Research integrity and ethics - concepts, practices and challanges

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Responsible research

Why does it matter?

- Advances in science
- Innovative capacity
- Sustainable growth

- Responsibility toward society
- Public trust in science

Numerous questions

What the responsible research is?

What are principles?

Responsibilities?

Challenges?

Practices?

Codes?

Challange

Variety of concepts

Absence of precise definitions

Aims

- Raise awareness
- Enhance understanding of basic concepts, principles and issues
- Discuss challenges
- Prevent irresponsible research practices
- Support early-career researchers and trainers
- Promote culture based on integrity and responsibility

Develop institutional culture

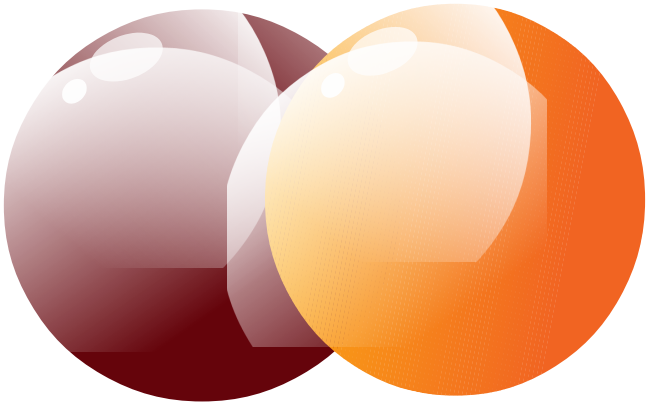
Contribution to European and international efforts

- Part of an unofficial international network related to the RI already for a decade
- Special focus on RI issues and
  - Contribution of professional networks
  - Policy analysis
  - Career development and early-career researchers
- Pioneering activities at European level focused on early-career and junior researchers: a survey, workshops
- Scientific contributions:
- Presentations at high-level and professional meetings
  - World Science Forum, 2015
  - World Conferences on Research Integrity

Research integrity and ethics

Research integrity

Respect of professional standards



Ethics

Responsibility toward society

Common issues
Variety of definitions - overlap in concepts
Different languages – inconsistent translations

Research integrity

"Research integrity relates to the performance of research to the highest standards of professionalism and rigour, and to the accuracy and truth of the research record in publications and elsewhere. Good research practice includes research ethics in the proposal and experimentation phase, as well as publication ethics in its analysis and dissemination"

Source:
Council of the European Union
Irish Universities Association
Royal Irish Academy

Research integrity and RRI in European research framework

Responsible research and innovation

Research integrity part of a broader concept of responsible research

Open science
Public engagement
Gender issues
Research integrity and ethics

Hot issues: 1. Plagiarism

- The most frequently recognised irresponsible research practice
- Cases of misconduct attract a large media and community attention

  for example, plagiarised ministerial thesis

- Raise many questions about research integrity practices and trust in science and scientists

Research integrity

Much more than plagiarism!

It deals both with good and bad practices

Principles
Responsibilities
Challenges
Addresses different parties in science enterprise

Research integrity principles

- Honesty in communication
- Reliability in performing research
- Objectivity
- Impartiality and independence
- Duty of care
- Fairness in providing references and giving credits
- Responsibility for the scientist and researchers of the future

Source: ESF (2010). Fostering Research Integrity in Europe - European Code of Conduct for Research Integrity

Research misconduct

“Serious deviation of normal practice”

Source: Nick Steneck, WCRI 2015

Strong focus on FFP as misconduct**:**

- Fabrication,
- Falsification,
- Plagiarism

Research misconduct

Other forms of misconduct:

- Failure to meet clear ethical and legal requirements
- Breach of confidentiality
- Lack of informed consent and abuse of human subject or materials
- Improper dealing with infrigenments, attempts to cover up misconduct and reprisals on whistle-blowers

Source: ESF (2010). Fostering Research Integrity in Europe - European Code of Conduct for Research Integrity

Good research practices

Data
Procedures
Responsibility
Publications
Editorial responsibility

Source: ESF (2010). Fostering Research Integrity in Europe - European Code of Conduct for Research Integrity

Autorship

Why is it important?
Why scientists struggle for the authorship?
What does the authorship mean?
Are all contributors the authors?

- Evidence for the advancement in science and reference for the recognition and career progress
- **Responsibility** for the published work

Types of autorship

Guest
Gift
Ghost
Anonymous

All contributors are not the authors

Autorship

PhD researchers should be the principal authors for the publications resulting from their doctoral theses

Junior researchers who were major contributors to the the research should be given an opportunity to be authors of the relevant publications

Negotiate early on the authorship!

Why misconduct happen?

Intentional
or
Unintentional?

What are the consequences?

How much does it cost?

Why misconduct happen?

Intentional misconduct

- **Profile**: Persons leaded by personal ambitions and benefits
- **Circumstances** may also influence intentional misconduct:
  High publications demands - “publish or perish”

Unintentional:

- Unawareness of the rules and methods
- Cultural differences (particularly important for mobile researchers)
- Language skills

Special position of young researchers - features

- Level of experience
- Level of knowledge – related to professional and ethical standards
- Career level – more frequently exposed to publishing pressures
- Dependent status – relations with supervisors and senior staff are highlighted
- High mobility rates – influence of different practices
- Special status – both students and researchers – raise questions related to training practices

Source: Krstic, S. (2015). Research integrity practices from the perspective of early-career researchers, SEE

Special position of young researchers - issues

- Insufficient or unsuitable training
- Negligence of RI standard and ethical rules by senior staff
- Authorship issues
- Prevailing institutional culture protecting senior staff

- Regarding RI training – discrepancy in the perceptions between supervisors and students on what is provided and what is received

Crucial role of mentors & supervisors

Mentors:

Both trainers and role models

Important role of other parts of research system:

- Research institutions
- Funding institutions
- Senior staff and colleagues, Pis
- Professional networks and societies
- External bodies – RI and Ombudsman offices

Ethical apprisial in H2020

Ethical evaluation of proposals and projects:

Pre-screening
Screening

Ethical checks
Ethical auditing

What is needed

Knowledgeable approach to the research and research integrity
Higher awareness on rules and principles
Better training
Better opportunities to researcher at early stages of their careers
Open new avenues on research
Build the institutional culture