QRPs and the limitations of the FFP definition of research misconduct

Dr. Felix Hagenström, Dr. Nele Reeg, Dr. Katrin Frisch

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Structure of the German Research Ombudsman

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

Dr. Hjördis Czesnick
Head of Office

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M.Sc.

Michaele Kahlert
M.A.

The Committee: assessing enquiries, solution-orientated conflict mediation

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

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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

Discussion hub: „Dealing with plagiarism in academia“
Project coordination: Dr. Felix Hagenström

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

Book *Fairness in Science*: commentary on current challenges (due to be published in autumn 2022)

DFG Guidelines for Safeguarding Good Research Practice, 2019
Research Misconduct vs. QRP

**Research Misconduct:** comprises *fabrication, falsification, and plagiarism* (FFP) → 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
- Cluttering the literature with science that’s neither robust nor replicable
- Loss of trust in science and its findings
- Misallocation of credit
- Waste of money and resources

## Impact on Society
- Waste of taxpayer money
- No improvement of knowledge, but instead impairment of gathering robust knowledge
- Negative effects on policy making and discourses in society as well as on decisions by 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

QRPs are way more prevalent than FFP
(cf. Martinson et al 2005; Fanelli 2009; Gopalakrishna/Riet/Vink et al. 2022)

Precise numbers are hard to come by
(cf. John/Loewenstein/Prelec 2012; Fiedler/Schwarz 2016)

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) – at least for some QRPs (where “questionable” might be seen as euphemistic)

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.
Thank you for your attention!

www.ofdw.de/discussion-hubs
felix.hagenstroem@ofdw.de
nele.reeg@ofdw.de
twitter.com/NeleReeg
katrin.frisch@ofdw.de
twitter.com/FrischKatrin

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