

# Monitoring Open Science at university level

for research assessment?

---

Nicolas Fressengeas

January 22, 2025

Université de Lorraine

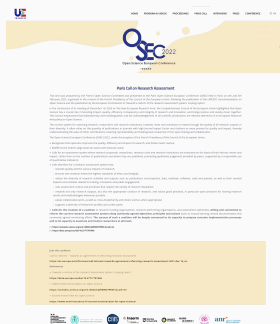


# Research Assessment

---

## Launched by the 2022 Open Science European Conference

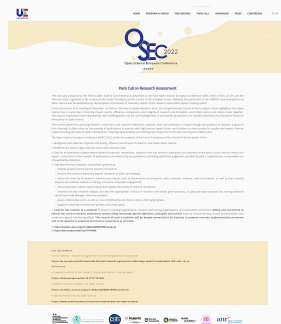
Calls for the creation of a **coalition** of research funding organisations, research performing organisations, and assessment authorities, willing and committed to reform the current research assessment system [...].



First call for research assessment reform launched by the Open Science community

## Launched by the 2022 Open Science European Conference

Calls for the creation of a **coalition** of research funding organisations, research performing organisations, and assessment authorities, willing and committed to reform the current research assessment system [...].



First call for research assessment reform launched by the Open Science community

*An academic's job typically consists of a **large number of activities** in addition to research.<sup>1</sup>*

- Overall tendency to **underestimate** open research additional workload
- Researchers need **clear incentives** to optimize their time and workload



"Overloaded" by Johnragai-Moment Catcher is licensed under CC BY 2.0.

---

1. Hostler, T. J. (2023). The Invisible Workload of Open Research. Journal of Trial & Error.

*An academic's job typically consists of a **large number of activities** in addition to research.<sup>1</sup>*

- Overall tendency to **underestimate** open research additional workload
- Researchers need **clear incentives** to optimize their time and workload



"Overloaded" by Johnragai-Moment Catcher is licensed under CC BY 2.0.

---

1. Hostler, T. J. (2023). The Invisible Workload of Open Research. Journal of Trial & Error.

*An academic's job typically consists of a **large number of activities** in addition to research.<sup>1</sup>*

- Overall tendency to **underestimate** open research additional workload
- Researchers need **clear incentives to optimize** their time and workload



"Overloaded" by Johnragai-Moment Catcher is licensed under CC BY 2.0.

---

1. Hostler, T. J. (2023). The Invisible Workload of Open Research. Journal of Trial & Error.

1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research
2. Base research assessment primarily on **qualitative evaluation** for which peer review is central, supported by **responsible use of quantitative indicators**
3. **Abandon inappropriate uses in research assessment of journal- and publication-based metrics**, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index
4. Avoid the use of rankings of research organisations in research assessment



## Political framework in Lorraine

- Led by Human Resources, Research and Open Science vice-rectors
- Community driven

## Among the issues addressed :

- Open science
- Publish or perish
- Discipline specific assessment
- Research productions beyond publications

## Political framework in Lorraine

- Led by Human Resources, Research and Open Science vice-rectors
- Community driven

## Among the issues addressed :

- Open science
- Publish or perish
- Discipline specific assessment
- Research productions beyond publications
- ...

## Political framework in Lorraine

- Led by Human Resources, Research and Open Science vice-rectors
- Community driven

## Among the issues addressed :

- Open science
- Publish or perish
- Discipline specific assessment
- Research productions beyond publications
- ...

# Open Science Monitoring

---

## A bit of history

- First university to open its local monitor
- Code opening and dissemination
- **National** work frame
  - French national open science monitor
- **International** initiative
  - UNESCO Open Science Monitoring Initiative

## Local implementation framework

- The head of the French open science monitor project is in Lorraine
- A national monitor designed to be locally adapted
  - Straightforward local implementation
- Local add-ons



## A bit of history

- First university to open its local monitor
- Code opening and dissemination
- **National** work frame
  - French national open science monitor
- **International** initiative
  - UNESCO Open Science Monitoring Initiative

## Local implementation framework

- The head of the French open science monitor project is in Lorraine
- **A national monitor designed to be locally adapted**
  - **Straightforward local implementation**
- Local add-ons



- **Publications**
  - Many details beyond the 70.6% figure for 2023
- **Data sharing**
  - Proportion of papers mentioning data sharing
- **Source code openness**
  - Proportion of papers mentioning code opening
- **PhDs**
  - Proportion of open PhD dissertations
- **APC spending**
  - In house expenses and Lorraine site estimations
- **Open science training**
  - How many trainees...



<https://scienceouverte.univ-lorraine.fr/en/bibliometrics/lorraine-open-science-barometer/>



Assessment and monitoring?

---

## CoARA : abandon inappropriate uses in research assessment of **journal- and publication-based metrics**

- Monitoring yields **journal- and publication-based metrics**
- Not CoARA compliant
- Quantitative open science metrics can easily be gamed
- **NO** open science quantitative metric used for assessment

When a measure becomes a target, it ceases to be a good measure

(Goodhart's law)

## CoARA : abandon inappropriate uses in research assessment of **journal- and publication-based metrics**

- Monitoring yields **journal- and publication-based metrics**
- Not CoARA compliant
- Quantitative open science metrics can easily be gamed
- **NO** open science quantitative metric used for assessment

When a measure becomes a target, it ceases to be a good measure

(Goodhart's law)

# Towards a qualitative evaluation

## A particular example for a narrative CV

- Pick five research products you are proud of in a given period of time
- Explain why they are important
  - and be assessed on that

## Opening your research product helps

- in explaining
- in giving proof
- in enlarging the reach
- to show compliance with national and institutional policy
- for a better evaluation



# Towards a qualitative evaluation

## A particular example for a narrative CV

- Pick five research products you are proud of in a given period of time
- Explain why they are important
  - and be assessed on that

## Opening your research product helps

- in explaining
- in giving proof
- in enlarging the reach
- to show compliance with national and institutional policy
- ...
- for a better evaluation



# Towards a qualitative evaluation

## A particular example for a narrative CV

- Pick five research products you are proud of in a given period of time
- Explain why they are important
  - and be assessed on that

## Opening your research product helps

- in explaining
- in giving proof
- in enlarging the reach
- to show compliance with national and institutional policy
- ...
- for a better evaluation



## Building research assessment change **from the community**

- Seen as a burden, open science is strongly opposed
- Seen as an opportunity, it is not opposed
  - Researchers are actually taking the opportunity!

## A **monitor** that is **available** to the community

- Some research communities **chose to be monitored** and picked a part of the global monitor
- They **chose to be assessed** on it

## Building research assessment change **from the community**

- **Seen as a burden, open science is strongly opposed**
- **Seen as an opportunity, it is not opposed**
  - **Researchers are actually taking the opportunity!**

## A **monitor** that is **available** to the community

- **Some research communities chose to be monitored**  
and picked a part of the global monitor
- They **chose to be assessed** on it



## Building research assessment change **from the community**

- Seen as a burden, open science is strongly opposed
- **Seen as an opportunity, it is not opposed**
  - **Researchers are actually taking the opportunity!**

## A **monitor** that is **available** to the community

- Some research communities **chose to be monitored** and picked a part of the global monitor
- They **chose to be assessed** on it

## Building research assessment change **from the community**

- Seen as a burden, open science is strongly opposed
- Seen as an opportunity, it is not opposed
  - Researchers are actually taking the opportunity!

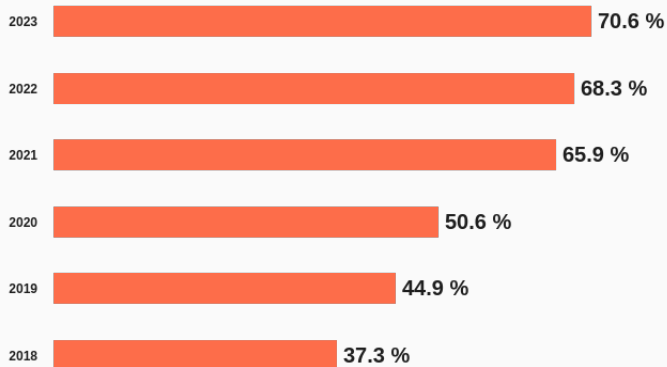
## A **monitor** that is **available** to the community

- Some research communities **chose to be monitored**  
and picked a part of the global monitor
- They **chose to be assessed** on it

## Leaving the hard part to larger shoulders

- National and international funders
- National performing organisations
- ...

Université de Lorraine (UL) : Open access rate of scientific publications of UL, with a Crossref DOI, published during the previous year by observation year



French Open Science Monitor



These slides are on Zenodo

