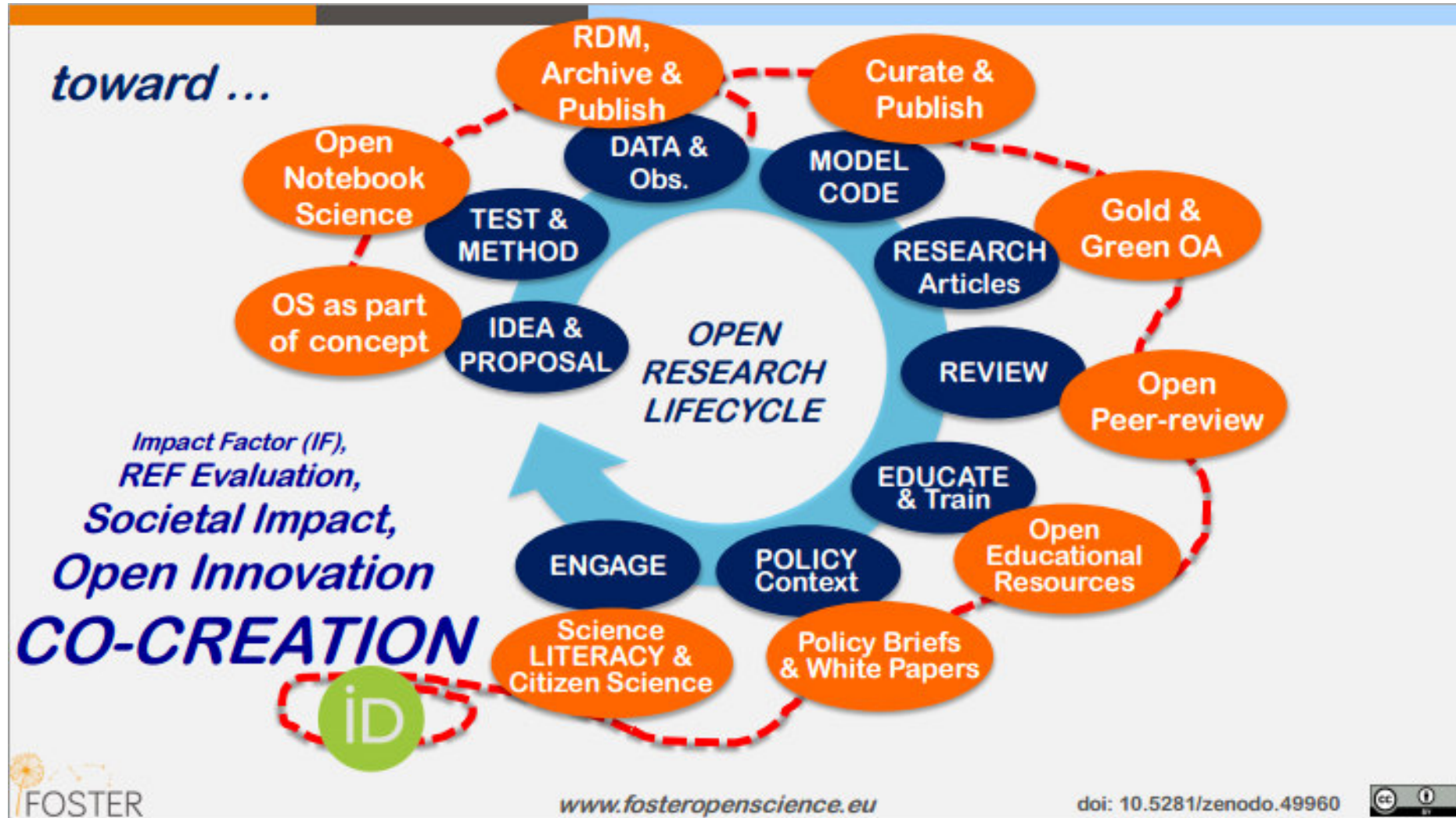




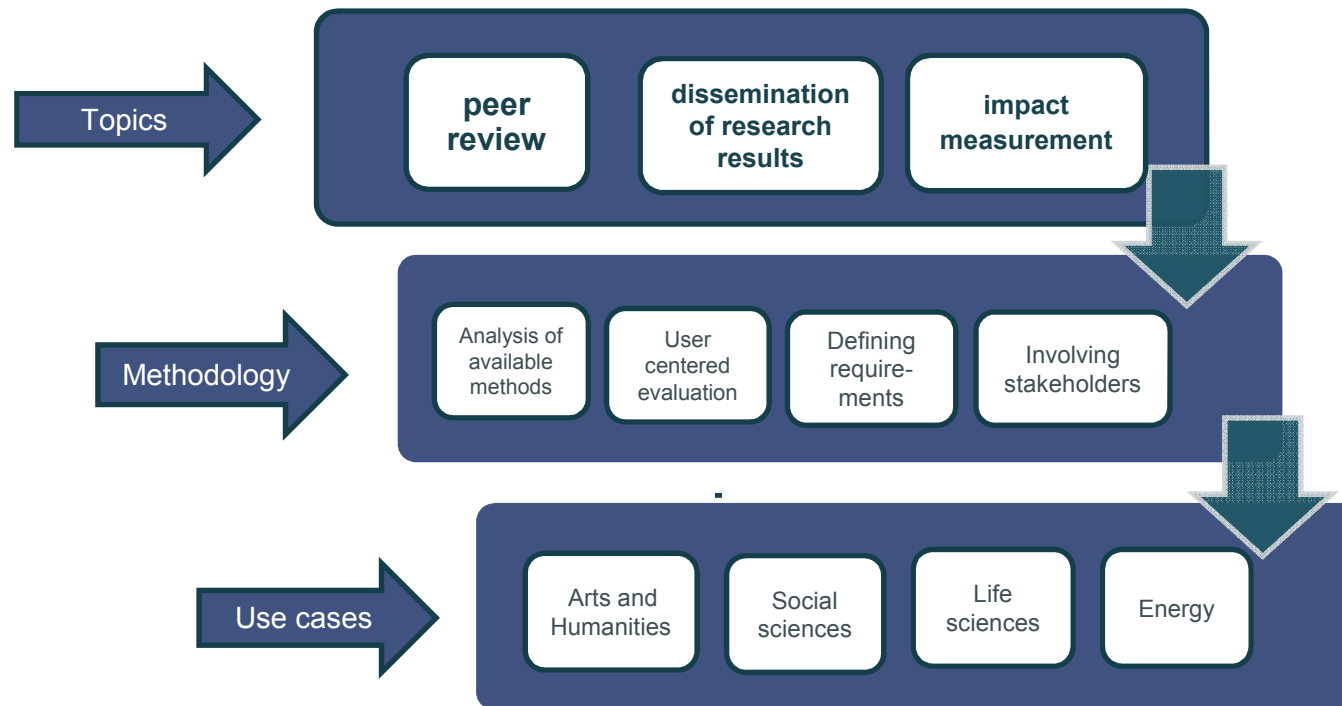
## Peer review under the microscope: Results of a user-centred survey

Edit Görögh, University of Göttingen  
Vilte Banelyte, PPMI, Lithuania  
PEERE 2018  
Rome, March 8



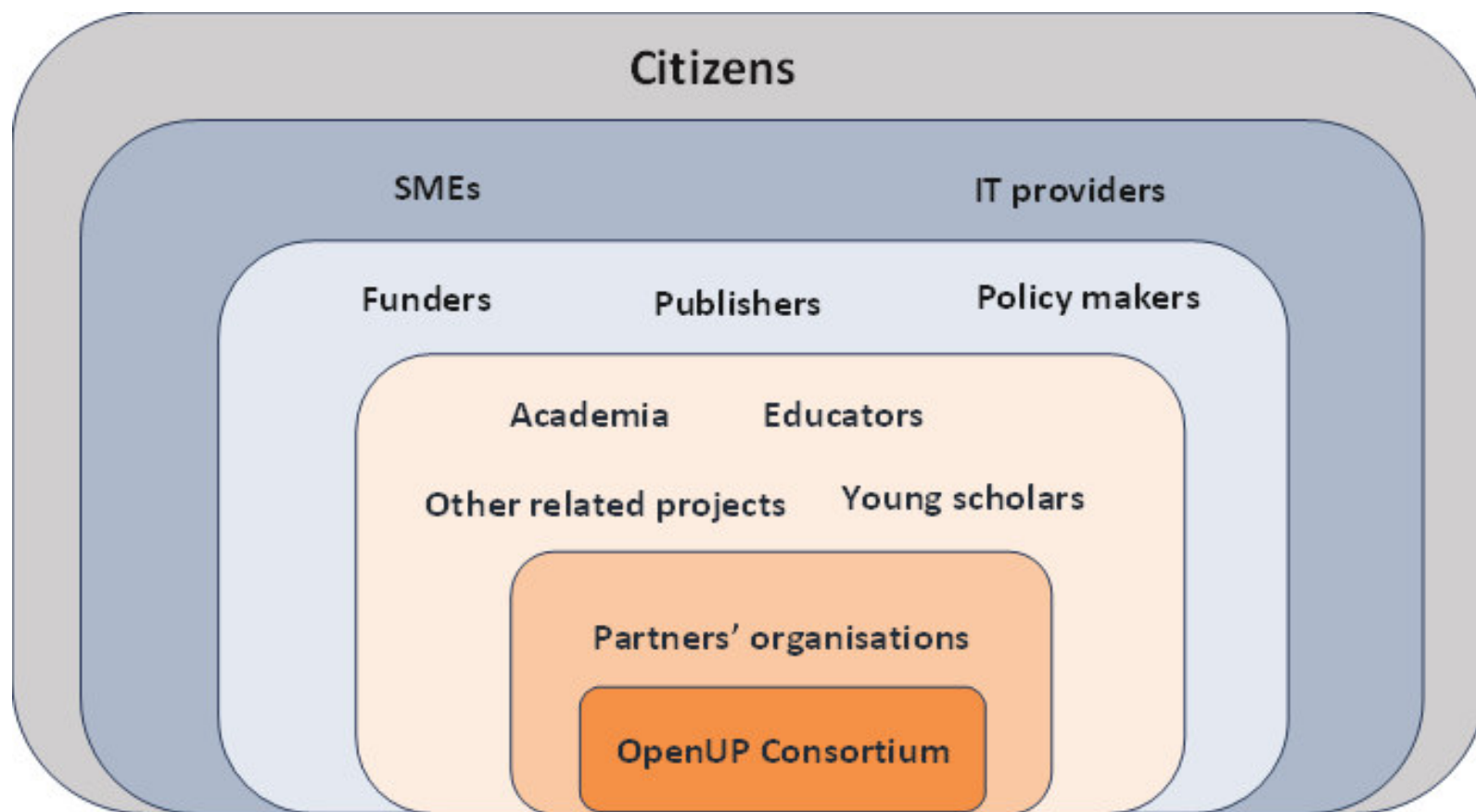
# Our mission

 pening UP new methods, indicators and tools for...



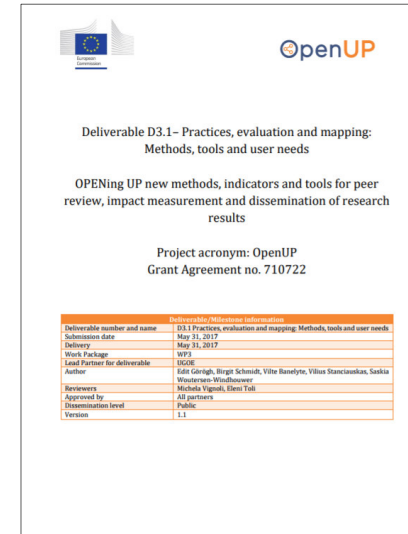
within the Open Science ecosystem.

# Target communities



# Aims and activities

1. Peer review landscape scan:
  - Map out the alternative review tools and services
  - User-centered survey
  - Examine peer review in context of research flow and in different disciplinary settings
  - Develop a framework for evidence-based research on peer review
  - Produce information resources
  - Produce policy recommendations

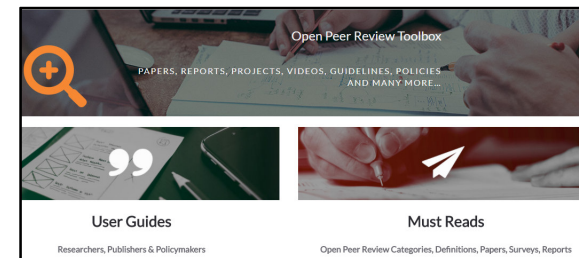


Deliverable D3.1- Practices, evaluation and mapping: Methods, tools and user needs

OPENING UP new methods, indicators and tools for peer review, impact measurement and dissemination of research results

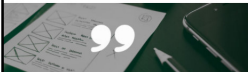
Project acronym: OpenUP  
Grant Agreement no. 710722

Deliverable D3.1- Practices, evaluation and mapping: Methods, tools and user needs	
Deliverable number and name	D3.1 Practices, evaluation and mapping: Methods, tools and user needs
Submission date	May 31, 2017
Delivery	May 31, 2017
Work Package	WP3
Lead Partner for deliverable	UCLouvain
Author	Edi Gorigh, Birgit Schmidt, Vibe Bandbye, Vilnis Stancionkas, Saskia Wouters-Windhouwer
Reviewers	Michela Vigani, Elena Tuli
Approved by	All partners
Dissemination level	Public
Version	1.1




Open Peer Review Toolbox

PAPERS, REPORTS, PROJECTS, VIDEOS, GUIDELINES, POLICIES AND MANY MORE...



**User Guides**

Researchers, Publishers & Policymakers



**Must Reads**

Open Peer Review Categories, Definitions, Papers, Surveys, Reports

# Aims and activities

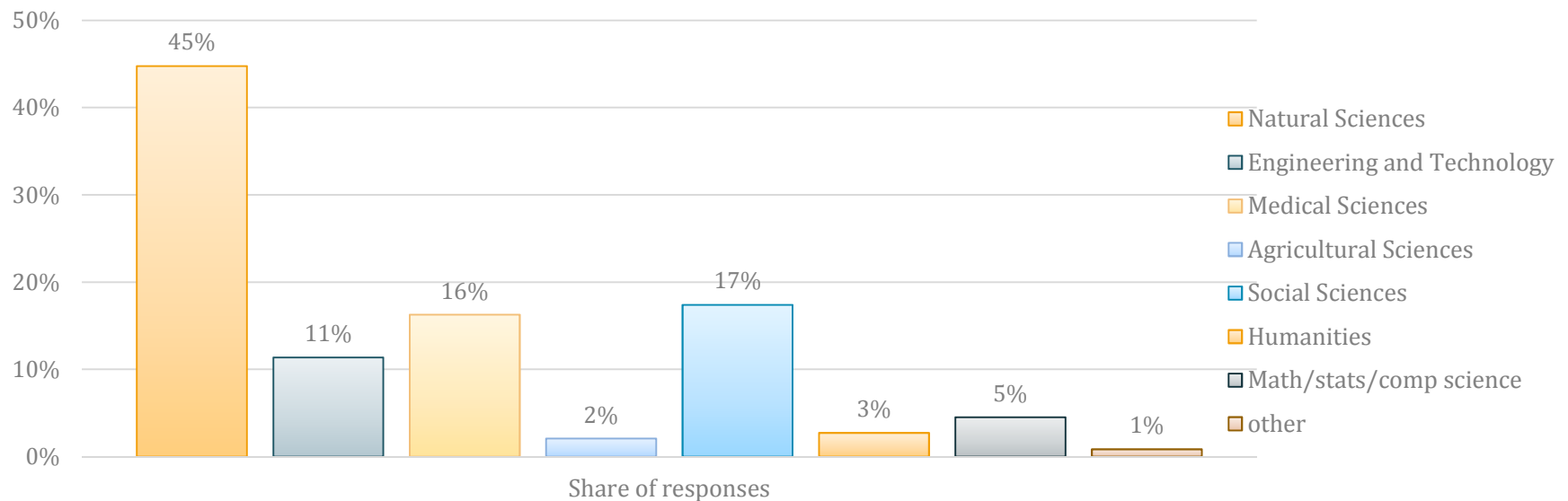
## 2. Contributing to the developing open science discourse

- Create ties with other EU projects – aligning efforts in researching open peer review and open science practices.
- Sharing taxonomies (FOSTER),
- Building on previous research (OpenAIRE), developing collaborations.
- Open science advocacy work: organizing workshops and webinars.

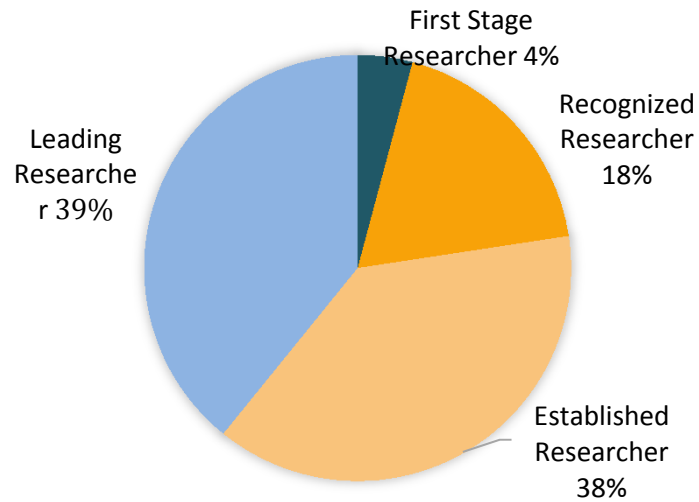


# Methodology

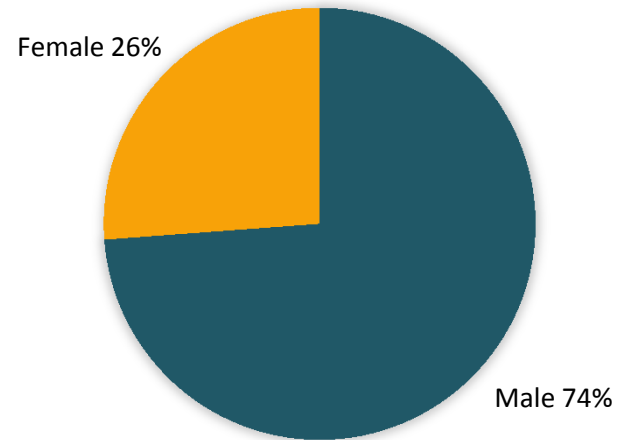
- The survey conducted between January 20 – February 23, 2017.
- The survey targeted researchers from the EU-28, Switzerland and Norway.
- Survey invitations were sent to a random sample of researchers from arXiv, Pubmed and RePEc with at least one publications as main authors. Later sample was broadened to reach underrepresented areas through the DARIAH website, THESIS network, EURODOC, AIMS portal, the Parthenos community and other channels.
- 1347 responses, of which 976 were completed.



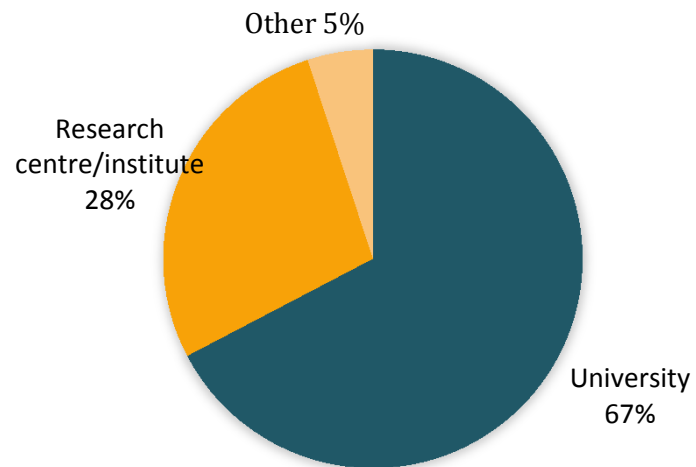
# Career stage



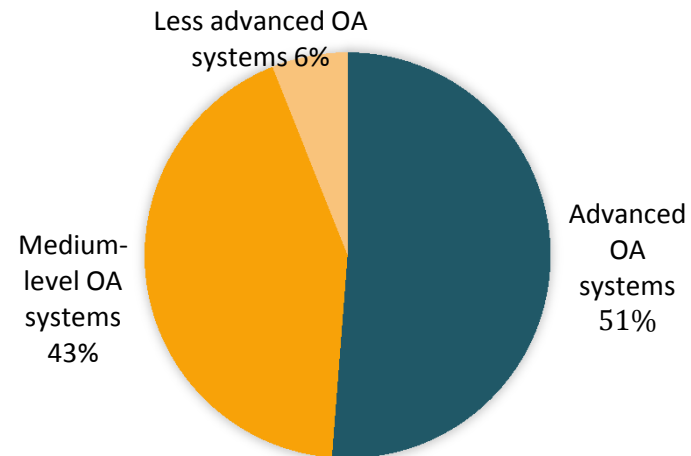
# Gender



# Organisation type



# Country of affiliation





# Researcher/author perspective

# Satisfaction with peer review process

How satisfied are researchers with the current peer review process?

Are they willing to take up open peer review?

Overall, almost 73% of respondents were very or somewhat satisfied

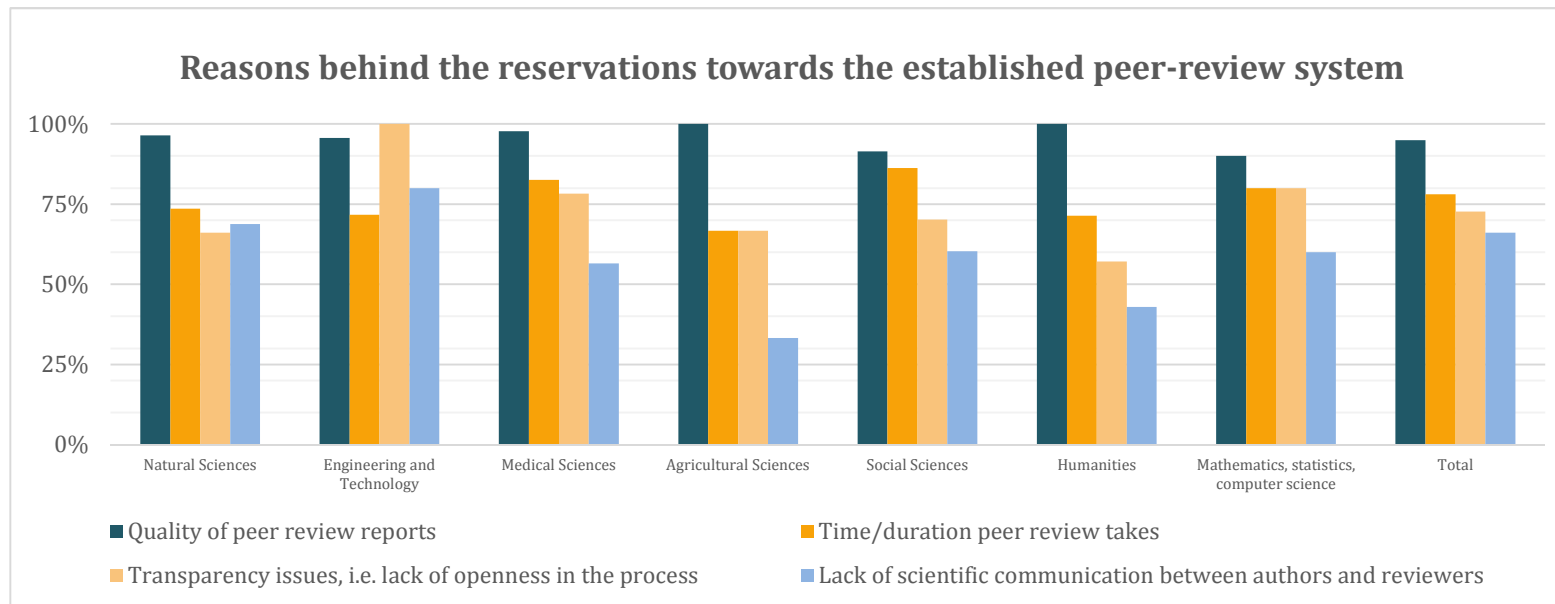
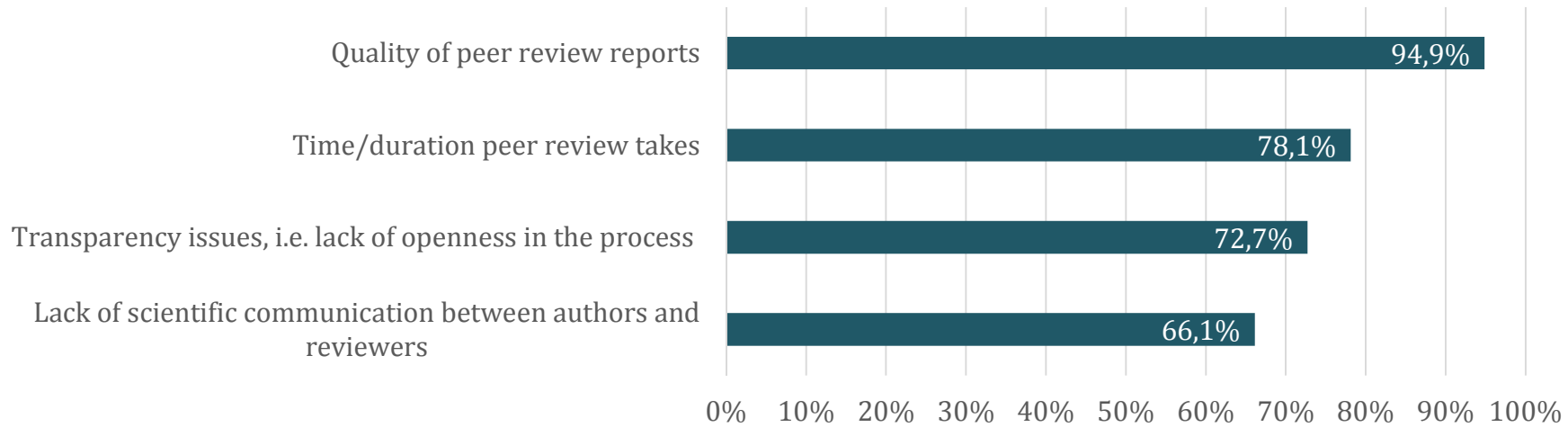
## **Disciplinary differences**

Respondents from the engineering & technology discipline were less satisfied (60%) than researchers from other disciplines

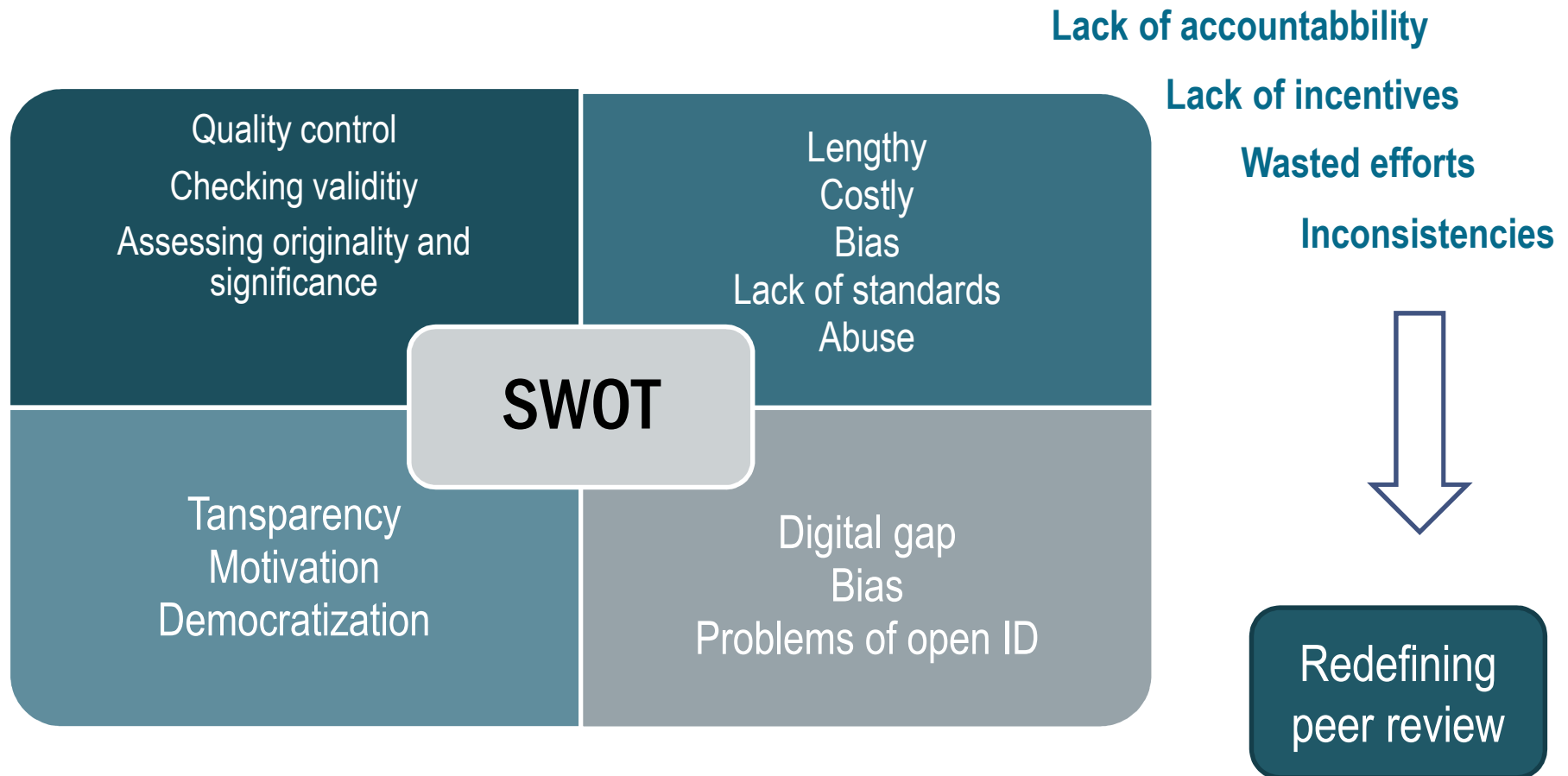
## **Career stage differences**

Younger researchers (50-60%) were substantially less satisfied with the process than leading researchers (81%)

# Main concerns regarding traditional peer review



# Established review system



# Peer review re-defined

Quality assurance mechanism where scholarly works are scrutinised by peers/experts, whose feedback are used to improve the works



# Defining open peer review

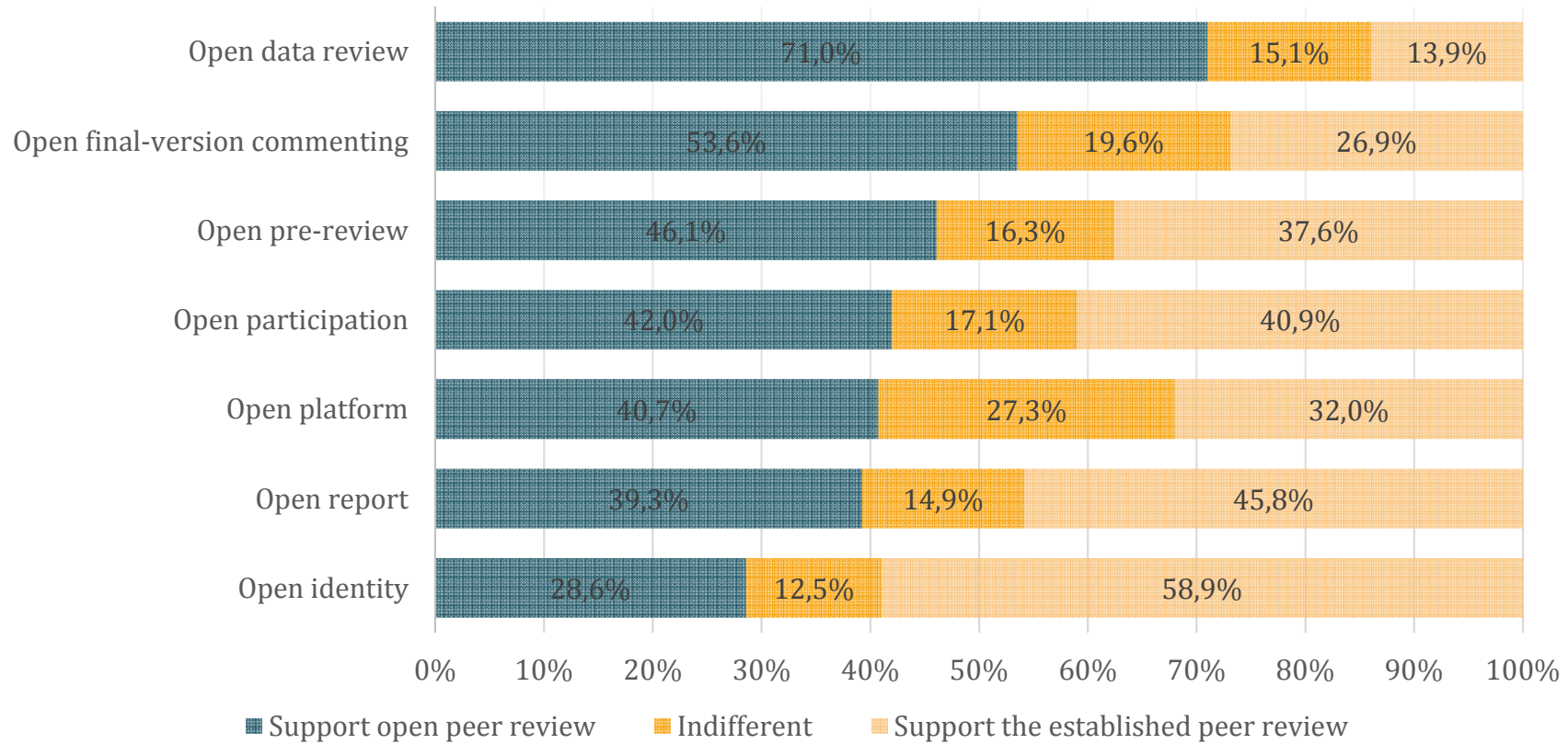
Open Peer Review encompasses diverse constellations of many distinct aspects:

- 122 definitions collected and analysed
- 22 distinct configurations of 7 traits identified

<b>Open identity</b>	authors and reviewers are aware of each other's identity
<b>Open report</b>	review reports are published alongside the relevant article
<b>Open participation</b>	wider community contributes to the review process
<b>Open platform</b>	de-coupled from publishing: facilitated by a different organizational entity than the venue of publication
<b>Open interaction</b>	direct reciprocal discussion between author(s) and reviewers, between reviewers
<b>Open pre-review manuscripts</b>	manuscripts are made immediately available in advance of any formal peer review procedures
<b>Open final-version commenting</b>	review or commenting on final "version of record" publications

Ross-Hellauer, 2017, doi: 10.12688/f1000research.11369.2

# Preferences on open versus traditional peer review

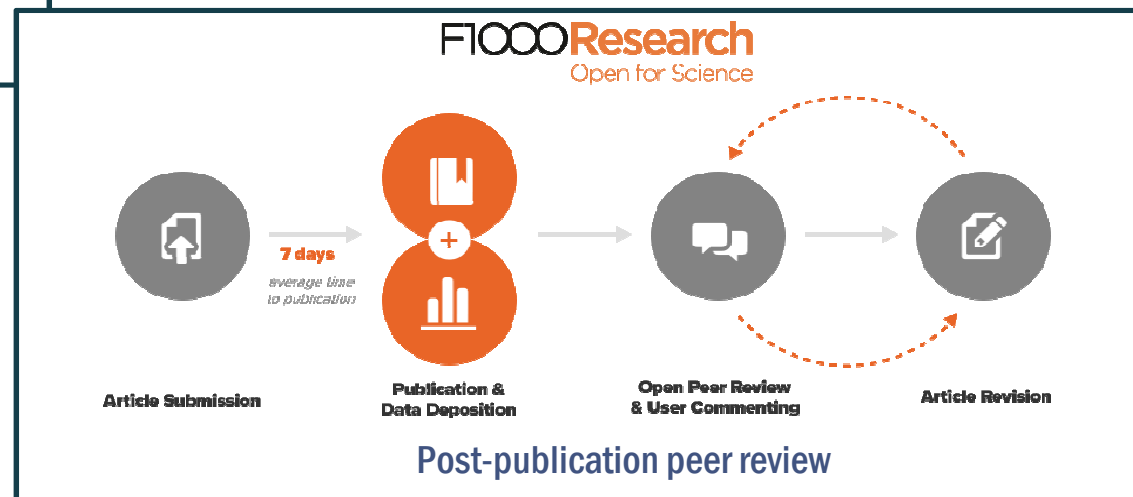
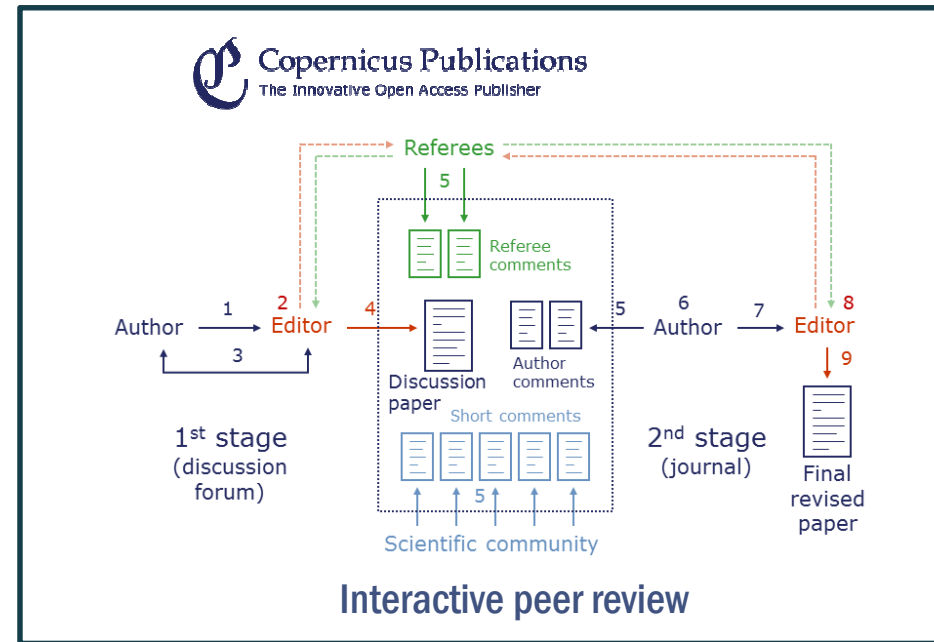


# Alternative review services & platforms





# Publishing platforms



# Decoupled review services



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Harness the power of *peer review*

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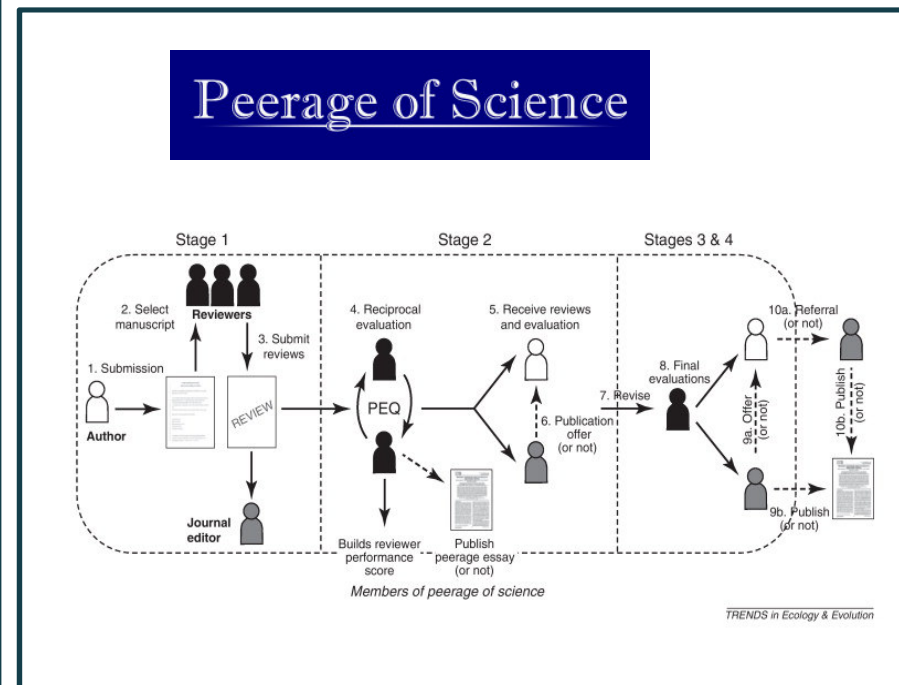
Verified Peer Review Record  
PREPARED BY PUBLONS ON DECEMBER 1ST 2015  
Dr. Pierre Réveur  
https://publons.com/u/

Peer Review Summary  
Reviewed 270 manuscripts for journals including Journal of Chromatography B, Journal of Chromatography A, Journal of Pharmaceutical and Biomedical Analysis, Clinical Biochemistry, Planta Medica, Journal of Organic Chemistry, Analytica Chimica Acta, Journal of Separation Science, Molecules, Journal of Agricultural and Food Chemistry, and TAC - Topics in Analytical Chemistry.

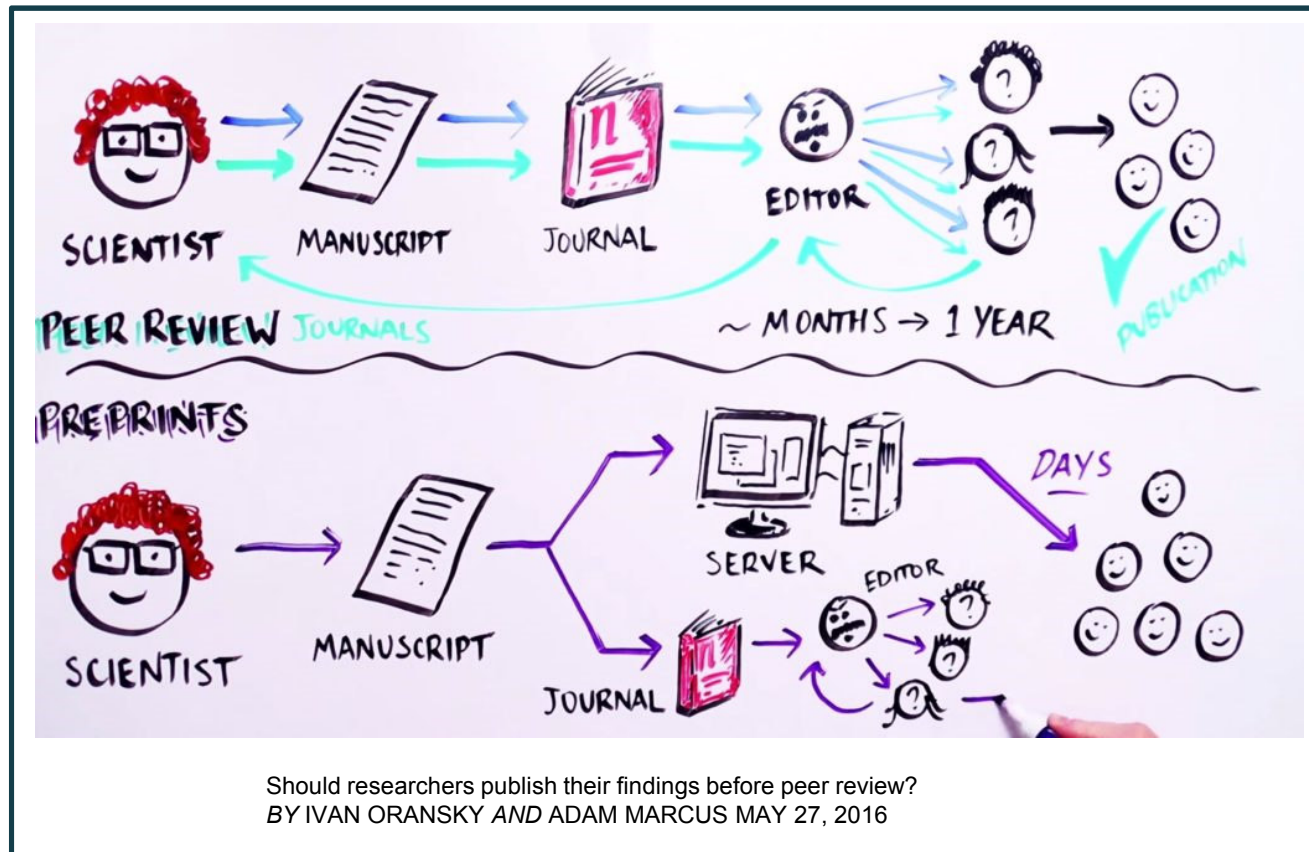
Jonas Rånstam  
Professor of Medical Nutrition (Senior), Clinical Nutrition, Lund University  
ResearcherID: A6090-2013

EDITING AND REVIEWING  
Journal of Chromatography B, Journal of Chromatography A, Journal of Pharmaceutical and Biomedical Analysis, Clinical Biochemistry, Planta Medica, Journal of Organic Chemistry, Analytica Chimica Acta, Journal of Separation Science, Molecules, Journal of Agricultural and Food Chemistry, TAC - Topics in Analytical Chemistry

Journal of Chromatography B, Journal of Chromatography A, Journal of Pharmaceutical and Biomedical Analysis, Clinical Biochemistry, Planta Medica, Journal of Organic Chemistry, Analytica Chimica Acta, Journal of Separation Science, Molecules, Journal of Agricultural and Food Chemistry, TAC - Topics in Analytical Chemistry

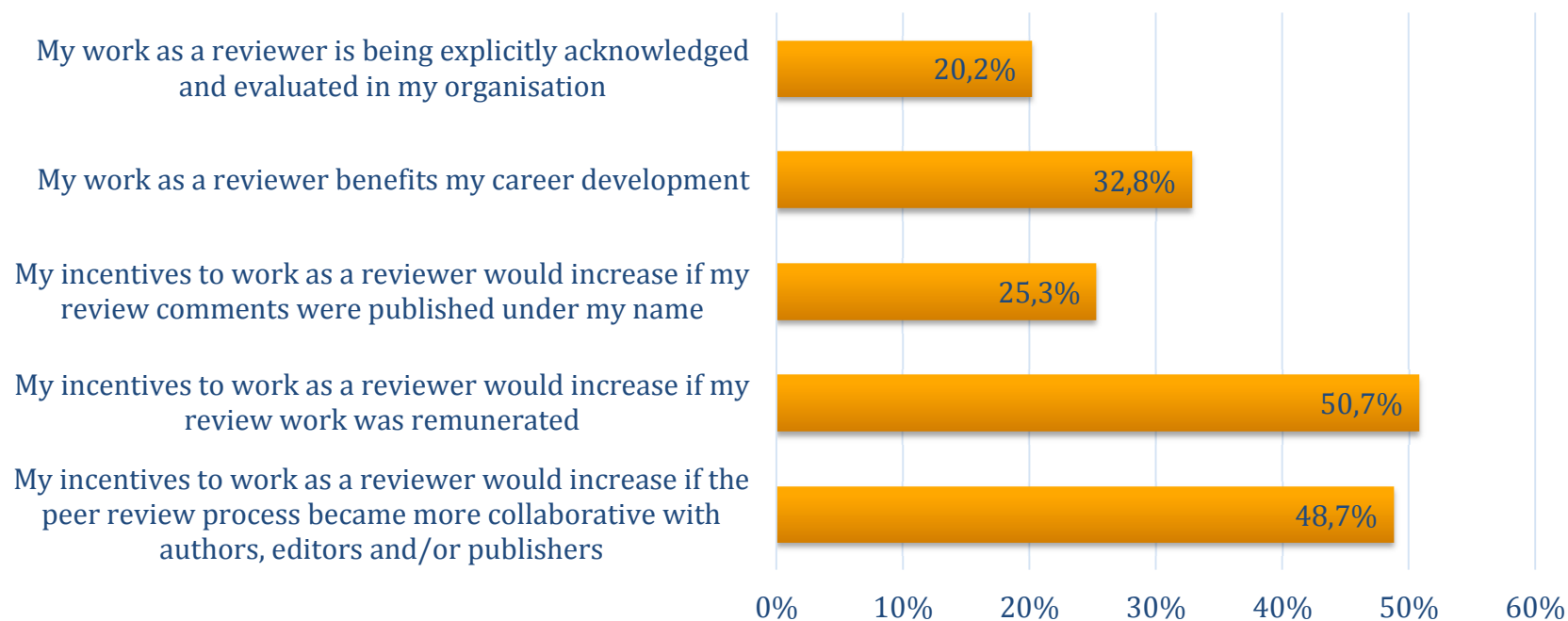


# Preprint based publishing



# Reviewers' perspective

# Incentives to review



# Incentives to review

## Crediting peer review

- ✓ Publons, Peerage of Science
- ✓ Peer review in academic promotion- recommendation of the OSI workgroup:

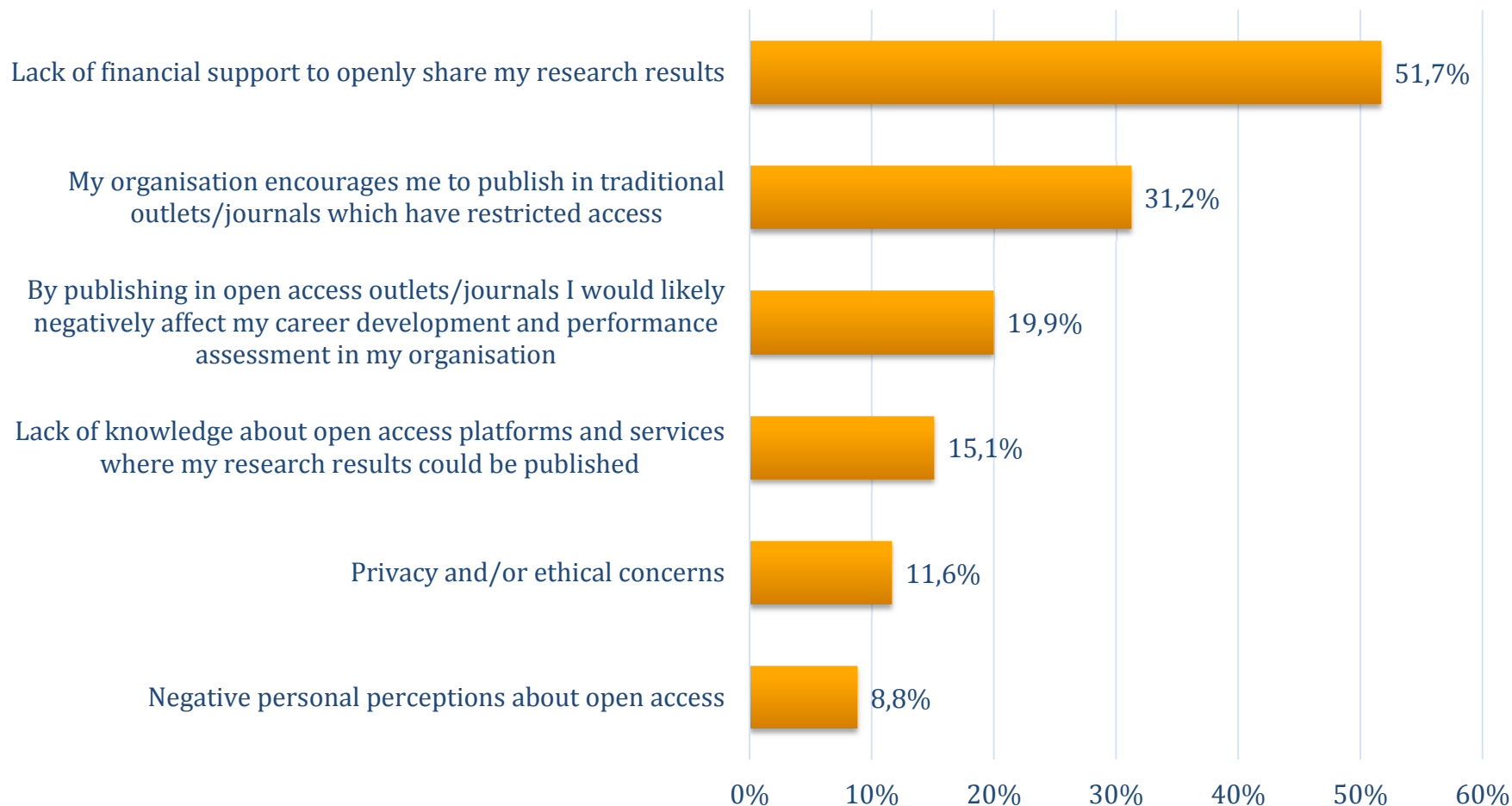
Address incentives and motivations to participate in peer review, not only in the context of rewards or credits for individuals but also in terms of the importance of peer review for promotion and tenure. (Acreman 2016)

	Natural Sciences	Engineering and Technology	Medical Sciences	Agricultural Sciences	Social Sciences	Humanities	Mathematics, statistics, computer science	Total
<b>My work as a reviewer is being explicitly acknowledged and evaluated in my organisation</b>	20,3%	28,7%	17,5%	20,0%	17,8%	4,0%	11,1%	20,2%
<b>My work as a reviewer benefits my career development</b>	32,0%	35,3%	36,9%	21,1%	30,3%	28,0%	24,4%	32,8%
<b>My incentives to work as a reviewer would increase if my review comments were published under my name</b>	20,6%	30,6%	31,0%	26,3%	31,3%	25,0%	18,2%	25,3%
<b>My incentives to work as a reviewer would increase if my review work was remunerated</b>	50,5%	47,3%	54,5%	63,2%	52,8%	60,0%	43,2%	50,7%
<b>My incentives to work as a reviewer would increase if the peer review process became more collaborative with authors, editors and/or publishers</b>	41,1%	61,1%	57,0%	60,0%	55,0%	52,0%	33,3%	48,7%

Note: Responses to question '2.2a - To what extent do you agree with these statements considering your experience as a reviewer under the established peer review system?' N=[870 – 900]. The percentages show a share of respondents who chose 'strongly agree' and 'rather agree' answer options.

# Open science practices: open sharing

# Main factors/barriers affecting open sharing





## Growing demands

1. Transparency
2. Incentives to review
3. Training reviewers

## Reluctance to participate

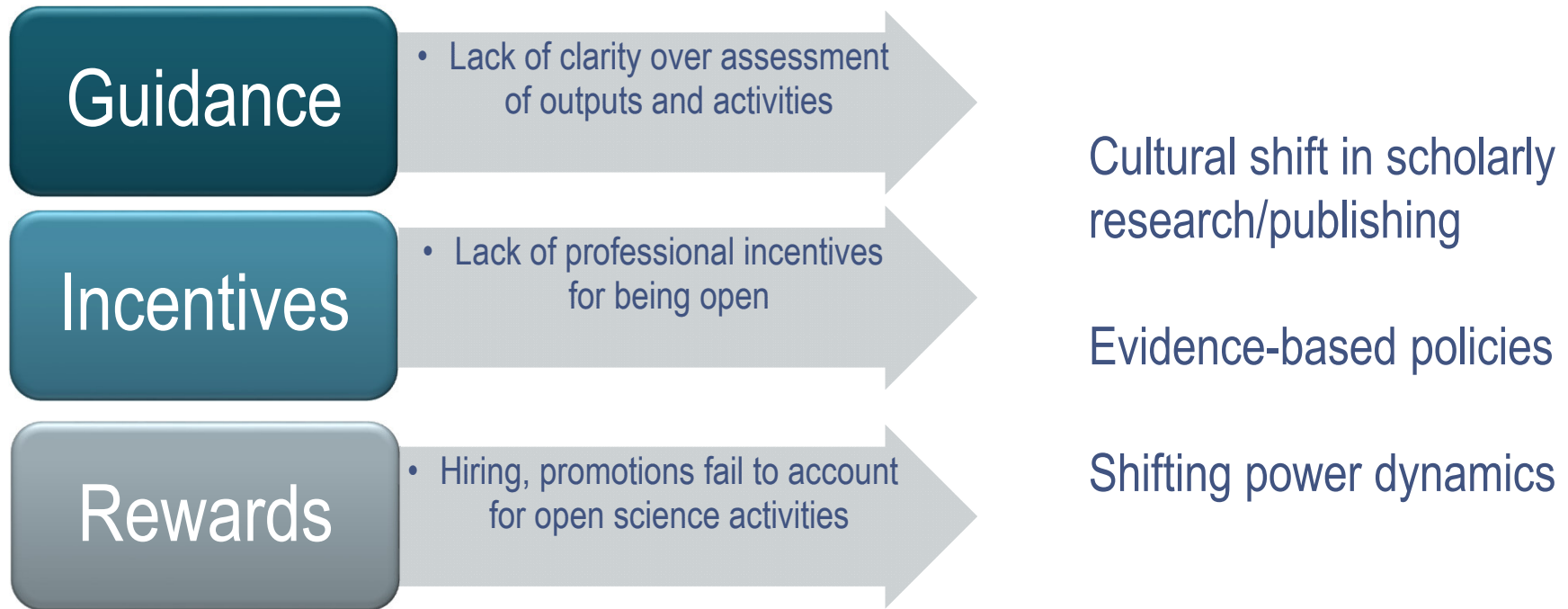
Reluctance governed by **FEAR**:

- Ideas being stolen
- Not being credited
- Public humiliation
- Abuse of power dynamics and intimidation
- Empowerment of bad actors
- Marginalization
- Less honesty and criticism.

Source: Jon Tennant

<https://www.slideshare.net/OSFair/osfair2017-workshop-fear-and-loathing-in-open-peer-review>

## Solutions



### Goal:

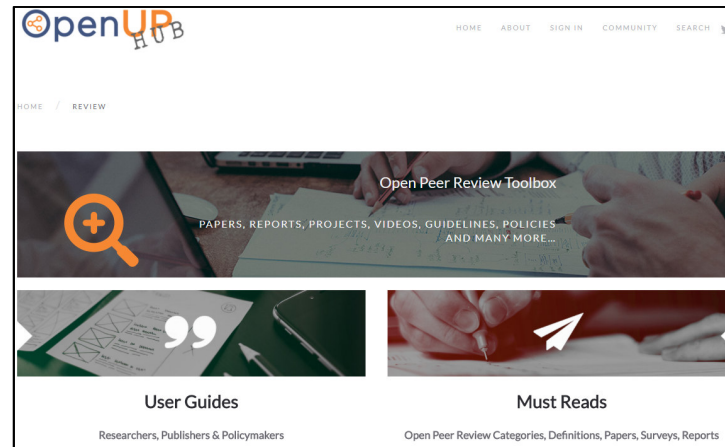
build a global community of Open Science based on sharing and collaborations

Source: Jon Tennant <https://www.slideshare.net/OSFair/osfair2017-barriers-to-open-science-for-junior-researchers>



# Open Science tools

## OpenUP Hub



<https://www.openuphub.eu/review>

## FOSTER Open Science Training Handbook

### FOSTER Open Science Training Handbook: feedback wanted!

Gwen Franck | 2018-02-26 | scholarly communication | Add Reply



FOSTER releases the **first draft** of the **Open Science Training Handbook**. 14 experts from 10 countries have worked for 5 days to create the first draft of what will become a comprehensive overview of practical resources and tools to support trainers who would like to teach and inspire researchers on Open Science topics. The Handbook is open for comment/feedback until **March 4th, 2018!**



# Principles of Open Scholarship

Transparency

Accountability

Inclusivity

Responsibility

Community & Collaboration

Visibility

Rigour

Equality

Public good

Reproducibility

Findability

Accessibility

Interoperability

Re-usability

Innovation

CC BY @tonyR\_H

Source: Tony Ross-Hellauer [https://www.slideshare.net/OpenAIRE\\_eu/peer-review-in-the-age-of-open-science](https://www.slideshare.net/OpenAIRE_eu/peer-review-in-the-age-of-open-science)



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Thank you!

More information:

<http://openup-h2020.eu/>

<https://www.openuphub.eu/>



@ProjectOpenUP

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- Tennant JP, Dugan JM, Graziotin D *et al.* A multi-disciplinary perspective on emergent and future innovations in peer review [version 1; referees: 2 approved with reservations]. *F1000Research* 2017, 6:1151. DOI: [10.12688/f1000research.12037.1](https://doi.org/10.12688/f1000research.12037.1)