



Research assessment and its reform

CoARA and the DFG

Dr. Matthias Kiesselbach
(Division “Research Culture”)



Today's session

- 9:00** Overview presentation
Research assessment and its reform
- 9:30** Group discussions
 - Table A: Applicant's perspective
 - Table B: Reviewer's perspective
 - Table C: The science system under review
- 10:00** Collecting inputs, final discussion



Overview presentation Contents

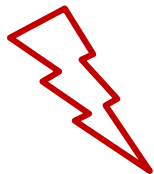
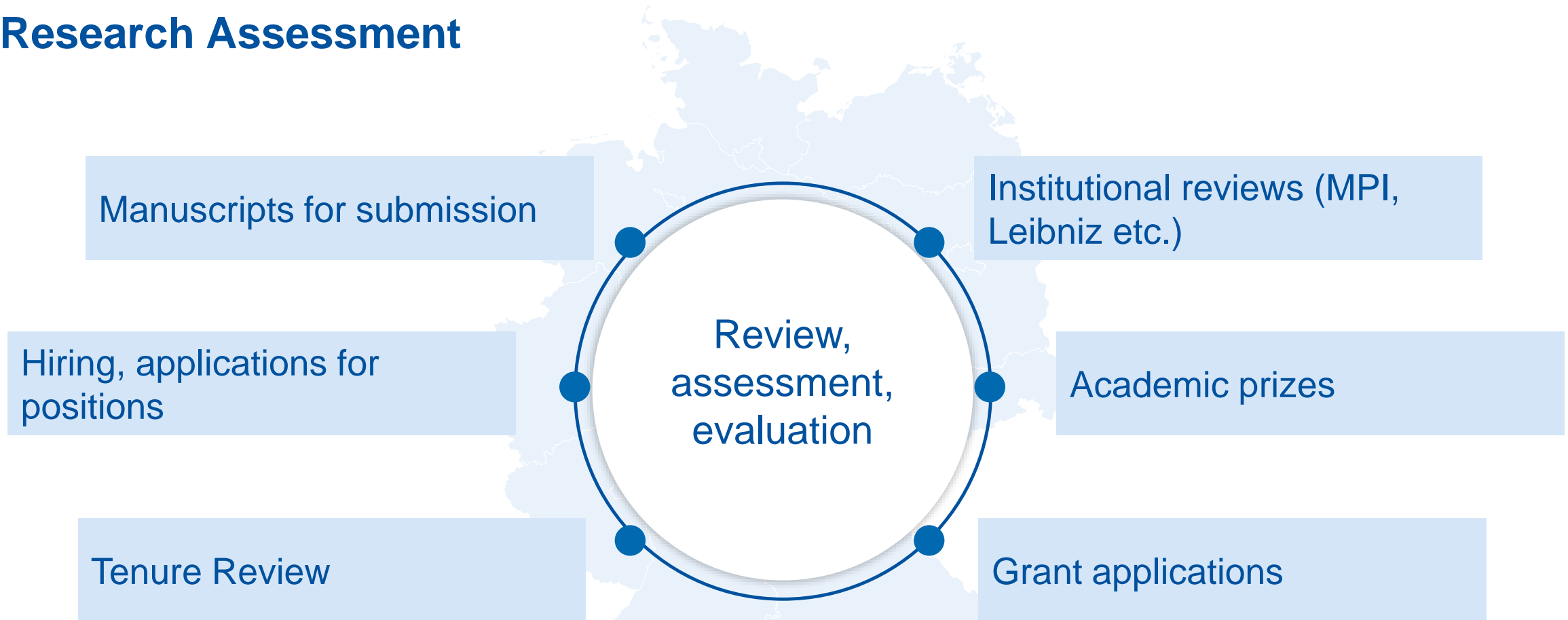
1. A need for reform
2. CoARA & Co.: reform initiatives
3. Some recent changes at DFG
4. What (else) can we (all) do?



DFG Deutsche
Forschungsgemeinschaft

A need for **reform**

Research Assessment



A lot of reviewing... a lot of incentives to „cut corners“

Research Assessment (Increasingly) well-known problems

- Inappropriate use of (quantitative and journal-centric) proxies **lowers the quality of research assessment...**

...and is (therefore) **detrimental to science itself.**

- ▶ **Matthäus-Effekt** Merton, R. K. (1968). The Matthew Effect in Science. *Science*, 159(3810), S. 56-63. doi: 10.1126/science.159.3810.56
- ▶ **Matilda-Effekt** Rossiter, M. W. (1993). The Matthew Matilda Effect in Science. *Social Studies of Science*, 23(2), 325-341. doi: 10.1177/030631293023002004
- ▶ **Reputation des Publikationsorts lässt nicht auf tatsächliche Rezeption des einzelnen Beitrags schließen.** Osterloh, M., & Frey, B. (2015). Ranking Games. *Evaluation Review*, 39(1), S. 102–129. doi:10.1177/0193841X14524957; Osterloh, M., & Frey, B. (2015). Rankings und der Preis der Wissenschaft. *Zeitschrift für Kulturwissenschaften*, 9(1), S. 51–63. doi:10.25969/mediarep/13926
- ▶ **Reihenfolge der Namen von Autorinnen und Autoren und deren Stelle im Alphabet kann die Zitationswahrscheinlichkeit von Artikeln beeinflussen** Stevens, J. R., & Duque, J. F. (2018). Order matters: Alphabetizing in-text citations biases citation rates. *Psychonomic Bulletin & Review* (4. Oktober 2018), S. 1–7.
- ▶ **Umgekehrt proportionaler Zusammenhang zwischen Journal-„Rang“ und Forschungsqualität** Brembs, B. (2018). Prestigious Science Journals Struggle to Reach Even Average Reliability. *Front. Hum. Neurosci.* 12:38. doi: 10.3389/fnhum.2018.00037; Brembs, B., Button, K., Munafò, M. (2013). Deep impact: unintended consequences of journal rank. *Frontiers in Human Neuroscience* 7. doi:10.3389/fnhum.2013.00291
- ▶ **Fokus auf schnelle Publikationen kann Forschungsqualität senken** Steen, G., Casadevall, A., & Fang, F. (2013). Why Has the Number of Scientific Retractions Increased? *PLoS ONE* (8. Juli 2013). doi:10.1371/journal.pone.0068397 und Hill, R., Stein, C., Race to the Bottom: Competition and Quality in Science, *The Quarterly Journal of Economics*, 2025;https://doi.org/10.1093/qje/qjaf010

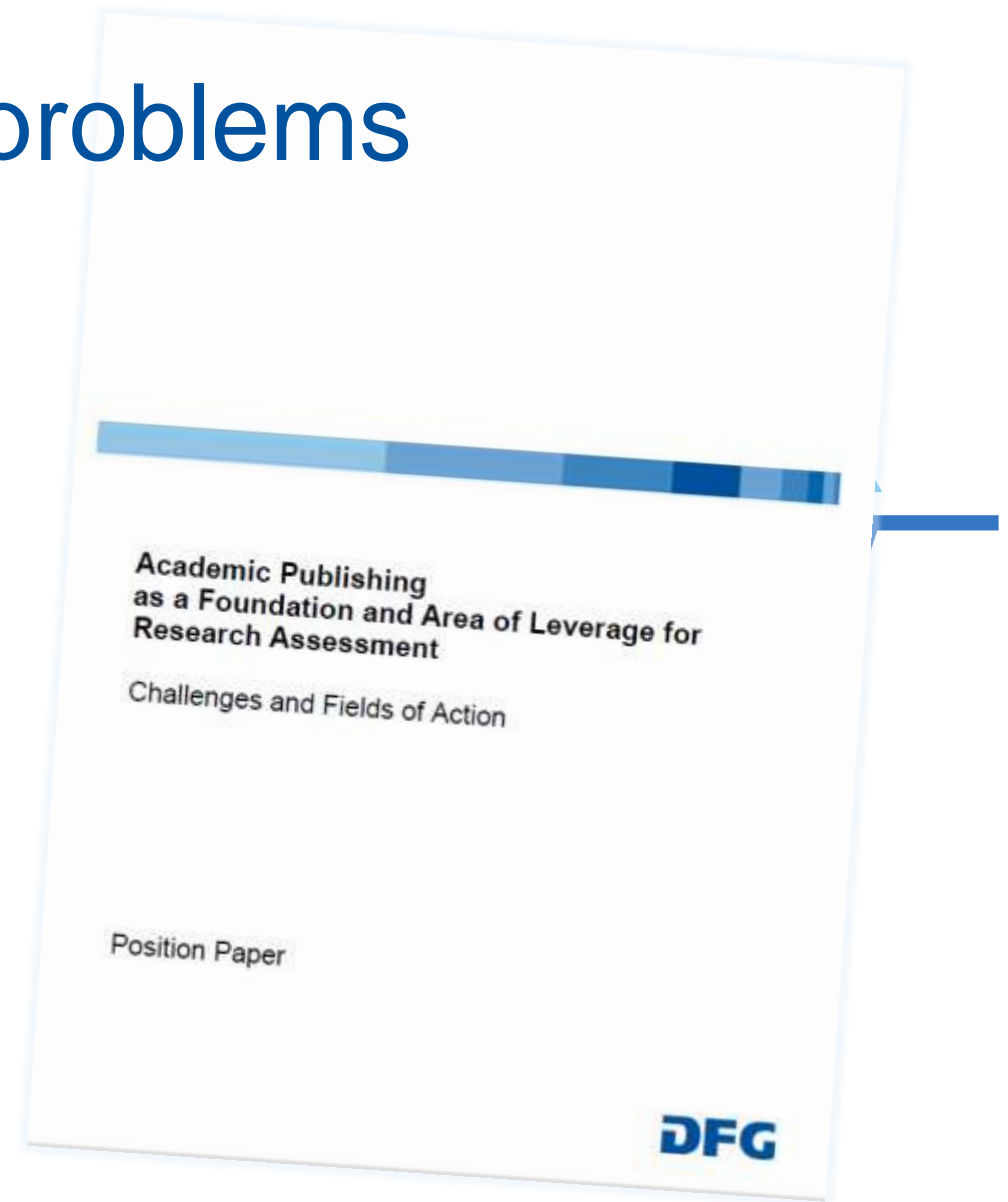
Research Assessment (Increasingly) well-known problems

- Inappropriate use of (quantitative and journal-centric) proxies **lowers the quality of research assessment...**

...and is (therefore) **detrimental to science itself.**

- It also contributes to an **unhealthy research culture** and to a **cost explosion** in the publication sector.

This is also **detrimental to science.**



Disadvantages of a (mostly) **prestige-driven, commercialized, journal-based** publication culture

- **Delay** between conclusion of research and publication
- **Reduced public awareness**, visibility, findability of topics which are (currently) not „marketable“
- **Insufficient recognition** of scientific output of the non-prestigious kinds

**Impediments
to the flow of
(new) knowledge**

- **Incentives for cutting corners** in research process and hasty publication
- Incentives for **violations of good scientific practice**

**Loss of
scientific quality**

- **High cost of publication** (money for prestige)

Rising costs

Advancing publication culture: **needs and ideas**

- Establish and support **fast, open publication formats** (e.g. preprints)
- **Equal access for all topics** in reaching the academic public
- **Scientific community as owner** of data, publications and publication venues
- Recognition of **all forms of scientific output**

**Improve the
flow of scientific
knowledge**

→ **Open Science position paper:**

<https://zenodo.org/record/7193838#.Y3zS6qSZNaT>

→ **DFG code:**

<https://wissenschaftliche-integritaet.de/en>

- Incentivize **quality control in the entire cycle of research**
- Incentivize **good scientific practice** (e.g. via recognition for Open Science adherence)

**Increase
quality**

→ Action Plan for Diamond Open Access:

https://www.dfg.de/foerderung/info_wissenschaft/2022/info_wissenschaft_22_26/index.html
<https://zenodo.org/record/6282403#.Y3zTr6SZNaQ>

- Establish and support **science-driven, affordable publication venues**

Lower the cost

Advancing publication culture: **needs and ideas**

- Establish and support **fast, open publication formats** (e.g. preprints)
- **Equal access for all topics** in reaching the academic public
- **Scientific community as owner** of data, publications and publication venues
- Recognition of **all forms of scientific output**

Improve the
flow of scientific
knowledge

- Incentivize **quality** research
- Incentivize **good scientific practice** (e.g. via recognition for Open Science adherence)

Increase
quality

- Establish and support **science-driven, affordable publication venues**

Lower the cost

Requires a reform of research assessment:
■ Ideas not metrics
■ Recognition of broad variety of outputs



CoARA & Co. – Reform initiatives



San Francisco Declaration on Research Assessment

(DORA, 2012, <https://sfdora.org/>)

Declaration originating from the Annual Meeting of the American Society for Cell Biology

18 proposals, directed at different groups (funders, institutions, publishers, data service providers, researchers etc.)



Leiden Manifesto for Research Metrics

(2015, <http://www.leidenmanifesto.org/>)

10 proposals against inappropriate uses of quantitative (mainly bibliometrical) data for purposes of research assessment (on different levels)



Hong Kong Principles for Assessing Researchers

(2019, <https://www.wcrif.org/guidance/hong-kong-principles>)

Adopted at the 6th World Conference on Research Integrity



Coalition for Advancing Research Assessment

(CoARA, 2022, www.coara.eu)

Convergence on **two main demands**:

For purposes of research assessment (esp. of research proposals and individual achievements, e.g. in tenure review) **qualitative approaches should be prioritized** over quantitative proxies like JIF, h index etc.

For purposes of research assessment (esp. of research proposals and individual achievements), a **broader variety of practices and contributions to science should count** (not just journal articles)

Ideas and contents
instead of mere
numbers

Diversity of research
practices and types of
contributions

The Agreement on Reforming Research Assessment



► Core Commitments

1. Recognise the **diversity of contributions to, and careers in, research** in accordance with the needs and nature of the research
2. Base research assessment primarily on **qualitative evaluation** for which peer review is central, supported by responsible use of quantitative indicators
3. **Abandon inappropriate uses in research assessment of journal- and publication-based metrics**, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index
4. **Avoid the use of rankings of research organisations** in research assessment

...an organisation with over 700 institutional members



700 MEMBER MILESTONE

As we near the two-year milestone, I believe CoARA is ready to take the next step in advancing our ambitions, both in substance and organisation. We are proud to see CoARA thriving as a coalition of actors leading the forefront of reform through their practical commitments. Moving forward, we remain dedicated to responding to their needs, providing this vibrant community with the recommendations and resources necessary for members to successfully implement the Agreement on the Reform of Research Assessment.

-Rianne Letschert, Chair of CoARA Steering Board

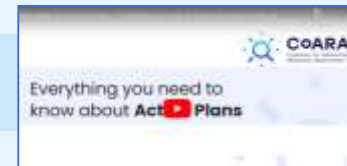
Organisations from further countries have joined the coalition since June 2024:

- *Kenya*
- *Mexico*
- *Tanzania*



CoARA as an organisation of committed institutions

Commitments reflected in action plans



- ✓ Established corpus
- ✓ Webinar and other support mechanisms
- ✓ National level discourse

Active Working Groups



- ✓ Consultations and events
- ✓ First outputs
- ✓ Regular updates via the website and newsletter

Growing number of National Chapters



- ✓ 16 National Chapters
- ✓ Local implementation communities
- ✓ Liaising with ministries, outreach work, support to action plans

Cascade Funding



- ✓ Grants for institutions to implement the ARRA
- ✓ 80+ applications received for the first round and 25 projects selected

CoARA Events



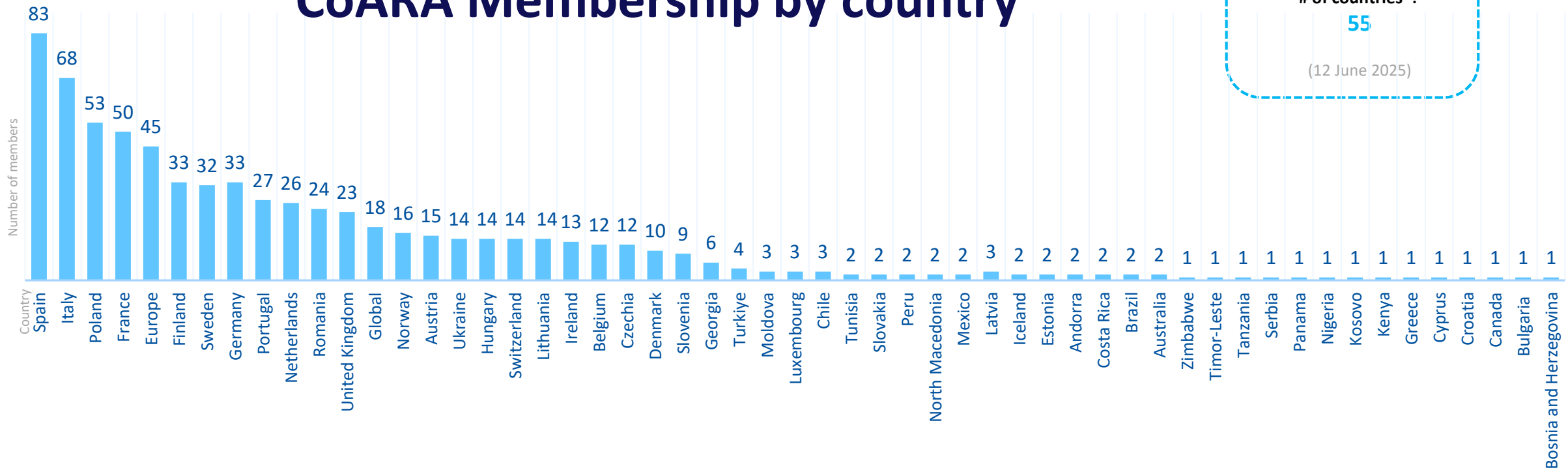
- ✓ Online and hybrid
- ✓ Call for hosting events for CoARA members



Funded by
the European Union



CoARA Membership by country



Membership total:
742

of countries*:
55

(12 June 2025)

*excl. pan-European and global organisations



Reforming Academic Career Assessment



Multilingualism and Language Biases in Research Assessment



Towards Open Infrastructure for Responsible Research Assessment



Global Framework for Research Evaluation in the Social Sciences and Humanities (SSH)



Responsible Metrics and Indicators



Towards Transformation, Transdisciplinarity, Applied/Practice-Based Research, and Impacts



Early-and-Mid-Career Researchers (EMCRs) – Assessment and Research Culture



Supporting the Alignment of Research Assessment Systems with CoARA in Biomedical Disciplines Through Administrative Reforms and Governance



1st WGs Co-Chair meeting
17 November 2023



Recognizing and Rewarding Peer Review



Experiments in Assessment – Idea Generation, Co-Creation, and Piloting



Improving Practices in the Assessment of Research Proposals



Ethics and Research Integrity Policy in Responsible Research Assessment for Data and Artificial Intelligence



TIER – Towards an Inclusive Evaluation of Research

The **areas** of discussion include:

- What information to request from applicants (includes: format of CVs)
- Recruiting and guiding reviewers
- Structuring panel or review board sessions
- The roles of science officers and panel rapporteurs
- Formulating panel or board votes

among others.

**Reports planned for
autumn of 2025**

With **discussion foci** such as the following:

- Balancing applicant expertise and project idea (*main target of review is likelihood of valuable results – applicant's expertise is subservient to that*)
- Countering mainstream bias (*panel discussion rules in controversial cases, including "wild cards" e.g.*)
- Designing programmes and competition spaces to allow for diverse projects (*protected spaces for specific project types, other ways of supporting diverse projects e.g.*)
- Improving clarity in criteria and processes (*in programme descriptions and review guidelines, explicit leeway in interpreting and weighting of criteria e.g.*)
- Recognizing diverse and non-linear career paths (*sensitizing and training reviewers, role of chair e.g.*)

among others.



Some recent **changes** at the **DFG**



A tradition of qualitative assessment

- 1998** Memorandum „Safeguarding Good Scientific Practice“:
„Universities and research institutes shall always give originality and quality precedence over quantity in their criteria for performance evaluation“ (Recommendation 6)
on **risks and downsides of quantitative modes of assessment** (S. 73f)
- 2004** Senate Commission for Clinical Research DFG on performance-based funding („Leistungsorientierte Mittelvergabe“, LOM):
emphasizes the value of a **qualitative assessment** of proposals and of the performance of individual researchers
- 2010** „Quality before Quantity“ regarding cited or mentioned previous works in applications: maximum of ten entries

Continuing the tradition of qualitative assessment

2022 Policy package supporting qualitative mode of assessment:

- **Novel CV template** with optional narrative elements (on biography, activities in the research system e.g.)

Separate spaces for **different types of published scientific results** (category A for peer reviewed journal or book publications; category B for other forms of published results)

- Previous work mentioned in application must be **explicitly summarized and linked to current proposal**

see https://www.dfg.de/en/news/news-topics/announcements_proposals/2022/info-wissenschaft-22-61



Supplementary Career Information *optional; free text*

[free text, please overwrite]

Activities in the Research System *optional, free text*

Here you can provide information on other activities you have pursued within the research system. This includes committee involvement, activities in the field of academic self-governance, organisation of academic events, activities in teaching and mentoring.

[free text, please overwrite]

Supervision of Researchers in Early Career Phases *optional, free text/*

Curriculum Vitae [09/22]:
https://www.dfg.de/formulare/53_200_elan/53_200_de_elan.rtf

Two categories of scientific results
... to ensure that „non-classical“ contributions
are visible

Curriculum Vitae [09/22]:
https://www.dfg.de/formulare/53_200_elan/53_200_de_elan.rtf

Scientific Results *Part A required, Part B optional; free text*

Please indicate here your most important published scientific results (see also “Guidelines for Preparing Publication Lists”, [DFG form 1.91](#). If available, please also provide persistent identifiers (e.g. DOI/Digital Object Identifier), preferably by stating the number, otherwise by naming the URL. Open access publications should be designated accordingly.

Details of quantitative metrics such as impact factors and h-indices are not required and are not considered as part of the review.

Please also explain – where possible – how you were involved in the published findings and/or explain why you have listed the publication or the academic contribution here.

These details fall into two categories:

Category A *required, free text*

*In this category please enter articles in peer-reviewed journals, peer-reviewed contributions to conferences or anthology volumes, and book publications (see also [DFG form 1.91](#)). A **maximum of ten items** may be listed.*

[free text, please overwrite]

Category B *optional, free text*

*Here you can cite **any other form of published research results**. This might include articles on preprint servers and non-peer-reviewed contributions to conferences or anthology volumes, data sets, protocols of clinical trials, software packages, patents applied for and granted, blog contributions, infrastructures or transfer. You may also **indicate other forms of academic output** here, such as contributions to the (technical) infrastructure of an academic community (including in an international context) and contributions to science communication. **This second category is also restricted to a maximum of ten items.***

[free text, please overwrite]

Applicants are asked to discuss their previous work / publications
– not just list them

1 Starting point

State of the art and preliminary work

For new proposals please explain briefly and precisely the state of the art in your field in its direct relationship to your project. This description should make **clear in which context you situate your own research and in what areas you intend to make a unique, innovative, promising contribution**. Indicate the current state of your preliminary work. This description must be concise and understandable without referring to additional literature.

Proposal preparation instructions [03/24] („Leitfaden“)
https://www.dfg.de/formulare/54_01/54_01_en.pdf

Reviewers asked to recognize full breadth of scientific contributions, avoid metrics

Assessment of the achievement of a researcher must be carried out **in its entirety and based on substantive qualitative criteria**. In addition to the publication of **articles, books, data and software**, other dimensions can be taken into account, such as involvement in teaching, academic self-administration, public relations or knowledge and technology transfer. Details of **quantitative metrics such as impact factors and h-indices** are not required and are not to be considered as **part of the review**.

General Guidelines for Reviews [09/24]:
https://www.dfg.de/formulare/10_20/10_20_en.pdf



DFG

...stay tuned for further developments!

Feeding ideas from CoARA back into the DFG



Do you have any **questions or suggestions?**



What (else) **can we all do?**

**Group discussions
until 10.00**

**Change tables as you
like (e.g. after 10 or 15
minutes)**

**10.00 collecting
inputs, final round**

A

The applicant's perspective

How should funders like the DFG (and other institutions?) change their assessment practices / procedures?

B

The reviewer's perspective

How can reviewers be motivated / incentivized / trained / informed to review in a broad and qualitative way?

C

The science system under review

If you could change fundamental aspects of the science system, what would that be? (Unrealistic answers allowed!)



Further information:

www.dfg.de

Matthias Kiesselbach

matthias.kiesselbach@dfg.de

DFG Deutsche
Forschungsgemeinschaft



www.dfg.de



Bluesky | [@dfg.de](https://bsky.app/@dfg.de)



Instagram | [dfg_public](https://www.instagram.com/dfg_public)



LinkedIn | Deutsche Forschungsgemeinschaft
(DFG) – German Research Foundation



Mastodon | [@dfg_public](https://mastodon.social/@dfg_public)



Youtube | [@DFGbewegt](https://www.youtube.com/DFGbewegt)