

**What can research institutes do  
to foster research integrity?**

***Lex Bouter***

# Content

- **QRPs are more important than FFP**
- **Researchers need support to prevent QRPs**
- **Research institutes have duties of care**



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# ACADEMIC RESEARCH CLIMATE AMSTERDAM



**RESEARCH**

**Open Access**

# Researchers' perceptions of research misbehaviours: a mixed methods study among academic researchers in Amsterdam



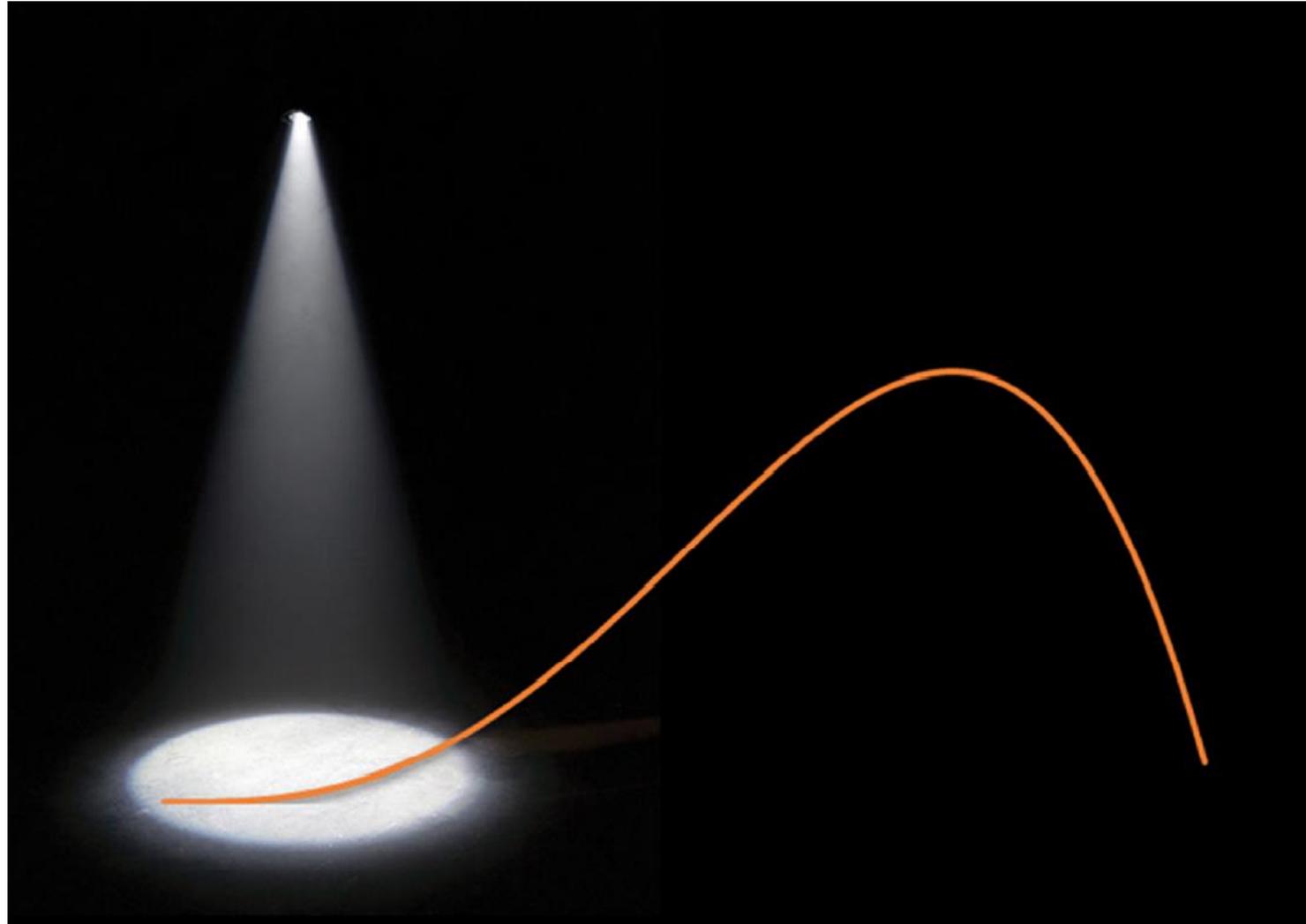
Tamarinde L. Haven<sup>1\*</sup> , Joeri K. Tijdink<sup>1,2</sup>, H. Roeline Pasman<sup>3</sup>, Guy Widdershoven<sup>2</sup>, Gerben ter Riet<sup>4,5</sup> and Lex M. Bouter<sup>1,6</sup>

# Top 5 – aggregated impact



1. Insufficiently *supervise* or mentor junior coworkers
2. Let own *convictions influence* the conclusions substantially
3. Choose a clearly *inadequate* research *design* or using evidently unsuitable *measurement instruments*
4. *Not publish* a valid ‘negative’ study
5. Give insufficient attention to the *equipment, skills* or *expertise* which are essential to perform the study

# Too much focus on FFP

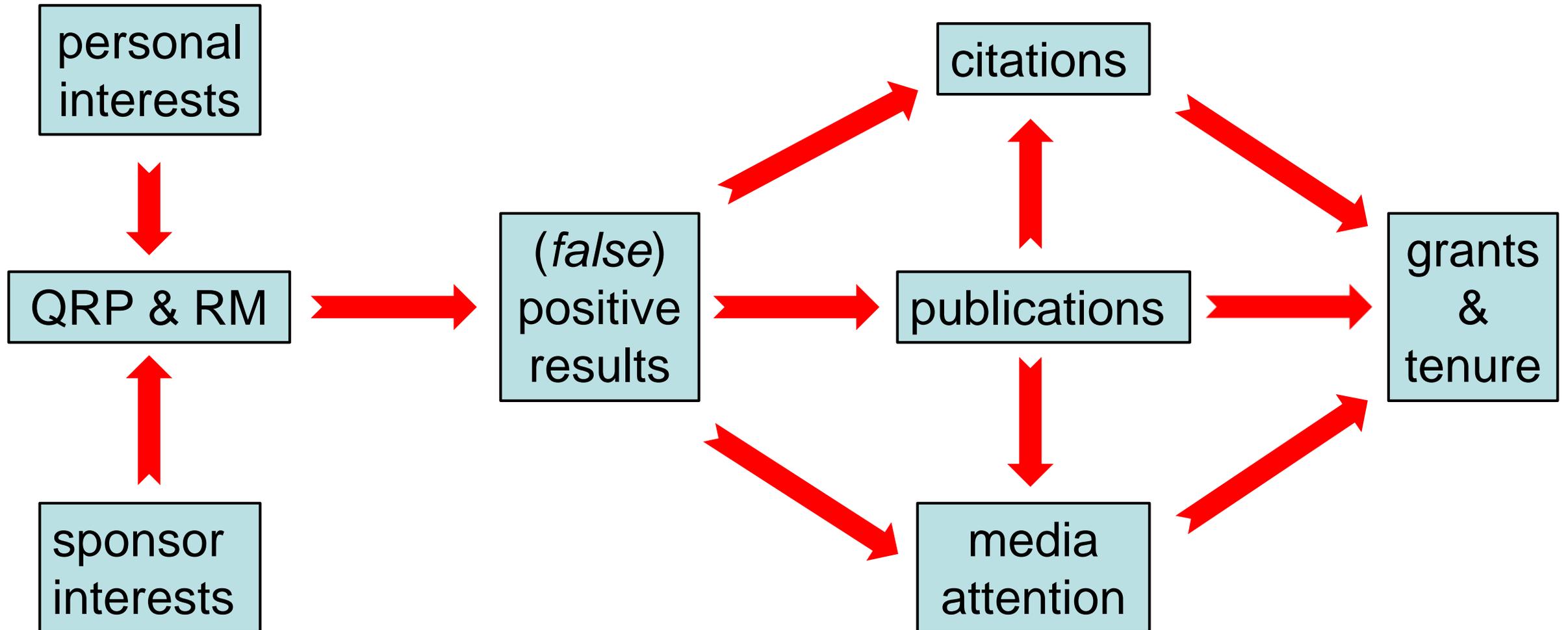


# Functioning of moral compass depends on:

- Individual virtuousness
- Research climate
- Perverse incentives



# How things can go wrong

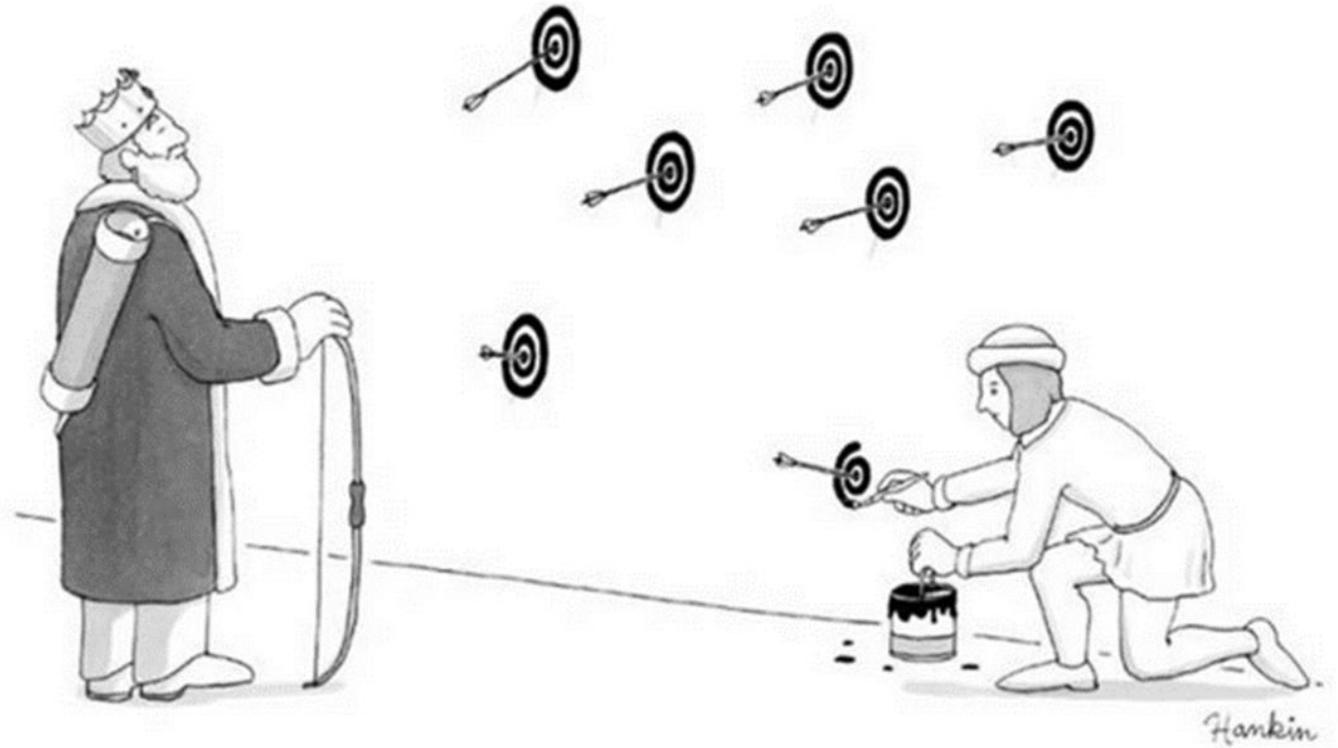


# Important tools to get positive results

- Selective reporting
- Low power
- P-hacking
- HARKing



**Hypothesizing After  
Results are Known**



# Degrees of Freedom in Planning, Running, Analyzing, and Reporting Psychological Studies: A Checklist to Avoid *p*-Hacking

*Jelte M. Wicherts\*, Coosje L. S. Veldkamp, Hilde E. M. Augusteijn, Marjan Bakker, Robbie C. M. van Aert and Marcel A. L. M. van Assen*

**34 Researcher Degrees of Freedom that can be used to get Positive Results**

# 1. Have clear codes, guidelines and SOPs

That explain what is expected behaviour in operational terms



**The European  
Code of Conduct for  
Research Integrity**

REVISED EDITION



**Leitlinien zur Sicherung  
guter wissenschaftlicher Praxis**

Kodex

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Welcome to the quality handbook that was developed by the EMGO+ Institute for Health and Care Research. This manual contains guidelines for a wide variety of topics, covering your research project from the start to the finish. The content of the guidelines was updated in 2017 with the help of key experts in our organisation. If you have any questions or comments, please do not hesitate to contact the quality committee by pressing the button on the right.

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**ORIGINAL ARTICLE**

**Responsible Epidemiologic Research Practice: a guideline developed by  
a working group of the Netherlands Epidemiological Society**

Gerard M.H. Swaen<sup>a,\*</sup>, Miranda Langendam<sup>b</sup>, Joost Weyler<sup>c</sup>, Huibert Burger<sup>d</sup>, Sabine Siesling<sup>e</sup>,  
Willem Jan Atsma<sup>f</sup>, Lex Bouter<sup>g</sup>

## 2. Have fair procedures for handling allegations

That protect both the whistleblowers and the scientists they accuse

ACCOUNTABILITY IN RESEARCH

2017, VOL. 24, NO. 6, 359–366

<https://doi.org/10.1080/08989621.2017.1327814>



Taylor & Francis  
Taylor & Francis Group

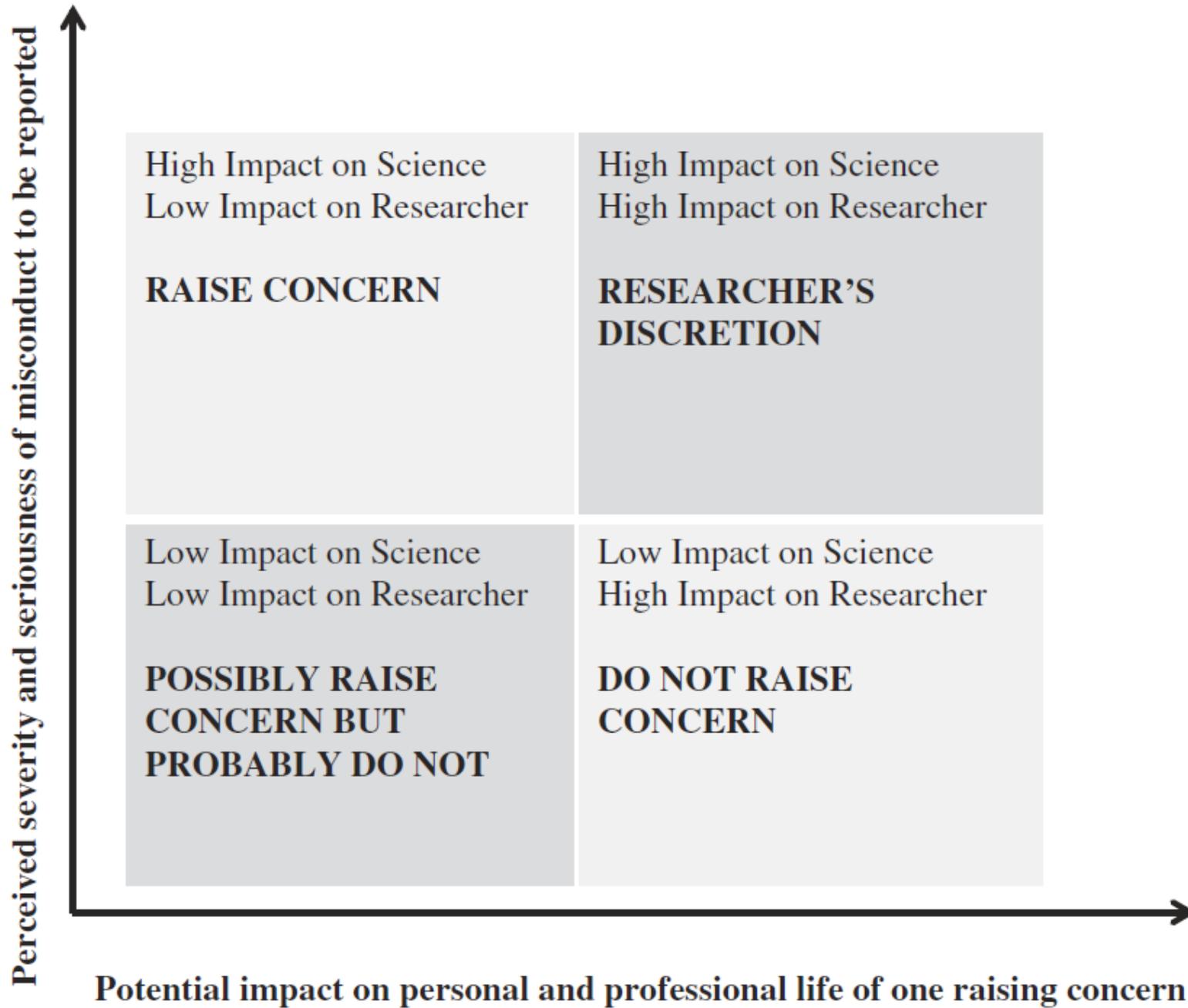
COMMENTARY



### Both Whistleblowers and the Scientists They Accuse Are Vulnerable and Deserve Protection

Lex M. Bouter, Ph.D.<sup>a,b</sup> and Sven Hendrix, M.D., Ph.D.<sup>c</sup>





### 3. Provide adequate mentoring and training in RCR

Which is likely to be important not only for PhD students

- PhD and postdoc RI courses are common
- No '*Licence to Supervise*'
- Insufficient mentoring is QRP #1
- Good role models are important
- Integration of mentoring skills + RI skills



← Onze opleidingen

# Superb supervision junior – a course for junior PhD supervisors

 3 dagen

Inschrijven →

## **4. Provide methodological and statistical support**

Because many QRPs have to do with poor methods

## **5. Have a system of internal audits**

Which is so often ignored in academia

## **6. Have good facilities for data-management and storage**

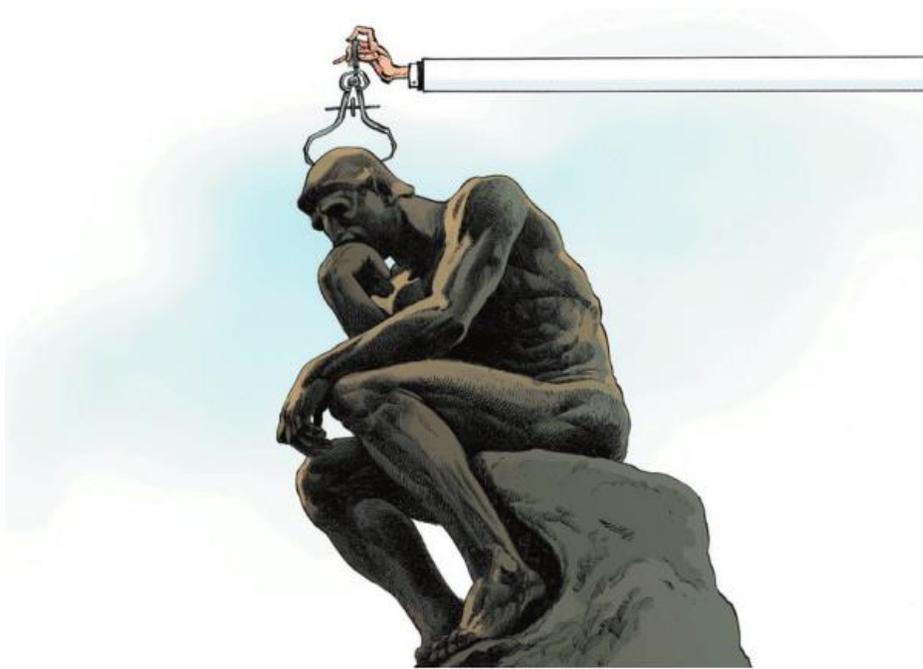
Using web-based solutions for being transparent and accountable

# FAIR Principles

**Research data are  
Findable, Accessible, Interoperable and Reusable**

# 7. Remove the perverse incentives in the reward system

And do not only count publications and citations



The Leiden Manifesto  
for research metrics



# THE HONG KONG PRINCIPLES FOR ASSESSING RESEARCHERS



FOSTERING RESEARCH INTEGRITY



## What are the HKP?

The Hong Kong Principles (HKP) were developed as part of the 6th World Conference on Research Integrity. They were developed to reinforce the need to ensure that researchers are rewarded for specific behaviors that promote trustworthy research.

# Hong Kong Principles

1. Assess responsible research practices
2. Value complete reporting
3. Reward the practice of Open Science
4. Acknowledge a broad range of research activities
5. Recognize essential other tasks like peer review and mentoring

## 8. promote an open research climate

With open discussion of dilemmas and learning from mistakes



**What  
Researchers  
Think About the  
Culture They  
Work In**

RESEARCH ARTICLE

# Perceptions of research integrity climate differ between academic ranks and disciplinary fields: Results from a survey among academic researchers in Amsterdam

Tamarinde L. Haven <sup>1\*</sup>, Joeri K. Tjink<sup>1,2</sup>, Brian C. Martinson <sup>3</sup>, Lex M. Bouter <sup>1,2</sup>

# Research Integrity Climate

- **junior researchers** perceive the research integrity climate **more negatively** than senior researchers
- **junior researchers** note that their **supervisors are too little committed** to talk about key research integrity principles
- **PhD students** perceive **more competition and suspicion** among colleagues than associate and full professors
- researchers from the **natural sciences** have a **more positive perception** of the research integrity climate
- Researchers from **social sciences** as well as from the **humanities** perceive **less fairness** of their departments' expectations in terms of **publishing** and **acquiring funding**

Science and Engineering Ethics

<https://doi.org/10.1007/s11948-020-00178-5>

OPINION/COMMENTARY



# What Research Institutions Can Do to Foster Research Integrity

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# 7<sup>th</sup> WORLD CONFERENCE ON RESEARCH INTEGRITY

Cape Town, South Africa  
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