

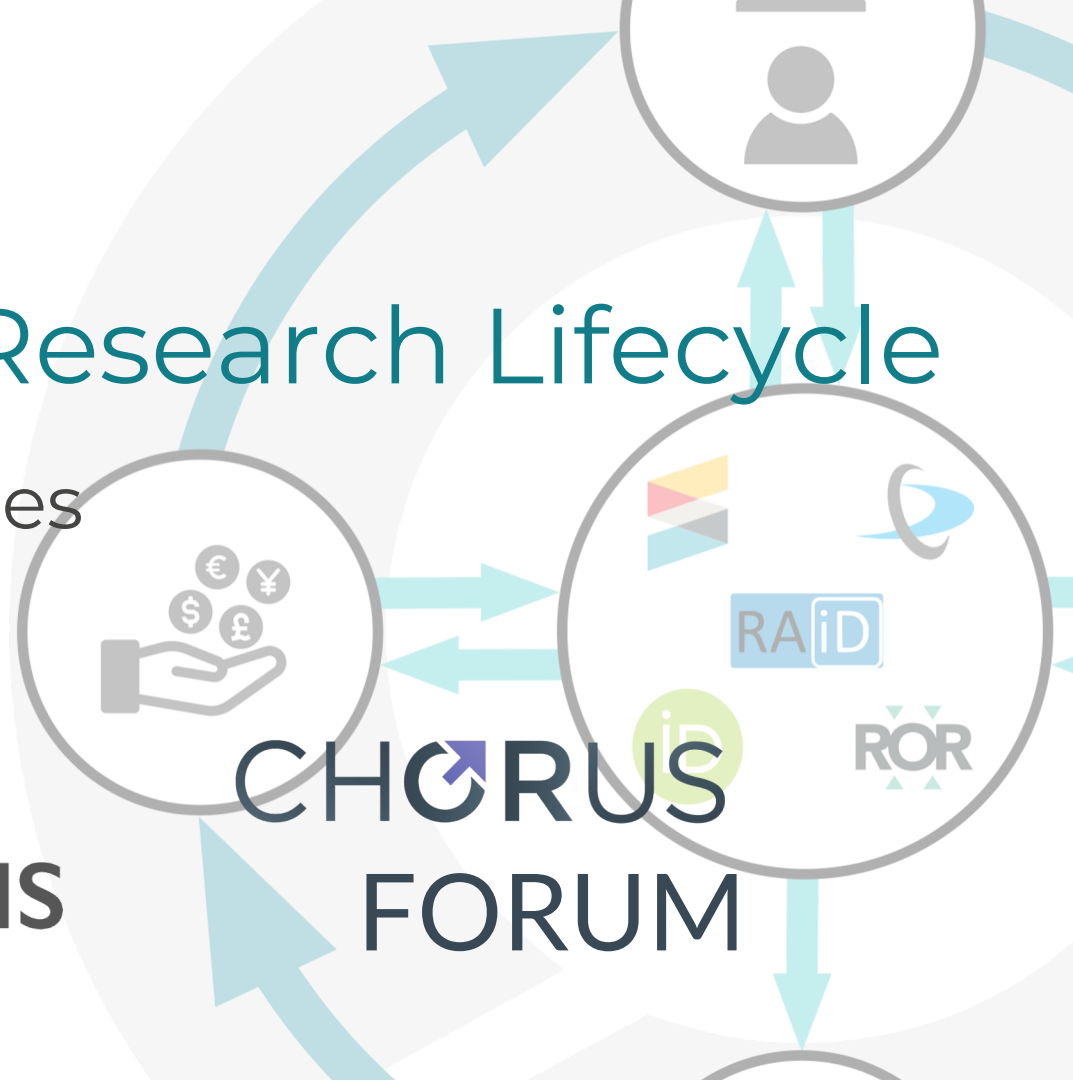
# Mapping the Research Lifecycle

Connecting the pieces

Phill Jones, PhD  
Co-founder, Digital and Technology

**MORE+BRAINS**

**CHORUS  
FORUM**

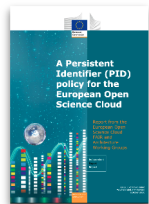


# Research to be open connected and trackable

## G7 Research Compact (2021)

Commitment to work together to improve “...availability, sustainability, usability, interoperability of research data, technologies, infrastructure and services”

<https://policycommons.net/artifacts/1592313/g7-2021-research-compact-pdf-356kb-2-pages/2282082/>



## High-level PID policy for EOSC (2020)

“...a future where PIDs can be used as the preferred method of referring to its assigned entity”

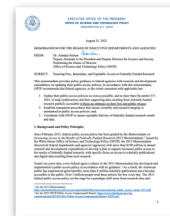
<https://doi.org/10.2777/926037>

## US Office of Science and Technology Policy memo

**Ensuring free, immediate and equitable access to federally funded research** (2022)

“...all author and co-author names, affiliations, and sources of funding, referencing digital persistent identifiers”

<https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf>



## UNESCO Recommendation on Open Science (2021)

“...the definition and attribution of open persistent identifiers as appropriate for each type of digital object, the necessary metadata for their efficient assessment, access, use and re-use...”

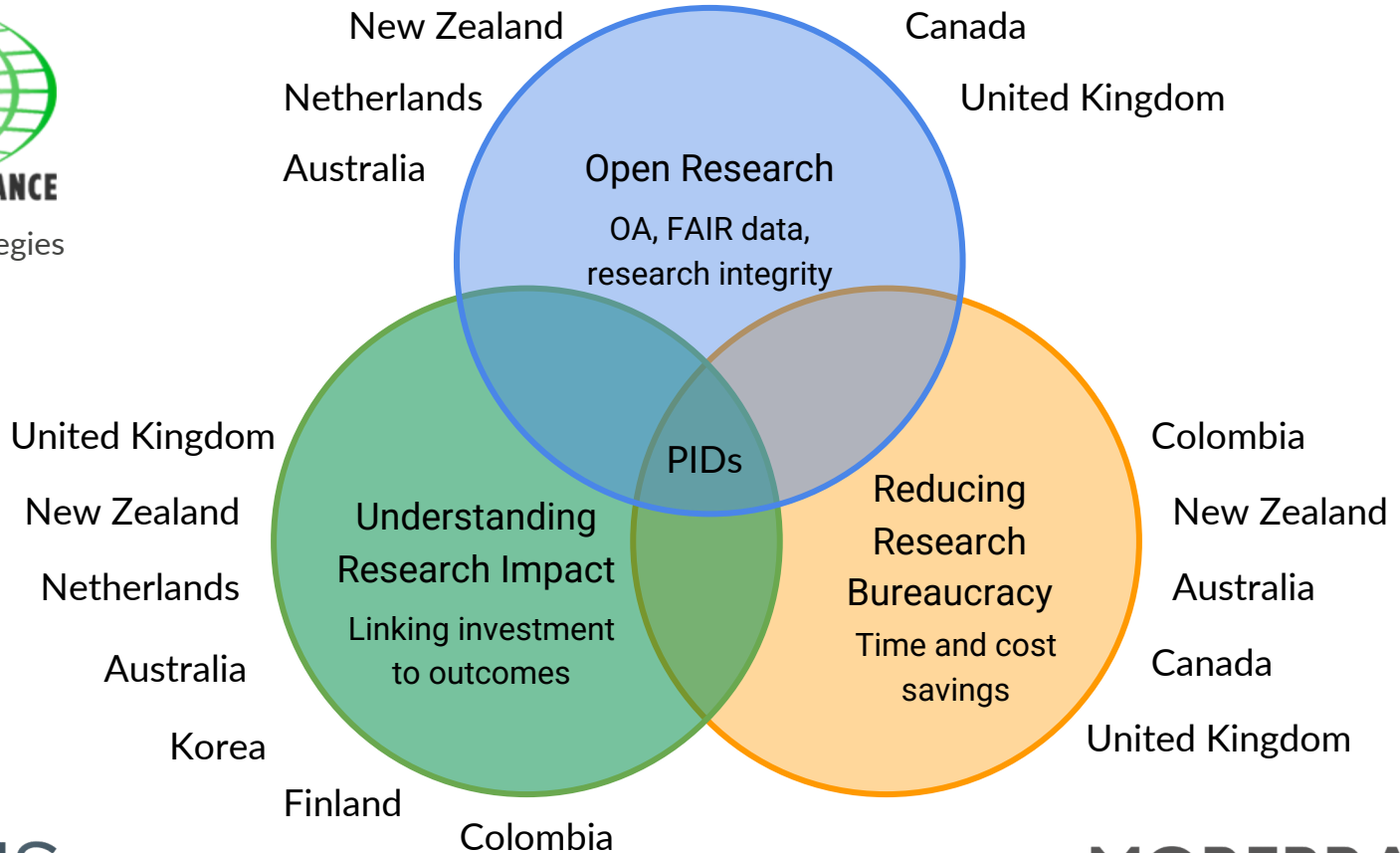
<https://doi.org/10.54677/MNMH8546>

# Key policy drivers



RESEARCH DATA ALLIANCE

National PID Strategies  
Interest Group



# | What are PIDs?

- PIDs are long-lasting, globally unique identifiers that 'resolve' to a location on the web

Often with...

- Metadata registries with defined, open schema for information storage and exchange

Importantly:

- Persistence is a function of organisations, it cannot be achieved through technology alone

**Persistent**



An organisation or governance framework exists to keep it alive

**IDentifier**



Globally unique alphanumeric string

## Other common characteristics

- Open and/or community governance
- Administered by a mission driven organizations or initiative
- Parachute / survival plan to ensure persistence

# PIDs that correspond to the core academic entities



*Grants* - Crossref DOIs for grants allows unique identification and certainty of referencing



*Persons* - ORCIDs represent a verifiable, reusable record of the employment, funding history, and research outputs of an individual



*Outputs* - DOIs as registered by both Crossref and DataCite are unique and permanent identifiers of publications and other outputs

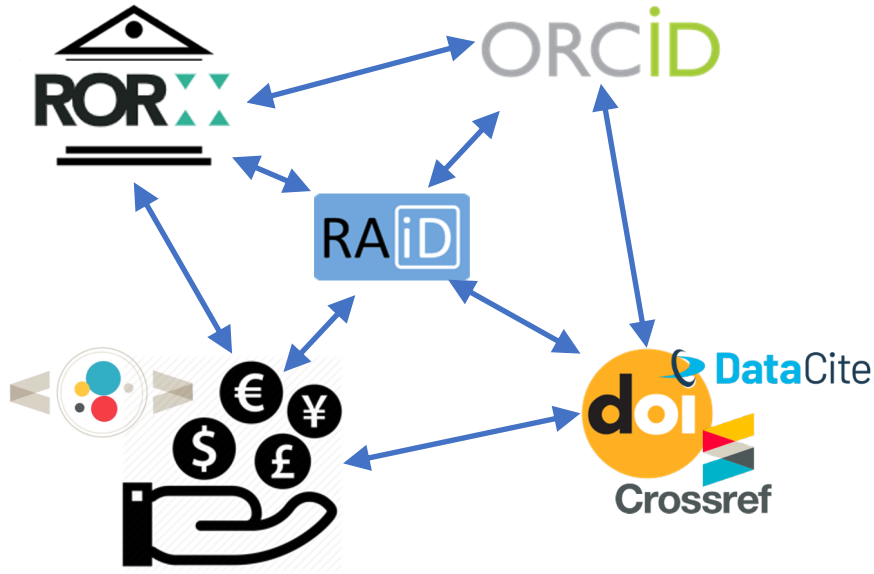


*Projects* - A portable container of research project activities connecting the people, publications, instruments and institutions involved

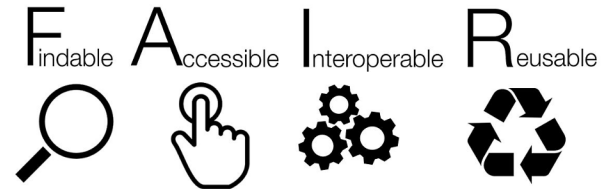


*Organisations* - Unique identifier for organisations for accurate discovery of the activities, outputs and impacts of research institutions

# Characteristics that make PIDs invaluable



- Unique
- Open metadata
- Don't change
- Connected to each other
- Can be read by computers
- Save effort and time when finding and compiling information



# Open Research

In the UK, the PID strategy began as a way to support the movement to open research



*“Jisc to lead on selecting and promoting a range of unique identifiers, including ORCID, in collaboration with sector leaders with relevant partner organisations.”*

Professor Adam Tickell, *Open access to research: independent advice* (2020)



<https://doi.org/10.5281/zenodo.5609266>



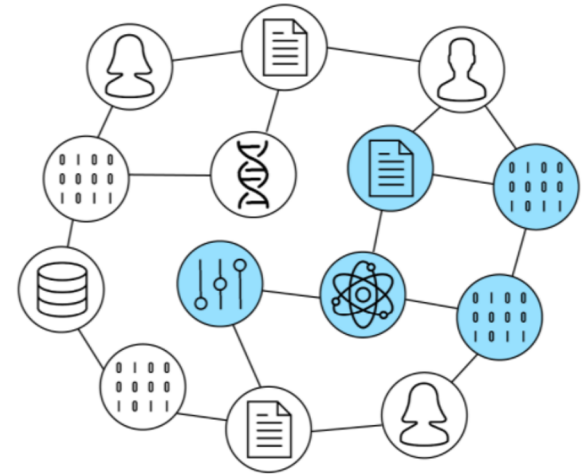
PIDs are considered fundamental to making research data Findable, Accessible, Interoperable and Reusable

FAIRsFAIR “Fostering FAIR Data Practices in Europe”,  
EU Horizon 2020 project: INFRAEOSC-2018-2020

# Research (impact) assessment

## PID metadata are the edges of the research graph

- Governments need to understand the impact of their investments in R&D
- Funders need to understand the research outputs associated with grants
- Institutions need to understand who they're collaborating with, where they're publishing and where their funding is coming from
- Researchers need to connect research outputs, collaborators and find funding opportunities
- Publishers need to understand which institutions their authors are from, and connect research outputs to make them discoverable



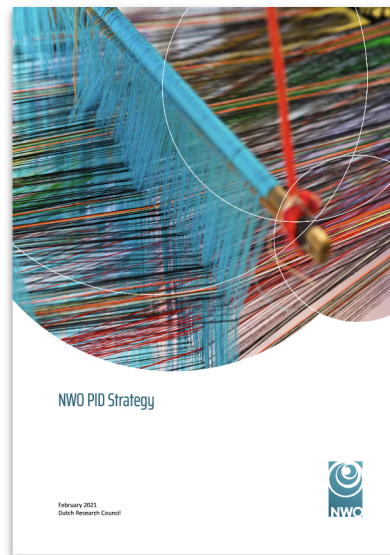
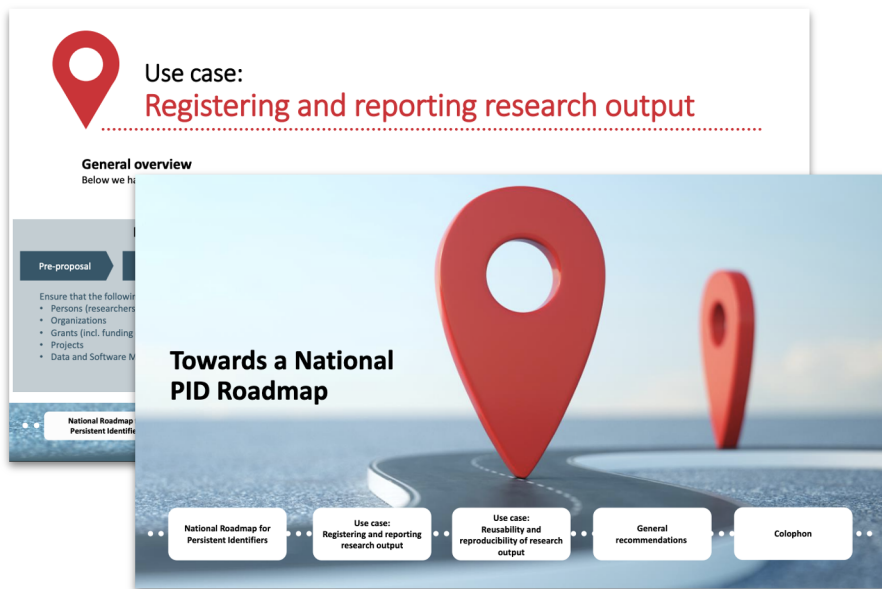
Introducing the PID Graph, Fenner and Aryani (2020)  
<https://www.project-freya.eu/en/blogs/blogs/the-pid-graph>



# Monitoring research impact

## Towards a National PID Roadmap (2022)

PID advisory board (NWO, DANS-KNAW, UKB, SURF and CWTS-Leiden University) [10.5281/zenodo.5849310](https://doi.org/10.5281/zenodo.5849310)



## NWO PID Strategy (2021)

*"We propose a persistent identifier strategy to improve NWO's capacity for analyzing the impact of research funding."*

# Administrative burden is reaching crisis point

Estimates of time spent on admin range from 10-42%

## nature

CAREER COLUMN | 17 June 2019

### 'I'll work on it over the weekend': high workload and other pressures faced by early-career researchers

Stress and long working hours are regrettably common among early-career researchers, reveals a survey by the Young Academy of Europe.

Toma Susi, Shaul Shalvi & Mangala Srinivas

<https://www.nature.com/articles/d41586-019-01914-z>



The Review endorses the proposal for a PID consortium made by MoreBrains in their report: 'The case for investment in a UK persistent identifier strategy: Resilience, insight, and leadership in global research and innovation' - Prof Adam Tickell

Independent report to HM govt. 2022

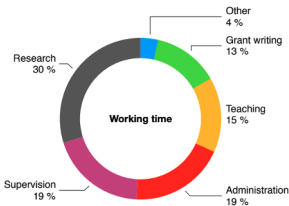
### If you love research, academia may not be for you

Dutch figures show just how little time professors get for their own research. It may be easier to pursue your intellectual interests outside the university system, says *THE* reporter David Matthews

November 8, 2018

David Matthews

<https://www.timeshighereducation.com/blog/if-you-love-research-academia-may-not-be-you>

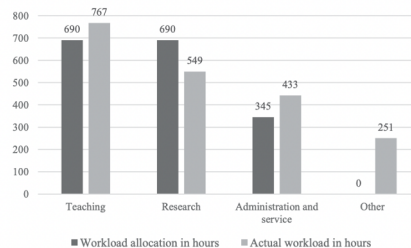


### Where does the time go? An academic workload case study at an Australian university

Julia Miller

To cite this article: Julia Miller (2019): Where does the time go? An academic workload case study at an Australian university, *Journal of Higher Education Policy and Management*, DOI: 10.1080/1360080X.2019.1635328

[10.1080/1360080X.2019.1635328](https://doi.org/10.1080/1360080X.2019.1635328)



I note the higher education sector's concern regarding the workload required for the current mode of delivery of the ERA assessment.

... I ask that the ARC identify ways to minimise administrative burden on researchers.

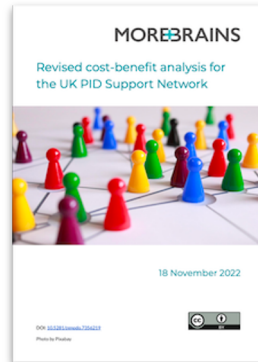
- Hon Jason Clare MP  
Minister for Education  
Statement of Expectations 2022

# Lack of integrations cause massive inefficiencies

## Revised cost-benefit analysis for the UK PID Support Network

- Cost of unnecessary rekeying of research management information into institutional systems in the UK
  - £19M / year
  - 55,000 person days / year
- Net savings after investment in the PID support network: £45 million

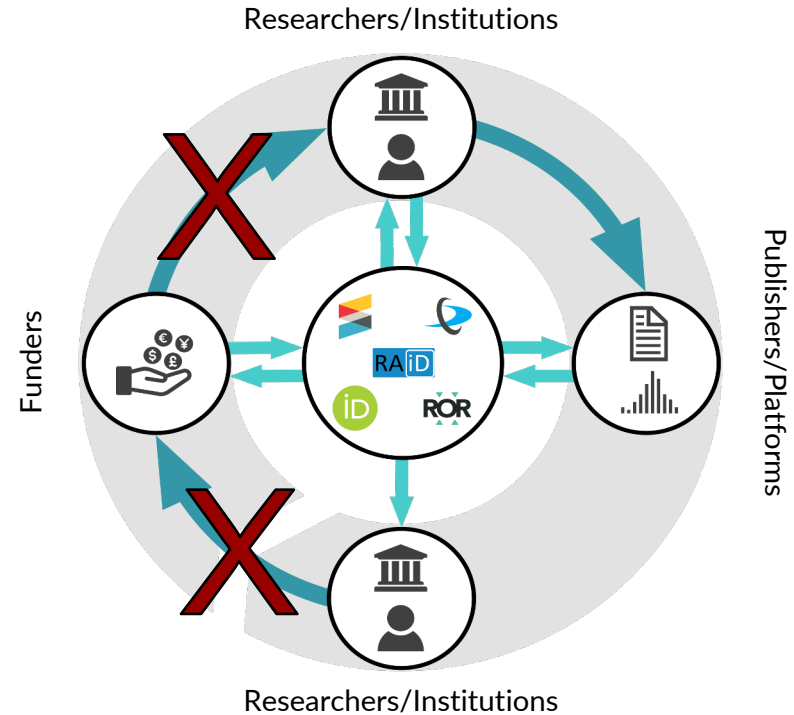
[10.5281/zenodo.7356219](https://doi.org/10.5281/zenodo.7356219)



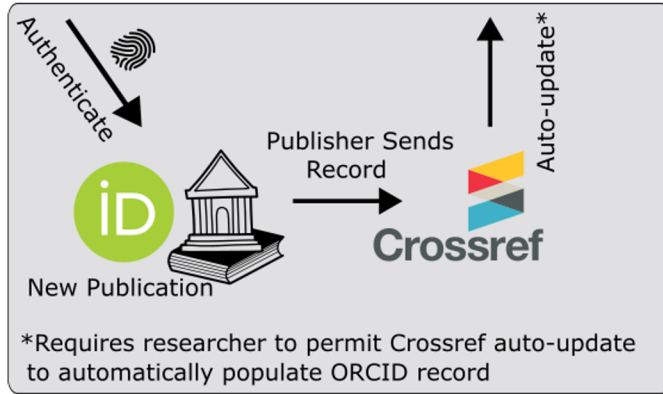
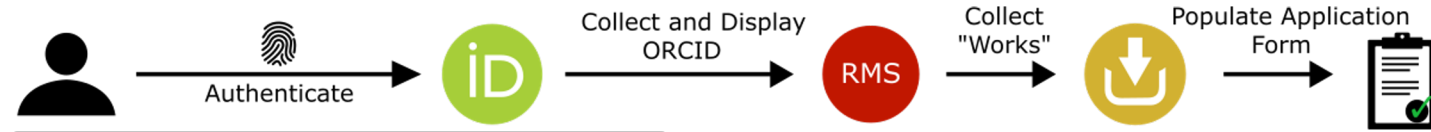
## Incentives to invest in identifiers: A cost-benefit analysis of persistent identifiers in Australian research systems

- Cost of unnecessary rekeying of research management information into institutional systems in Australia
  - \$24M AUD / year
  - 38,000 person days / year

[10.5281/zenodo.7100578](https://doi.org/10.5281/zenodo.7100578)

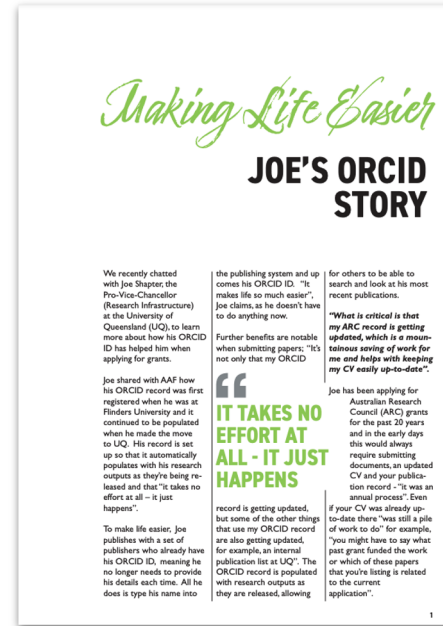


# Integrations save time: ORCID at ARC



*This saved me 3-4 days per grant application - the difference in workload was staggering!"*

- Joe Shapter, PVC (Research Infrastructure)  
University of Queensland



*Thank you!*

*Over to  
Lori Schultz*