

### National eResearch Newsletter - January 2022

#### Message from AeRO:

Welcome to 2022! We are looking forward to an exciting year ahead, as hopefully the constraints of Covid gradually diminish. We are especially looking forward to a face-face eResearch Australasia Conference, in Brisbane from 17th to 21<sup>st</sup> October (to complement the New Zealand eResearch Conference, which will be online again this year (9<sup>th</sup> to 11<sup>th</sup> February). We are also looking forward to another annual AeRO Forum – the last one of which (held online in September) resulted in a significant contribution towards the National Research Infrastructure Roadmap (see https://2021nriroadmap.dese.gov.au/ get-involved/exposure-draft/).

We also have a number of other exciting initiatives planned that we hope will lead to increased collaboration with the Sector, with a new membership model to be announced shortly.

Finally, thanks to all those regular (and occasional) contributors to this Newsletter, which we hope you continue to find helpful and interesting.

Kind regards, Alex Reid – Newsletter Editor.

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BioCommons Single Cell Omics Survey: by 4-Feb



The Australian BioCommons are focussing on Single Cell Omics and want to hear about your infrastructure needs – the datasets, tools, pipelines, standards, compute resources and any difficulties you have faced for single cell omics analysis.

You can get involved in the Single Cell Omics discussion by:

- completing a 10 minute survey before 4th February 2022, and
- joining us for an on-line video conference Wednesday 17th February 2022 12:00 pm (noon) AEDT where we will discuss the results of the survey, and explore ways that national coordination/consolidation could help to address the challenges (complete the survey to be invited).

Survey link: <u>https://docs.google.com/forms/d/e/1FAIpQLSf8AAph-</u> P8Hel0sq66DENiakbxnzIXdQayz1yCI-eidexTcOQ/viewform?usp=sf\_link.

#### eResearch NZ 2022 Now Online: 9 to 11-Feb



Following consultation with the community and deliberation within the Organising Committee, eResearch NZ 2022 is moving its programme online. The conference dates remain the same, 9-11 February 2022.

Registration is now open, and tertiary students can register for FREE! eResearch NZ 2022 has opportunities for skills training, professional development, and mentoring so please invite any tertiary students you think would be interested!

Read the latest event updates: https://mailchi.mp/nesi/ernz-2022-registration-live?e=8fd6e1df44.

Draft Programme: https://www.eresearchnz2022.org.nz/programme/.

Research Data Alliance 19th Plenary - Call for Sessions: by 26-Feb



RDA Plenary 19 is currently planned to take place as a hybrid event, as part of International Data Week 2022, taking place 20-23 June 2022. Please submit your session application using the forms at the website below by 26 February, 2022. See: <u>https://www.rd-alliance.org/rdas-19th-plenary-call-sessions-now-open</u>.

#### Call for Contributions iPres 2022: due 8-Mar



Call for Contributions for iPres 2022 is open! See https://ipres2022.scot/important-dates/.

iPres is the premier conference series on digital preservation. The conference brings together information scientists, students, researchers, archivists, librarians, service providers, software developers and experts from different sectors to share emerging and cutting-edge insights in digital preservation. Hosted in Scotland in September 2022, it will be delivered in a hybrid format. Submissions invited for papers, workshops, posters, panels, hack-a-thons, and a Digital Preservation Bake-Off Challenge.

Submissions should relate to the conference theme Data for All, for Good, for Ever: Let Digits Flourish. Deadline: 8 March 2022. Read more at: <u>https://ipres2022.scot/news/</u>.

#### Data Science Week is back in 2022: 9 to 13-May



Australia's #DataScienceWeek is back in 2022 and we're looking for YOUR amazing events to complete the week!

Focusing on the theme Data Science Every Day, this week aims to bring together a community of data scientists, technologists, educators, data science enthusiasts and more to raise awareness around data science, STEM, network and share ideas with like-minded peers. Register your event here: <u>www.datascienceweek.org</u>.

Continuing National Collaborative Graduate Education Initiative for HPCD Domain Applications



This inaugural collaborative course was launched as a live online interactive event delivered by 14 internationally renowned professors and scientists from Sep to Nov 2021. See <a href="https://intersect.org.au/education/collaborative-graduate-courses/1st-graduate-course/">https://intersect.org.au/education/collaborative-graduate-courses/1st-graduate-course/</a>.

Since Dec 2021, the course materials - recorded lectures, tutorials, slides etc - remain available to Australian HDR students and ECRs for self-paced learning with ongoing support from the course coordinator, NCI Training and the teaching team. Click here for insights and reflections from academic organising committee members of the course: <u>https://intersect.org.au/news/a-national-australian-</u>collaborative-graduate-education-program-insights-from-the-academic-organising-committee/.

Interested researchers, new to the course, can click here to register: <u>https://hpcdinmaterialsdesignanddiscovery.eventbrite.com.au/</u>.

#### **Agricultural Research Federation Platform**



Federation University Australia's Centre for eResearch and Digital Innovation (CeRDI) together with the University of Sydney, Queensland Cyber Infrastructure Foundation (QCIF) and the Australian Research Data Commons (ARDC) are collaborating to accelerate research innovation and expand participation for the Agricultural Research Federation (AgReFed) Platform. The platform supports collaboration and innovative insights in agricultural research, development and policy. Enhancements to the platform will further improve the discoverability of trusted, reusable and analysis-ready agricultural research data from across Australia.

AgReFed: https://www.agrefed.org.au/

For information about the project and deliverables view the CeRDI newsletter: https://www.cerdi.edu.au/CeRDINewsletterSpring2021#4.

Bushfire Data Challenges Program Adds 7 Projects to Understand Bushfire Impact.



The ARDC announced 7 new projects in the Bushfire Data Challenges program that will help understand the impact of bushfires in Australia.

See: <u>https://ardc.edu.au/news/bushfire-data-challenges-adds-7-projects-to-understand-bushfire-impact/</u>.

#### **Google Cloud Expands Learning Paths for Researchers**



Google has created new free training pathways and resources that help researchers get up to speed quickly on Google Cloud. Whether you are a researcher wanting to build a genomics pipeline, run a Monte Carlo simulation, create an auto-scaling HPC cluster with Slurm, or host Jupyter Notebooks, we've curated training resources that will get you straight to the solution without wasting time or resources. Organized by research discipline, learning labs guide you through the cloud skills you'll need for Engineering, Physical Sciences, Environmental Sciences, Mathematical Sciences, Computer Science, and Life Sciences. <u>https://cloud.google.com/blog/topics/public-sector/google-expands-</u>learning-paths-help-researchers-get-cloud.

#### Get Started with DReSA, a Portal for Digital Research Skills Training

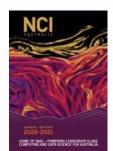


Visit DReSA, a portal for researchers, trainers and training providers to browse, discover and organise research training materials and resources in Australasia. Learn how to get started, or visit the portal.

Portal: <u>https://dresa.org.au/</u>.

Get Started: https://www.youtube.com/channel/UC4zBZxORo2hdyXSwNBKx4iA.

## NCI Annual Report Highlights COVID-19, Genomics and Climate Research from 2020-2021



Published at the end of last year, the NCI Annual Report highlights the high-performance computing, high-throughput computing and big data research taking place at Australia's leading computing and data science infrastructure. Opening with a stunning cover image of turbulent particle motion from astrophysical simulations, the Report features researchers from across the country working on a wide range of nationally significant, world-class projects. Read the whole Report here: https://nci.org.au/about-us/annual-reports.

#### Pandemic Decision-Making Supported by Australia's National Research Cloud, Nectar



From the moment COVID-19 was detected in Australia, state and federal governments have relied on infectious disease modelling and epidemiological analytics conducted on the ARDC Nectar Research Cloud. See <u>https://ardc.edu.au/news/pandemic-decision-making-supported-by-australias-national-research-cloud-nectar/</u>.

GPU, Machine Learning and Other Skills Training on Offer Through NCI in 2022



NCI ramped up training in a big way in 2021, with more than 3,000 hours of teaching provided to the HPC and Data community. We have a lot planned in 2022, starting with the return of Introduction to Gadi training for beginner users, as well as new Skill Sharpening courses and NCI-NVIDIA GPU bootcamps in coming months. Visit the Training page at: <u>https://nci.org.au/users/user-training</u>.

#### Data is Only Half the Battle



Read the report from eResearch Australasia session "Data is only half the battle" for guidance, policy and other materials on sharing, citing, curating and preserving research software and other digital objects. See: <u>https://doi.org/10.5281/zenodo.5637353</u>.

# Calling for an EMCR Representative for the Academy's National Committee for Data in Science



The Australian Academy of Science is calling for applications for the EMCR Representative on their National Committee for Data in Science.

This committee aims to enable Australian scientists to more effectively exploit the emerging data-rich research environment in order to conduct data-intensive research, and to represent and promote Australian science in international data science and data management forums. The committee provides strategic science policy advice on scientific data management to the Academy and also serves as the Australian CODATA National Committee and participates in CODATA (<u>https://codata.org/</u>).

More information here: <u>https://www.science.org.au/supporting-science/national-committees-</u> science/be-voice-emcrs-your-discipline.

Application form here: https://www.science.org.au/supporting-science/emcr-representative-application.

### Contributions

This newsletter is based on contributions from 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 all contributions (max. 100 words + link + image) or pointers to any other relevant articles or newsletters to <u>editor@aero.edu.au</u>.

Newsletter archives are available at http://aero.edu.au/newsletters/.

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Thanks, Alex Reid, AeRO Newsletter Editor.

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