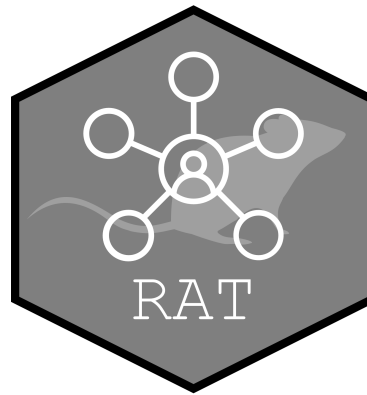


Inclusiveness

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

r-index

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 overlap between expected and observed distributions, i.e., the sum of minimum values among expected and observed for each octave

$$i * r$$

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

