Group closely collaborates with the Earth Science Information Partners (ESIP) Information Quality Cluster and the Data Quality Domain Working Group of the Open Geospatial Consortium (OGC).</li> <li>The next meeting, Thursday, 4-Mar-21, 12-1pm AEDT, will have a presentation from Dr Nathan Robinson (Federation University) on issues related to a Data Quality Framework for grains related trial research.</li> <li>More info: <a href="https://sites.google.com/ardc.edu.au/australian-data-quality-ig">https://sites.google.com/ardc.edu.au/australian-data-quality-ig</a> (how to join via Events tab).</li> </ul>
LIFESCITRAINERS.ORG ACCELEBRING SCHWISTS	<ul> <li>Global Survey of Life Science Trainers: 20-Mar</li> <li>Workshops, bootcamps, and short courses are important ways that life scientists learn new skills. Trainers are central to the success of these events and often volunteer their time to support the scientific community.</li> <li>The Life Science Trainers Community wants to highlight the important role of trainers and understand how they can be better supported. If you are, or have been, a trainer, share your thoughts in this first-ever global survey by March 20 2021.</li> </ul>

	For more information and links to the survey in multiple languages visit: <u>https://lifescitrainers.org/2021/01/18/global-</u> trainers-survey/.
TRAIN-THE-TRAINER WORKSHOPS @aarmet Book yours now	Bookings Open for AARNet 2021 Train-The-Trainer Workshops AARNet's training is focused on improving the sector's understanding of the capabilities of networks and data movement and how to use the services it provides, such as CloudStor and SWAN. Workshops provide the practical knowledge needed to transfer, store and manage research data (of any size) in complex scenarios throughout the research and data lifecycle: See <u>https://news.aarnet.edu.au/aarnet-train-the-trainer-workshops/</u> .
RDA's 17th Plenary Meeting 20-22 April 2021, Edinburgh Dependent by Dependent by	RDA Virtual Plenary 17: 20-22 April 2021, Edinburgh, Scotland: 20-Apr         The Digital Curation Centre in collaboration with Jisc and STFC-UKRI will be hosting RDA'S 17th Plenary meeting on 20-22 April 2021, as a fully virtual event.         See <a href="https://www.rd-alliance.org/plenaries/rda-17th-plenary-meeting-edinburgh-hybrid%C2%A0%C2%A0">https://www.rd-alliance.org/plenaries/rda-17th-plenary-meeting-edinburgh-hybrid%C2%A0%C2%A0</a> .         The Call for Sessions has now closed, and sessions are under review by the Technical Advisory Board (TAB).         The Call for Co-located events ( <a href="https://www.rd-alliance.org/rdas-17th-plenary-call-co-located-events">https://www.rd-alliance.org/rdas-17th-plenary-call-co-located-events</a> ) closes on 12         February 2021.         The Call for Posters ( <a href="https://www.rd-alliance.org/rdas-17th-plenary-call-posters">https://www.rd-alliance.org/rdas-17th-plenary-call-co-located-events</a> ) closes on 26 March 2021.
10 - 14 May, 2021	Enter a #DataScienceWeek Event! 10-May Pawsey is excited to announce the return of Data Science Week 2021! Data Science Week aims to bring together a community of data scientists across the Australasian region to network and discuss trending topics and ideas. This is achieved through your blog posts, training, events, conferences, workshops or any other idea you may have.

	DSW2021 will run during the week of 10 – 14 May 2021 and we would love to share your contribution with the data science community. Complete your Expression of Interest here: <u>https://forms.gle/udTHRjWcGDfDb9SY8</u> .
	Global Ecosystem Research Infrastructure (GERI) Agreement Signed The managing institutions that operate six different continental-scale ecosystem observing infrastructures, from Africa, Asia, Australia, Europe and North America (two from Europe), signed a landmark Memorandum of Understanding, expressly committing to the development of the first-ever Global Ecosystem Research Infrastructure (GERI). See <a href="https://www.tern.org.au/news-gerimou/">https://www.tern.org.au/news-gerimou/</a> for more info.
	Monitoring Australia's Life-Sustaining 'Critical Zone' Resources A consortium of Australian universities has secured \$1.2M of Australian Government funding to help create a network of Critical Zone Observatories (CZO) across Australia. The funding will enable research into Australia's outer skin—from treetop to bedrock, where water, atmosphere, ecosystems, soil and rock interact—to better understand and manage the availability of its life-sustaining resources. See <a href="https://www.tern.org.au/news-ozczo-announcement/">https://www.tern.org.au/news-ozczo-announcement/</a> .
C Google Cloud	Google Cloud Research Credit Grants Extended to PhD Students The Google Cloud Research Credits program has been extended in 2021 to cover all PhD students in addition to university research staff. The program provides US\$5,000 of Google Cloud credits to staff academic researchers, and US\$1,000 for PhD students in Australia and New Zealand. Individuals can apply directly, as the short application process does not require institutional approval. Program details here: <u>https://edu.google.com/programs/credits/research</u> .



## NCI Research: Qubits and the Quantum Computing Future

World-class supercomputers such as Gadi allow scientists to perform incredibly complex research at the atomic level. For researchers studying aluminium oxide tunnel junctions for quantum computing development, the computational performance of Gadi opened up the possibility of analysing the formation of these junctions atom-by-atom.

Read more: <u>https://nci.org.au/research/research-highlights/qubits-and-quantum-computing-future</u>.



## NCI Research: Teaching Computers to Understand Language

Teaching computers to understand language is no easy task. To work on this major research challenge, scientists are using Natural Language Processing (NLP). NLP is a fusion of linguistics, computer science and machine learning that uses a variety of computational methods running on supercomputers for the automated understanding, analysis and creation of spoken, written and signed language.

Read more: <u>https://nci.org.au/research/research-highlights/teaching-computers-understand-language</u>.



## New AARNet Terabit Network to North Asia Goes Live

On 9 February AARNet announced the launch of high-bandwidth services delivering one terabit per second on the AARNet spectrum of the new Japan-Guam-Australia South subsea cable system (JGA South) connecting Sydney, Australia and Piti, Guam.

Lighting JGA South extends the reach of the AARNet network into North Asia and provides AARNet with additional connectivity options across the Pacific Ocean via Guam to North America, and complements AARNet's investment in the Indigo subsea cable link connecting Sydney, Perth and Singapore. This improves the diversity and resilience of dedicated high-performing international connectivity for big science, research and education.

See https://news.aarnet.edu.au/new-aarnet-terabit-network-to-north-asia-goes-live-for-research-and-education/.

	NCI Research: Supercomputer Fire Modelling The 2019-20 bushfire season showed just how widespread, unpredictable and terrifying bushfires can be. The Bureau of Meteorology, with the help of the NCI supercomputer, is developing new modelling tools that are already helping authorities deepen their understanding of fires and their behaviour. This story was first published in the NCI 2019-20 Annual Report. Read more: <u>https://nci.org.au/research/research-highlights/supercomputer-fire-modelling</u> .
	<ul> <li>Humans of NCI: Dr Kelsey Druken, NCI Data Collections Manager</li> <li>The first "Human of NCI" for 2021 is Dr Kesley Druken, Data Collections Manager and geophysicist. Humans of NCI is our way of recognising our great users and staff who make up our big big-data and big-computing community. Especially since Thursday the 11th of February was the International Day of Women and Girls in Science, we want to highlight the great contributions of women to our scientific community.</li> <li>To read more about Kelsey, click here: <a href="https://nci.org.au/research/people/dr-kelsey-druken">https://nci.org.au/research/people/dr-kelsey-druken</a>, and to join the Women in HPC Australasia Chapter Slack channel, click here: <a href="https://whpcausnz.slack.com/">https://whpcausnz.slack.com/</a>.</li> </ul>
SUPERCOMPUTER CHALLENGE Start now to test your supercomputing knowledge	Quiz: Test your Supercomputer Knowledge!         Put your supercomputer knowledge to the test with this quiz style survey.         Whether you are a novice or an expert, we invite you to take part in Australia's Supercomputer Challenge to understand how much you know about supercomputing and supercomputer facilities in Australia.         Just click here to start: <a href="https://supercomputerchallenge.questionpro.com/">https://supercomputerchallenge.questionpro.com/</a> .
	Yarra Catchment Atlas The Yarra Catchment Atlas ( <u>www.yarraatlas.org.au/</u> ) is a spatial information portal featuring biodiversity, environmental and cultural information for the Yarra Catchment. The Centre for eResearch and Digital Innovation at Federation University Australia has partnered with the Yarra Riverkeeper Association (YRA) on this project, having completed substantial work on the online information portal in 2019.

	Recent upgrades were made to support greater community reporting of pollution data under Phase 2 of the project Sources & Solutions of Polystyrene Pollution in the Yarra. The portal now enables the recording of observations about polystyrene pollution ( <u>https://map.yarraatlas.org.au/sights</u> ), including a new polystyrene rating tool that enables documenting of polystyrene pollution hotspots. These observations are visualised in the online mapping portal: <u>https://map.yarraatlas.org.au/?view=16268_3c7ff35</u> .
INTERNATIONAL DATA WEEK 2021 Deta to Improve our World NOVEMBER 201 BOOLEMER 201 BO	International Data Week (IDW 2021): 8-11 Nov 2021 The International Science Council's Committee on Data (CODATA) and World Data System (WDS), and the Research Data Alliance (RDA) are delighted to announce that the 2021 edition of International Data Week (IDW 2021) will be held on 8–11 November 2021 in Seoul, South Korea. See <u>https://internationaldataweek.org/</u> . For more information, including on the 18th RDA Plenary, which is part of IDW 2021: <u>https://rd- alliance.org/plenaries/rda-18th-plenary-meeting-part-international-data-week-2021-8%E2%80%9311-november-2021- seoul-south</u> .
Software Preservation Network	AARNet Joins Software Preservation Network AARNet is pleased to announce its membership to the Software Preservation Network (SPN), an international community based in USA that aims to advance the practice of curating and preserving software. This membership complements its participation in the Digital Preservation Coalition and is in support of the ARC Linkage Project Play It Again: Preserving Australian videogame history of the 1990s. led by Prof Melanie Swalwell at Swinburne University with collaborators from RMIT and the Australian Centre for the Moving Image (ACMI) . https://news.aarnet.edu.au/aarnet-joins-the-software-preservation-network/.

	AARNet CEO Chris Hancock Honoured with a Member of the Order of Australia (AM) The accolade recognises Hancock's significant service to education and on-line research networks, and to Australia- USA relations. "I'm proud and humbled to receive this acknowledgment," said Hancock. "It has been a great privilege to work with many of the nation's best and brightest minds to drive the technological developments that empower Australian researchers and educators nationally and globally." See <u>https://news.aarnet.edu.au/aarnet-ceo-chris-hancock-honoured-with-member-of-the-order-of-australia-am/</u> .
JOBS	<ul> <li>eResearch Jobs AeRO provides details of the latest eResearch job opportunities in the sector. Jobs are posted immediately to <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and the website at <a href="http://aero.edu.au/jobs/">http://aero.edu.au/jobs/</a> and the eResearch Chat Platform at <a href="https://twitter.com/AeRO_eResearch">http://aero.edu.au/jobs/</a> and the eResearch Chat Platform at <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and the website at <a href="http://aero.edu.au/jobs/">http://aero.edu.au/jobs/</a> and the eResearch Chat Platform at <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and the website at <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and website at <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and website at <a href="https://twitter.com/AeRO_eResearch">https://twitter.com/AeRO_eResearch</a>, and and <a href="https://twitter.com/AeRO_eResearch">https://twitter.</a></li></ul>

#### Contributions

This newsletter is based on contributions provided by members of the eResearch community, and draws on news articles and newsletters published across the sector. The Newsletter is published around the 16th of each month.

Please send any contributions (max. 100 words, plus a link and image) or pointers to any other relevant articles or newsletters to <u>editor@aero.edu.au</u> Archives of these Newsletters are held at <u>http://aero.edu.au/newsletters/</u>. Click <u>HERE</u> to add yourself to the eResearch Mailing List.