



INSTITUTIONAL RESPONSES TO VIOLATIONS OF RESEARCH INTEGRITY

- COPE European seminar *Publication Ethics from student to professional*, London 22-03-'13
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References

- *The European Code of Conduct for Research Integrity* (ESF/ALLEA, 2011)
- *Responsible Conduct in the Global Research Enterprise* (IAP, 2012)
- *Investigating Research Misconduct Allegations in International Collaborative Research Projects: A Practical Guide* (OECD Global Science Forum, 2009)
- *The fraudulent research practices of social psychologist Diederik Stapel* (Stapel Investigation, WordPress, 2012)



Institutional Responses

- Universities and research institutes
- Funding agencies
- Academies of Sciences and Humanities
- (Journals and publishers)



Violations of research integrity

- Fabrication (making up results)
- Falsification (manipulating research processes or data)
- Plagiarism (appropriation of ideas/results/words without credit)
- Improper dealing with violations
- Minor misdemeanours (falsification *in statu nascendi*)



Responses

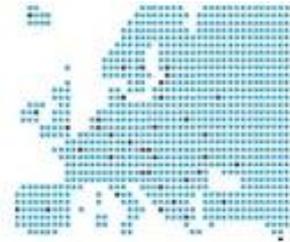
- Depend on *seriousness* of misconduct (level of intent, consequences, aggravating/mitigating factors)
- To be shown that misconduct was committed *intentionally, knowingly, or recklessly*
- No honest errors or differences of opinion



Universities and Research Institutes

Practices and Measures

- Code of Conduct, set of good practices, well defined procedures in cases of misconduct
- Educating, training, mentoring
- Supporting conditions and regulations:
 - Procedures reporting
 - Integrity officers/c'tees
 - Protection of whistle blowers
 - Plagiarism detection systems
 - Data storage and archiving
 - Pledge students/employees
- Impartial investigation mechanisms regarding suspected cases of misconduct (confident, fair, comprehensive, expedient, timely), followed by appropriate actions. Minor misdemeanours?



Universities and Research Institutes

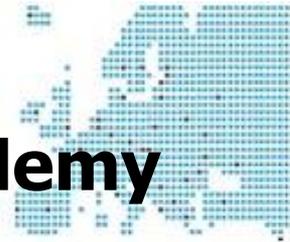
Practices and Measures (II)

- Transparency, collegial control; responsibility of supervisors e.o.; co-authors fully responsible for the whole publication (unless otherwise indicated)
- Retractions (preferably with mentioning the reason)
- Allevation of emphasis on metrics; additional ways of quality measurement



Funding Agencies

- Insist on responsible research practice; condition for grants
- Actual power and opportunities to investigate in Europe are limited (integrity control considered to be responsibility of university/research institute)
- Instruments and means:
 - Funding research into nature and prevalence of research misconduct
 - Increasing alertness and sensitivity of reviewers
 - Provide funding only if responsible research practices are warranted
 - Require storage and accessibility of data
 - Support more replication and verification studies
 - Avoid publication bias



Academies of Sciences and Interacademy Organisations

- Reflection on basic norms and standards; assistance in developing and disseminating standards and codes
- In dialogue with other national players: National Research Council, Association of Universities/Rectors Conferences
- Foundation (and (wo)manning) of National Council for Research Integrity
- Not: Investigation bodies, or decisive court of appeal
- (In case of Academy research institutes: regular employer's responsibility)
- Same applies *mutatis mutandis* for associations of Academies at supra-national level



All-embracing enquiry

- In cases of demonstrated fraud the university or research institute has the responsibility to scrutinise the whole of the fraud's body of scientific work (own publications, co-authored publications, dissertations under his/her supervision)
- In case of Stapel:
 - proven fraud in 55 of the 137 publications examined,
 - high probability of fraud in another 10 publications
 - fraud in 10 out of 18 dissertations



Statistical evidence

- Stapel in Amsterdam period:
 - No data available
 - No confession
- Statistically highly implausible results/irregularities; Bayesian formula indicating 'proof of manipulation'
- Rating all publications on scale: (not applicable –) none – negligible – slight – relatively strong – strong
- Wider applicability of the Bayesian formula: C'tees of enquiry, boards of faculty/university, journal editors



Annulment of granted degree

- In many countries degree can be nullified if there is proof that serious infringements of research integrity have taken place in preparing the dissertation; Question: Is 'statistical' evidence sufficient for judge?
- Withdrawal of degree on the bases of misconduct perpetrated *after* the conferral of the degree?



Conclusion

- In this presentation we have seen:
 - Various measures and actions of responsible academic institutions available
 - Not always one best approach
 - Some questions remain unanswered
 - Practical or legal obstacles may hinder desired response

- Discussion may contribute to raising awareness and a sense of urgency to develop policies and strategies how to deal with and (more importantly) how to prevent unethical and harmful violations of the principles of research integrity