



OpenAlex

International Intelligence

Today's Agenda

Context

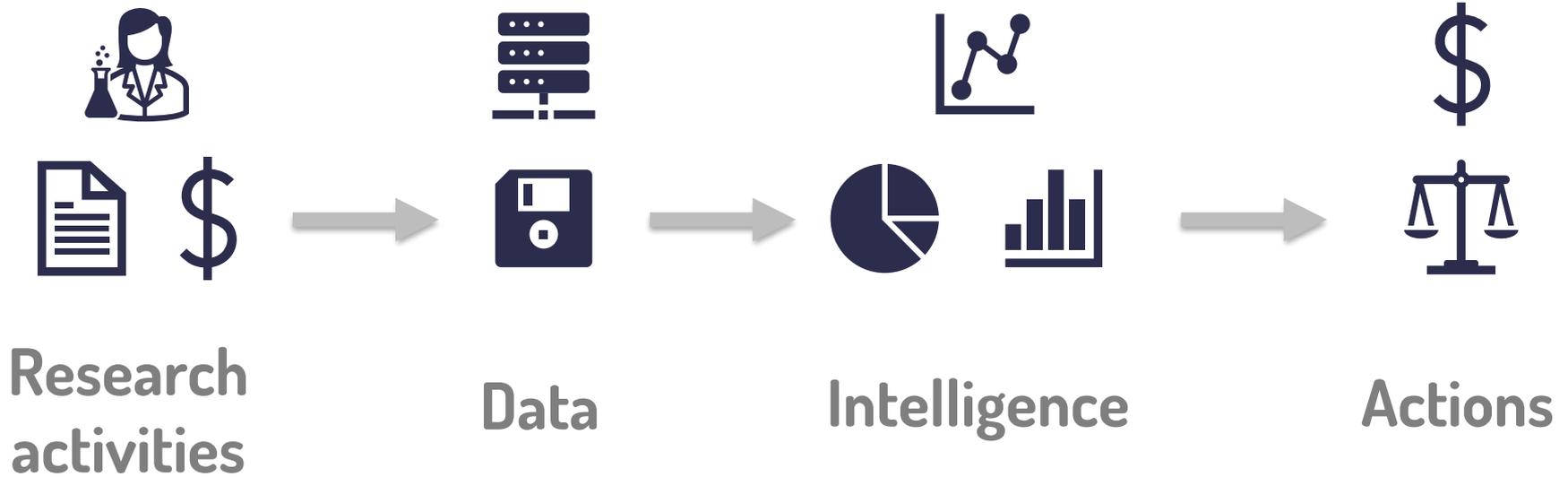
- OpenAlex & International Intelligence

Use Cases

- User Interface walk-through of common use cases
- University of Washington's international dashboard

Q&A

International intelligence: overview



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.

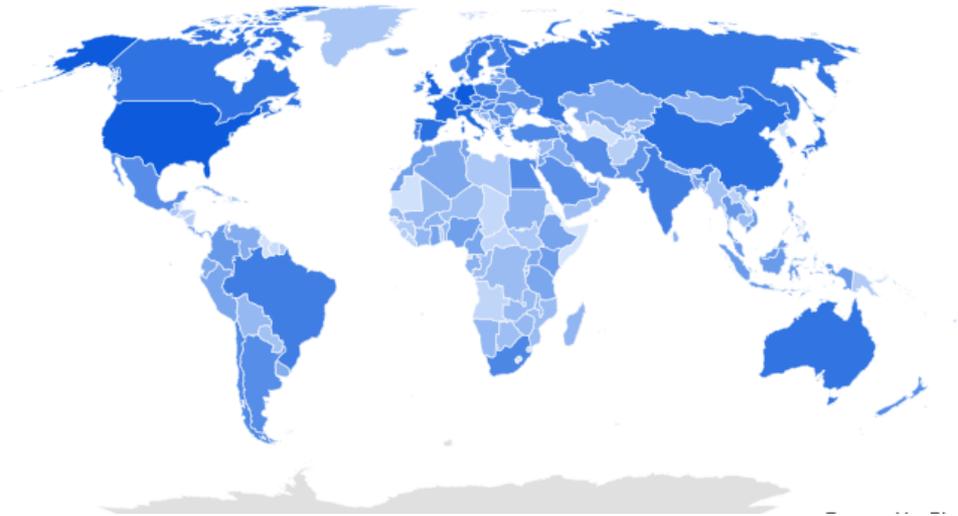
Funders (4) ↓

Locations (3) ↓

Identifiers (4) ↓

International intelligence: University use cases

- Which countries do we collaborate with?
- How are we contributing to UN SDGs?
- Which institutions do we collaborate with in a particular country?
- Which countries lead in focus areas?
- Which of our researchers collaborate with a specific country?
- How do we compare to other countries in the shift to Open Science?



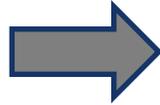
Filter & Count by

Filters

- Year
- Institution
- Search terms
- Country
-
- Concept



Results



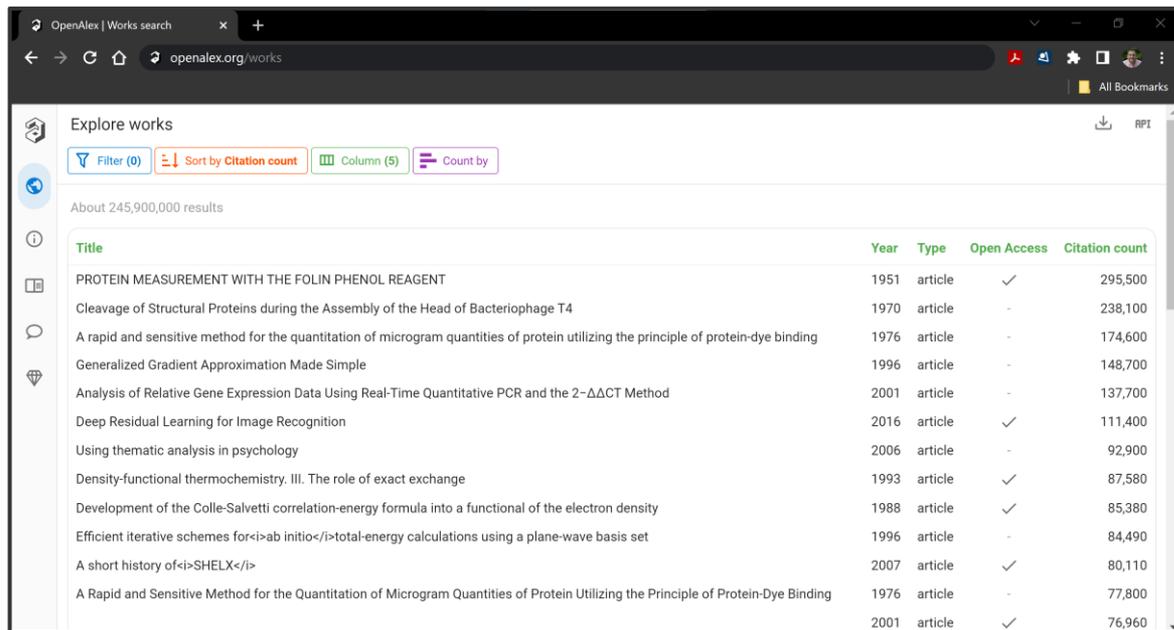
Count by



International Intelligence: examples in OpenAlex

Use Case	Filters	Group by
Understanding your contributions to topics	Country X	Sustainable Development Goals / Concepts
Identifying collaborators	Country X / Institution X	Country / Institution
Understanding collaborations	Country (X) <u>AND</u> Country (Y)	SDGs / Concepts Year(s)
Benchmarking	SDG / Concept	Country, Institution, and/or Author
Find researchers for a specific international research opportunity	Country <u>AND</u> Search terms	Researcher
Monitoring progress on Open Access goals	Country [AND OA]	OA; Year [Source; Authors]

User Interface now in Beta!



The screenshot shows the OpenAlex Works search interface. The browser address bar displays 'openalex.org/works'. The page title is 'Explore works'. Below the title, there are filters: 'Filter (0)', 'Sort by Citation count', 'Column (5)', and 'Count by'. The page indicates 'About 245,900,000 results'. A table of results is displayed with columns: Title, Year, Type, Open Access, and Citation count. The table lists several articles, including 'PROTEIN MEASUREMENT WITH THE FOLIN PHENOL REAGENT' (1951, 295,500 citations) and 'Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4' (1970, 238,100 citations).

Title	Year	Type	Open Access	Citation count
PROTEIN MEASUREMENT WITH THE FOLIN PHENOL REAGENT	1951	article	✓	295,500
Cleavage of Structural Proteins during the Assembly of the Head of Bacteriophage T4	1970	article	-	238,100
A rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein-dye binding	1976	article	-	174,600
Generalized Gradient Approximation Made Simple	1996	article	-	148,700
Analysis of Relative Gene Expression Data Using Real-Time Quantitative PCR and the 2- $\Delta\Delta$ CT Method	2001	article	-	137,700
Deep Residual Learning for Image Recognition	2016	article	✓	111,400
Using thematic analysis in psychology	2006	article	-	92,900
Density-functional thermochemistry. III. The role of exact exchange	1993	article	✓	87,580
Development of the Colle-Salvetti correlation-energy formula into a functional of the electron density	1988	article	✓	85,380
Efficient iterative schemes for ab initio total-energy calculations using a plane-wave basis set	1996	article	-	84,490
A short history of SHELX	2007	article	✓	80,110
A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding	1976	article	-	77,800
	2001	article	✓	76,960

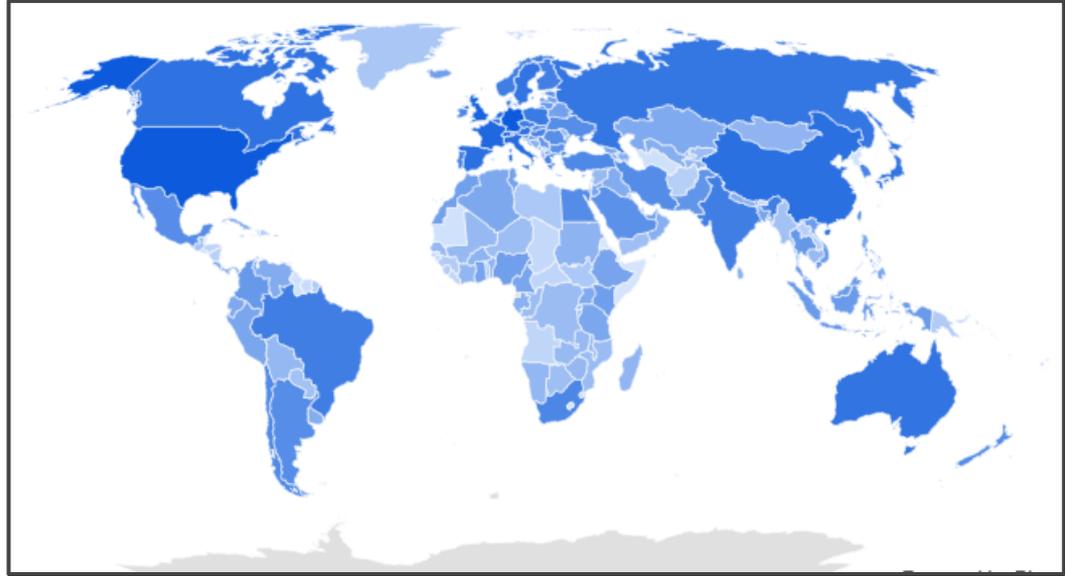
Access at: openalex.org

Walk through tutorials coming soon. Until then: play around and send us feedback!

openalex.org/feedback

Open interface means shareable, repeatable results

Completely open data and UI means you can share data and analyses with anyone!



**OpenAlex is better live.
Let's jump in.**

<https://openalex.org/works>

Link to University of Washington's International Intelligence dashboard that we'll review.

<https://www.washington.edu/global/publications/>