

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

**APAN 53**  
March 9, 2022



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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





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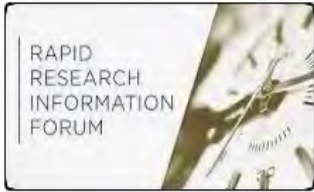
What we've learnt

# 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



New Zealand's COVID-19 research response



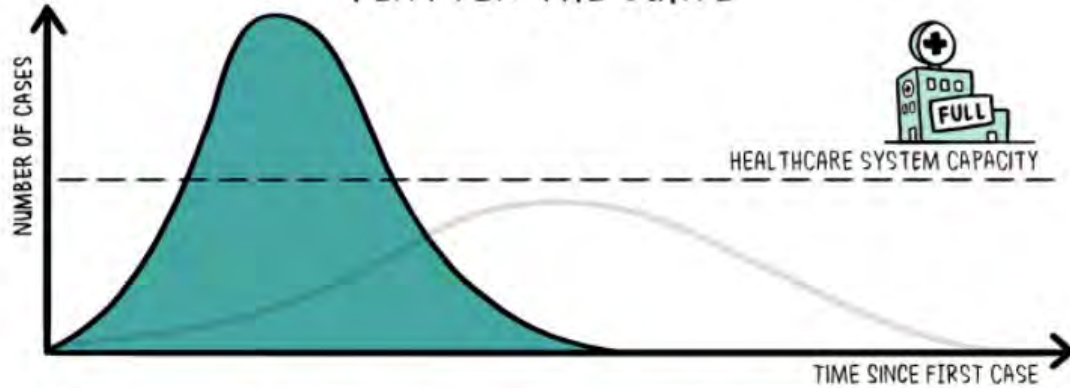
Open science: after the COVID-19 pandemic there can be no return to closed working

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!





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# 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.



Hover for links



Version 2 | 27 September 2021



Links & additional information

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

**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

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

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

**2006**

**2008**  
**Brisbane Declaration on Open Access published**

**2010**  
**CAUL Statement on Open Scholarship published**

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

**2008**

**2008**  
**AOASG formed**  
Supported initially by six universities to advocate for open access across Australia.

**2011**  
**National Research Infrastructure Roadmap published**

**2011**  
**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.

**2013**  
**Open Access & Research Conference held in Brisbane**  
Knowledge Unlatched launched at the conference. recommended all levels of government 'implement an open access policy for publicly-funded research'.

**2013**  
**data.gov.au launched**  
allowing access to anonymised public data published by federal, state & local government agencies.

**2013**

**2013**  
**CAUL Statement on Open Scholarship updated**

**2014**  
**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.

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

**2015**  
**Productivity Commission Report on Intellectual Property Arrangements**  
recommended all levels of government 'implement an open access policy for publicly-funded research'.

**2015**  
**CAUL Statement on Open Scholarship updated**

**2015**  
**Curtin Open Knowledge Initiative established**  
A hub for analysis and evaluation of open knowledge in higher education.

**2015**

**2015**  
**Australian Government Funding Arrangements for non-NHMRC Research**  
Inquiry recommends strategic approach to open research.

**2016**  
**Government response to Productivity Commission report**  
Accepted the report but did not act on it.

**2016**  
**CAUL & AOASG joint statement on Plan S**  
welcoming the plan's aspirations.

**2016**  
**CAUL & AOASG statement prior to federal election**  
advocating for a strategic approach to open research.

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

### 2011 - 2019

**2017**  
**Open Repositories Conference held in Brisbane**

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### 2020 - 2021

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### 2020 - 2021

**2020**  
**First two CAUL-negotiated transformative agreements**  
with Microbiology Society & Portland Press come into effect.

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

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### 2020 - 2021

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

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

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### 2020 - 2021



Please attribute CAUL & OAA

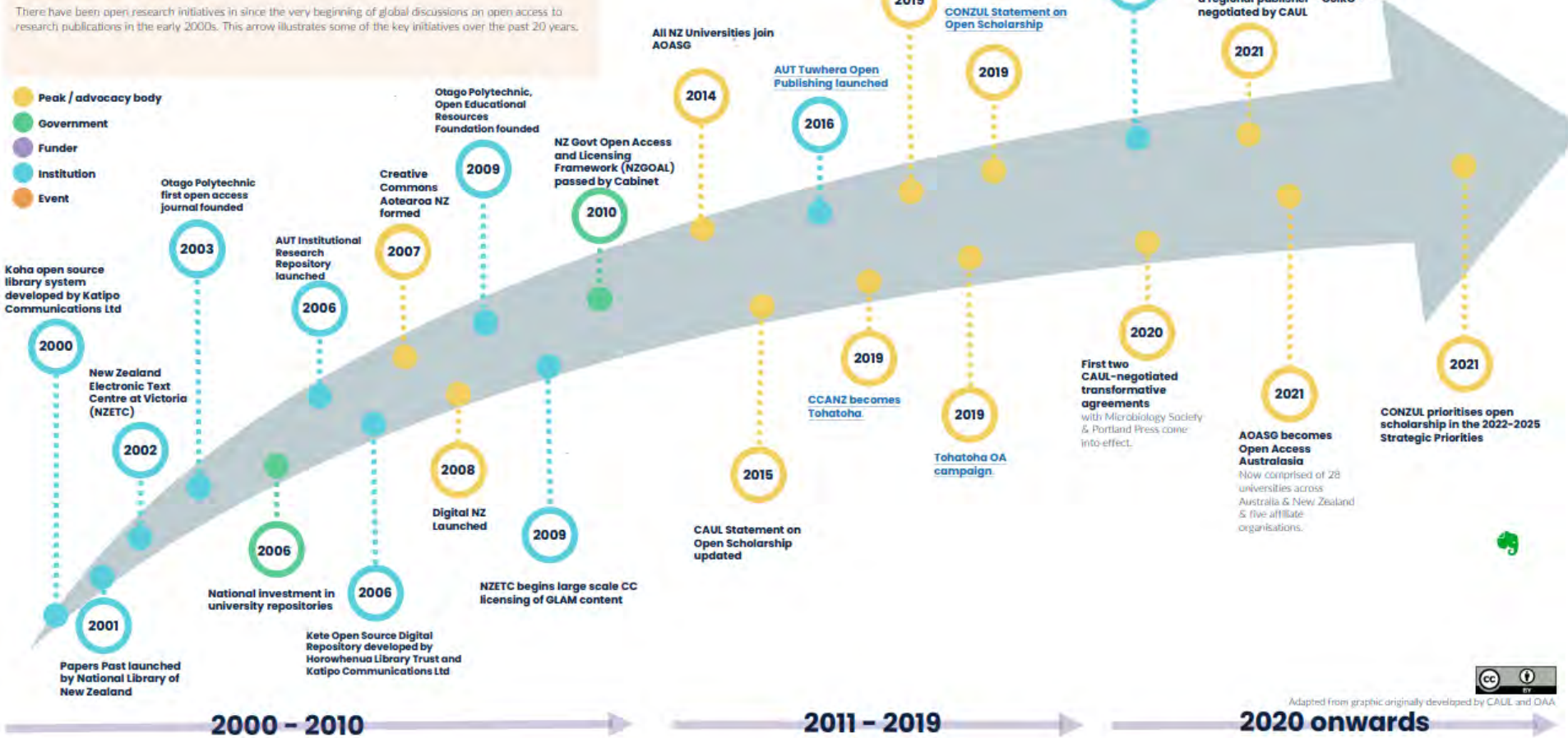


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## 20+ years of open in Aotearoa New Zealand

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# 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*



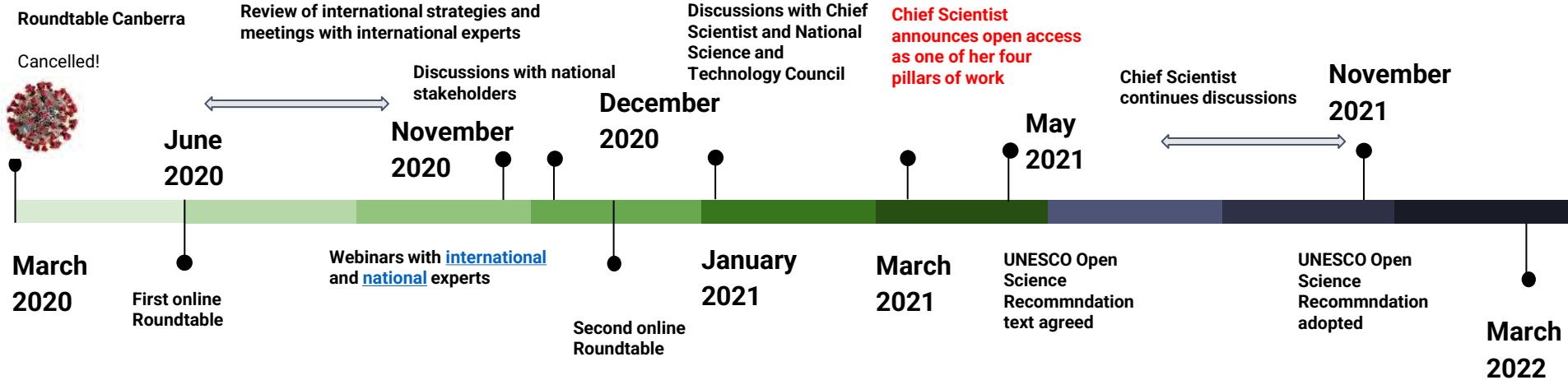
A map was created from open, yet disparate, data sources to show real time information of fire fronts in NSW during Black Summer, 2019.

Image taken: 20210224, 09:14

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

## Advancing Open Scholarship (FAIR)

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



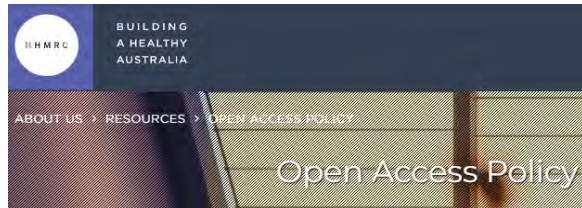
# 2021 in Australasian open science - policy

## 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

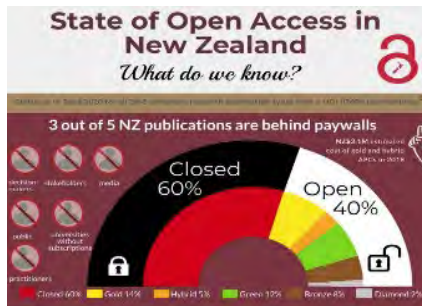


## Advancing Open Scholarship (FAIR)

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

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

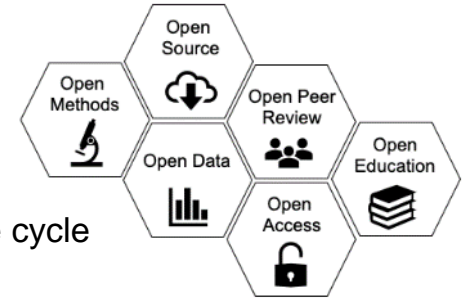


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COVID -19 showed that open science practices are essential across the research life cycle

- 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

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