

Accelerating the paradigm shift towards Open Science and Data Sharing in Pandemic times and beyond

APAN 53
March 9, 2022



Prof Virginia Barbour
Director, Open Access Australasia
<https://oaaustralasia.org/>
@ginnybarbour





Open science initiatives triggered by COVID-19 in Australasia

Ongoing Australasian approaches to open research

What we've learnt



A diverse membership

28 universities across Australia & Aotearoa New Zealand

Creative Commons Australia, Tohatoha Aotearoa Commons, Australian Library and Information Association, Australian Digital Alliance, Wikimedia Australia

Principles

- equity in scholarly communications, to access & publish research
- diverse ecosystem of open access approaches
- integrity and quality in research
- maximisation of the impact of research
- appropriate and respectful use of Indigenous knowledges
- retention of rights by authors or their institutions





Open science initiatives triggered by COVID-19 in Australasia

Ongoing Australasian approaches to open research

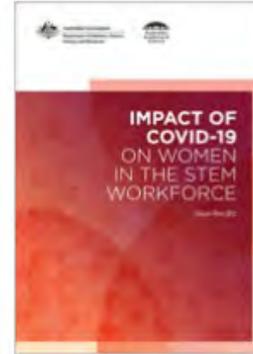
What we've learnt

Australasian open science initiatives triggered by COVID-19



COVID-19 Expert Database

A collaboration between Australia's leading academies
Championed by Australia's Chief Scientist



Open science: after the COVID-19 pandemic there can be no return to closed working

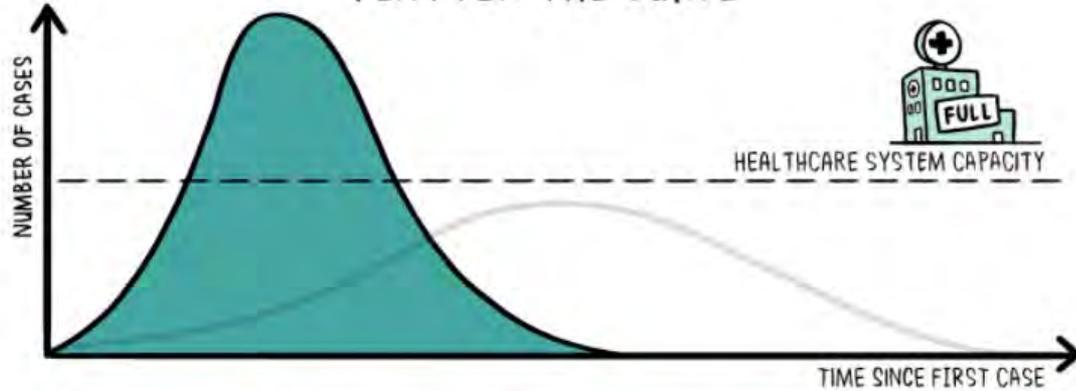
New Zealand's COVID-19 research response

COVID-19 research database



Information for the health and medical research sector in response to the COVID-19 pandemic

FLATTEN THE CURVE



@SIOUXSIEW @XTOTL @THESPINOFFTV

'ADAPTED FROM @DREWAHARRIS, THOMAS SPLETTSTÖBER (@SPLETTE) AND THE CDC'
CC-BY-SA

Some of the best pandemic science communication came from New Zealand!





Open science initiatives triggered by COVID-19 in Australasia

Ongoing Australasian approaches to open research

What we've learnt

CONNECTING THE DOTS

20+ years of open in Australia

There have been open research initiatives in Australia since the very beginning of global discussions on open access to research publications in the early 2000s. The initiatives in Australia have come from a range of actors, including the federal government, funders, institutions, and peak and advocacy bodies. This arrow illustrates some of the key initiatives over the past 20 years. In 2020, the Council of Australian University Librarians (CAUL) and the Australasian Open Access Strategy Group (AOASG, now Open Access Australasia) facilitated a national discussion on open research. In 2021, there is increased momentum towards open access to research publications driven by work from the Office of the Chief Scientist, Dr Cathy Foley.



Links & additional information

Australian National University (ANU) repository established
Australia's first institutional repository.

- Peak / advocacy body
- Government
- Funder
- Institution
- Event

Federal investment in university repositories
through the ARROW, ASHER and RUBRIC programs.

Australian National Data Service established
with the aim of making Australia's 'data assets more valuable'.

2000
Queensland University of Technology (QUT) Open Access Policy
First university in the world with institution wide OA mandate.

2003

2004
ANU Press established
Australia's first open access university press.

2005
Creative Commons Australia launched

2000 - 2010

2006

2008
Brisbane Declaration on Open Access published

2008
CAUL Statement on Open Scholarship published

2008

2008
OAK List published
An online, searchable database of publishers' agreements and open access policies developed by QUT researchers.

2008
Australian Research Council (ARC) Open Access Policy
Major Australian funder requires OA after a 12 month embargo for research outputs produced from research funded by the ARC.

2008

2008

2008

2008

2008

2008

2008

2008

2011
National Research Infrastructure Roadmap published

2011
AOASG formed
Supported initially by six universities to advocate for open access across Australia.

2011

2011

2011

2011

2011

2011

2011

2012
data.gov.au launched
allowing access to anonymised public data published by federal, state & local government agencies.

2012
CAUL Statement on Open Scholarship updated

2012

2012

2012

2012

2012

2012

2012

2013
Open Access & Research Conference held in Brisbane
Knowledge Unlatched launched at the conference.

2013
Productivity Commission Report on Intellectual Property Arrangements
recommended all levels of government 'implement an open access policy for publicly-funded research'.

2013

2013

2013

2013

2013

2013

2013



Hover for links

2014
National Health & Medical Research Council (NHMRC) Open Access Policy
Australia's other major funder requires OA after 12 month embargo for research outputs produced from research funded by the NHMRC.

2014
Australian Government Funding Arrangements for non-NHMRC Research
Inquiry recommends strategic approach to open research.

2014

2014

2014

2014

2014

2014

2014

2015
CAUL Statement on Open Scholarship updated

2015
F.A.I.R. Policy Statement for access to Australia's research outputs
issued by a Working Group convened by the Universities Australia Deputy Vice Chancellors (Research) Committee.

2015

2015

2015

2015

2015

2015

2015

2016
Curtin Open Knowledge Initiative established
A hub for analysis and evaluation of open knowledge in higher education.

2016
Australian Research Data Commons established
as a provider of digital research infrastructure.

2016

2016

2016

2016

2016

2016

2016

2017
Government response to Productivity Commission report
Accepted the report but did not act on it.

2017
Open Repositories Conference held in Brisbane

2017

2017

2017

2017

2017

2017

2017

2018
CAUL Statement on Open Scholarship updated

2018
Funder open access policies strengthened
By 2018, both ARC & NHMRC OA policies include Creative Commons licensing.

2018

2018

2018

2018

2018

2018

2018

2019
CAUL & AOASG joint statement on Plan S
welcoming the plan's aspirations.

2019
First two CAUL-negotiated transformative agreements
with Microbiology Society & Portland Press come into effect.

2019

2019

2019

2019

2019

2019

2019

2020
CAUL & AOASG open research consultations
National & international consultations on a potential policy approach to open research in Australia.

2020
CAUL Statement on Open Scholarship published

2020

2020

2020

2020

2020

2020

2020

2021
Chief Scientist statement on open access
Dr Cathy Foley noted that open access was one of her four pillars of work.

2021
AOASG becomes Open Access Australasia
Now comprised of 28 universities across Australia & New Zealand & five affiliate organisations.

2021

2021

2021

2021

2021

2021

2021

2021

2021



Version 2 | 27 September 2021



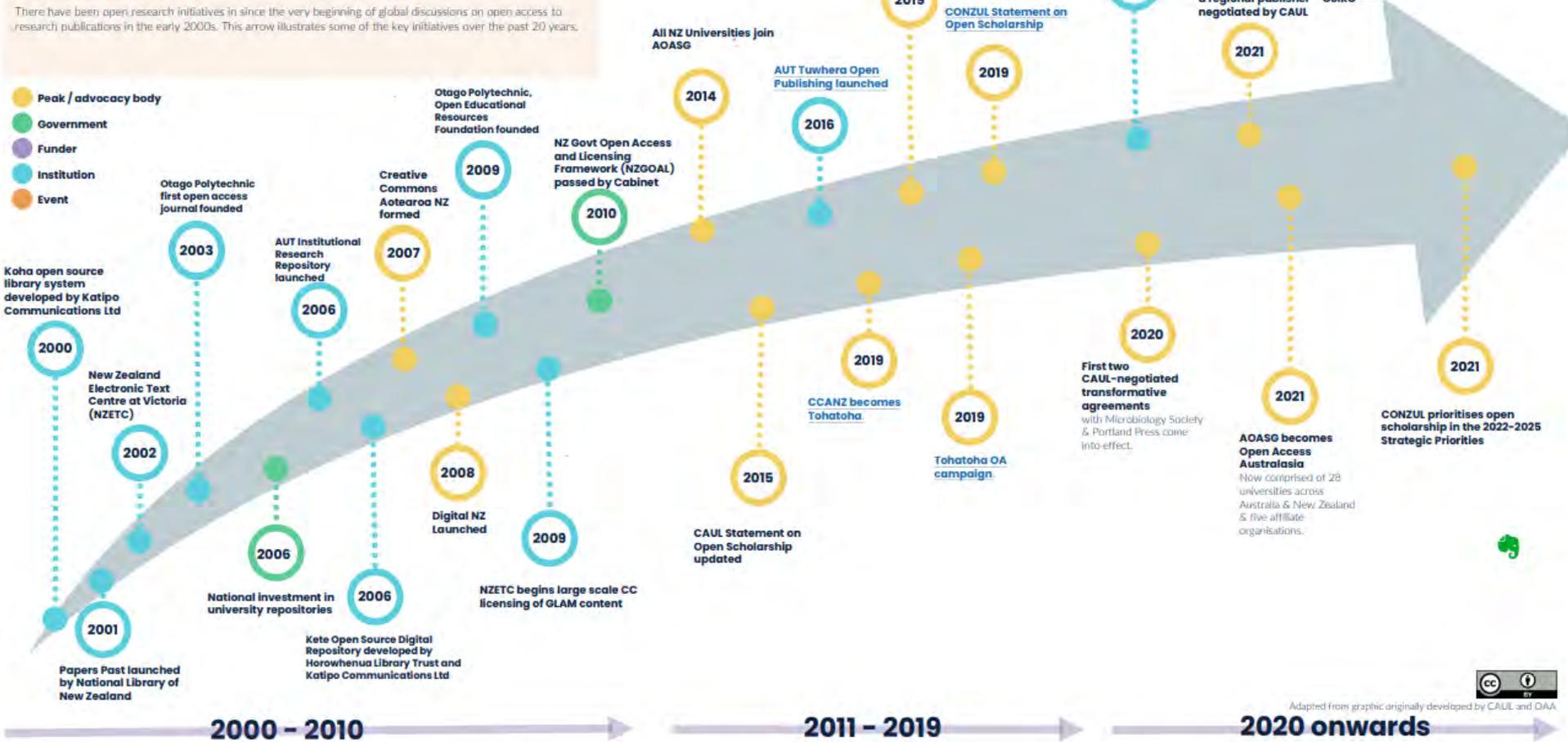
Please attribute CAUL & OAA

CONNECTING THE DOTS

20+ years of open in Aotearoa New Zealand

There have been open research initiatives in since the very beginning of global discussions on open access to research publications in the early 2000s. This arrow illustrates some of the key initiatives over the past 20 years.

- Peak / advocacy body
- Government
- Funder
- Institution
- Event



Case studies illustrate need for a coordinated approach

Case Study 1: Policy advisors can't access the research they need

Barriers to access academic research increases time frame for policy advice



The COVID-19 pandemic has shown how valuable it is to have immediate, free access to research to inform policy, but this is far from the norm for most research that policy advisors need to review.

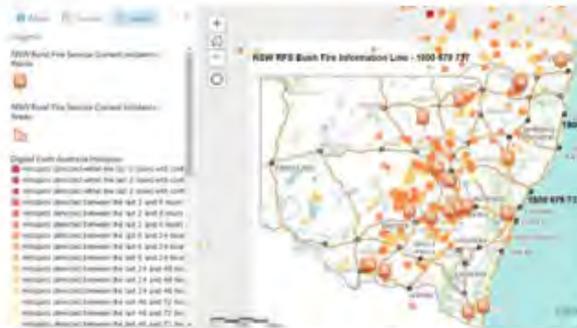
"Lack of access drastically increases the timeframe for policy work" – Health policy advisor

Spending on open research neither coordinated nor transparent

Responses to specific issues often siloed by sector & availability

Case Study 2: Mapping NSW Black Summer Bushfires

Responding to data gaps in real time



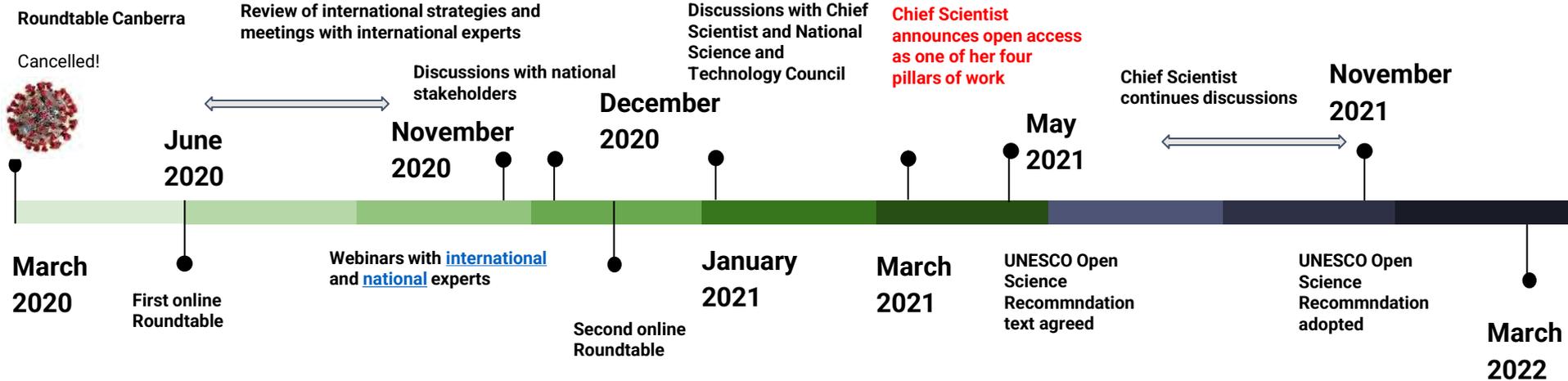
A map was created from open, yet disparate, data sources to show real time information of fire fronts in NSW during Black Summer, 2019.

Image taken: 20210224, 09:14

"Difference in the data update times really showed the challenge in what they [firefighters] were dealing with" – map creator

Making the case for a national approach for Open Research in Australia

Advancing Open Scholarship (FAIR)



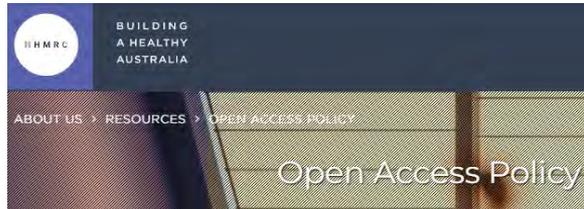
2021 in Australasian open science - policy

Achieving impact from Australian science

Wednesday, 17 March 2021



Dr Foley speaks at the Press Club.



Australia's Chief Scientist, Dr Cathy Foley, has named Open Access as one of the key pillars of her strategic work plan, and is the government's champion for Open Access in Australia.

NHMRC open access policy review

“These advantages of open access publishing have been clearly demonstrated over the last 15 months as governments have relied on emerging science for evidence-based policy to address the COVID-19 pandemic.”

Position statement - Open Science



Australian Academy of Science “maintains that the advancement of scientific knowledge is best served through the free, open, and accessibly distribution of high-quality peer-reviewed research.”

2021 in Australasian open science - advocacy & analysis

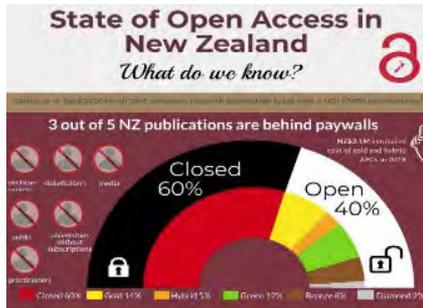


Advancing Open Scholarship (FAIR)

“Open scholarship and FAIR scholarly practices support the efficient dissemination of knowledge to researchers, students, policy makers and to the wider public, facilitate faster scientific discovery and problem solving, and underpin the integrity of research.”



“What has been made apparent during COVID-19 is the need for a broad conversation about how research publications are disseminated – specifically the need for universal open access to research globally.”



CONZUL open access project “Only two out of five articles by New Zealand researchers are free-to-access”

<https://www.caul.edu.au/programs-projects/advancing-open-scholarship-fair>

<https://oaaustralasia.org/2020/12/21/what-a-year-its-been/>

https://www.universitiesnz.ac.nz/sites/default/files/uni-nz/documents/oa-infographic_20200820%5B1%5D.pdf

<https://peerj.com/articles/11417/>

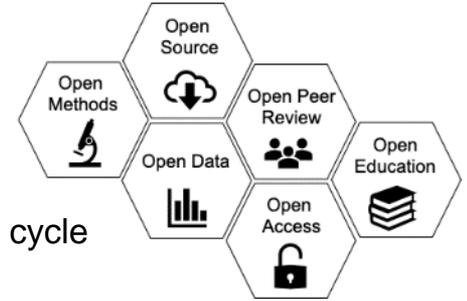


Open science initiatives triggered by COVID-19 in Australasia

Ongoing Australasian approaches to open research

What we've learnt

What we've learnt



COVID -19 showed that open science practices are essential across the research life cycle

- Need to be systematically planned and implemented
- Needs to be principle-led with equity at the forefront
- Infrastructure for open science remains fragmented, fragile and lacking capacity

The change in how we worked had some positive effects

- A wider range of people could participate in online global conversations (as in this conference)
- Interest in open educational resources was driven by understanding of inequity in current models

However

- Terms are still being dictated by service providers, not users
- Need a high-level champion to effect real change
- System-wide shift to a “bibliodiverse” open ecosystem requires political will and global collaboration

Feedback and follow up welcome!

Dr Ginny Barbour

director@oaaustralasia.org

<https://oaaustralasia.org/>

twitter: [@openaccess_australia](https://twitter.com/openaccess_australia)

Other than third party images

