Internationalization

i-index

The *i* number of co-author countries in more than *i* publications

> For each publication by a given researcher/institution, derive the list of countries of the co-authors' institutions;

Remove duplicated countries;

Sum the number of instances per country across all publications;

Order countries by their sum;

Calculate *i* as the number of countries whose sum is higher or equal than their rank when ordered.

Representativeness



Overlap between an author's collaborative network and the expected network if co-authors were distributed independently of country GDP

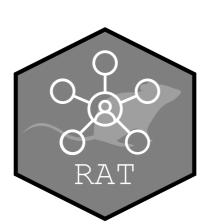
> Calculate the expected and observed distribution (in log octaves) of global GDPs per capita of all countries represented in a set of publications:

> Remove duplicated countries within a single publication; count multiple time countries across publications:

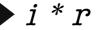
Exclude the author's own country;

Standardize expected and observed distributions:

Calculate r as the sum of minimum values among expected and observed for each octave.



 $i = max \{ i \in N : Ci \ge i \}$



weighted i-index



Promote recognition of scientific partnerships

Incentivize collaboration and transfer of knowledge among countries

Promote the use of more inclusive metrics within Academic evaluations at personal and institutional levels



