



A

Aalto-yliopisto

Research integrity and ethics in Aalto

Annukka Jyrämä
Senior Advisor, Secretary
of the Research Ethics
committee at Aalto
University

Why is Research Ethics important to us in Aalto?

Internal reasons

We **want** to have research and education that do not harm anyone inside or outside Aalto and that follow the highest standards in every respect.

External reasons

EU regulations, publishers' and funding organizations' requirements, general opinion and potential mistrust, technical easiness to copy, etc., culture of open science...

In the multicultural global research community, regulations and practices must be explicitly described and **cannot be taken for granted**



Ossi Naukkarinen
Vice President for Research



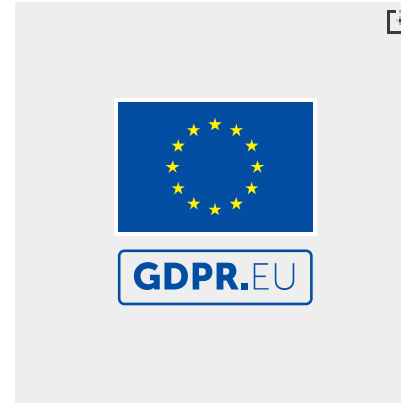
Background



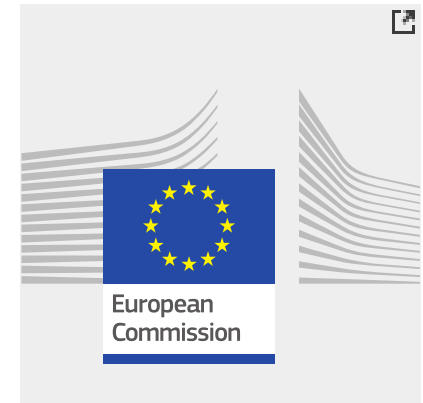
Aalto University follows the national rules and guidelines



European guidelines



EU General data protection regulation



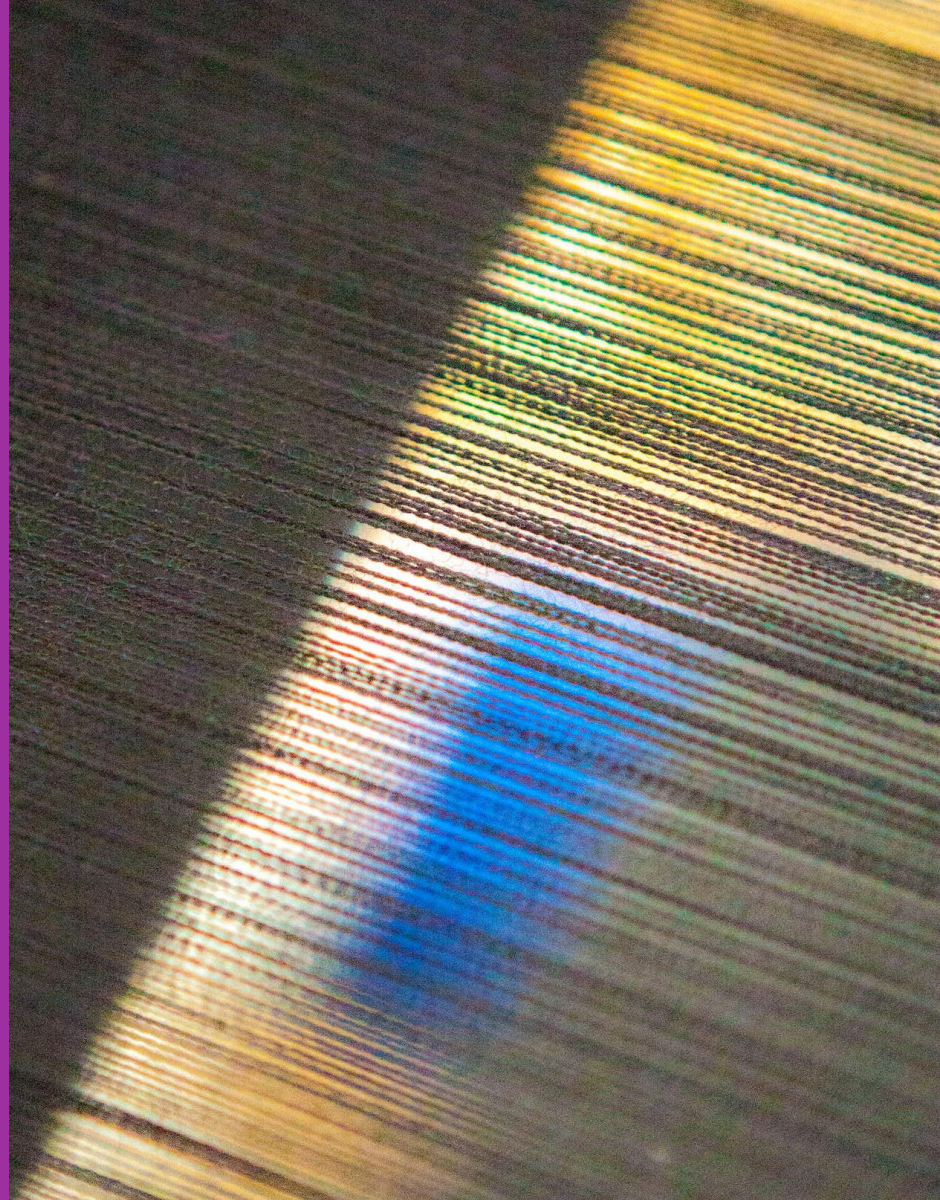
EU and other funding organizations and some journals etc. may have specific requirements



Responsible Research – website provides advice, info and different perspectives on the topic

Research Integrity

Key Guidelines
From National
research Integrity
guidelines (TENK)
Updated 2023



Good research practice

Basic principles of research integrity

Reliability in ensuring the quality of research, reflected in the design, the methodology, the analysis and the use of resources.

Honesty in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair, full and unbiased way.

Respect for colleagues, research participants, society, ecosystems, cultural heritage and the environment.

Accountability for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts.

The context and scope

- 1) Research Environment,
- 2) Training, Supervision and Mentoring,
- 3) Research Procedures,
- 4) Safeguards,
- 5) Data Practices and Management,
- 6) Collaborative Working
- 7) Publication, and
- 8) Reviewing, Evaluating and Editing

Figure 2. Assessment criteria for the severity of RI violations.

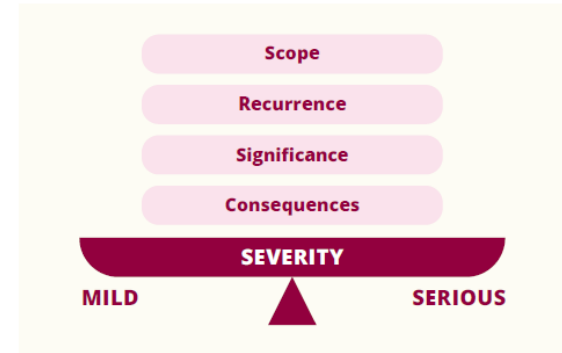


Figure 2. Assessment criteria for the severity of RI violations.

Research misconduct


Fabrication refers to reporting invented observations to the research community. In other words, the fabricated observations have not been made by using the methods as claimed in the research report. Fabrication also means presenting invented results in a research report.

Falsification (misrepresentation) refers to modifying and presenting original observations deliberately so that the results based on those observations are distorted. The falsification of results refers to the unfounded modification or selection of research results. Falsification also refers to the omission of results or information that are essential for the conclusions.

Plagiarism

or unacknowledged borrowing, means using someone else's work or research ideas without permission or reference. Plagiarism also infringes on the rights of the original authors. Plagiarism can be direct, modified or paraphrased. Plagiarism includes presenting or using as one's own another researcher's text or sections of text, research plans, manuscripts, articles, results, materials, research ideas, observations, programme codes, translations, diagrams, images or other visual material without appropriate reference to the original.

Disregard for good research practice



Manipulating authorship, for example, by including in the list of authors person's work who have not participated in the research, or by taking credit for by what is referred to as ghost authors

Publishing the same research results multiple times ostensibly as new and novel results (redundant publication, also referred to as self-plagiarism)

Denigrating the role of other researchers in publications, such as neglecting to mention them, and referring to earlier research results inadequately or inappropriately

Expanding the bibliography of a study to artificially increase the number of citations

Disregard for the responsible conduct of research

Reporting research results and methods **in a careless manner**, resulting in misleading claims

Exaggerating one's own scientific and scholarly achievements, for example, in a CV or its translation, in a list of publications, or on one's homepage > **CV guidelines reviewed spring 2020**

Misleading the research community in other ways

Examples of disregard for good research practices in different stages of research.

Disregard in planning and preparation

- Failure to request relevant permits, decisions and/or statements (e.g. official permits, data permits, research permits, decisions on the disclosure of data, ethical review statements by ethics committees)

Disregard in implementation

- Failure to comply with data permit or research permit decisions or with statements issued in the ethical review process
- Inappropriate use of research data or materials or failure to comply with research data agreements
- Inadequate documentation and storage of research results and data
- Inappropriately delaying or otherwise hampering the work of other researchers

Authorship-related violations

- Inadequate or inappropriate references to previous results
- Omitting the name of a co-author who has made a significant contribution
- Denigrating or deliberately neglecting to mention other researchers' contributions
- Manipulating authorship by other means, such as adding guest authors or honorary authors who have not contributed to the work in question or by taking credit for work done by ghost authors

Disregard by embellishing one's research achievements

- Misleading the research community, research funders or the general public over one's research
- Exaggerating or changing one's research achievements or merits e.g. in a CV or its translation or a list of publications
- Self-plagiarism, i.e. republishing one's own work without reference to the original publication

Disregard by misusing one's academic status

- Failure to declare significant conflicts of interest
- Violation of confidentiality in the peer review process
- Inappropriate use of seniority and influence

Disregard in the RI process

- Inappropriate interfering with the RI process or harassment of those involved in the RI process
- Delaying or inappropriately hampering the work or career development of another researcher who has submitted a notification of an alleged RI violation
- Submitting a notification of an alleged RI violation with malicious intent

The most significant reforms in the RI Guidelines are:

- The duration of the RI process and the deadlines for requesting a statement from TENK have been shortened
- The description of the role of the research integrity advisers has been added
- The categorisation of RI violations has been aligned with international practice
- To clarify the categorisation of the RI violations, a description of the assessment of the severity of the offence has been added
- The principle of the European Code of Conduct for Research Integrity to protect those involved in investigations has been noted
- The requirement to declare significant conflicts of interest has been added
- The handling of alleged RI violations at B.A. and M.A. level degrees is assigned to the respective institutions of higher education
- The term *Responsible conduct of research* has been replaced by *Research integrity*

Responsible conduct as a member of researcher community

Research integrity advisor network

- Communications and training
- Confidential advice on ethical issues or research integrity
- Distinguish whether an official process for handling misconduct (HTK, engl. RCR) is needed
- For funder's requirements on ethical issues, contact School's Research and Innovation Services (RIS) team



Annukka Jyrämä
*network
coordinator*



Tuija Heikura
post-award



Teppo Huhtio
pre-award



Sonja Kniivilä
LES



Anne Sunikka
*data
management*



Essi Viitanen
*open science and
ACRIS*



Lucie Hradeca,
ACRIS



Paula Hohti
ARTS



Johanna Ahola-Launonen
BIZ



Juho Pokki
ELEC



Maaria Nordman
ENG



Linda Henriksson
SCI

OWNERS



Ossi Naukkarinen
VP for Research



Ella Bingham
*Head of
Research Services*

ADVISORS

ACADEMIC ADVISORS

Questions of misconduct – Official HTK RCR process

2-6

cases in Aalto
per year

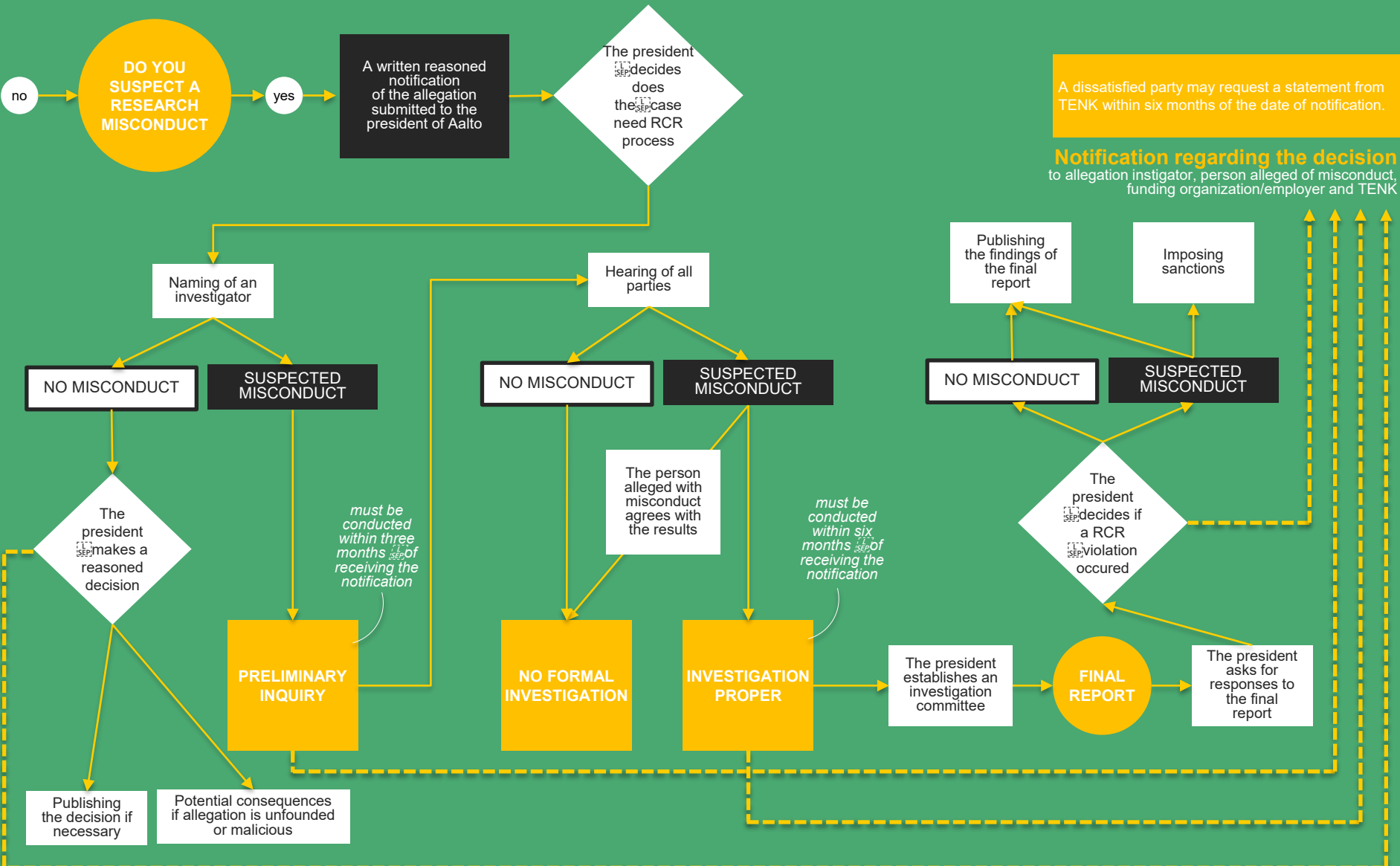


Ilkka Niemelä,
President



Anni Tuomela
Lawyer

- Cannot be made anonymously
- Documents are public
- Suspicion of misconduct to be sent to Registry office (Kirjaamo) addressed to the president of Aalto University
- TENK –notification template available



A dissatisfied party may request a statement from TENK within six months of the date of notification.

Notification regarding the decision to allegation instigator, person alleged of misconduct, funding organization/employer and TENK

must be conducted within three months of receiving the notification

must be conducted within six months of receiving the notification

Publishing the decision if necessary

Potential consequences if allegation is unfounded or malicious

Publishing the findings of the final report

Imposing sanctions

NO MISCONDUCT

SUSPECTED MISCONDUCT

NO MISCONDUCT

SUSPECTED MISCONDUCT

NO MISCONDUCT

SUSPECTED MISCONDUCT

The president establishes an investigation committee

FINAL REPORT

The president asks for responses to the final report

The president decides if a RCR violation occurred

The person alleged with misconduct agrees with the results

NO FORMAL INVESTIGATION

INVESTIGATION PROPER

PRELIMINARY INQUIRY

Naming of an investigator

Hearing of all parties

The president decides if the case needs RCR process

A written reasoned notification of the allegation submitted to the president of Aalto

DO YOU SUSPECT A RESEARCH MISCONDUCT

no

yes

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Ethical Review and Ethical Self-Evaluation at Aalto



Aalto-yliopisto
Aalto-universitetet
Aalto University

Research ethics

Preventing any harm caused to the **research subject, researcher or society**

Guiding principles:

- **right to self-determination**
- **prevention of harm**
- **privacy and personal data protection**

Research ethics is different from research integrity.

Why care about research ethics?

- You'll have less to worry about when you **reflect upon ethical issues** and **consider potential risks** to research participants and study subjects, researchers, and society **at the planning stage** of a research project.
- Careful consideration will **improve the quality** of your research plan and facilitate its implementation.
- **Major funders and scientific journals** increasingly **expect** researchers to conduct research according to accepted ethical guidelines.

Following proper ethical processes matters!

Definitions



Ethical self-evaluation is when you determine whether you need to apply for an ethics statement through an ethical review.

You should read the TENK recommendations and the European Commission's guidelines to assess whether you need an ethical review.

Failing to ask for review if required by TENK guidelines can be considered a misconduct.



Ethical review of research results in an ethics statement about the ethical acceptability of the research.

The ethics statement is given by the Aalto University Research Ethics Committee.

The ethical review process can be implemented also if the study's publication forum, financier or an international cooperation partner requests it.

Ethical review of research



TENK guidelines*

Ethical review is **mandatory** when there is/are

- deviation from the principle of **informed consent**,
- intervention in the **physical integrity** of research participants,
- **minors** under the age of 15, without separate consent from a parent, or without possibility to prevent the child's participation in the research,
- **exceptionally strong stimuli** to participants,
- risk of **mental or social harm that exceeds the limits of normal daily life**
- **a threat to the safety** of participants or researchers.

**The Finnish National Guidelines in line with the ALLEA code of conduct*

Will you collect sensitive data?

Research ethics review is needed if you collect implicitly or explicitly special category personal data (sensitive data)

- Race and ethnicity
- Genetics
- Sexual orientation
- Religion
- Political information
- Membership of a trade union
- General health



Ethical review and personal data



Collecting personal data does not require a research ethics review
– but requires compliance with GDPR regulations



For sensitive data, research ethics review is recommended



You may also need to prepare a data protection impact assessment (DPIA)



Publishers or funders may require research ethics documentation in all cases
where human participants are involved in research

Requesting an ethics review

1. Do I **need** an ethics review?

- [How and when should you apply for ethical review of research | Aalto University](#)

2. **Fill** in the e-form and it's appendices

- Don't be afraid to ask for help
- Start preparation early on – take the time now

3. **Check** the Aalto Research Ethics Committee meeting and submissions times

- Note that most requests need correcting or modification and there is a possibility that there are major issues and a need for re-submission for the next meeting

4. **Submit**

5. You can make **updates** if there are changes in the research

Applies to

- *research projects*
- *Doctoral research*
- *Master theses*

Two types of ethical reviews

In the e-form, you also self-evaluate whether your research requires a **concise** or an **actual (full) ethical review**

Concise review – in planning*



- Occurs **continuously**
- Questions on ethical issues should result “non-applicable”
- If there are any ethical issues that were unnoticed by the researcher, the Chair will refer the request to a full review

Full ethical review



- Occurs **monthly** based on the meeting schedule of The Aalto University Research Ethics Committee
- Ethical review requests must be in the e-system **three (3) weeks** before the meeting

**Planned to start
in Autumn 2023.*

Ethical pre-review of research projects

Aalto University Research Ethics Committee

- Preliminary ethical assessments for non-medical research which relates to the human sciences (based on TENK guidelines)
- Concerns individual research projects.
- Research projects under the Medical Research Act (488/1999) are provided by the ethical committees of the Hospital District of Helsinki and Uusimaa (HUS).



Ossi Naukkarinen
Chair



Arno Solin
Assistant professor
SCI



Benjamin Wilson
Staff Scientist
CHEM



Annukka Jyrämä
Secretary



Hanna Renvall
Head of Laboratory
HUS, Medical Expert
Vice chair



Maaria Noordman
Assistant professor
ENG



Masood Masoodian
Professor
ARTS



Anni Tuomela
Legal advisor



Riitta Salmelin
Professor
SCI



Ilkka Laakso
Assistant professor
ELEC



Katri Kauppi
Associate professor
BIZ



Anniina Harju
Legal advisor

50-75
Applications per year

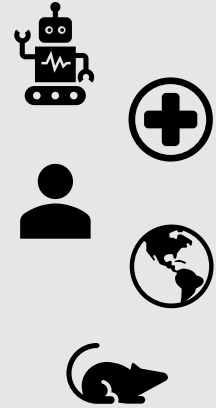
Holistic view: Ethical self-evaluation



What ethical issues apply?

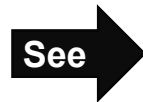
There are **different processes** for cases of research with

- humans (medical) and research with human tissues, cells etc.
- humans (non-medical) including also surveys, interviews etc.
- animals
- non-EU countries
- effect on environment, health and safety
- artificial intelligence
- potential misuse of research results



Note that the national guidelines and laws may differ on

- *personal data*
- *dual use*
- *sanctions*



[How to make an ethics self-assessment in research projects | Aalto University](#)

Responsible conduct and ethics in education

Guidelines in Intro

[Code of academic integrity and handling violations thereof](#)

Aalto Academic Affairs Committee code (2011, amend. 2013)

- Refers to RCR (HTK) guidelines (2012)

Applies to all students in their studies

- also sets obligations for teachers and schools: educating and informing the students to consider good scientific practice, preventing the use of unfair means

Responsible
LES
Anna Johansson

Proceedings in handling violation suspicions

- School Dean and Investigator (=LES Manager) are responsible for handling course level and bachelor's thesis and master's thesis (still in process) misconduct cases
- if case falls under RCR guidelines or requires disciplinary actions (written caution or suspension for max 1 year) → Dean transfers the case to President
- President (supported by legal counsels) is responsible for handling misconduct cases concerning approved master's thesis and doctoral level thesis (RCR guidelines) and disciplinary actions

Research ethics

<https://www.aalto.fi/en/research-art/research-ethics-and-research-integrity>



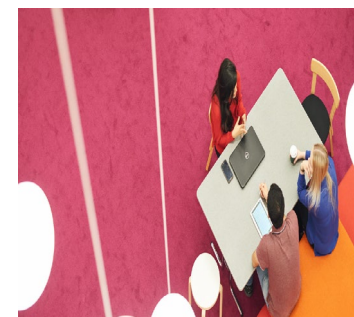
Materials for awareness and education in research ethics on My course platform
<https://mycourses.aalto.fi/course/view.php?id=23138>



More information on research integrity
<https://www.aalto.fi/en/services/research-ethics-and-research-integrity>



More information on Research Ethics pre review
<https://www.aalto.fi/en/services/research-ethics-committee>



How to make an ethics self-assessment in research
<https://www.aalto.fi/en/for-aalto-community/how-to-make-an-ethics-self-assessment-in-research-projects-aalto-support-and>

More information on dual use and sanctions

[Responsible internationalisation – Export control and sanctions compliance at Aalto University | Aalto University](#)

Thank you!



A”

Aalto-yliopisto
Aalto-universitetet
Aalto University