



## Session on the use of bibliometric data

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# Session on the use of bibliometric data

## Speakers:

- Gunnar Sivertsen
- Jung Cheol Shin
- Ping Zhou
- Fiona Wood

## Moderator:

- Valerio Vercesi

## Rapporteur:

- Thomas Zimmermann



# Main Questions

- Why should we continue to rely on peer-review if bibliometrics can provide us with reliable and valid data to evaluate grant proposals?
- Why should we take bibliometric data into account since it does only provide a rough estimate on the track record of the applicant but not whether a certain project may prove successful in the future?

# Gunnar Sivertsen (NIFU, Norway)

- Outcome of peer review is often correlated with bibliometric analyses but very often not strongly
- Various problems with bibliometric data:
  - Coverage of publication databases for Social Sciences and Humanities is low
  - Data must be normalized for discipline, time, etc.
  - Data is often not appropriate for the evaluation of applicants/applications
- Bibliometrics cannot replace peer review but serve as complementary information
- Bibliometric analyses provided to the funding body may prove useful. However, they must always be interpreted.



# Jung Cheol Shin (Seoul National University, South Korea)

- General problems with bibliometric data:
  - Differences in disciplines
  - Unclear how to count citations, number of authors
  - Language barrier (English vs. non-English)
  - Mathew's law: richer become richer
- However, peer review may also be problematic:
  - reliability of peer review
  - reviewer bias
  - Competitive researchers working in the same field
- Bibliometric may be useful for ex-post evaluation of funding schemes.

# Ping Zhou

(Institute of Scientific and Technical Information, China)

- Bibliometric studies started late, but developed fast
  - Databases for Chinese journals are established
  - Own citation databases are developed and integrated with the major databases
  - Research evaluation centres provide bibliometric studies and education on this issue
  - Complementary role of bibliometrics in peer-review
  - Government funding agencies are cautious in applying quantitative evaluation procedures
- Bibliometrics are more widely used for strategic studies than in the evaluation of grant applications

# Fiona Wood

(University of New England, Australia)

- Problems of the use of bibliometrics:
  - Publication and citation numbers are treated as proxies for performance
  - Bibliometrics do not take properly into account originality, conceptual innovation, and research applications
  - Bias towards English, established researchers and low risk research
- Lessons learned in the ERA-Analysis:
  - Measures should developed that match purposes
  - Data should be captured at appropriate levels
- (E)-Collaboration to develop new means how to report scientific achievements



# Final Conclusions

- Many questions concerning the use of bibliometrics still remain open
- If bibliometrics are used in evaluation procedures the difficulties and drawbacks of this method have to be known and taken into account
- Bibliometrics always have to be interpreted
- No bibliometric data are available on broader impact
- The most interesting and intriguing use of bibliometrics is not for the evaluation of grant applications but for strategic analyses