Good scientific practice and code of conduct in Finland. Procedures for handling misconduct and alleged fraud in science.

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Overview

- Procedures applied in Finland are available in English at www.tenk.fi
- The international state-of-the art is best described by
  - **The European Code of Conduct for Research Integrity** from April 2011 (www.esf.org/publications).
  - The Singapore Statement (www.singaporestatement.org) at the global level

The European CoC and the Singapore Statement

- **The European Code of Conduct for Research Integrity is a consensus document of the ESF Member Organisation Forum on Research Integrity together with ALLEA. The code addresses good practice and bad conduct in science, offering a basis for trust and integrity across national borders.**
- **The principles set out in the Singapore Statement on Research Integrity represent the first international effort to encourage the development of unified policies, guidelines and codes of conduct, with the long-range goal of fostering greater integrity in research worldwide.**
- **The Statement is the product of the collective effort and insights of the 340 individuals from 51 countries who participated in the 2nd World Conference on Research Integrity in 2010.**
- **The Singapore Statement on Research Integrity is intended to challenge governments, organizations and researchers to develop more comprehensive standards, codes and policies to promote research integrity both locally and on a global basis.**

Differences between European and American approaches

- **The European approach relies on self-regulation**
  - However, self-regulation does not work if it is not practiced.
  - Demands are growing for national regulation systems for RI in Europe.
- **The American approach relies on a legalized system with RI officials with "police powers". ORI announces its misconduct findings and the sanctions applied on its web page (http://ori.hhs.gov)**
  - Not acceptable to the European academic institutions or community which consider the ORI approach legalistic and criminalizing

Misconduct allegations in the world

- No comparable global data available but plenty of indirect evidence that misconduct cases have multiplied over the past ten years
  - In the U.S. the number of cases increased three-fold during 1998-2008
  - Nature has detected plagiarism in up to 23% of articles sent to it for publication.
  - Data from Thomson Reuters indicate that there was a 15-fold jump in the number of retraction notices between 2001 and 2010, from just 22 in 2001 to 339 in 2010. In the first six months of 2011 there were 210 retraction notices, suggesting that the numbers are continuing to climb (THE 25 August 2011).
  - Particularly common in high-impact journals
  - Medicine and pharmacology particularly prone to misconduct (May 28, 2009 - 20:33 in Psychology & Sociology)
  - ORI consultant claims that one in every 100 researchers engages in serious misconduct over a three- to five-year period. (THE, 5 August 2010)

Finland

- Very little data available from the research institutions beyond the allegations reported to TENK
- TENK deals with up to ten cases of alleged misconduct annually
- TENK is usually informed about alleged misconduct at post-graduate level, (licentiate, doctoral studies onwards, but does not exclude MA thesis level cases)

TENK's role

- TENK is a kind of "appeals court" without being a court
- It does not investigate alleged misconduct cases. The investigations are conducted by the institutions themselves acc. to TENK guidelines
- All Finnish universities and other research institutions are committed to following the TENK guidelines
- If the parties involved are not satisfied with the investigation, they can ask TENK for an opinion
- TENK does not pronounce verdicts or issue sanctions

TENK guidelines

- Date from 2002 and are currently being updated. New guidelines expected to be finished in 2012.
- Misconduct in science is manifested as gross negligence and irresponsibility especially in the conduct of research.
    - Other examples of misconduct in science include understatement of other researchers' contribution to a publication and negligence in referring to earlier findings; careless, and hence misleading, reporting of research findings and the methods used; negligence in recording and preserving results; publication of the same results several times as new; and misleading the research community about one's own research.
- Fraud in science means deceiving the research community and often also decision-makers. It is to
    - give false information or present false results to the research community or to disseminate them for instance in a publication, in a paper presented at a scientific conference, in a manuscript submitted for publication or in a grant application.
- Different manifestations of fraud are divided in four categories:
    - fabrication, misrepresentation, plagiarism and misappropriation.

International guidelines

- In international contexts fraud or misconduct is usually divided in three categories: fabrication, falsification, plagiarism (FFP) which, however, cover the same types of misconduct as are described in the Finnish guidelines

Irresponsible but rampant practices

- Irresponsible but rampant practices (so-called gray area practices) will be discussed in the updated guidelines
  - These practices are often also called minor misdemeanours, questionable research practices or condemnable research practices. These practices are particularly common in academic publishing and include ghost or guest authorship, chain-letter style referencing, photoshopping, self-plagiarism etc.

- The new guidelines will also include discussion on
  - Peer reviewers' role and responsibilities,(cf. ESF guidelines), CVs, lists of publications, project leader's roles and responsibilities
  - Doctoral students' and project researchers' rights and responsibilities
  - Data ownership issues

- Normally, irresponsible conduct in these areas does not lead to formal investigations but need to be discussed and discouraged in RI education and training

Possible sanctions

- Issued by the research institution
  - Dismissal
  - Revoking a degree
- Other consequences
  - Media publicity
  - Loss of academic reputation and career prospects

Finally

- The responsibility for responsible research practices lies on the individual researcher
- Integrity is a concept between your own ears