

MLE Research Integrity Challenge paper on Incentives

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## What do we mean by incentives?

- Opposite of sanctions/punishments
- Sanctions:
  - aim to change behaviour with the threat of a penalty penalty that comes in the form of a cost paid in terms of career, social reputation, finances or even personal freedom
- Incentives:
  - aim to encourage desirable behaviours by offering rewards of the same nature
- Anything used to sanction can be converted in an incentive
- Forced requirements are not ideal incentives
  - "carrots" make people give their best.



## Who has the power? Incentives are not just set top-down

Inter-university/national Research Integrity organizations

**Funding institutions** 

University leadership

School/Dep. leadership

Lab leaders

Senior researchers

Trainees, students, future researchers



## What aspects of research integrity can be incentivized?

- Conducting research with integrity, responsibility, transparency and accountability
- Encouraging good research practice in other actors
- Fostering an environment supportive of research integrity
- Seek training for oneself and actively training colleagues in research integrity
- Actively promoting RI and preventing, reporting and amending behaviours that constitute research misconduct
  - Special efforts in aiding self-correction, e.g. helping uncover flaws of a commonly used methodology or ensuring the correction or retraction of flawed publications.
  - Correcting or retracting one's own flawed work.



## Who can do what? Most, most.

	Conduct research with integrity, responsibility and accountability	Encourage good research practice	Foster an environment supportive of research integrity	Seek training for oneself and actively train others in research integrity	Actively promote RI and prevent, report and amend research misconduct
Trainees	X	X	X	X	X
Senior r.	Х	X	X	X	X
Lab lead	Х	X	X	X	X
School/dep		Χ	X	Χ	Χ
University		Χ	X	Χ	Χ
Funding				Χ	Χ
Inter-univ			X	Χ	X

## What kinds of incentives can be offered?

#### Informal acknowledgement

- private and public praise, citations
- e.g. for researchers who self-retract

#### Formal acknowledgements

- Badges, awards and other symbolic but official signs of recognition
- e.g. journal badges for Open Science

#### Formal honours and other marks of prestige

Exclusive access to prestigious roles and positions

#### Material access to resources

- Research grants and monetary awards
- e.g. Nobel and other prizes, COS registration challenge



#### Perverse Incentives

- Are pressure to publish and bibliometrics threatening research integrity?
  - No hard evidence, possibly contrary evidence
- Perverse incentives beyond pressure to publish
  - By-product of competitive "tournament model"
  - Competition good, connect RI with winners
- Science as a changing enterprise
  - Radical and rapid developments call for innovation
- Setting positive incentives to encourage the adoption of new and better practices



## Beware of unintended consequences

- E.g. Incentives to share and re-use data
  - Nourishment for "data parasites"?
- NIH regulation 2017: all brain imaging studies need to register, report etc. like clinical trials
  - Slowing neuroscience and killing small labs?
- DFG include only you 5 "best" publications
  - New revised to 10.
- In general:
  - Any activity or resource directed at incentivizing RI is by definition subtracted to other objectives
  - Need optimal balance, monitoring and dialogue



### Incentives in EU countries

- A clear mandate to set incentives in principal documents and reports
- Little evidence of incentives in practice
  - Growing activities of promoting RI, preventing RM
  - A few "stick" approaches:
    - Require compliance to access funds, do PhD etc.
  - Very few known carrots
  - (but list in Table 2 is incomplete)



### Lessons to be learned

- Printeger suggests new promotion activities
  - Integrity Cafè
  - Value vision workshops
  - Ethics reflection workshops
  - Content tools topics to explore and discuss
- Ongoing SOPs4RI project

# Challenge s

- Which activities related to research integrity can be incentivized?
- What types of incentives can be implemented?
- What may be the unintended consequences of a given activity-incentive?
  - What advantages and disadvantages would such incentives have compared to compulsory regulations?

	Advantages/ desirable outcomes	Disadvantages/challenges/unintended consequences
Internal	Strengths:	Weaknesses:
	What makes this activity-incentive particularly suitable, applicable, and useful for your organization?	What makes this activity-incentive unfeasible, impractical or unlikely to yield the desired outcomes, if it were implemented by your organization?
External	Opportunities:	Threats:
	What makes this activity-incentive particularly suitable, applicable, and useful for your country?	What makes this activity-incentive unfeasible, impractical or unlikely to yield the desired outcomes, if it were implemented in your country?