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# RM Lecture 1 & 2

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# THE IMPACT FACTOR (I.F.)

**Eugene Garfield**

(1925 – 2017)

Introduced the impact factor in 1963.

Source: http://www.garfield.library.upenn.edu

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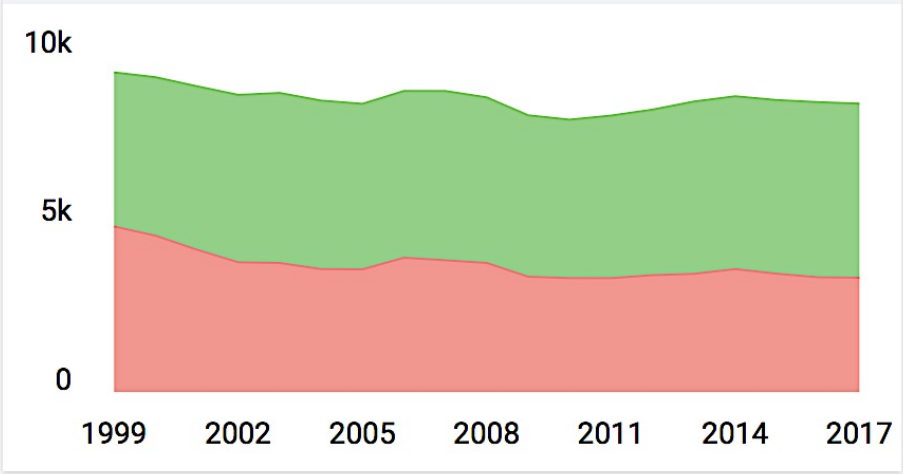
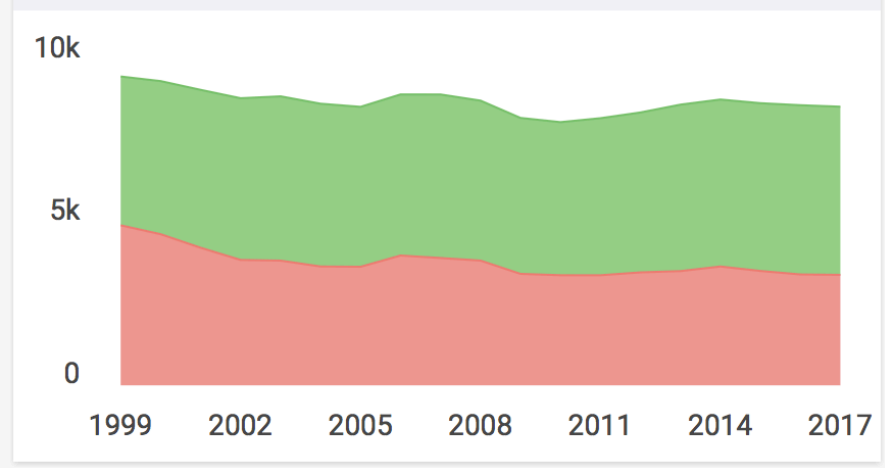
# Even Science & Nature…




**Science**

Cited documents Uncited documents

**Nature**




Source: https://www.scimagojr.com/

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# BIBLIOGRAPHY DATABASES

- **Google Scholar**
  - Free
  - Indiscriminate
  - H5-Index

- **Clarivate Analytics ISI WOS**
  - Oldest commercial citation database
  - Institutionalized
  - Impact Factor

- **Scopus**
  - Introduced in 2004
  - Broader coverage than ISI
  - SNIP

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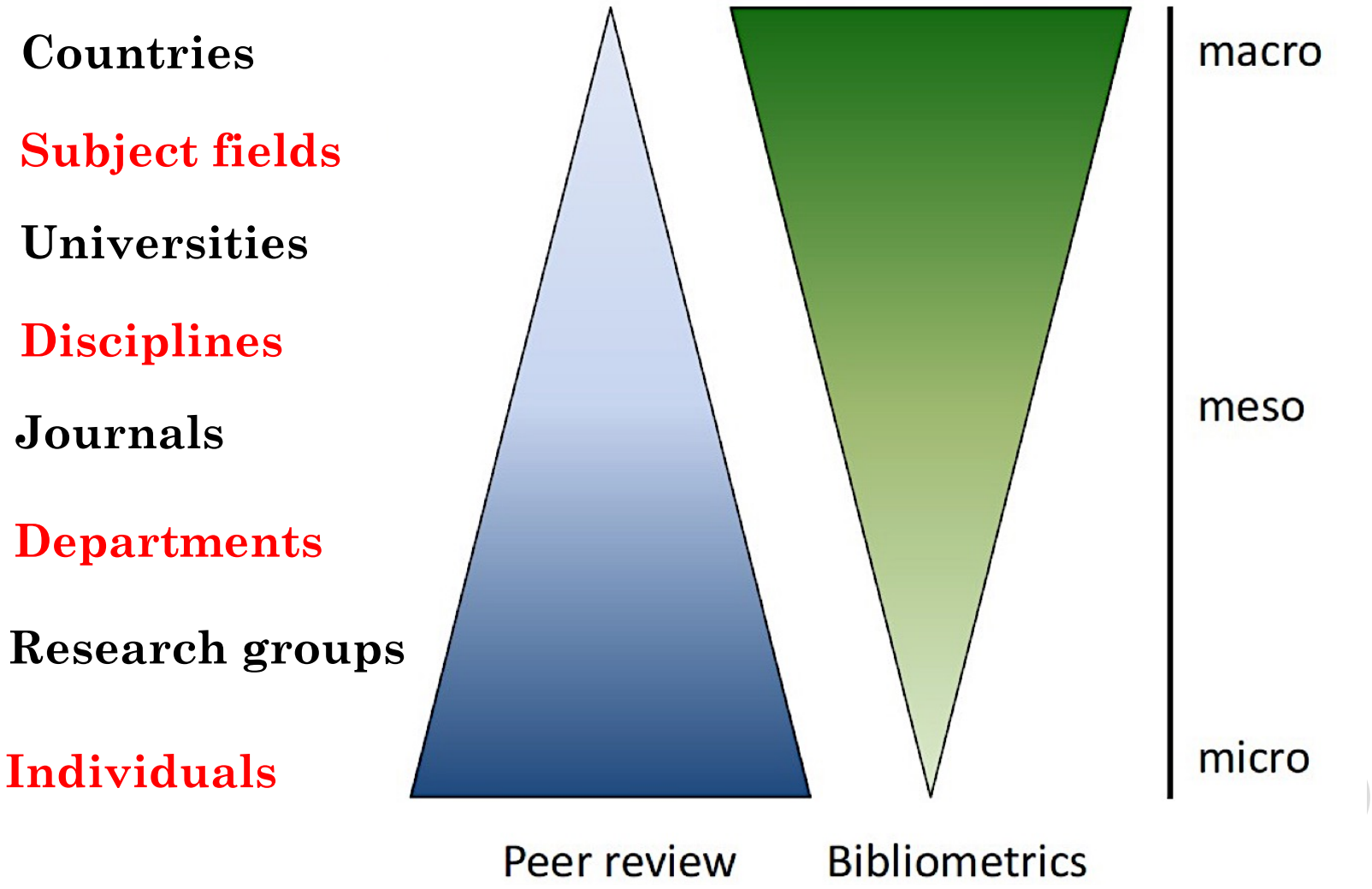
# Packing research in a number!

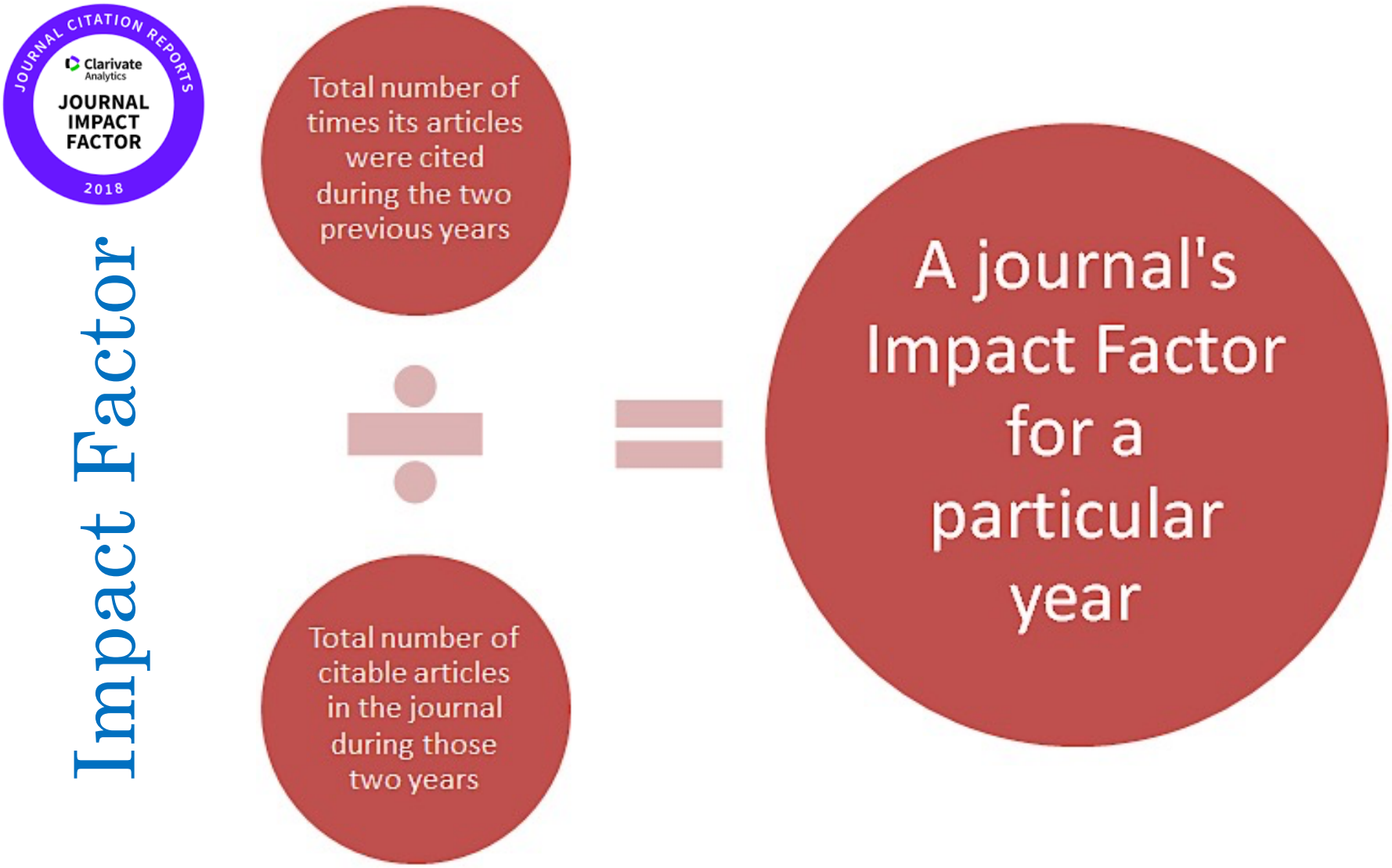
- **Bibliometrics**
  - Impact Factor
  - SNIP
  - SJR
  - H-5 Index
  - …
- **Peer Review**
  - Core ERA Rankings
  - ABS Rankings
  - Conference Rankings
  - …

# The Weight of Qualitative vs Quantitative




Source: Glanzel, 2011

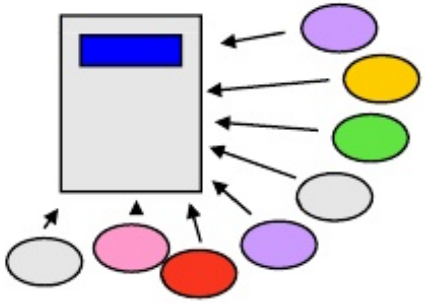
# Impact Factor (IF)



# Source Normalized Impact per paper (SNIP)

- The **SNIP** measures contextual citation **impact** by weighting citations based on the total number of citations in a subject field. It's the ratio of 3 years Scopus based IF by Database Citation Potential.

1. Collect papers citing 1-3 year old papers in target journal in 2009



2. Collect reference lists of citing papers

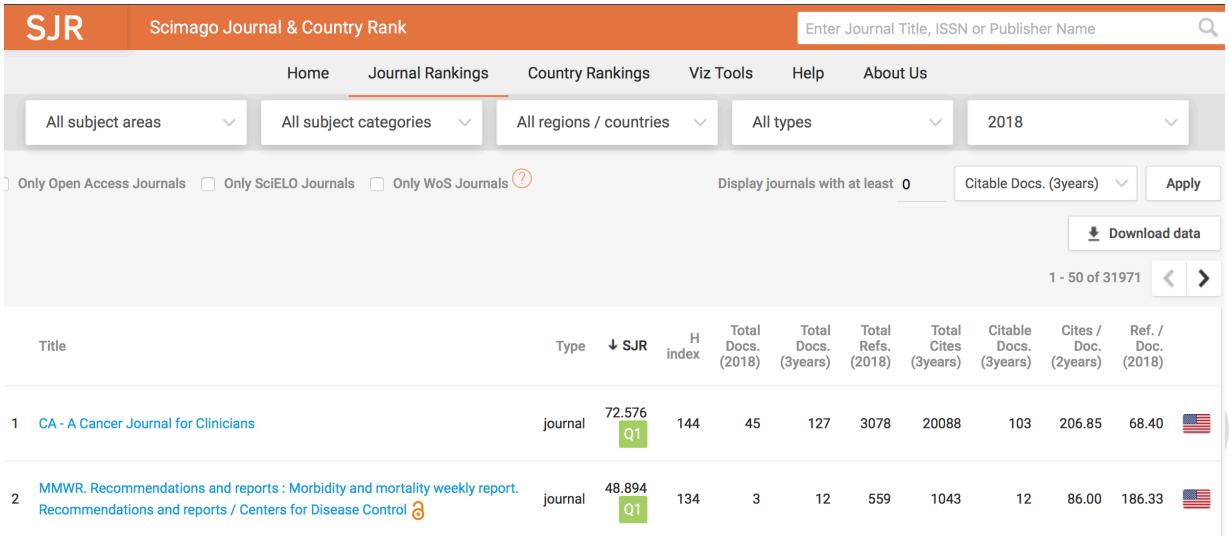
3. Count number of references in citing papers to any (in any journal) 1-3 year old papers

4. Citation Potential = average number of references to any 1-3 year old papers

# SCIMAGO JOURNAL RANK (SJR)

- Based on the **eigenvector centrality** measure used in network theory. Such measures establish the **importance of a node** in a network based on the principle that connections to high-scoring nodes contribute more to the score of the node.

https://www.scimagojr.com/



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# GOOGEL SCHOLAR METRICS

- Google Scholar Metrics provide an easy way for authors to quickly gauge the visibility and influence of recent articles in scholarly publications. Scholar Metrics summarize recent citations to many publications, to help authors as they consider where to publish their new research.
- https://scholar.google.com

Google Scholar

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# EXCELLENCE RESEARCH AUSTRALIA

- The Computing Research and Education Association of Australasia, CORE, is an association of university departments of computer science in Australia and New Zealand. The latest guide includes a total of **1630** conferences.

**http://www.core.edu.au/**

CORE
Computing Research & Education

**A* - 04%**
**A - 14%**
**B - 26%**
**C - 49%**
**Other- 8%**

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# ASSOCIATION OF BUSINESS SCHOOLS

- A guide to the range, subject matter and relative quality of journals in which business and management academics publish their research. The latest guide includes a total of **1582 journals**.

**https://charteredabs.org/**

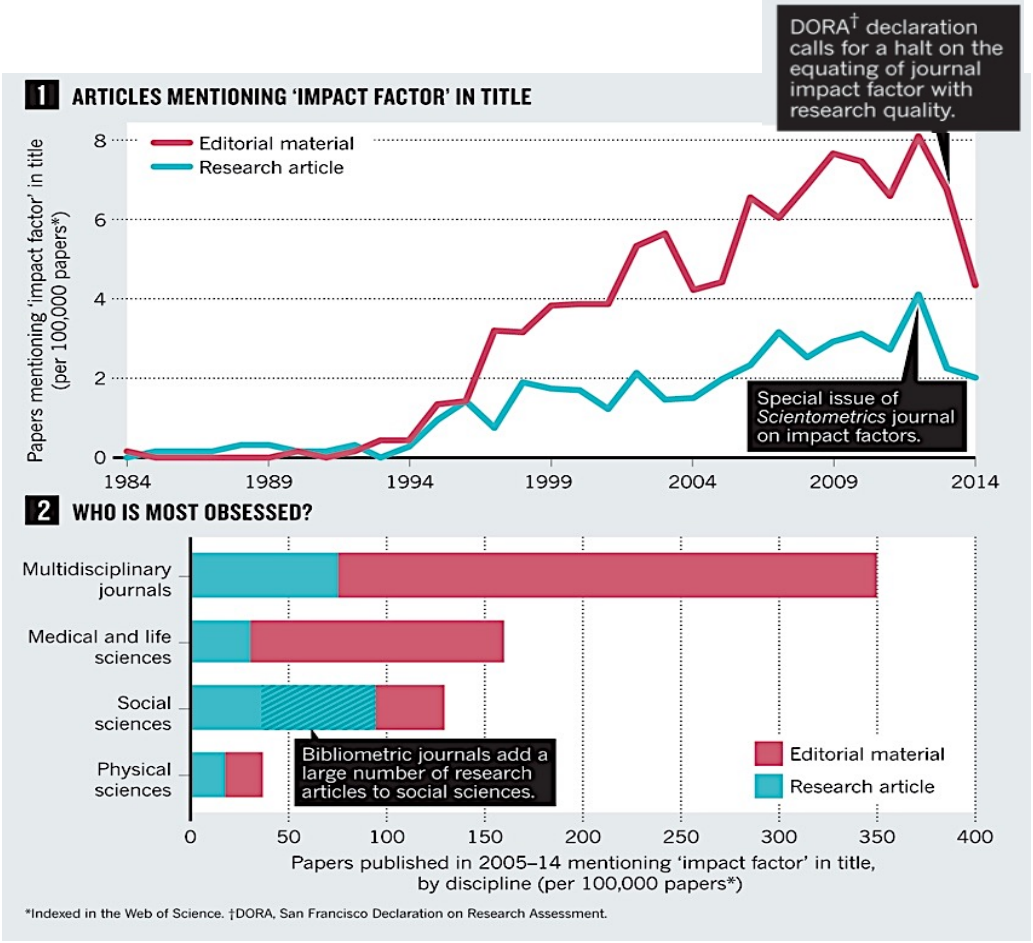
AJG 2018
ACADEMIC JOURNAL GUIDE

**4* Tier**
**4 Tier**
**3 Tier**
**2 Tier**
**1 Tier**

# IMPACT FACTOR OBSESSION

**Sans Francisco, The Declaration on Research Assessment (DORA)**

"impact factor" term per 100k papers




Data Source: Thomson Reuters Web of Science; Analysis: D.H., L.W.