

QRPs and the limitations of the FFP definition of research misconduct

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Project "Discussion Hubs to Foster Research Integrity", as part of the German Research Ombudsman, funded by the DFG (German Research Foundation)

Structure of the German Research Ombudsman



The Office: first point of contact for questions and enquiries, confidential advice



Dr. Hjördis Czesnick **Head of Office**



Fanny Oehme M.Sc.



Michaele Kahlert M.A.

The Committee: assessing enquiries, solutionorientated conflict mediation



Prof. Dr. Eric Steinhauer (Spokesman) Director of the University Library University of Hagen

Prof. Dr. Renate Scheibe Plant Physiology University of Osnabrück





Prof. Dr. Daniela N. Männel Immunology University of Regensburg



Prof. Dr. Roger Gläser **Technical Chemistry** University of Leipzig



Project: Discussion Hubs to Foster Research Integrity



Dr. Katrin Frisch



Dr. Felix Hagenström



Dr. Nele Reeg

Discussion Hubs to Foster Research Integrity (funded by the DFG)





Discussion hub: "Authorship criteria and best practices in authorship conflicts"

Project coordination: Dr. Nele Reeg



Discussion hub: "Dealing with research data"

Project coordination: Dr. Katrin Frisch



Located on the boundary between *research* and the work of the German Research Ombudsman.



Discussion hub: "Dealing with plagiarism in academia"

Project coordination: Dr. Felix Hagenström

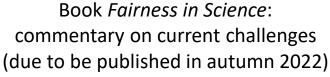
Translation and sharing expertise from the German Research Ombudsman with others.

Discussion Hubs to Foster Research Integrity (funded by the DFG)



Main Aims of the Project











Bringing together diverse experts and stakeholders for interviews, workshops and panel discussions.

Developing guidelines

supplementary to the standards of good research practice formulated in the DFG Code of Conduct.





DFG Guidelines for Safeguarding Good Research Practice, 2019

Research Misconduct vs. QRP



Research Misconduct: comprises *fabrication, falsification,* and *plagiarism* (FFP) \rightarrow most common definition.

Questionable Research Practices: do not fall under misconduct, but still are at odds with Good Research Practice (GRP).

Examples:

- Idea, conception or design: e.g., insufficient review of current literature, deselecting appropriate methods.
- Data acquisition, analysis or interpretation: e.g., hypothesizing after the results are known, ignoring negative results, cherry picking of data, lack of validation.
- Publication: e.g., salami slicing, self-plagiarism, inappropriate attribution of authorship, selective reporting of results (cf. Ravn/Sørensen 2021; Hall 2019).



From the point of GRP, both research misconduct and QRPs constitute a deviation, if not a violation.

> Fostering research integrity needs to give consideration to QRPs.

Negative Impact of QRPs

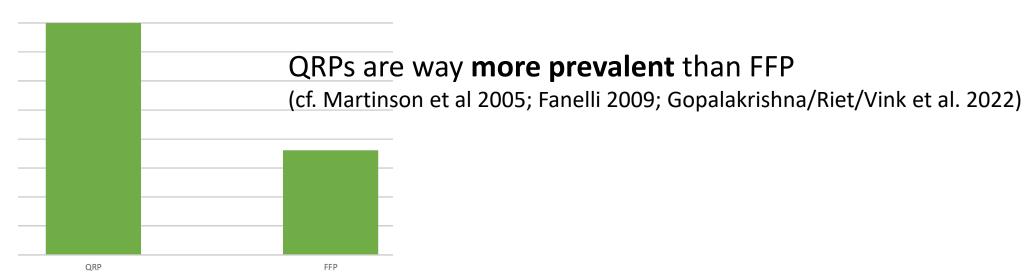


Impact on Science	Impact on Society
 Cluttering the literature with science that's neither robust nor replicable 	Waste of taxpayer money
 Loss of trust in science and its findings 	 No improvement of knowledge, but instead impairment of gathering robust knowledge
Misallocation of credit	 Negative effects on policy making and discourses in society as well as on decisions by
Waste of money and resources	people who rely on science for their professional duties

- Acknowledging the *detrimental impact* of QRPs voids the argument that QRPs are less serious than FFP
- Detrimental aspect should not only be tied to the specific category of deviation from good research practice (misconduct or not) but also to the *outcome* of said deviation

Prevalence of QRPs







Despite the lack of precise numbers: serious issue that needs addressing

Unresolved issues



No consensus on:

- what constitutes QRPs
- what constitutes misconduct
- assessing the severity of QRPs





Lack of:

- guidelines that explicitly address QRPs and their distinction from misconduct
- discipline-specific debates on QRPs
- guidelines that specify rules for specific research contexts

Practical difficulties for research integrity officers and institutions:

- in mediating cases of conflict
- in determining appropriate sanctioning and preventive measures



What adds significance to these issues

- With more international collaboration, a cross-cultural, cross-national understanding becomes increasingly important
- QRPs can also be read as a symptom of science being broken

Recommendations



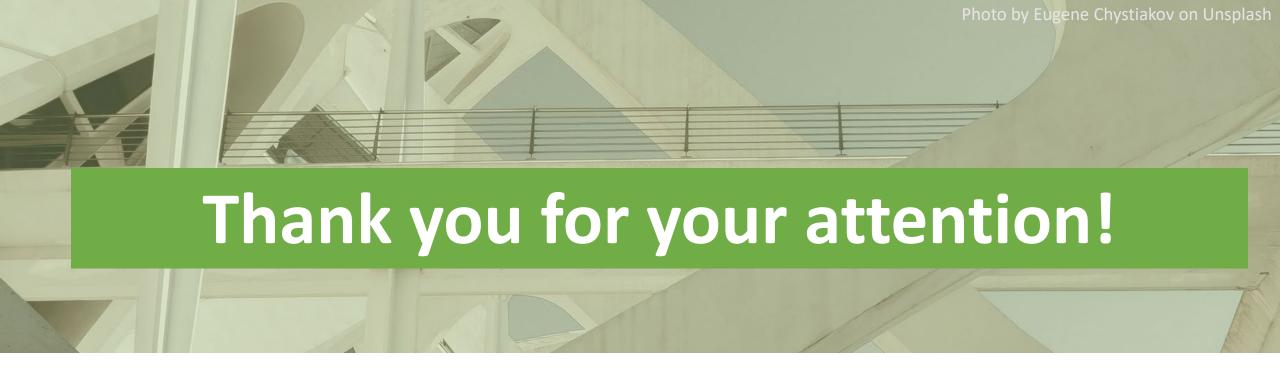
Change of terminology around misconduct and QRPs: establishing the term "detrimental research practice" (DRP) (as suggested by the NASEM report 2017)





Development of **recommendations** for handling cases of conflict: in form of guidelines, FAQs or case examples including adequate solutions (esp. useful for research integrity officers and institutions dealing with such cases)

Preventive measures: Apart from training and rising awareness, addressing the incentive structures in academia is of crucial importance. Currently, QRPs are rewarded. Better instead: **rewarding research** practices **in line with GRP**.





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