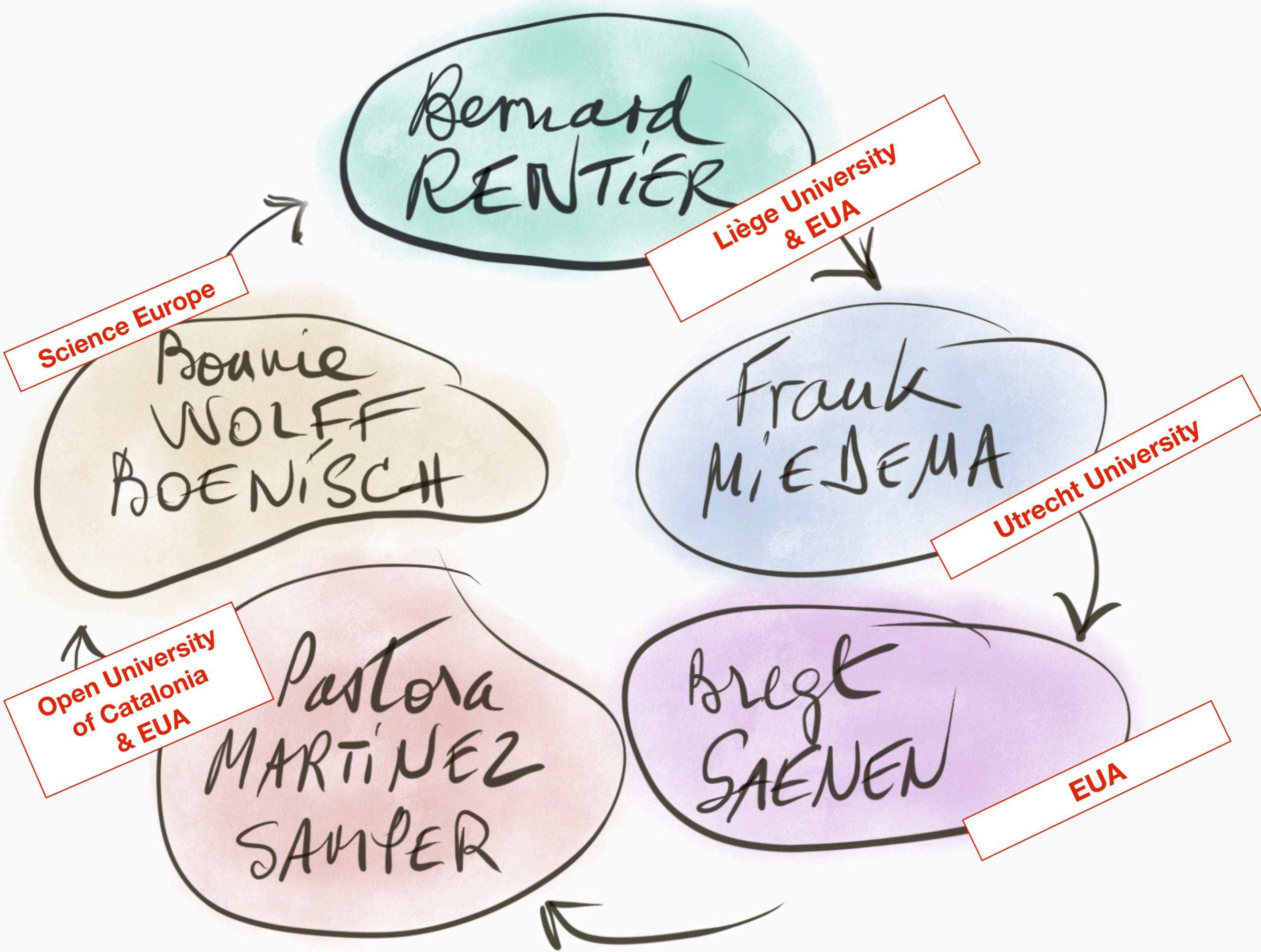


Panel Session: Research Assessment

Bernard RENTIER, Chair

Open Science Fair
Porto, September 17, 2019



Open Science: a paradigm shift

- Open Scholarly Communication
- Open citations
- Open Research Data
- Open Source Software
- Citizen Science

-
- *Open Education*

Why do we assess ?

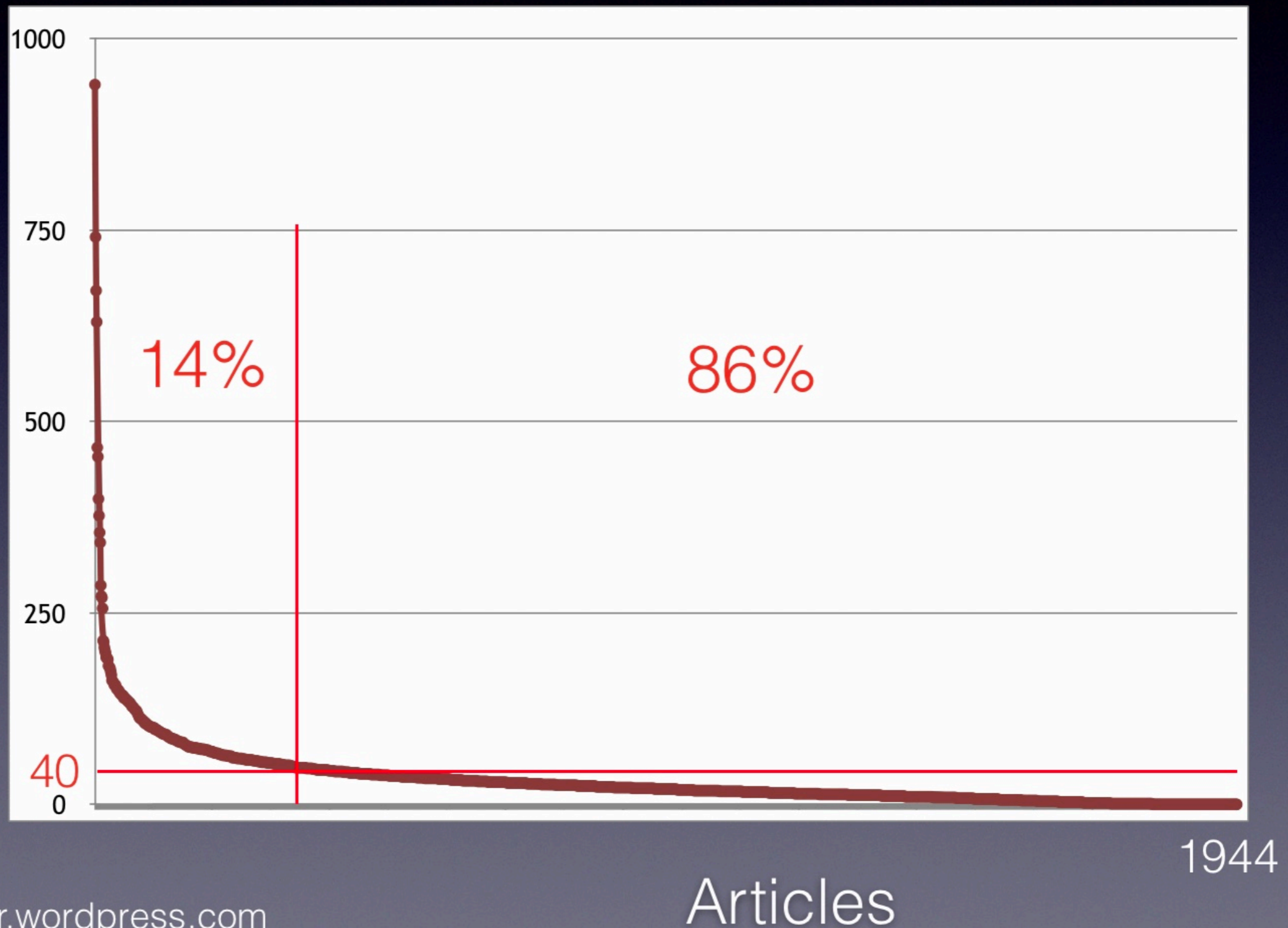
- Resources are scarce (money, time)
- Selection is permanently needed
- Researchers are accountable for public funds

How do we assess ?

- Today mostly on quick proxies (Journal Impact Factors,...), not enough on content and advancement of knowledge
- Impact of research is a good indicator but it should be clear which impact, on what and how to measure it

The Impact Factor Deception

Frequency of citations in 2014 per article published
in *Nature* (FI=40) in 2012-2013



Why should we change ?

- Growing distrust and frustration
- Quantitative assessment promotes competitiveness rather than cooperation
- Quantitative metrics induce overpublication

THE EVOLUTION OF ACADEMIA

PUBLISH



PUBLISH
OR
PERISH



PUBLISH
IN HIGH IMPACT
JOURNALS
OR
PERISH



PUBLISH
FREQUENTLY IN
HIGH IMPACT
JOURNALS
AND
MAYBE
YOU WON'T
PERISH



Why should we change ?

Current evaluation methods
shape researchers in the same mould.

They kill diversity.

Why should we change ?

- Landscape is changing towards Open Science, based on exchange and sharing
- Assessment should take the OS principles into account.

Why should we change ?

- Authorship has become an obsolete concept in fields where contributions abound.
- Position (first, last or middle of the pack) authorship has no evaluation value.
- Real acknowledgement of contributing merit is needed

 **CONTRIBUTORSHIP** rather than **AUTHORSHIP**

June 2019 - Hiring conditions in a prestigious institution...

It is essential that you have a PhD in a relevant area. You should have demonstrated expertise in Sustainable Engineering, as applied to energy and the environment, through the writing and dissemination of research results in papers and presentations. It is also essential that you can work in a team, as well as independently. A specific requirement for this position is to have published as main author or co-author (at least one journal article) in a high-impact journal (impact factor above ten, e.g., Nature, Science, Nature Communications, Nature Energy, Nature Sustainability, Nature Climate Change, PNAS, Energy & Environmental Science, etc.). Applications not fulfilling the latter requirement will get a rejection.

De : kevin kalala [<mailto:kevinkalala@ukr.net>]

Envoyé : jeudi 27 juin 2019 13:39

À : [REDACTED]

Objet : scopus

Bonjour, [REDACTED]

Nous travaillons avec des revues de notation de la base de données Scopus et WOS dans tous les domaines et garantissons leur indexation.

Il est possible de publier des articles dans les magazines Scopus Q3 et Q4 d'ici la fin de l'année et dans les magazines Scopus Q1 et Q2 pour l'été 2020.

Envoyez votre article pour une réponse de révision préliminaire sur le calendrier et le coût de la publication.

Si vous n'avez pas encore votre article, mais que la publication est requise et que les délais sont serrés, nous avons un certain nombre d'articles déjà prêts qui ont déjà été acceptés par les magazines. Vous pouvez vous ajouter en tant que collaborateur, vous pouvez apporter vos propres modifications et suggestions. Nous traduisons la traduction en anglais et concevons l'article nous-mêmes.

Ecrivez-moi votre spécialité, je vais choisir des sujets pour co-auteur.

Le nombre de places dans les prochaines publications est limité.

Demandez des détails dans le courrier de retour ou appelez et écrivez [+380930538539](tel:+380930538539)

Hello, [...]

We work with Scopus and WOS database rating reviews in all areas and guarantee their indexing.

It is possible to publish articles in Scopus Q3 and Q4 magazines by the end of the year and in Scopus Q1 and Q2 magazines for the summer of 2020.

Send your article for a preliminary review response on the timing and cost of publication.

If you don't have your article yet, but publication is required and deadlines are tight, we have a number of articles ready that have already been accepted by the magazines. You can add yourself as a collaborator, you can make your own modifications and suggestions. We translate the translation into English and design the article ourselves.

Write to me your specialty, I will choose topics for co-author.

The number of places in future publications is limited.

Ask for details in the return letter or call and write +380930538539

Are there alternatives ?

- DORA & Leiden Manifesto
- Several theoretical paths
- Best practices are being surveyed

A variety of assessment contexts

Researchers

- Hiring
- Promotions
- Awards

Teams

- Institutional support (equipment, space, personnel)

Projects

- Funding
- Publications

OS-CAM, A DISRUPTIVE PROPOSAL

Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for researchers
practicing Open Science

edited by

Conor O'CARROLL – Chair - Research Policy & Funding Consultant at SciPol and chair of the Steering Group on Human Resources and Mobility (SGHRM)
Bernard RENTIER – Vice-Chair - Recteur honoraire de l'Université de Liège - EUA Expert on Open Science
Cecilia CABELLO VALDES - FECYT – Spanish Foundation for Science and Technology
Fulvio ESPOSITO - University of Camerino
Eeva KAUNISMAA - Ministry of Education and Culture
Katrien MAAS - League of Research Universities - LERU
Janet METCALFE - CRAC – Head of Vitae
David McALLISTER - Head of Skills & Careers at BBSRC/RCUK
Karen VANDEVELDE - University of Ghent

Contributions:

Isabelle HALLEUX - R&D Executive Director - University of Liege
Caroline Lynn KAMERLIN - Uppsala University
Norbert LOSSAU - member of OSPP/EUA – Vice-President of Göttingen University
Wainer LUSOLI - European Commission - RTD A6
Frank MIEDEMA - Utrecht University - chair of the MLE experts 'altmetrics and rewards'
Céline RAMJOUE - Head of Sector DG CNECT C3 - Digital Sciences
Sylvia SCHREIBER - PARISBERLIN EU correspondent Bureau Brussels
Paul WOUTERS - Leiden University

Assessment must be based on
MULTIPLE CRITERIA

1. Research output

- Research activity
- Publications
- Datasets
- Open source
- Funding

2. Research Process

- Stakeholder engagement/citizen science
- Collaboration & interdisciplinarity
- Research integrity
- Risk management

3. Service & Leadership

- Leadership
- Academic standing
- Peer review
- Networking

4. Research Impact

- Communication & dissemination
- IP (patents, licenses)
- Societal impact
- Knowledge exchange

5. Teaching and supervision

- Teaching
- Mentoring
- Supervision

6. Professional Experience

- Continuing professional development
- Project management
- Personal qualities

« MATRIX, NOT METRICS »

OS-CAM, the Career Assessment Matrix

	R1	R2	R3	R4
Research output	+	++	+++	++++
Research Process	+	+++	++++	++++
Service & Leadership		+	+++	++++
Research Impact	+	++	+++	++++
Teaching and	(++)	+	++	++++
Professional Experience		+	+++	++++

OS-CAM, a customised matrix

		Engineering		R1		R2		R3		R4	
		Humanities		R1		R2		R3		R4	
		Social		R1		R2		R3		R4	
		Earth		R1		R2		R3		R4	
Life Sciences		R1		R2		R3		R4			
Research output		+		++		+++		++++			
Research Process		+		+++		++++		++++			
Service & Leadership				+		+++		++++			
Research Impact		+		++		+++		++++			
Teaching & supervision		(++)		+		++		++++			
Professional Experience				+		+++		++++			

It will be impossible
to implement Open Science harmoniously

without a large, significant and determined consensus
on new ways to evaluate research and researchers.

E-book freely available at:

<https://academie-editions.be/>

BERNARD RENTIER

OPEN SCIENCE,
THE CHALLENGE
OF TRANSPARENCY

Preface by Philippe Busquin



ACADÉMIE ROYALE DE BELGIQUE
Collection L'ACADÉMIE EN POCHE