

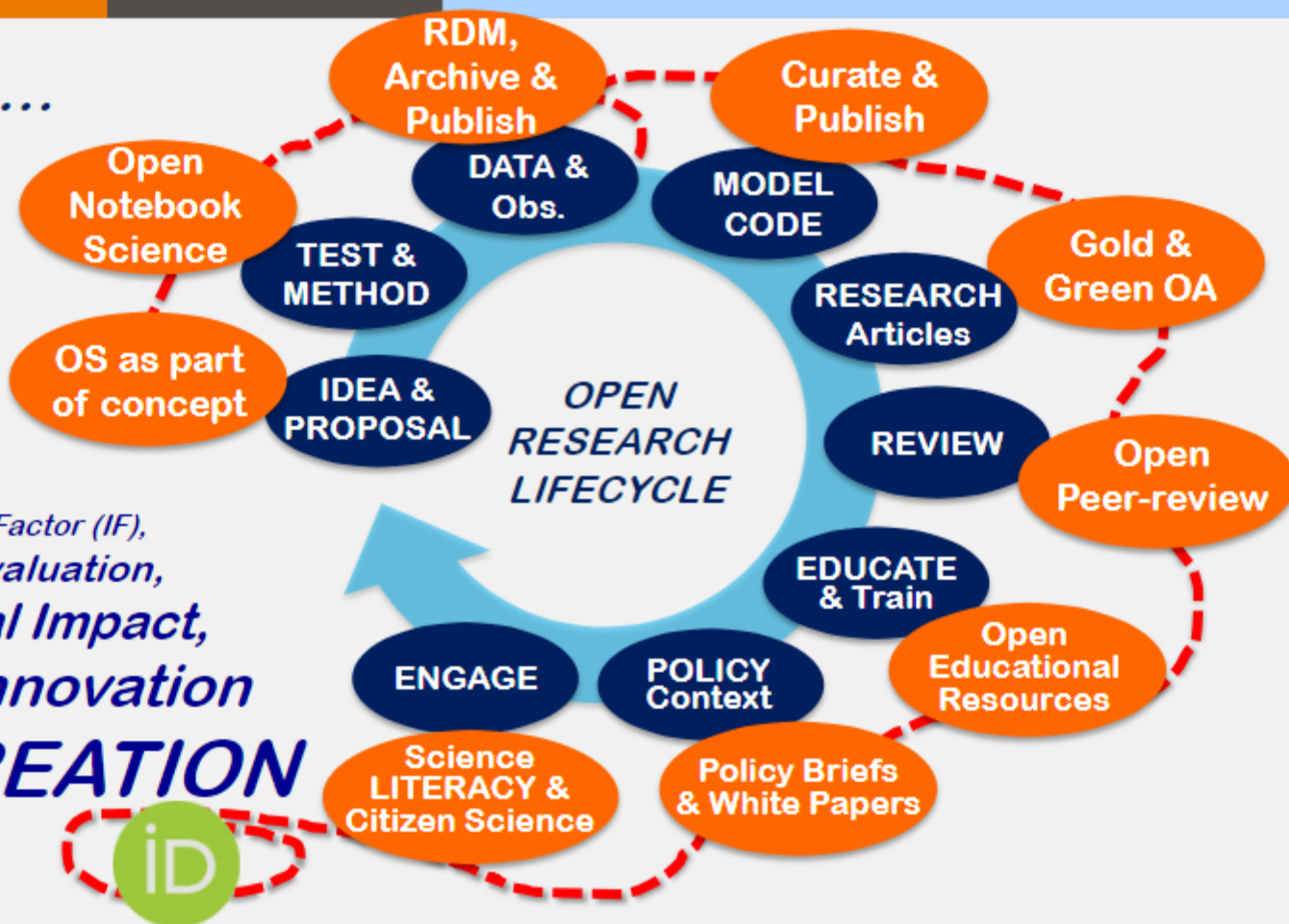
A decorative background composed of a grid of squares in various shades of orange, brown, and blue, arranged in a pattern that resembles a stylized city skyline or a data visualization.

Make Open Peer Review Transparent Again

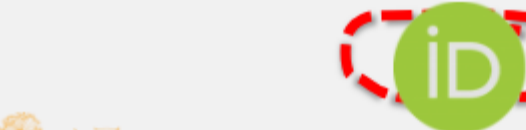
Open Peer Review Training

Edit Görögh

toward ...



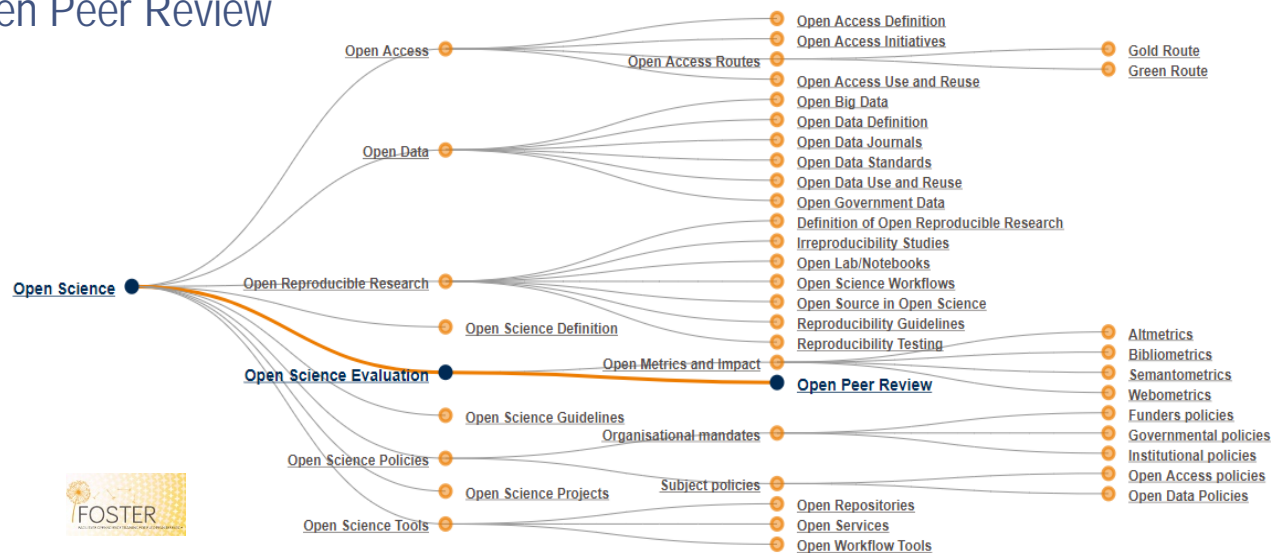
*Impact Factor (IF),
 REF Evaluation,
 Societal Impact,
 Open Innovation*
CO-CREATION



Open Science

Opening up scientific processes and products from all levels to everyone.

- Open Access to publications
- FAIR Data
- Open Source software
- Open methods, protocols & materials
- Citizen Science
- Open Evaluation / Open Peer Review



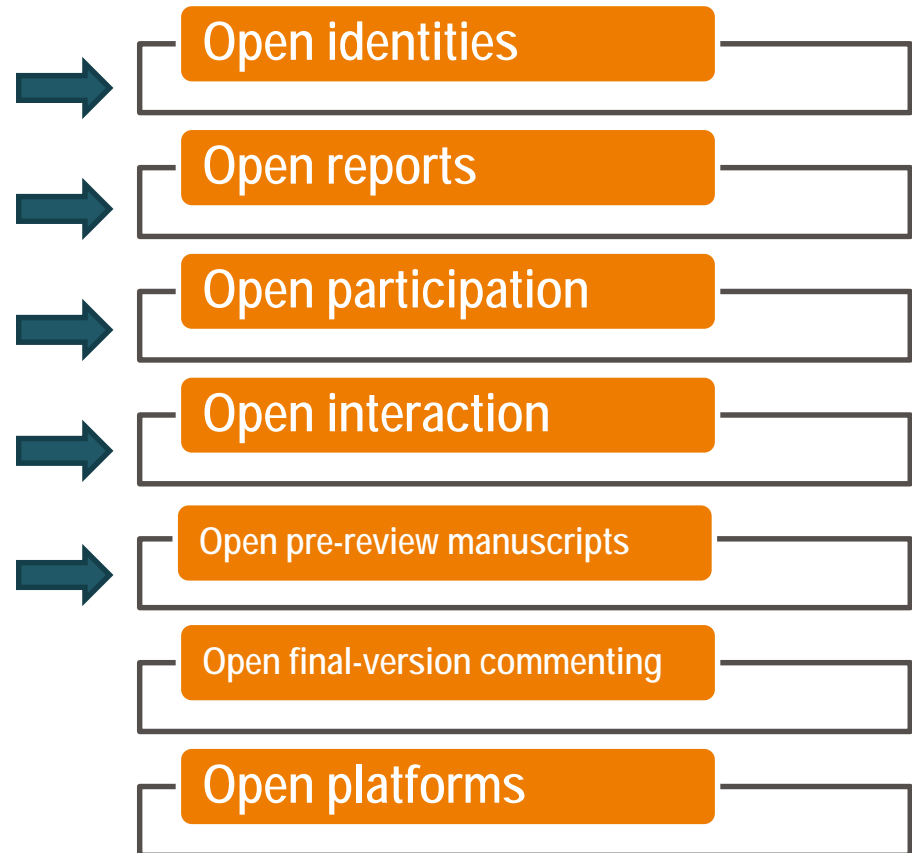
4 FUNDAMENTAL RULES OF OPEN SCIENCE





Open peer review

Open peer review is an umbrella term for a number of overlapping ways that peer review models can be adapted in line with the aims of Open Science.



Open identities

- Authors and reviewers aware of each other's identity

Open reports

- Review reports published alongside relevant article

Open participation

- Wider community able to contribute to review process

Open interaction

- Direct discussion between author(s)/reviewers, and/or between reviewers

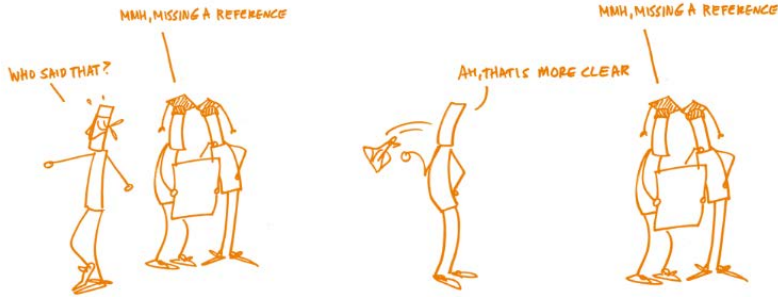
Open pre-review manuscripts

- Manuscripts/pre-prints available online in advance of peer review

But there are a lot of choices

n	Open identities	Open reports	Open participation	Open interaction	Open pre-review manuscripts	Open final-version commenting	Open platforms
41	■						
29	■	■					
9	■	■	■		■		
6	■	■	■	■			
6	■	■	■	■	■		
5	■	■					
5	■	■	■				
4		■					
2	■			■			
2			■				
2			■		■		
1		■	■		■		
1			■			■	
1	■	■	■	■	■		
1	■	■	■	■	■	■	
1	■	■	■	■	■	■	■
1	■	■	■	■	■	■	
1	■			■	■		
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1	■	■	■		■	■	■
1		■	■	■	■		
1	■	■		■			
1	■	■		■			

MODES OF PEER REVIEW:



BLIND PEER REVIEW

OPEN IDENTITIES



OPEN REPORTS

Collaborative peer review



Consultative peer review

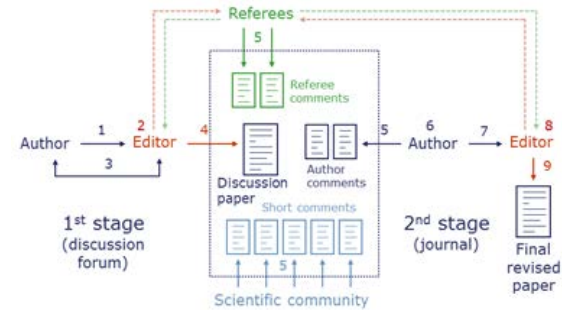


Open Science Training Handbook. <https://book.fosteropenscience.eu/>

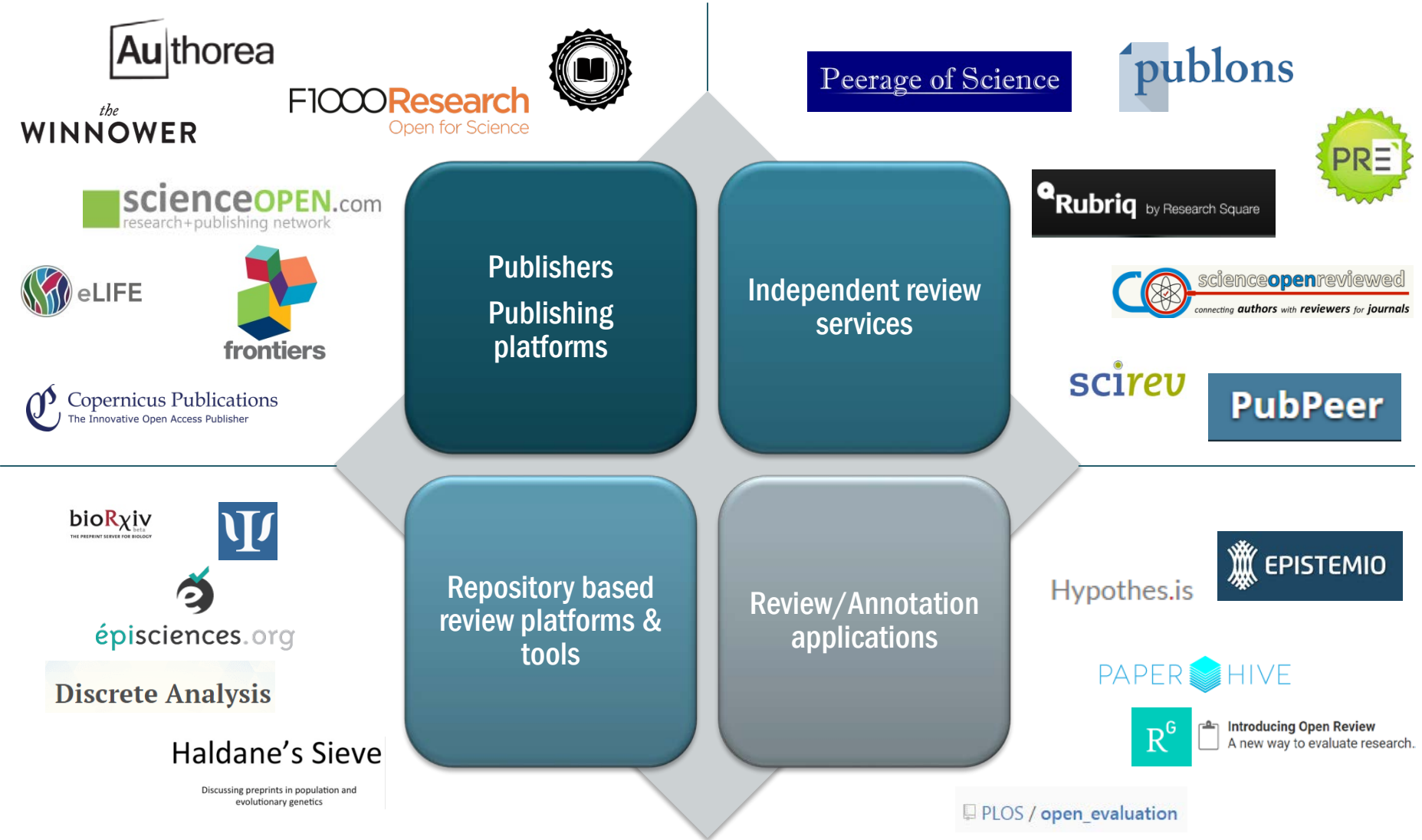
Interactive peer review



Post publication peer review



Alternative review services & platforms



Open identities

Positives

- Increase quality of reports
- Foster transparency to avoid conflicts of interest
- More civil language (in review and response)

Negatives

- Difficulty in taking and giving critical feedbacks (reviewers might blunt their opinions for fear of reprisals esp. from senior peers)
- Labor-intensive process

Open reports

Positives

- Feedback improves work and provide contextual information
- Giving better feedback - increase review quality
- Enable credit and reward for review work
- Help train young researchers in peer reviewing

Negatives

- Higher refusal rates amongst potential reviewers
- Time-consuming and more demanding process
- Fear of being exposed (esp. for early career researchers)

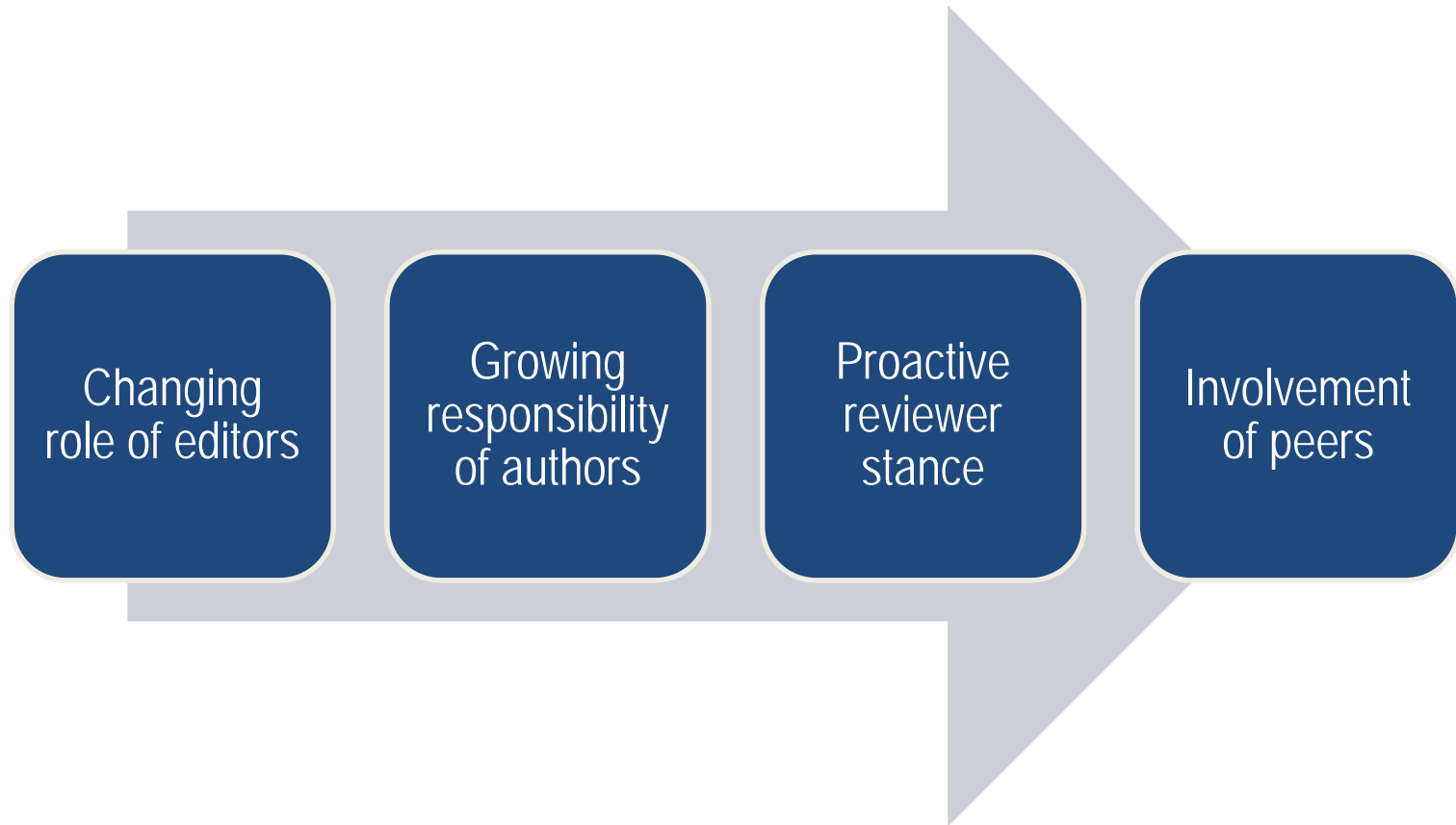
Open participation

Positives

- Expanding the pool of reviewers (including to those non-traditional research actors)
- Support cross-disciplinary dialogue
- Increase number of reviewers
- Being part of the debate

Negatives

- Time issue: difficulties motivating commentators to take part and deliver useful critique
- Self-selecting reviewers tend to leave less “in-depth” responses
- Feedback from non-competent participants



Growing demands

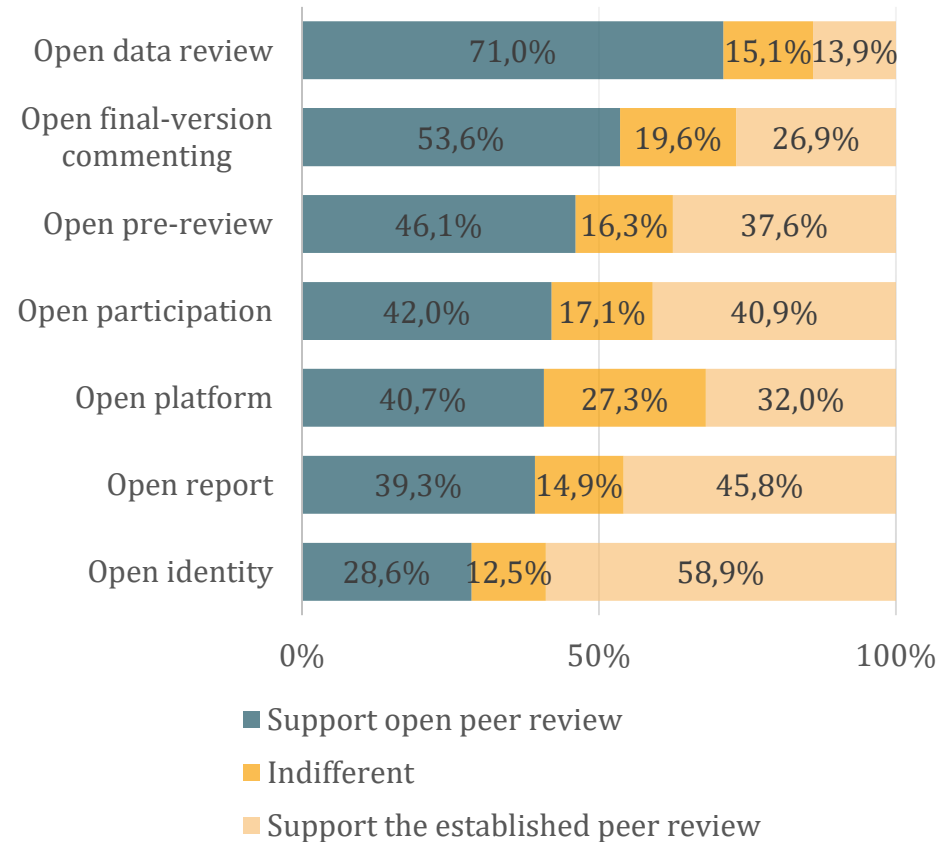
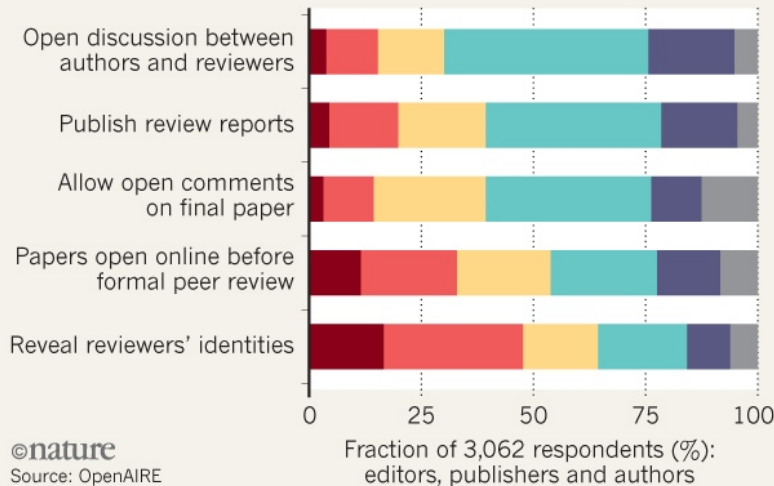
1. Transparency

OPENING UP PEER REVIEW

A poll finds support for making peer-review reports public, but less enthusiasm for revealing reviewers' identities.

“Will ‘X’ make peer review better, worse, or have no effect?”

■ Much worse
 ■ Worse
 ■ Neither better nor worse
■ Better
 ■ Much better
 ■ Don't know



Ross-Hellauer T, Deppe A, Schmidt B (2017) Survey on open peer review: Attitudes and experience amongst editors, authors and reviewers. PLoS ONE 12(12): e0189311. <https://doi.org/10.1371/journal.pone.0189311>

Stančiauskas, V. and Banelytė, V. (2017). OpenUP survey on researchers' current perceptions and practices in peer review, impact measurement and dissemination of research results. Accessed on May 3, 2017: <https://doi.org/10.5281/zenodo.556157>

Growing demands

2. 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)

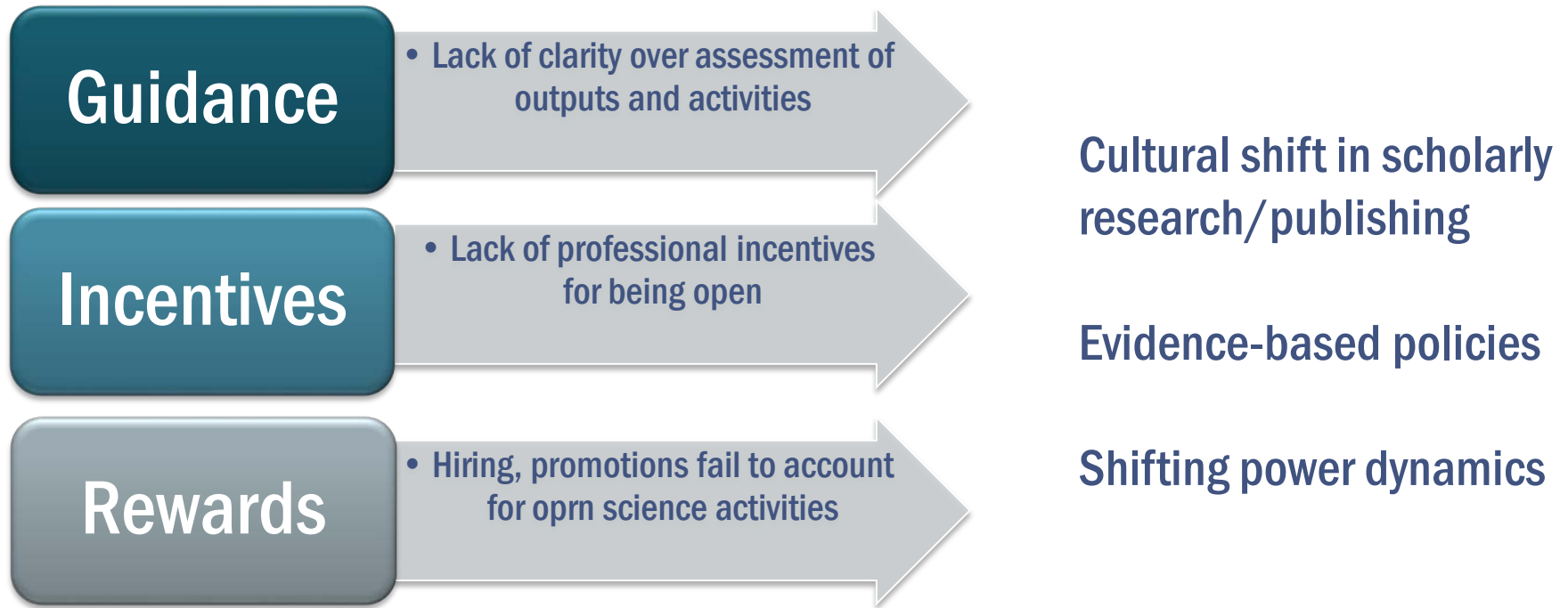
	Natural Sciences	Engineering and Technology	Medical Sciences	Agricultural Sciences	Social Sciences	Humanities	Mathematics, statistics, computer science	Total
My work as a reviewer is being explicitly acknowledged and evaluated in my organisation	20,3%	28,7%	17,5%	20,0%	17,8%	4,0%	11,1%	20,2%
My work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

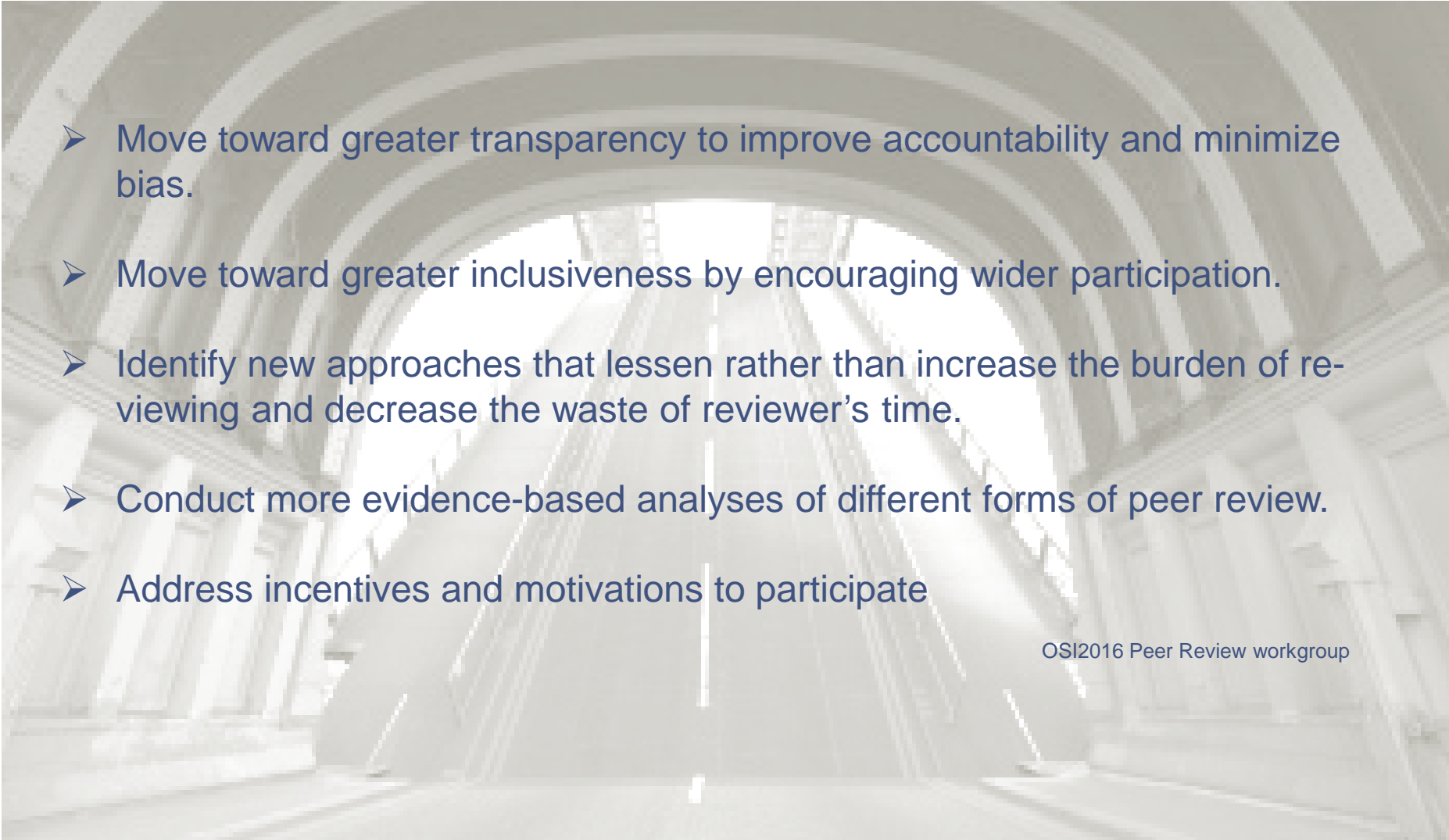
3. Training young scholars



Solutions



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

- 
- A grayscale background image of a long, perspective-view tunnel with a series of large, repeating arches. The lighting is bright at the far end of the tunnel, creating a strong sense of depth and perspective.
- Move toward greater transparency to improve accountability and minimize bias.
 - Move toward greater inclusiveness by encouraging wider participation.
 - Identify new approaches that lessen rather than increase the burden of reviewing and decrease the waste of reviewer's time.
 - Conduct more evidence-based analyses of different forms of peer review.
 - Address incentives and motivations to participate

OSI2016 Peer Review workgroup

References

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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)

Thank you!

<http://openup-h2020.eu/>
<https://www.openuphub.eu/>



Small group discussion

Goals and issues to discuss

Goal: to discuss the challenges the participants might have encountered, gather possible solutions for these problems and collect best practices and good examples how these aspects of the review process have been managed in different disciplines.

Issues:

1. increasing reliability and incentives (how higher visibility can contribute to better reviews and more active participation in the review process),
2. encouraging data sharing and data availability (how access to data improve the review process),
3. training for reviewers (how training young researchers incentivize participation).

Structure

1. TOPIC DISCUSSIONS

- Good examples/best practices
- Challenges
- Needed actions
- By whom
- Any other issue

2. VALIDATION Round 1

- Evaluate input with stickers
- red: disagreement
- green: agreement
- Add further input

3. CONCLUSIONS

- Providing feedback