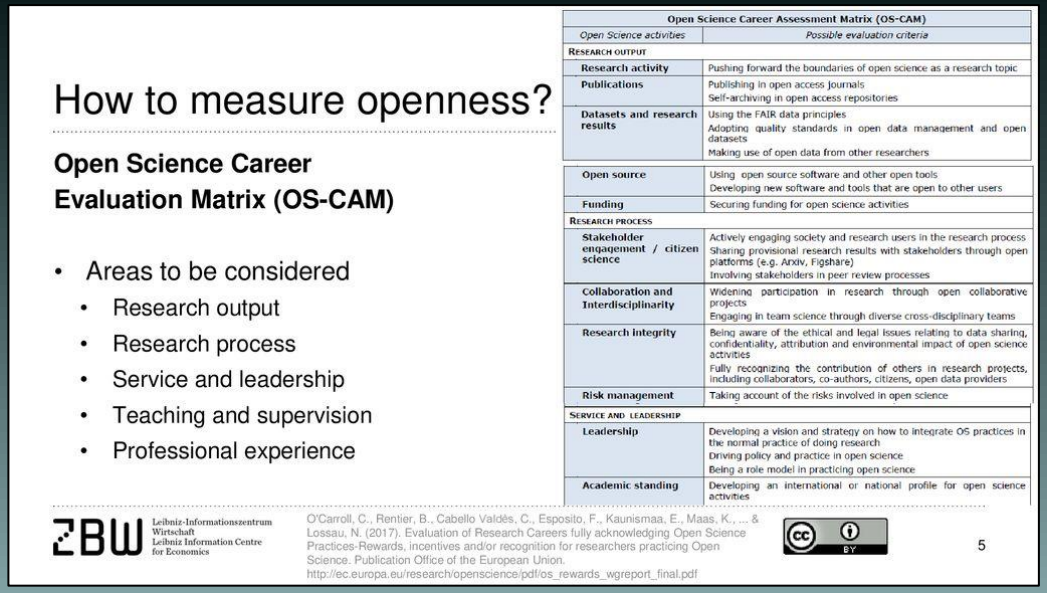

## How to measure openness?

**Open Science Career Evaluation Matrix (OS-CAM)**

- Areas to be considered
  - Research output
  - Research process
  - Service and leadership
  - Teaching and supervision
  - Professional experience

| Open Science Career Assessment Matrix (OS-CAM) | |
|---|---|
| *Open Science activities* | *Possible evaluation criteria* |
| RESEARCH OUTPUT | |
| **Research activity** | Pushing forward the boundaries of open science as a research topic |
| **Publications** | Publishing in open access journals<br>Self-archiving in open access repositories |
| **Datasets and research results** | Using the FAIR data principles<br>Adopting quality standards in open data management and open datasets<br>Making use of open data from other researchers |
| **Open source** | Using open source software and other open tools<br>Developing new software and tools that are open to other users |
| **Funding** | Securing funding for open science activities |
| RESEARCH PROCESS | |
| **Stakeholder engagement / citizen science** | Actively engaging society and research users in the research process<br>Sharing provisional research results with stakeholders through open platforms (e.g. Arxiv, Figshare)<br>Involving stakeholders in peer review processes |
| **Collaboration and Interdisciplinarity** | Widening participation in research through open collaborative projects<br>Engaging in team science through diverse cross-disciplinary teams |
| **Research integrity** | Being aware of the ethical and legal issues relating to data sharing, confidentiality, attribution and environmental impact of open science activities<br>Fully recognizing the contribution of others in research projects, including collaborators, co-authors, citizens, open data providers |
| **Risk management** | Taking account of the risks involved in open science |
| SERVICE AND LEADERSHIP | |
| **Leadership** | Developing a vision and strategy on how to integrate OS practices in the normal practice of doing research<br>Driving policy and practice in open science<br>Being a role model in practicing open science |
| **Academic standing** | Developing an international or national profile for open science activities |

ZBW Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

O'Carroll, C., Rentier, B., Cabello Valdés, C., Esposito, F., Kaunismaa, E., Maas, K., ... & Lossau, N. (2017). Evaluation of Research Careers fully acknowledging Open Science Practices-Rewards, incentives and/or recognition for researchers practicing Open Science. Publication Office of the European Union. http://ec.europa.eu/research/openscience/pdf/os_rewards_wgreport_final.pdf

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## Research Assessment in the Transition to Open Science

2019 EUA Open Science and Access Survey Results

Bregt Saenen, Rita Morais, Vinciane Gaillard and Lidia Borrell-Damián

October 2019

# Academic Career Assessment for Open Science:

# How to proceed?

*Gunnar Sivertsen*

Nordic Institute for Studies in Innovation, Research and Education, Oslo, Norway

NIFU

# How to proceed? Four ideas based on:

1. The 2019 EUA Open Science and Access Survey Results
2. The Open Science Career Assessment Matrix (OS-CAM)

# Still far to go?

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## Summary

- Universities consider themselves autonomous, but are keenly aware of external pressures
- Research assessment is primarily, but not only developed at the institutional and faculty/department level
- Publishing research and attracting external research funding makes careers in research
- Quantitative metrics (JIF and h-index) and qualitative peer-review are the leading methods for careers in research
- Open Science and Open Access are not commonly part of the incentive and reward system for researchers
- Universities are starting to review their research assessment practices, but are moving in different directions

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Which types of academic work matter most for research careers?

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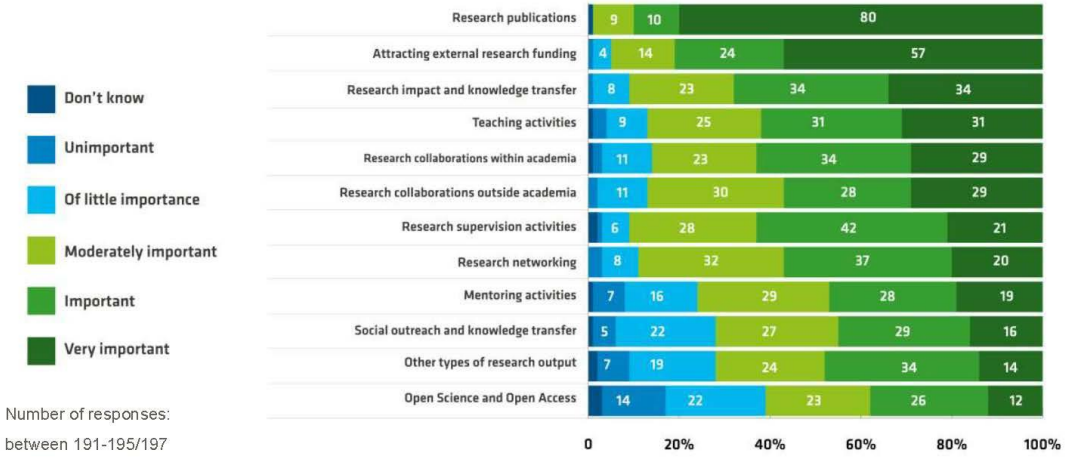


Number of responses: between 191-195/197

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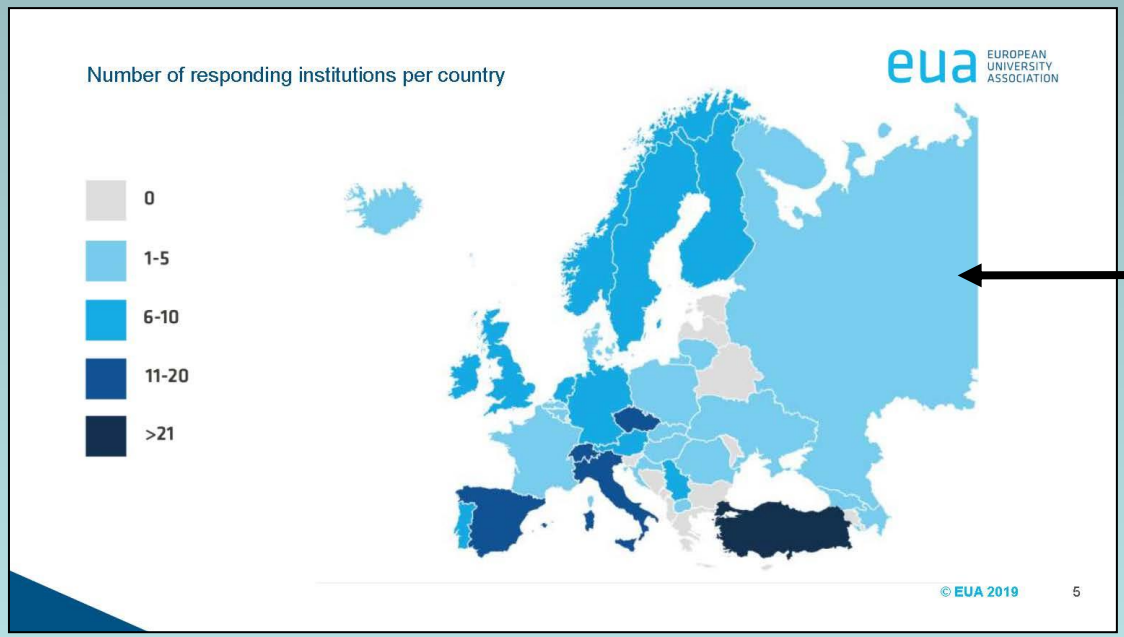
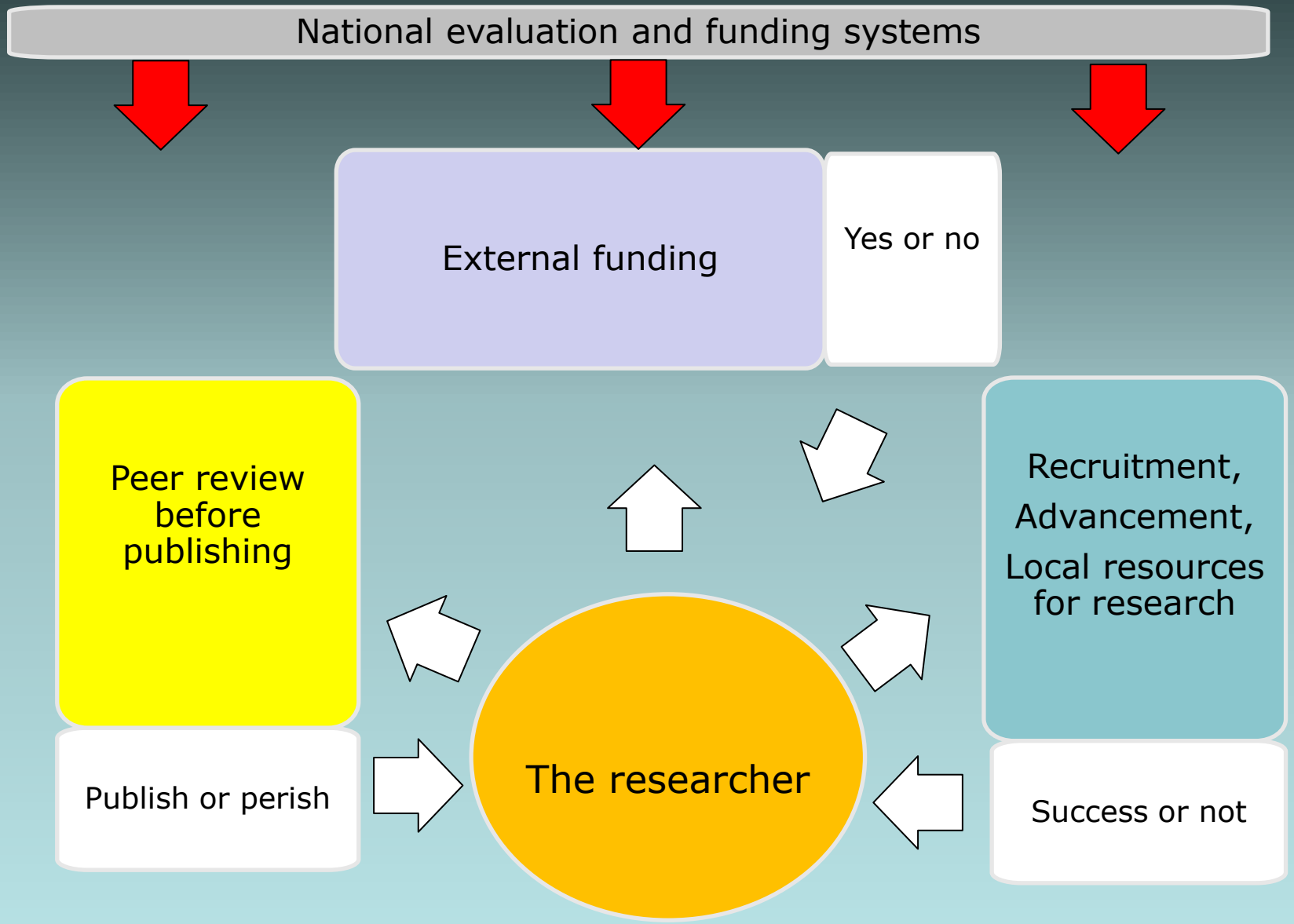
# The dynamics of observing differences: Mutual learning as a next step?

"The findings in this report give a **general impression** of European university approaches to research assessment.
It should be made clear that the results **do not capture important national and disciplinary differences**."




Can we learn from some of the member universities?

# National evaluation and funding systems as a constraint on Open Science Career Development

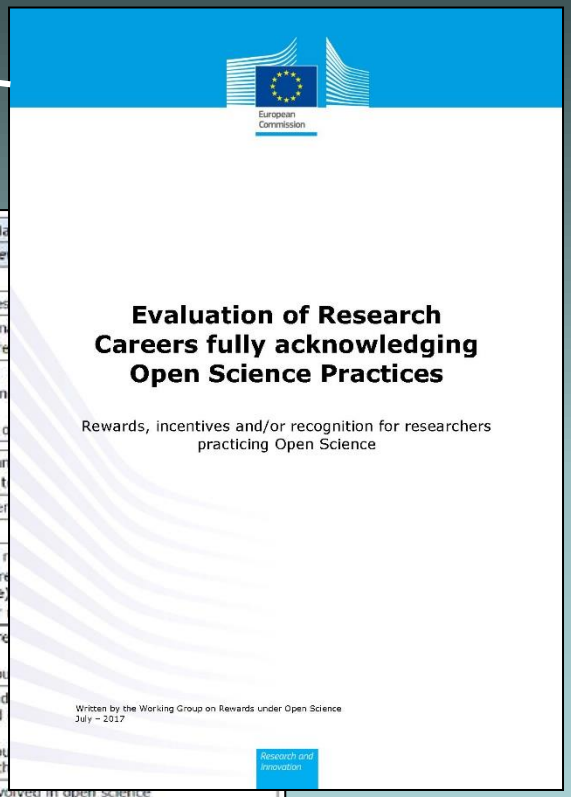


# How to proceed? Four ideas based on:

1. The 2019 EUA Open Science and Access Survey Results
   - Create mutual learning by observing differences and providing good examples
   - Overview and discuss national evaluation and funding systems from the perspective of universities and OS
2. The Open Science Career Assessment Matrix (OS-CAM)

**A working group appointed by Universities Norway is currently exploring how dimensions from OS-CAM can be used in a general national guide for the assessment of researchers and projects**

Universities Norway




# How to measure openness?

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# The ambition is to create a general guide for Norway and to report back to EUA

OS activities are **integrated in general activities**

OS criteria are **integrated in general criteria**

Columns are added for
Description
Documentation Sources
Reflection (why important)

| Open Science Career Assessment Matrix (OS-CAM) | |
|---|---|
| *Open Science activities* | *Possible evaluation criteria* |
| **RESEARCH OUTPUT** | |
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| **Risk management** | Taking account of the risks involved in open scien |
| **SERVICE AND LEADERSHIP** | |
| **Leadership** | Developing a vision and strategy on how to integ normal practice of doing research<br>Driving policy and practice in open science |
| | Being a role model in practicing open science |
| **Academic standing** | Developing an international or national profile for open science activit<br>Contributing as editor or advisor for open science journals or bodies |
| **Peer review** | Contributing to open peer review processes<br>Examining or assessing open research |
| **Networking** | Participating in national and international networks relating to o science |
| **RESEARCH IMPACT** | |
| **Communication and Dissemination** | Participating in public engagement activities<br>Sharing research results through non-academic dissemination channe<br>Translating research into a language suitable for public understanding |
| **IP (patents, licenses)** | Being knowledgeable on the legal and ethical issues relating to IPR<br>Transferring IP to the wider economy |
| **Societal impact** | Evidence of use of research by societal groups<br>Recognition from societal groups or for societal activities |
| **Knowledge exchange** | Engaging in open innovation with partners beyond academia |
| **TEACHING AND SUPERVISION** | |
| **Teaching** | Training other researchers in open science principles and methods<br>Developing curricula and programs in open science methods, inclu open science data management<br>Raising awareness and understanding in open science in undergradu and masters' programs |
| **Mentoring** | Mentoring and encouraging others in developing their open scie capabilities |
| **Supervision** | Supporting early stage researchers to adopt an open science approac |
| **PROFESSIONAL EXPERIENCE** | |
| **Continuing professional development** | Investing in own professional development to build open scie capabilities |
| **Project management** | Successfully delivering open science projects involving diverse resea teams |
| **Personal qualities** | Demonstrating the personal qualities to engage society and resea users with open science<br>Showing the flexibility and perseverance to respond to the challenge conducting open science |

# How to proceed? Four ideas

- The 2019 EUA Open Science and Access Survey Results
  1. Create mutual learning among universities by observing differences and providing good examples
  2. Create an overview and discussion of national evaluation and funding systems from the perspective of the universities and Open Science

- The Open Science Career Assessment Matrix (OS-CAM)
  3. Develop OS-CAM into a general national guide and report back to EUA
  4. Investigate possible documentation sources to avoid heavier burdens of evidence on individuals