

Research Integrity

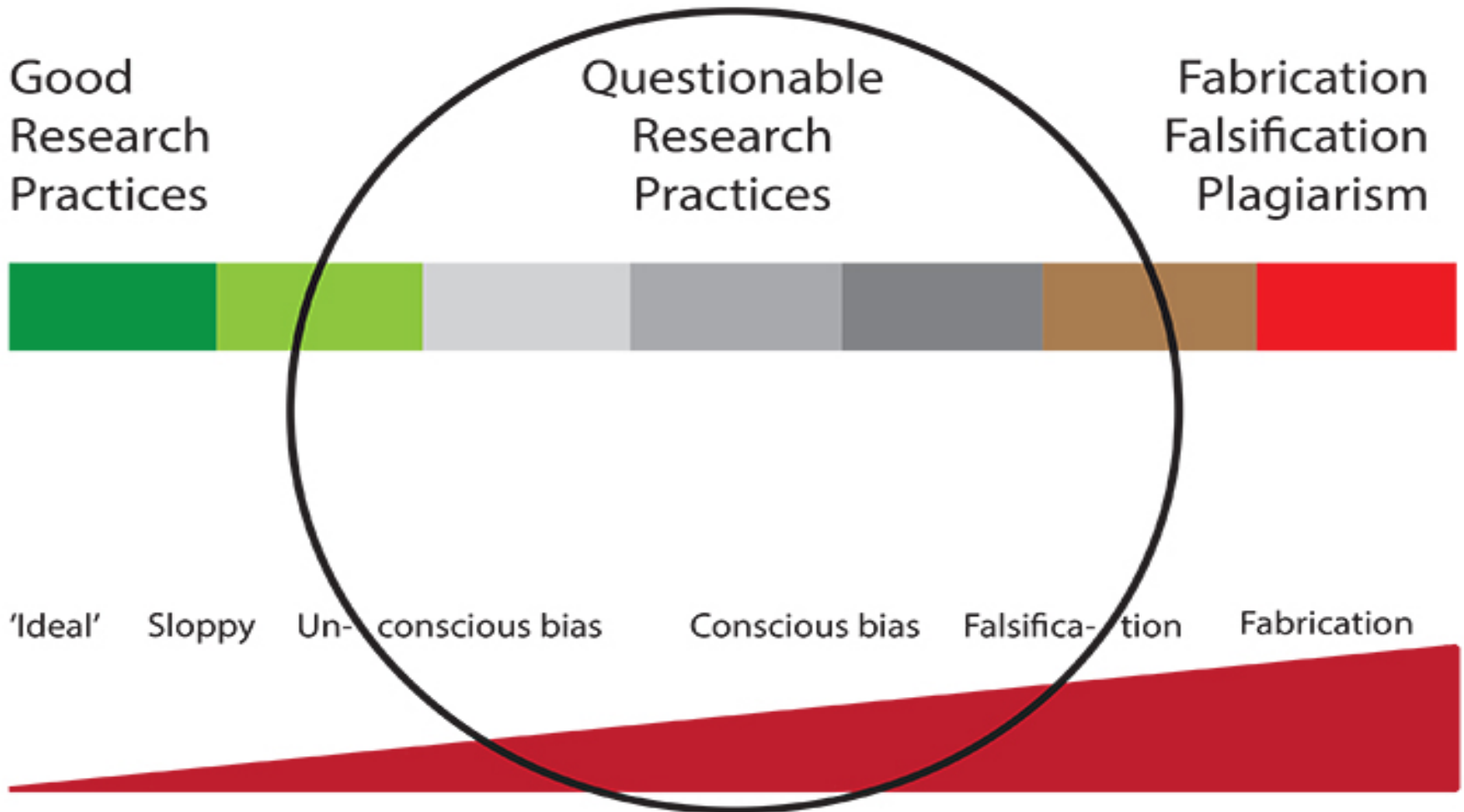


Source: Erasmus MC



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What's it about



Bad apples in the science bunch

Top drie van academische sjoemelaars

		
YOSHITAKA FUJII	JOACHIM BOLDT	DIEDERIK STAPEL
<ul style="list-style-type: none">● 52 jaar● Japanse anesthesist	<ul style="list-style-type: none">● 58 jaar● Duitse anesthesist	<ul style="list-style-type: none">● 46 jaar● Nederlandse socioloog
<ul style="list-style-type: none">● Moest 172 publicaties intrekken	<ul style="list-style-type: none">● Moest 88 publicaties intrekken	<ul style="list-style-type: none">● Moest 55 publicaties intrekken
<ul style="list-style-type: none">● Pas 12 jaar na eerste verdenking ontslagen	<ul style="list-style-type: none">● Knoelde onder meer met patiëntaantallen	<ul style="list-style-type: none">● Fraudeerde op grote schaal met gegevens

Source: De Morgen, 'Wetenschappelijke fraudeur krijgt levenslang' (Eline Delrue), 23/03/2013, pg.7

Some numbers

- FFP

(Fanelli, PloS ONE, 2009, p.1)

“A pooled weighted average of 1.97% (N = 7, 95%CI: 0.86–4.45) of scientists admitted to have fabricated, falsified or modified data or results at least once –a serious form of misconduct by any standard [...]. In surveys asking about the behaviour of colleagues, admission rates were 14.12% (N = 12, 95% CI: 9.91–19.72) for falsification [...].”

(Translated from EOS, April 2013, p.25)

“From 315 researchers who completed an extensive survey, 4 admit to having fabricated data one or several times in the last three years (1,3%).”

QRP

(Fanelli, PloS ONE, 2009, p.1)

“[...] and up to 33.7% admitted other questionable research practices. [In surveys asking about the behaviour of colleagues, admission rates were] up to 72% for other questionable research practices.”

(Translated from EOS, April 2013, p.28) *“[...] 69% admit that he/she added at least one coauthor without that person having a real input in the past three years” (gift authorship)*

(Translated from EOS, April 2013, p.26) *“[...] [27% of the respondents admit to have left out data or observations based on a gut feeling]”*

...

Who are they, what moves them? Causes

(Kornfeld, Academic Medicine, 2012)

Typology: 6 types

Misconduct = result of the interaction of psychological traits and the circumstances in which these individuals found themselves (~publication pressure)



“the desperate”

whose fear of failure overcame a personal code of conduct



"Hey hon, I finally finished writing the first line of my book! It took me three months, but it's the **BEST FIRST LINE EVER!!** Wanna hear it? Hon?"

INKYGIRL.COM: Daily Diversions For Writers
Copyright © 2008 Debbie Ridpath Ohi

“the perfectionist”

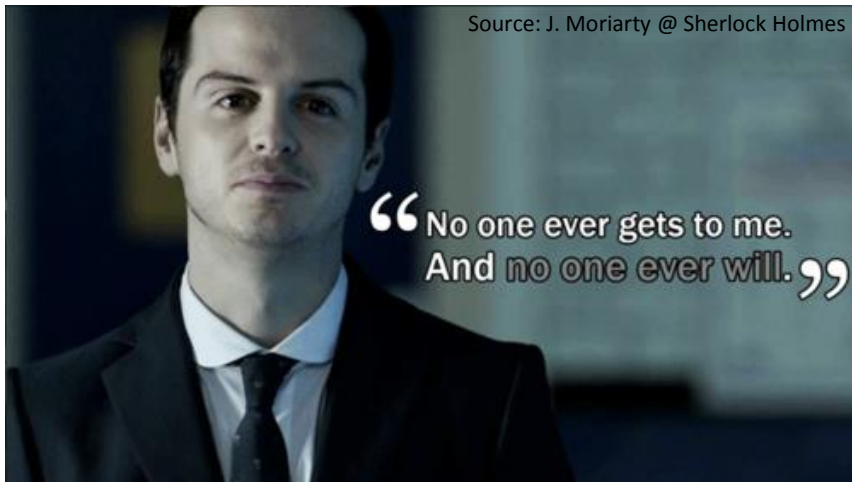
for whom any failure was a catastrophe



“the ethically challenged “
who succumbed to temptation



“the grandiose”
who believed that his or her superior
judgment did not require verification



“the sociopath”

who was totally absent a conscience (and, fortunately, was rare)



“the non professional support staff”

who were unconstrained by the ethics of science, unaware of the scientific consequences of their actions, and/or tempted by financial rewards



Whosoever desires constant success must change his conduct with the times.

(Niccolo Machiavelli)

ixquotes.com

Machiavellianism = a person's tendency to be unemotional, detached from conventional morality and hence to deceive and manipulate others, to focus on unmitigated achievement and give high priority to own performances'.

=> more easily engage in research misbehavior

(Tijdink et al., PlosOne,2016)



Narcissistic and psychopathic traits are more common in higher academic ranks.

Scientists in higher academic ranks have less self-esteem.

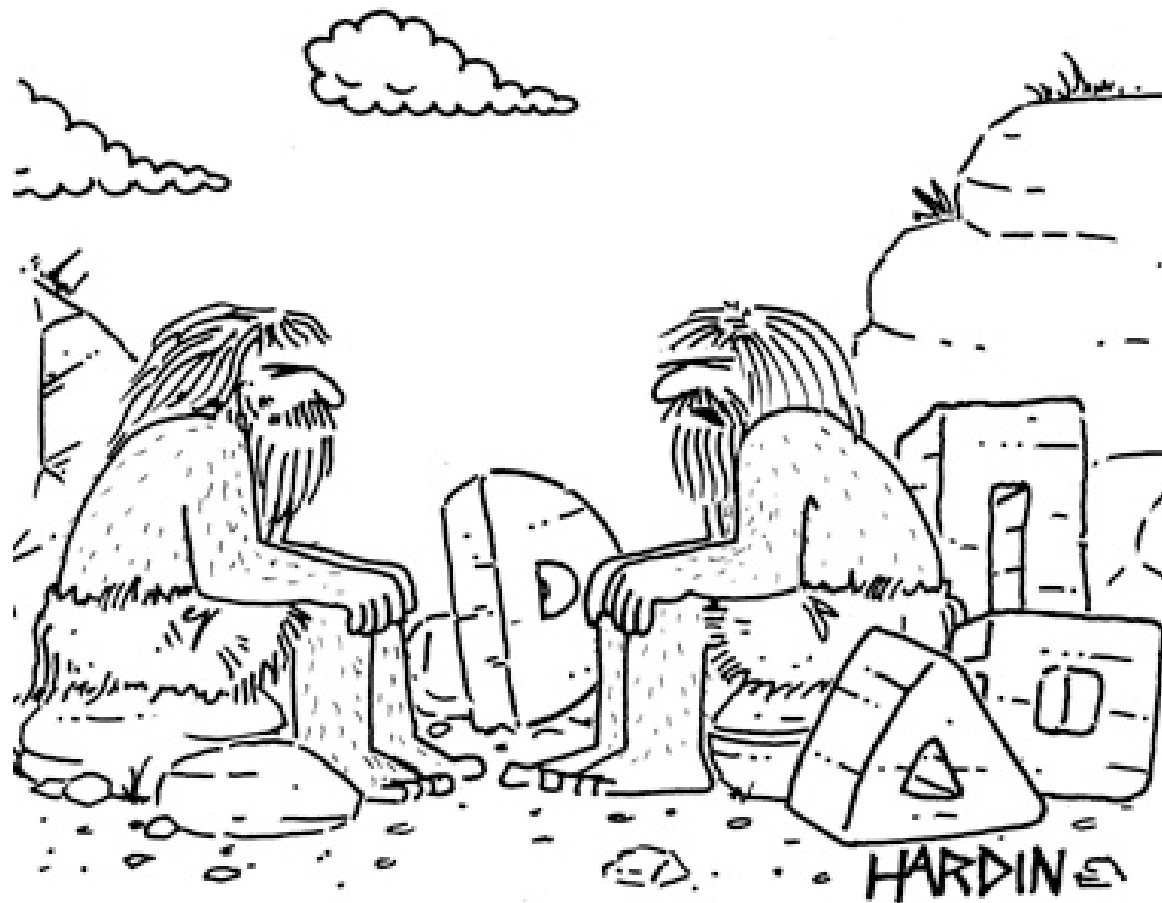
=> personality traits offer some kind of 'survival benefit' in academia.

(Tijdkink et al., PlosOne,2016)



Source: cuppacafe.com

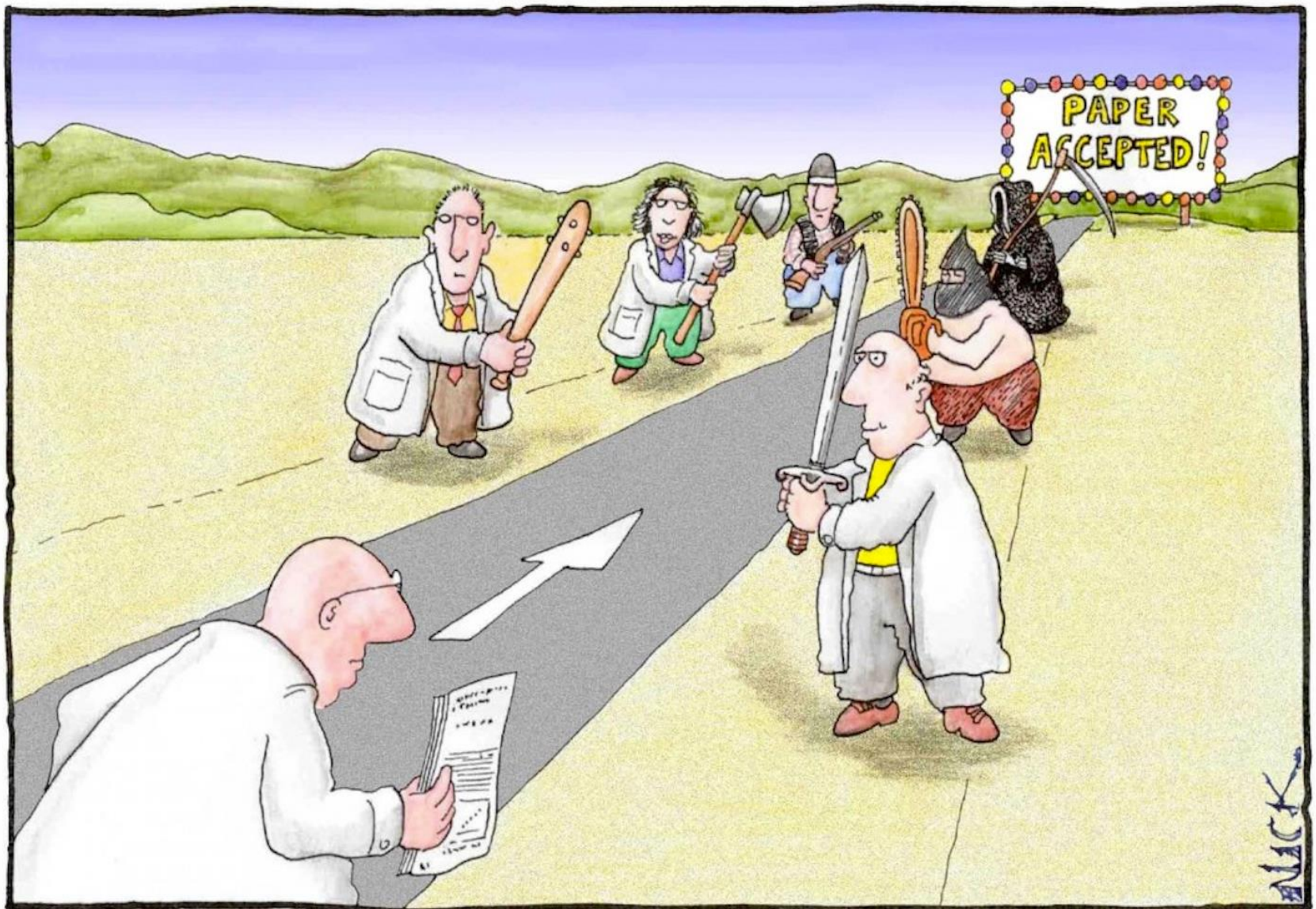
PRESSURE



"I was close to a breakthrough when
the grant money ran out."

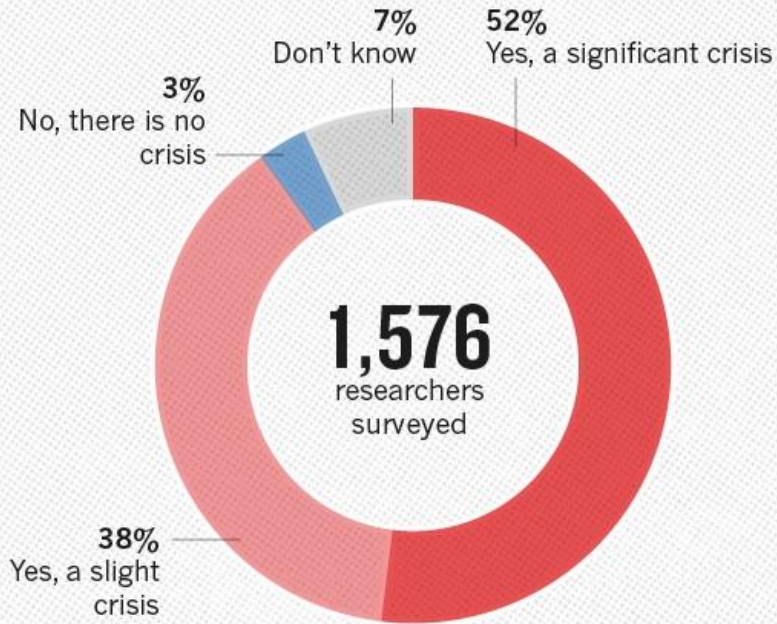


LOW DETECTION – myth of self correction



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

IS THERE A REPRODUCIBILITY CRISIS?



©nature



PUBLICATIONS AND DATA

Looking for answers

Code of conduct

Did you make the
right choice?



✓ **Check the code.**

The Singapore Statement on Research Integrity

PRINCIPLES

Honesty in all aspects of research

Accountability in the conduct of research

Professional courtesy and fairness in working with others

Good stewardship of research on behalf of others

1. Integrity: Researchers should take responsibility for the trustworthiness of their research.

2. Adherence to Regulations: Researchers should be aware of and adhere to regulations and policies related to research.

3. Research Methods: Researchers should employ appropriate research methods, base conclusions on critical analysis of the evidence and report findings and interpretations fully and objectively.

4. Research Records: Researchers should keep records of all research in ways that will facilitate replication of their work by others.

5. Research Findings: Researchers should report findings openly and promptly, as soon as possible, and provide an opportunity to establish priority and ownership.

6. Authorship: Researchers should take responsibility for their contributions to all publications, funding applications, reports and other representations of their research. Lists of authors should include all those and only those who meet applicable authorship criteria.

7. Publication Acknowledgement: Researchers should acknowledge in publications the names and roles of those who made significant contributions to the research, including writers, funders, sponsors, and others, but do not meet authorship criteria.

8. Peer Review: Researchers should provide fair, prompt and rigorous evaluations and respect confidentiality when reviewing others' work.

9. Conflict of Interest: Researchers should disclose financial and other conflicts of interest that could compromise the trustworthiness of their work in research proposals, publications and public communications as well as in all review activities.

10. Public Communication: Researchers should limit professional comments to their recognized expertise when engaged in public discussions about the application and importance of research findings and clearly distinguish professional comments from opinions based on personal views.

11. Reporting Irresponsible Research Practices: Researchers should report to the appropriate authorities any suspected research misconduct, including fabrication, falsification or plagiarism, and other irresponsible research practices that undermine the trustworthiness of research, such as carelessness, improperly listing authors, failing to report conflicting data, or the use of misleading analytical methods.

12. Responding to Irresponsible Research Practices: Research institutions, as well as journals, professional organizations and agencies that have commitments to research, should have procedures for responding to allegations of misconduct and other irresponsible research practices and for protecting those who report such behavior in good faith. When misconduct or other irresponsible research practice is confirmed, appropriate actions should be taken promptly, including correcting the research record.

13. Research Environments: Research institutions should create and sustain environments that encourage integrity through education, clear policies, and reasonable standards for advancement, while fostering work environments that support research integrity.

14. Societal Considerations: Researchers and research institutions should recognize that they have an ethical obligation to weigh societal benefits against risks inherent in their work.



The European Code of Conduct for Research Integrity

Code of Ethics for Scientific Research in Belgium



Looking for answers

Policy Plan RI@GU

Zoeken

[Zoek](#)

22 resultaten voor uw zoekopdracht wetenschappelijke integriteit. Niet gevonden wat u zocht?

→ Ook interne resultaten weergeven

→ Zoek binnen alle UGent-websites

Sorteer op [relevantie](#) · [datum \(meest recente eerst\)](#) · [alfabetisch](#)

[Filter de resultaten](#)

Wetenschappelijke integriteit

door [etdesmet](#) — gepubliceerd 09-10-2013 — Laatste wijziging: 06-09-2017 11:57

[Over UGent](#) > [Waarvoor staat de UGent?](#)

Wetenschappelijke integriteit

door [etdesmet](#) — gepubliceerd 01-04-2015 — Laatste wijziging: 07-09-2017 09:45

[Op het werk](#) > [Wetenschappelijk onderzoeksbeleid](#) > [Integriteit, ethiek en kwaliteitszorg](#)

LOG IN!

[Beleiden Wetenschappelijke Integriteit](#)

Policy Plan RI@UG

- Positive implementation: enhancing quality
- Wide implementation: fraud + sloppy science
- Focus
 - Proactive two-track policy
 - Shaping and encouraging “good practices of science”
 - Improving general quality culture
 - Zero tolerance policy
- Integrated part of daily practice
- Inclusive for all levels and across all disciplines
- Universal values
- Discipline translation own needs and questions
- Bottom up – involvement
- Structural embedding



Source: www.advisortweets.com



Fostering Responsible conduct of research FRCR

4x/py – 2/ps

Check DS Newsletter for new dates in Autumn!



FRCR – custom made workshop

Research Integrity Advisor - Committee for Research Integrity

- First line for all your doubts and questions

Stefanie.vanderburght@ugent.be

CWI@ugent.be

- Mediation
- Formal procedure



G. R. EVANS

THE GOOD,
THE BAD &
THE MORAL
DILEMMA



Dilemmas in science



Erasmus Universiteit Rotterdam

Dilemma Game Professionalism and Integrity in Research



Erasmus
ERASMUS UNIVERSITEIT ROTTERDAM

Dilemma fun

- Read the dilemma (in silence)
- Choose an option (letter) – don't tell/don't show!
- Raise your letters
- Discover the answers of your group members
- Group discussion
- Ask questions

DILEMMA

A close friend asks me to comment on his paper. While reading the paper I detect a great number of similarities with some recently published papers. The similarities do not constitute plagiarism in a literal sense, but are noticeable. When confronting my friend with my findings he seems unimpressed and submits his paper to an international journal without any profound changes. A couple of weeks later I receive the request from the journal to act as a referee on this particular paper.

What do I do?



OPTIONS

- A. I decline the invitation.
- B. I accept the invitation but in my review do not mention the similarities I noticed before.
- C. I accept the invitation and report the similarities.
- D. I ask my friend what he wants me to do.

CODE OF ETHICS

EU-code:

- Authors **acknowledge** important work and intellectual contributions of others, including collaborators, assistants, and funders, who have influenced the reported research in appropriate form, and **cite** related work correctly.
- Researchers **take seriously** their commitment to the research community by participating in **refereeing, reviewing and evaluation**.
- Researchers review and evaluate submissions for publication, funding, appointment, promotion or reward **in a transparent and justifiable manner**.
- Reviewers or editors with a **conflict of interest withdraw from involvement** in decisions on publication, funding, appointment, promotion or reward.
- **Ignoring** putative **violations** of research integrity by others or **covering up** inappropriate responses to misconduct or other violations by institutions is considered **misconduct**.

RI & publishing

Samenvatting van de verschillen tussen samenvatten, parafraseren en citeren

Samenvatten	Parafraseren	Citeren
Je moet verwijzen naar de oorspronkelijke bron	Je moet verwijzen naar de oorspronkelijke bron	Je moet verwijzen naar de oorspronkelijke bron
De tekst van de samenvatting is veel korter dan de originele tekst	De tekst kan zowel korter als langer zijn dan het origineel	De tekst is precies evenlang als het origineel
Je gebruikt je eigen woorden en citeert zo weinig mogelijk	Je gebruikt je eigen woorden	Je gebruikt precies dezelfde woorden als in het origineel
		Plaats de tekst tussen aanhalingstekens
		Verwijs naar de bladzijde in de originele tekst

Source: <http://www.vanderkaap.org/histoforum/2009/citeren.html>

- Images taken from the web
- Ideas taken from a journal
- Newspaper articles
- Your own ideas
- Common knowledge (f.e. start and end dates of the Vietnam war)
- Statistics compiled by one author, but appearing in another author's work (= secondary reference)

Electronic tools such as Mendeley, Endnote
BUT there's ALWAYS a risk!

Plan – Do - Check

- Keep track of sources and notes
- Understand the rules around citations and references
- Manage your time
- Develop your confidence
- Ask for help
- Take pride in the integrity of your work



- **Plagiaat** is het hergebruik van andermans materiaal zonder adequate bronvermelding.
- De internationaal gangbare definitie van plagiaat luidt: "*Plagiarism is the appropriation of other people's material without giving proper credit*"³. In deze definitie zijn twee elementen van belang: een plagiërende wetenschapper eigent zich het materiaal toe van een andere wetenschapper (*appropriation*) en doet daarbij onvoldoende recht aan de bijdrage van die ander (*credit*). Plagiaat gaat dus per definitie over gebruik van het materiaal van andere wetenschappers zonder adequate bronvermelding. ~~Plagiaat is het hergebruik van andermans materiaal zonder adequate bronvermelding.~~

DILEMMA



I am starting my PhD project and as a first task I am asked to rewrite a paper by a former PhD colleague who has meanwhile left academia. I notice the paper needs only small changes and the reviewers are very mild and friendly, so the paper may get accepted in the next round. My professor suggests putting me as last author, to support my academic career, despite my limited contribution to the actual research process. He will be the first author. The former PhD has agreed that others can use his work, but no specific agreements were made.

What do I do?

OPTIONS

- A. I agree to the offer and get listed as last author.
- B. I suggest that I should be mentioned in a footnote, but not listed as author.
- C. I contact the former PhD and ask him whether he wants the publication in his name.
- D. I decline the revising job; I do not want to be involved.

CODE OF ETHICS

EU-code:

- All authors agree on the **sequence of authorship**, acknowledging that authorship itself is based on a **significant contribution** to the **design** of the research, relevant **data collection**, or the **analysis or interpretation** of the results.
- Authors **acknowledge important work and intellectual contributions** of others, including collaborators, assistants, and funders, who have influenced the reported research in appropriate form, and cite related work correctly
- All authors are **fully responsible for the content** of a publication, unless otherwise specified.

On this page

- [Who can be put on the article as \(co-\) author?](#)
- [The order of the authors](#)
- [\(Legal and ethical\) infringements on authorship rules](#)

Info Je bent aangemeld. Info op jouw maat vind je op de studentensite of op het intranet voor personeel. ×

Authorship in scientific articles

Today, the traditional publication model of a single author prevails in only a few disciplines. In most other disciplines, multiple authors are almost always responsible for a publication, ranging from the limited partnership between doctoral students and their supervisor(s) to the publications by large(r) groups that collaborate in large international consortia.

Who can be put on the article as (co-)author?

Being an author in a legal sense (in terms of copyright)

The author(s) is/are the person(s) who has/have produced the publication.

A publication is co-authored when the co-authors together, in consultation with each other, have realized a publication which is concrete and sufficiently original (i.e. authentic and creative) to be protected by copyright. Not all authors are required to make the same (large) contribution. What is key is that the publication may have been possible without the contribution of a person designated as an author, but that it would have been different or may have been interpreted differently; in other words, **what matters is that the contribution was substantial**.

In this approach, there is still room for interpretation, as opinions may differ on what exactly is a substantial contribution. These concepts need to be interpreted in accordance with the ethical regulations concerning authorship in science.

Being an author in an ethical sense

Authorship: 10 best practices

If you are thinking about writing a new publication:

1. **Consult** the **guidelines on authorship** within your field and/or faculty and find out what policy is in place at the journal in question. Make sure that any arrangements are always in line with this policy.
2. **Discuss authorship issues beforehand** (i.e. before you start writing) with anyone you want to involve in your publication (e.g. your supervisor, colleagues, experts). Clearly state what role you would like them to take up and what they will get in return. As such, each person involved may point out what their expectations are.
3. Use an authorship protocol (e.g. protocol [of the Faculty of Law and Criminology](#), [of the Faculty of Arts and Philosophy](#)) to formalize any arrangements made or at the very least record arrangements in an email. The **allocation and order** of authorship is known and **approved by all partners**.
4. **Appoint one corresponding author** Naturally, this person meets all the criteria for authorship. At the very least, this person has a clear view of how the article was realized and what everyone's contribution was. S/he is also ultimately responsible for all contributions being correctly listed. This person is responsible for the entire content of the article, owns the materials used or knows where to find them (e.g. version control, data) and acts as the official point of contact. When this person is appointed, it is crucial that s/he continues to meet these requirements in the long term; at the very least s/he is required to have fixed contact date, as well as a commitment to follow-up.
5. In the course of the publication, certain **changes** are likely to occur (e.g. determined contributions may be altered, an expert may be added). In that case, any **decisions** that were taken will be reviewed and, if necessary, **amended**. + See item 3.
6. Journals increasingly require an authorship contribution statement, also known as contributorship disclosure, which explicitly and in detail describes what each author has done to realize the results, ranging from producing the research idea to writing and submitting a publication. Regardless of whether it was specifically requested by a journal, it is recommended that **for each manuscript** a clear description is given of **who was responsible** for what part and **what they did exactly**. These statements are preferably included in the actual article. Make sure that the contributions of all authors are explained in a clear, precise, detailed and accurate manner. Examples of authorship policies: [Nature](#), [PLoS](#), ...
7. For each author, add the **correct affiliation** and **ORCID**.
8. Anyone who **does not meet the criteria** for authorship **but did** somehow **make a valuable contribution** to the manuscript (e.g. by offering an idea, technical support, material, financial support or statistical advice) may be **acknowledged** by being mentioned in the acknowledgements section, in a footnote on the first

Faculty Ethical code and authorship protocol for PhD-student/staff collaborations

Everyone who is listed as an author should have made a substantial, direct, intellectual contribution to the work. For example (in the case of a research paper) they should have contributed to the conception, design, analysis and/or interpretation of data. Honorary or guest authorship is not acceptable. Acquisition of funding and provision of technical services, patients, or materials, while they may be essential to the work, are not in themselves sufficient contributions to justify authorship.



Source: www.communityfoundation.org.uk

CWI mediation



Source: best-buy-bakeware.wooshop.co.uk



DILEMMA

I receive a 'revise and resubmit' decision from a top tier journal. The editor, however, does not like the theoretical framework I used to derive my hypotheses. He suggests a different theoretical framework and asks me to completely re-write the introduction. As a result, my hypotheses would no longer be based on my a priori assumptions, but on a different post-hoc explanation.

What do I do?

OPTIONS

- A. I follow the advice of the editor and rewrite the paper.
- B. I send an email to the editor and explain why I think I should not do this.
- C. I revise the paper, but explain in detail in the revision notes why I disagree with the editor's recommendation.
- D. I indicate to the editor that I will not resubmit the paper and submit it to another journal.

CODE OF ETHICS

EU-code: ?

BE-code:

The researcher acts in a precise and nuanced manner when carrying out research and publishing its results. The obligation to obtain results should not interfere with this principle.

The research results must appear in full in publications and unwanted results must not be selectively omitted. Results which do not correspond to the stipulated hypotheses must always be mentioned in the publication of the research results. The level of uncertainty and the limits of the results must appear clearly in the publications, presentations and reports.

Other:

HARKing - Hypothesizing After Results are Known - typically with a view to make results to appear more spectacular ('Chrysalis effect')

DILEMMA

My PhD research is funded by a government organization. When discussing my conclusions it becomes clear that my conclusions are much too nuanced to make any political statements. The organization asks me to rewrite my conclusions into more clear-cut statements. Based on the data I think it is impossible to say things with such certainty. When I discuss the matter with my supervisor he tells me that I need to learn to write for my audience and that I should be able to make bolder statements. I might need the government organization for financing future research.



What do I do?

OPTIONS

- A. I rewrite my conclusions in the way the organization asks me to.
- B. I refrain from rewriting my conclusions.
- C. I decide to write an executive summary in which my conclusions are more certain and clear while keeping the nuanced conclusion in my dissertation.
- D. I ask an older researcher who is very strict on scientific guidelines to decide on the matter.

CODE OF ETHICS

EU-code:

*All authors **disclose any conflicts of interest and financial or other types of support** for the research or for the publication of its results.*



Need info?
Check our website!

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(Advice on) filing a complaint?
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