

Austrian Science Fund

Discovering what matters.



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Research integrity and research ethics at the Austrian Science Fund (FWF)

Hybrid Workshop

"Developing a Research Integrity Promotion Plan"

Tbilisi, 21 Feb 2023

Reinhard Belocky, Component 3 Leader, Twinning project "Supporting inter-sectoral collaboration possibilities between Research and Industry"

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The Austrian Science Fund – FWF



- Founded in 1968
- Independent legal entity on the basis of a federal law
- Supervisory authority: Ministry of Education, Science & Research
 - 3-year performance agreements
- Funding of fundamental research
 - All disciplines of science and humanities, including arts-based research
 - Exclusively international peer review
- Annual funding budget: 256 Mio. EUR (2021)
- 143 employees (2022)

Research Integrity



2008: Looking back in time in Austria...

nature

Vol 454 | Issue no. 7207 | 21 August 2008

Scandalous behaviour

Austria's most serious report of scientific misconduct in recent memory must be handled properly.

"There is no official body in Austria responsible for addressing issues of scientific misconduct." ... a urologist at a university has conducted a high-profile clinical trial so inappropriately that it must be considered entirely invalid. His department chair insists that he has no connection with, and no responsibility for, the scandal – despite having 'honorary authorship' on all the relevant papers, a practice that contravenes the university's code of practice. Shortly afterwards, for reasons known only to itself, the university council announced plans to fire the university's respected rector – who was going public with the problems – on grounds that many university and clinic officials believe to be invalid...

Austria is a small country, and networks between power-brokers are small and tight. But something, it seems, is rotten in the state of Austria, and it needs to be faced and dealt with openly.

→ Led to the foundation of the Austrian Agency of Research Integrity (OeAWI)

Good Practice







It is painful to admit, but important to do so. I apologize to all. I was a bit busy when this was submitted, and did not do my job well.

Frances Arnold @francesarnold

For my first work-related tweet of 2020, I am totally bummed to announce that we have retracted last year's paper on enzymatic synthesis of beta-lactams. The work has not been reproducible, science, sciencemag, org/content/364/64...

Research Integrity & Ethics FWF responsibility



- Internal procedures according to the highest ethical standards
- Appropriate handling of research integrity cases concerning funded researchers and research institutions
- Ethical aspects in connection with funded research
- Awareness raising in the scientific community

Research Integrity Implementation @ FWF



Transparency:

Assessment criteria, decision making structures, procedures, etc. is published

Checks & balances:

Double verification principle at all stages of grant application & decision process

Declaration of Interest:

Mandatory for all employees & board members

Comprehensive regulations on tackling conflicts of interest

Complaints Management:

For all types of complaints, concerning the FWF as an organisation, researchers funded, research institutions employing FWF-funded researchers, etc.

Research Integrity Suspected cases at the FWF



Rare cases

Falsifying or inventing research results

More frequent cases

- Dispute over of authorship contribution
- Use of third party ideas without acknowledgement
- Misappropriation of research funds, especially double funding

Borderline cases

- = partly no misconduct, but ethically problematic ("sloppy science")
- Self-plagiarism = multiple use of own publications/work without acknowledgement
- Authorship with questionable/insufficient contributions
- "Embellishing" graphs/statistics

Research Ethics Implementation @ FWF



Application Guidelines

- Mandatory description of ethical issues
- Compliance with legal and safety regulations
- Necessary permits required

Peer Review

Assessment of (potential) ethical issues by reviewers

Source:

https://www.fwf.ac.at/fileadmin/files/Dokumente/Antragstellung/Einzelprojekte/pantragsrichtlinien.pdf

Challenges for the research system



- 1. Institutionalisation: All bigger research institutions need commissions for Research Integrity and Research Ethics
- **2. Independency**: An independent agency is needed to investigate serious cases in order to avoid conflict of interests
- **3. Transparency**: While respecting personal rights, the procedures and measures (including sanctions) must be made transparent.
- 4. Incentives: More reflection is needed on the systemic causes of misconduct, such as misaligned incentives in the reputation system;
 cf.: Reforming Research Assessment (CoARA)
- **5. Training**: Sufficient training/information for researchers is needed, e.g. research integrity and ethics must be part of the curricula from the very beginning.

Recommendations to researchers



- Reflection: Consider and communicate the potential ethical impact of research in advance
- 2. Openness: Make publications, research data and similar materials, and the entire academic work cycle freely accessible as far as possible
- 3. Comprehensibility: Present the research results completely (including negative results) and reproducibly

- **4. Quality**: Do not publish "a lot", but "well", choosing the appropriate journals and conferences
- **5. Transparency**: Disclose author contributions and conflicts of interest
- **6. Objectivity**: Evaluate the performance of others according to fair and comprehensible criteria.
- 7. Education: Socialise the next generation of researchers according to these principles



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