



OpenAlex

Understanding your University's research

Today's Agenda

Overview

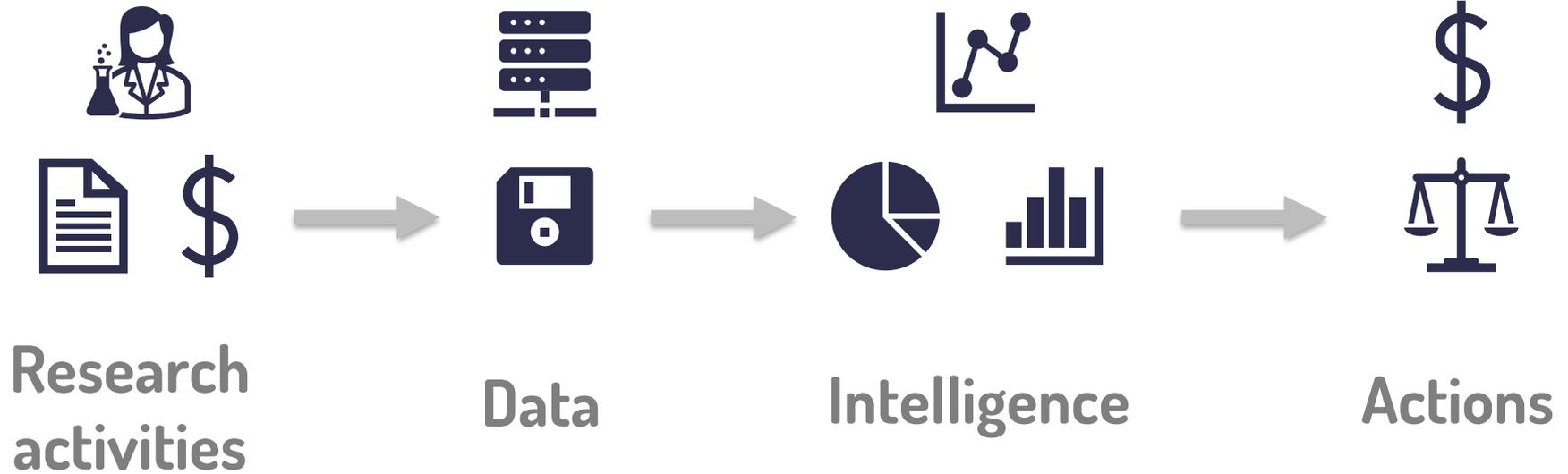
- OpenAlex & Research Intelligence

Institutional Use Cases

- the basics in OpenAlex
- common analyses for institutions

Q&A

Research intelligence: overview

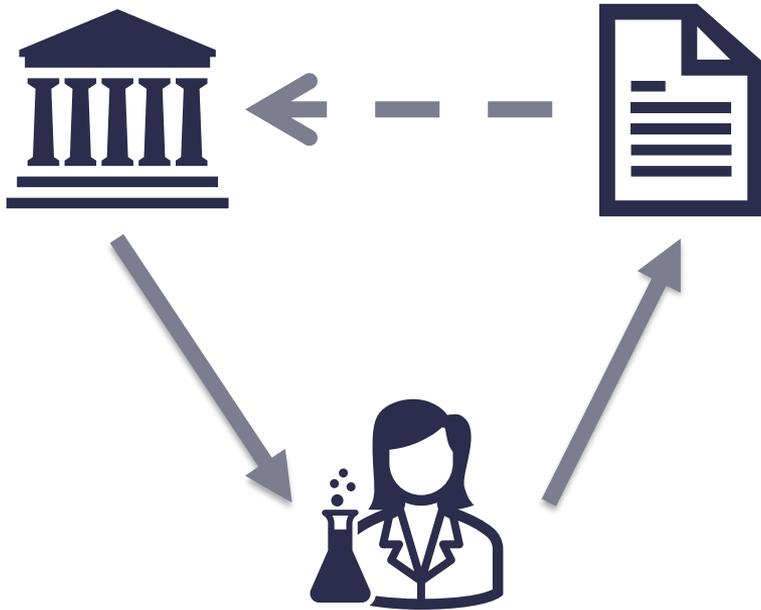


Research intelligence: University use cases

Research strategy
Reporting & compliance
Opportunity matching
Grant-writing

What research do we do?
Does our work advance SDGs?
Is there potential for interdisciplinary teams?
How are we progressing towards our OA goals?
How do we compare to our peers?
Who might be a good collaborator?
Which of our researchers work on a topic?
How can we demonstrate leadership in a field?

Research intelligence: the foundational challenge



Institutions don't get data on their research outputs.

They can't get data on comparator institutions.

OpenAlex indexes works & associated metadata

- Sources [248k] ←
- Concepts [65k] ←
- Publishers [10k] ←
- Institutions [107k] ←
- Works [245M] ←
- Funders [32k] ←
- Authors [93M] ←

Sudden collapse of a mesopredator reveals its complementary role in mediating rocky reef regime shifts

Work (Article)

[HTML](#)

Published: 2018
Source: Proceedings of The Royal Society B: Biological Sciences
Authors: Jenn M. Burt (Simon Fraser University); M. Tim Tinker (University of California, Santa Cruz); Daniel K. Okamoto (Florida State University, Simon Fraser University); Kyle W. Demes (University of British Columbia, Simon Fraser University); Keith Holmes (Tula Foundation); Anne K. Salomon (Simon Fraser University)
Concepts: Trophic cascade, Mesopredator release hypothesis, Reef

Cited by: 76
Cites: 55
Related: 10

Abstract

While changes in the abundance of keystone predators can have cascading effects resulting in regime shifts, the role of mesopredators in these processes remains underexplored. We conducted annual surveys of rocky reef communities that varied in the recovery of a keystone predator (sea otter, *Enhydra lutris*) and the mass mortality of a mesopredator (sunflower sea star, *Pycnopodia helianthoides*) due to an infectious wasting disease. By fitting a population model to empirical data, we show that sea otters had the greatest impact on the mortality of large sea urchins, but that *Pycnopodia* decline corresponded to a 311% increase in medium urchins and a 30% decline in kelp densities. Our results reveal that predator complementarity in size-selective prey consumption strengthens top-down control on urchins, affecting the resilience of alternative reef states by reinforcing the resilience of kelp forests and eroding the resilience of urchin barrens. We reveal previously underappreciated species interactions within a 'classic' trophic cascade and regime shift, highlighting the critical role of middle-level predators in mediating rocky reef state transitions.

Funders (4) ↓

Locations (3) ↓

Identifiers (4) ↓

OpenAlex as your research intelligence solution:

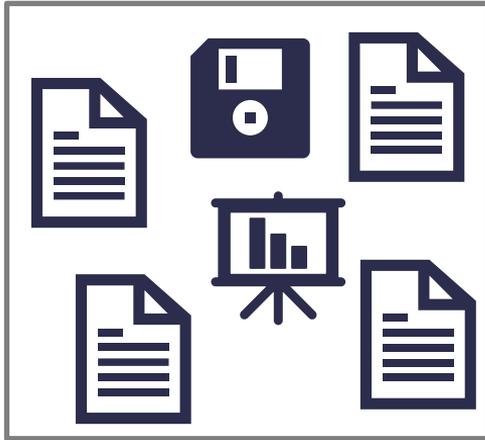
- It's Big.
- It's Open.
- It's Easy.

Research intelligence: Filter & Group by



Finding your institution's work

All works

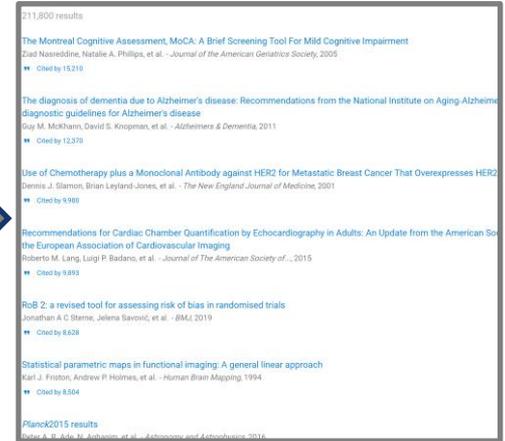


Logic layer

Filter:
Institution

*Find & select
your institution*

Results



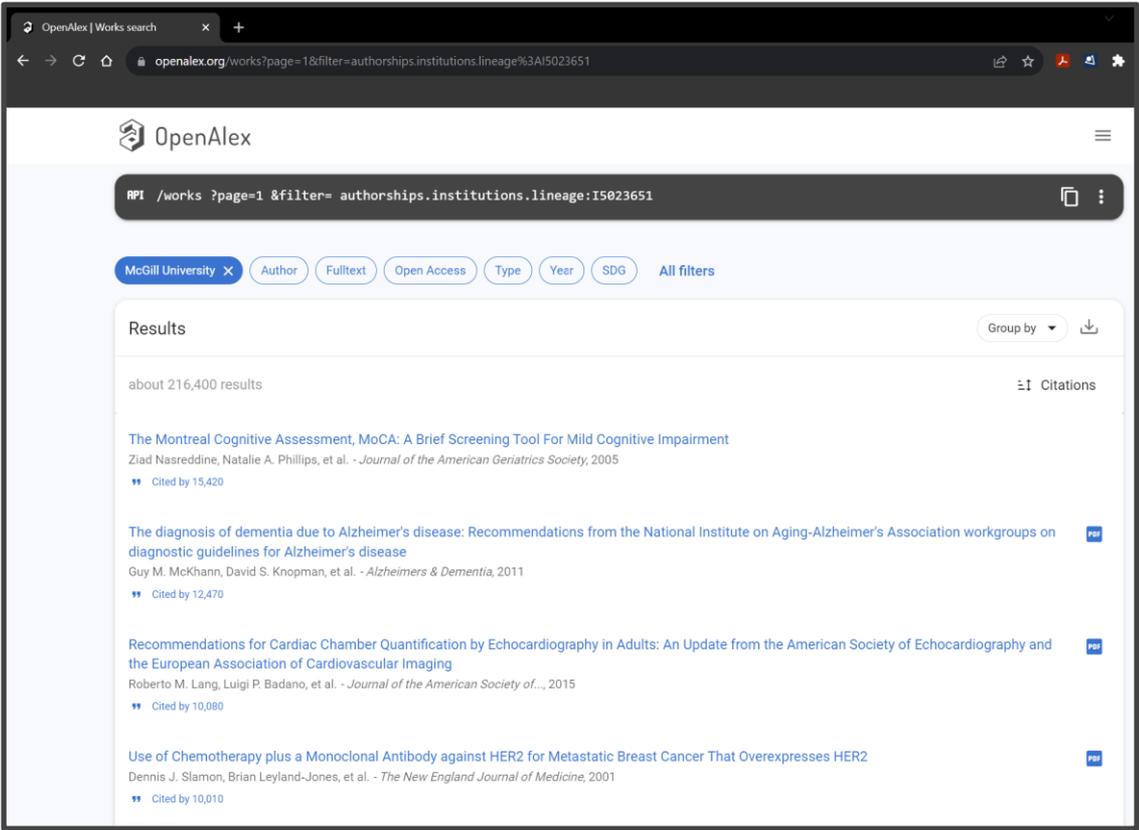
Finding your institution's works

UI link 

API call 

Filters 

Results 

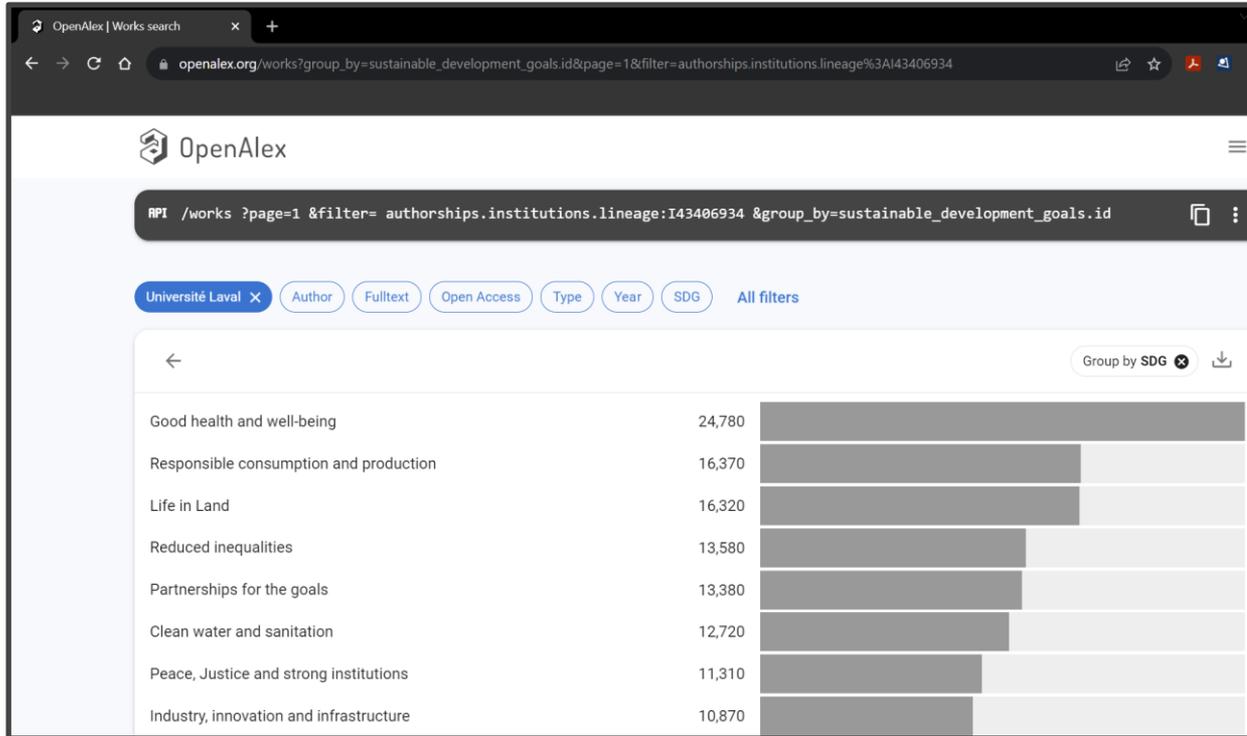


The screenshot shows a web browser window with the OpenAlex search interface. The URL in the address bar is `openalex.org/works?page=1&filter=authorships.institutions.lineage%3A%3A5023651`. The page header includes the OpenAlex logo and a navigation menu. Below the header is a search bar containing the API endpoint `/works?page=1&filter=authorships.institutions.lineage:IS023651`. A filter bar shows 'McGill University' selected, along with other filters like 'Author', 'Fulltext', 'Open Access', 'Type', 'Year', and 'SDG'. The main content area is titled 'Results' and shows 'about 216,400 results'. A 'Group by' dropdown and a download icon are visible. The results list includes several entries with titles, authors, and citation counts. For example, the first entry is 'The Montreal Cognitive Assessment, MoCA: A Brief Screening Tool For Mild Cognitive Impairment' by Ziad Nasreddine, Natalie A. Phillips, et al., with 15,420 citations. Other entries include 'The diagnosis of dementia due to Alzheimer's disease: Recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease' (12,470 citations) and 'Recommendations for Cardiac Chamber Quantification by Echocardiography in Adults: An Update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging' (10,080 citations).

 Info

 Export
 Sort

Intelligence on your institution's work



UI link



API call



Group by
Export



Intelligence

https://api.openalex.org/works?page=1&filter=authorships.institutions.lineage:143406934&group_by=sustainable_development_goals.id

Common research intelligence use cases

Use Case	Filters	Group by	Consider additional filters
Showcasing research outputs	Institution	Open Access Source / Work Type	Year(s)
Understanding your contributions to topics	Your institution	Sustainable Development Goals	Open Access
Identifying collaborators	Institution	Institution or Institution (corresponding)	Authors Count Year(s)
Understanding collaborations	Institution (A) AND Institution (B)	SDGs / Concepts Year(s)	Source type Institution type
Benchmarking	SDG / Concept	Country, Institution, and/or Author	Country, and/or Institution Type
Find researchers working on a topic	Concept / SDG or Search terms	Researcher	Year(s) and/or Country
Monitoring progress on Open Access goals	Institution [AND OA]	OA; Year [Source; Authors]	Funders

Showcasing outputs ex: Open Access over time

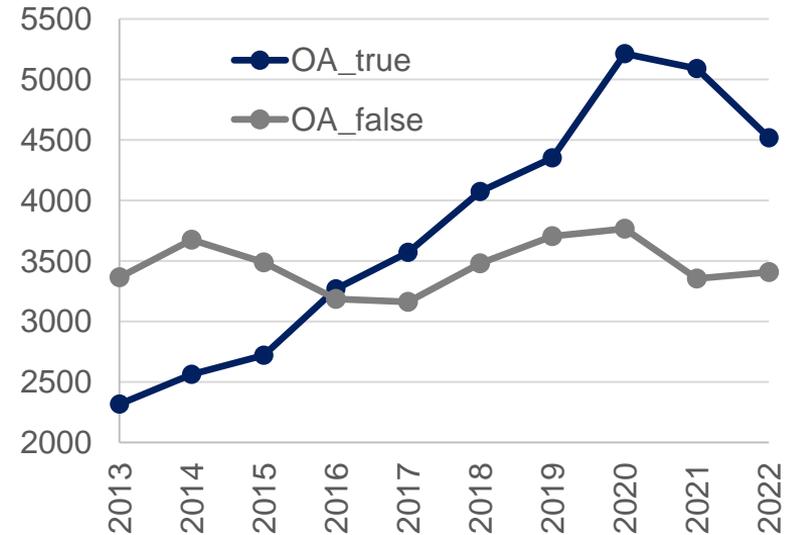
How have our OA practices changed in the last decade?

Filters:

- Institution: University of Arizona
- Open Access: true/false
- Source type: journal

Summarize by:

- Publication year



https://api.openalex.org/works?page=1&filter=authorships.institutions.lineage:l138006243,open_access.is_oa:true,primary_location.source.type:journal&group_by=publication_year

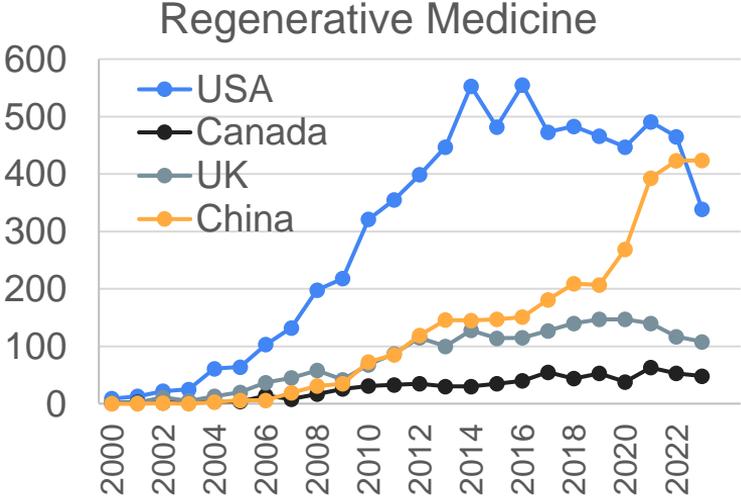
Benchmarking countries ex: Regenerative Medicine

How do countries compare in their publications relating to Regenerative Medicine over the past decade?

- Filters:**
- **Concept:** *Regenerative Medicine*
 - **Source type:** journal
 - **Work type NOT:** paratext
 - **Year:** >2000
 - **Country:** CA, US, UK, CH

Summarize by:

- **Publication year**



https://api.openalex.org/works?page=1&filter=concepts.id:C10854531,primary_location.source.type:journal,type:!paratext,publication_year:2000-,institutions.country_code:CA&group_by=publication_year

Peer intelligence ex: SDG Contribution Profiles

How do our SDG contributions compare to peers?

Filter:

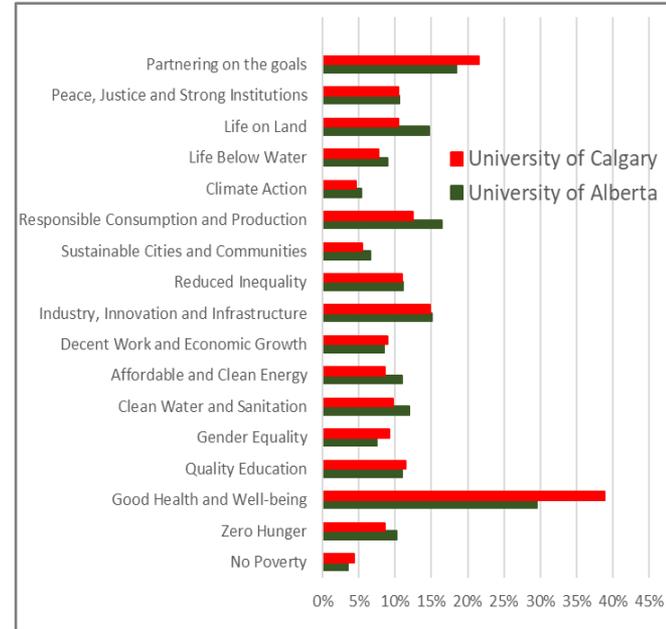
- Institution: University of Alberta
- Year: 2010-

Filter:

- Institution: University of Calgary
- Year: 2010-

Summarize by:

- SDGs [Sustainable Development Goals]



https://api.openalex.org/works?page=1&filter=publication_year:2010-
[,authorships.institutions.lineage:1168635309&group_by=sustainable_development_goals.id](https://api.openalex.org/works?page=1&filter=publication_year:2010-)

Finding experts ex: kelp forest researchers

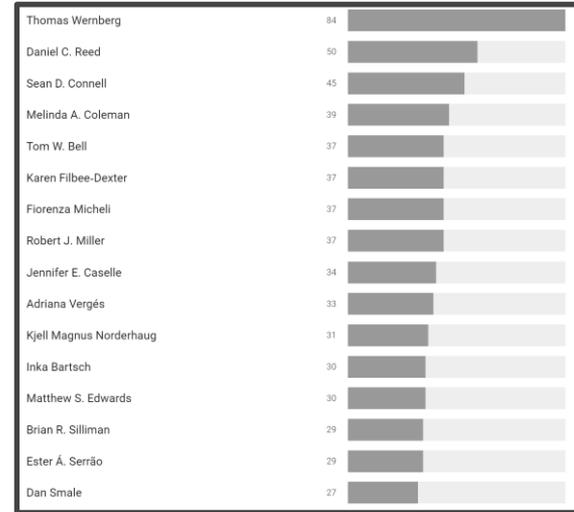
Finding all the kelp forest researchers to organize a knowledge synthesis project.

Filters:

- Search terms: kelp forest
- Source type: Journal
- Year: 2013-

Summarize by:

- Author



https://api.openalex.org/works?page=1&filter=default.search:kelp+forest,primary_location.source.type:journal,publication_year:2013-&group_by=authorships.author.id

Finding institutions ex: Gender Equality in medicine

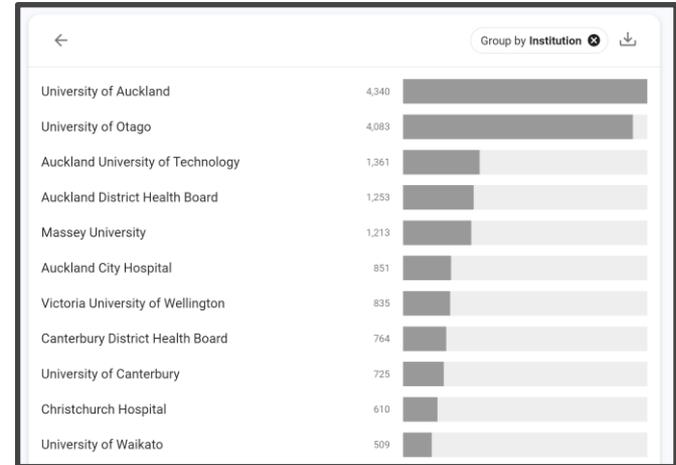
Which insitutions in New Zealand are working on Gender Equality work in medicine?

Filters:

- SDG: Gender Equality
- Concept: 'medicine' or 'family medicine'
- Country: New Zealand
- Authors count: 1-10

Summarize by:

- Institution



https://api.openalex.org/works?page=1&filter=sustainable_development_goals.id:https://metadata.un.org/sdg/5,concepts.id:C71924100|C512399662,institutions.country_code:NZ,authors_count:1-10

Understanding collaborations ex: UCLA-UBC

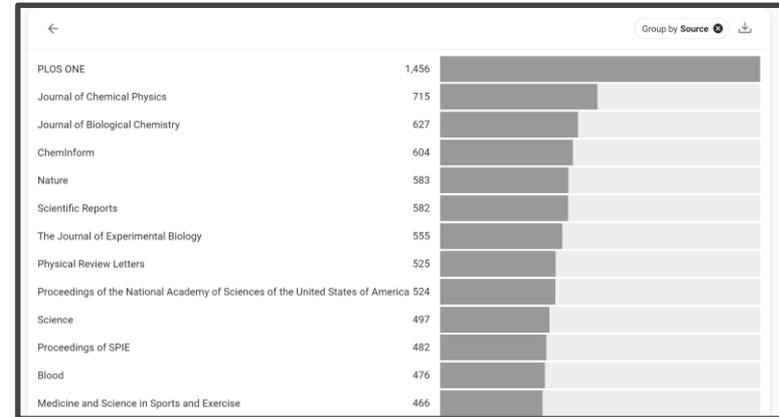
Where are collaborations between UCLA and UBC published most frequently?

Filters:

- Institution: UCLA and UBC
- Work type: article
- Source type: journal
- Authors count: 1-10

Summarize by:

- Source

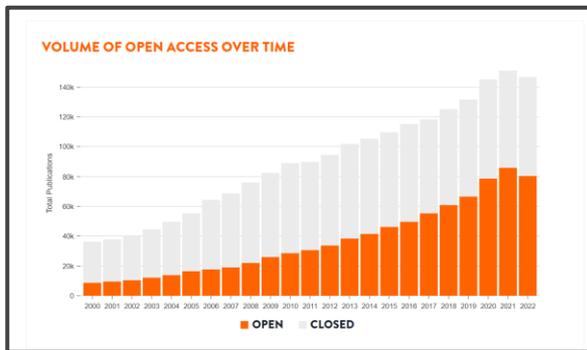


https://api.openalex.org/works?page=1&filter=authorships.institutions.lineage:1141945490+1161318765,type:article,primary_location.source.type:journal,authors_count:1-10&group_by=primary_location.source.id

Advanced use cases

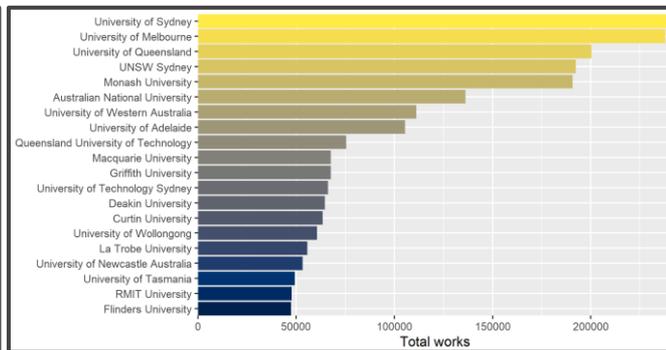
Open APIs allow for limitless additional analyses

RI dashboards



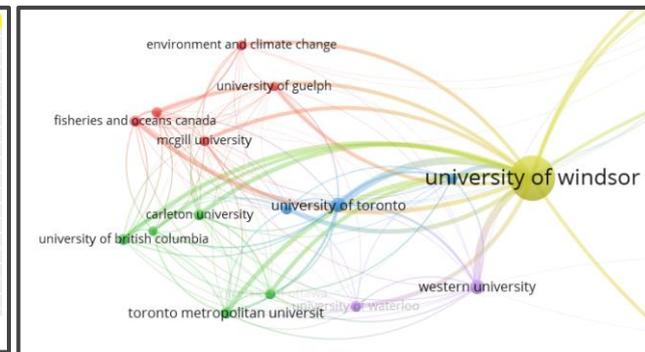
<https://open.coki.ac/country/CAN/>

RI analyses in R



<https://docs.ropensci.org/openalexR/>

VOSviewer without downloading



<https://www.vosviewer.com/>

Institutional data curation

Coming soon.

text file guides walking through best practices for identifying errors
templates for submitting data curation requests

Call for collaborations.

want to increase your institution's data accuracy and help us make a process that scales?
we're looking for a few librarians to collaborate. Let us know if that's you!

**Quick-hit tutorials coming soon.
Have use cases you want highlighted?**

<https://openalex.org/feedback>