

Austrian Science Fund

Discovering what matters.



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

Twinning mission

Tbilisi, 22 Feb 2023



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 scientific community



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



Application Guidelines

 All potential ethical, safety-related, or regulatory aspects of the submitted project and how the applicant plans to deal with them must be described in a separate section. These questions should be addressed briefly in the text even if the applicant believes the project does not raise any ethical issues, for instance, the European Commission's Ethics for Researchers or The European Code of Conduct for Research Integrity can serve as a guide here.

Source:

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



Application Guidelines

- Comply with legal and safety regulations, including the Federal Disability Equality Act, data protection
- Obtain the necessary permits, e.g. for animal experiments, clinical studies, the Federal Office for the Protection of Monuments, excavations or from the relevant foreign authorities.
 - Ethical votes for " ... research that may affect the physical or psychological integrity, the right to privacy, other subjective rights or overriding interests of subjects. "*
- In case of doubt, contact the ethics committee of the research institution.

^{*} Ethics Committee of the University of Vienna: https://www.gs.univie.ac.at/services/ethikkommission/



Peer Review

Special Questions to the international Peer Reviewers

Does the project give rise to any ethical issues?										
□ yes	□ no	☐ do not know								
If YES: Have they been addressed sufficiently or do they need to be addressed more specifically?										
Comme	nts:									



FWF - internally

Transparency: Procedures, assessment criteria, etc. published on website

<u>Checks & balances</u>: Double verification principle at all stages of grant application & decision process

<u>Declaration of Interest</u>: Mandatory for all employees & board members. Comprehensive regulations on tackling Col

<u>Complaints Management</u>: For all types of complaints (concerning the FWF, researchers, research institutions, etc.)



Principles

- Basis for the FWF: "Guidelines for Good Scientific Practice" of the Austrian Agency for Research Integrity (OeAWI).
- In case of suspicion in connection with an FWF application or an FWF project:
 - The FWF ensures that the interests of both the complainant and the researcher concerned are taken into account



FWF Procedure (1/2)

- 1. Reporting of suspicious cases openly or anonymously via an electronic system (compliant with EU Whistleblower Directive)
- 2. <u>Initial check</u> of plausibility by the FWF office
- 3. Statement requested by the concerned researcher
- 4. <u>Decision</u> by FWF Board



FWF Procedure (2/2)

- 5. Minor cases: FWF sends a cautionary letter
- 6. Substantial or serious suspicion:
 - a. Case is handed over to the research institution which forwards it to the OeAWI
 - b. Research institutions and the FWF impose sanctions (FWF = e.g. application ban, halt of the project, repayment of funds)
- 7. Transparency:

Publishing suspected cases and measures once a year in anonymised form



OeAWI Procedure (OeAWI = Austrian Agency for Research Integrity)

- 1. Handling by International Commission
- 2. <u>Documention</u>: Obtaining of opinions, statements, and other documents of all concerned parties by the Commission
- 3. Assessment with the involvement of international experts
- 4. <u>Arbitration</u> involving a mediator who mediates between the conflict parties (if necessary)
- 5. <u>Statement:</u> OeAWI reports investigation results + recommendation of further actions to research institutions and FWF
- 6. <u>Transparency:</u> Research institutions and FWF report measures to the OeAWI and publish results

Potential violations



Fabrication / falsification

- Falsification or invention of research findings
- Alteration of research findings
- Withholding of research findings
- Insufficient documentation of research findings

Potential violations



Plagiarism / disputed authorship

- Use of third-party ideas without indication of origin
- Multiple use of own research results without making this clear (self-plagiarism)
- Assertion of authorship without having made contribution
- Denial of authorship despite contribution
- Commissioning of a person other than the author or the use of a machine without acknowledgement (ghostwriting)

Potential misconduct



Other

- Misuse of research funds
- Influencing of research findings
- Restriction, obstruction, or sabotage of research
- Discrimination against whistleblowers
- Discrimination in professional advancement
- Copyright conflicts
- Violations of research ethics
- ...

Note: If a law is violated, a Research Integrity case can also have legal consequences

Statistics of suspected cases



2008-22

Suspicion / Action	Procedure in progress	Process discontinued	Cautionary letter	Corrections	Application ban (one year)	Application ban (multi years)	Repayments of funds	Project cancellation	Total	Treated by OeAWI
Assertion of authorship without having made a contribution			1						1	
Discrimination in professional advancement	1	2							3	1
Falsification or invention of research findings		1						1	2	
Obstruction/sabotage of research		5							5	
Multiple use of own research results without making this clear (self-plagiarism)		6	3		2	1			12	2
Use of third-party ideas without indication of origin	1	11	11		3				26	7
Insufficient documentation of research findings		1		2					3	
Denial of authorship despite contribution		2	3	2	1				8	2
Alteration of research findings		3							3	1
Misuse of research funds		7	3				1		11	
Violation of research ethics	1	1							2	1
Others		2		1					3	1
Gesamt	3	41	21	5	6	1	1	1	79	15
Treated by OeAWI		1	6	2	2	4				

Source: FWF, https://www.fwf.ac.at/de/forschung sfoerderung/research-integrityresearch-ethics/

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

Status Quo (Austria)



There is little evidence that scientific misconduct or unethical behaviour has significantly increased.

But:

- One serious case can be enough to damage the reputation of a person, institution or discipline for years.
- Institutionalisation alone is not enough; a culture of integrity is also needed
- Many cases are in the grey zone, in which questionable developments and behaviour can occur, e.g. due to wrong incentives

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

Sources of information



- FWF Procedure
- OeAWI Guidelines for Good Scientific Practice
- Austrian University Conference:
 Best Practice Guide for Research Integrity and Ethics
- Toolbox of the EU Project "Standard Operating Procedures for Research Integrity" (SOPs4RI)



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