Implementing research assessment reforms: Tales from the frontline

Special session

27th International Conference on Science, Technology and Innovation Indicators, STI2023

Schedule 11:15-12:30

11:15-11:25 Introduction: Janne Pölönen & Alex Rushforth

11:25-12:10 Tales from the frontline

- Leiden University: Sarah de Rijcke
- University of Turku: Laura Niemi
- University of Aalborg: Birger Larsen
- National Research Council of Italy: Francesca Di Donato

12:10-12:30 Questions & Answers with the audience

Research Assessment Reform



- Responsible Research Assessment (RRA) is "an umbrella term for approaches to assessment which incentivise, reflect and reward the plural characteristics of high-quality research, in support of diverse and inclusive research cultures": <u>The changing role of funders</u> (2020)
- Over 600 organisations have signed CoARA Agreement on Reforming Research Assessment, and commit to
 - 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

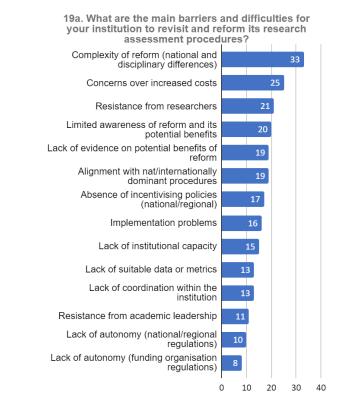
Goal of this Special Session

- Much appears to be happening in the (trans-)national spaces of assessment reform...
- ... however, the knowledge base on reform is still patchy and underdeveloped.
- Basic need to make sense of what we are seeing, share stories, facilitate mutual learning.
- Sessions such as this are a modest attempt to initiate/continue such discussions and call on the diverse expertise of STI community.

Barriers and obstacles

- Most frequently mentioned barriers to RA reform by 54 GraspOS Landscape survey participants from 19 European countries are
 - complexity resistance
 - increased costs limited awareness
- Observed implementation obstacles for OSaware assessments include
 - limited recognition of diverse research outputs, open science practices, and academic activities and roles
 - limited use of narrative CV/self-assessment portfolios for qualitative input
 - reliance on commercial data providers as well as author/venue based metrics

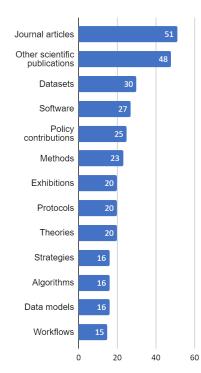




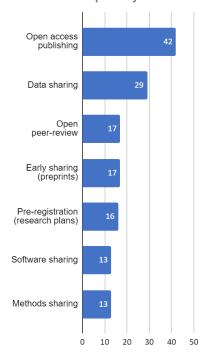
Recognizing Diversity in Assessments



10a. Types of research outputs



11a. Practises contributing to robustness, openness, transparency



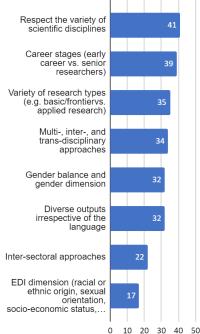
13a. Diverse research activities. practices and roles Industrv-academia cooperation Training, mentoring & supervision of PhD... Teaching Peer review Science communication and... Team science and collaboration Leadership roles Entrepreneurship 31 Knowledge valorisation Skills, competences & merits Roles outside of academia Diverse contributor roles

Citizen science

0 10 20 30

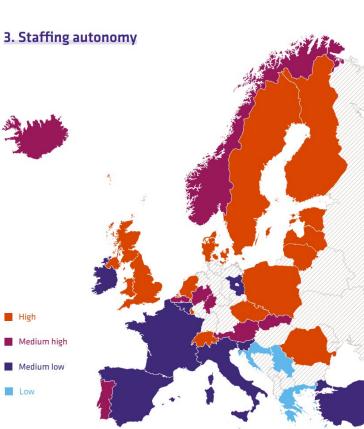
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12a. Practises contributing to the inclusiveness of research



Autonomy in Recruitment & Promotion

- EUA University Autonomy in Europe IV The Scorecard 2023 shows significant differences in recruitment procedures across Europe
 - ranging from a large degree of independence in the recruitment of staff to formalised procedures that necessitate the approval of an external authority
- Promotion practices differ across Europe and varying degrees of restrictions exist
 - rules regarding the selection committee or the requirement to have a post available at a higher level to promote staff.



National Performance-Based Research Funding Systems

- Performance-based allocation of institutional funding is increasingly common in EU Member States
- Systems differ widely in terms of assessments, indicators and the volume of funding (Zacharewicz et al. <u>Performance-based research funding in EU Member States—a comparative assessment</u>, Science & Public Policy 2019)

Table 1. Dominant assessment approach for the allocation of performance-based funding in the EU28.

		No RPBF											Lin	nited R	PBF	Quantitative formula with bibliometric assessment													Peer review			
Country		BG ^a	CH	CY	EL	ES	HU ^b	IE	LU ^c	LV ^d	MT	RO ^e	SI	AT	$\operatorname{GE}^{\mathrm{f}}$	NL	BE (FI)	BE (WA) ^g	CZ^h	DK	EE ⁱ	FI	HR	NO	PL ^j	SE	SK	FR	IT	LT	PT	UK
Education metrics		Х	х			х	Х	х	Х			Х		Х	Х	Х	Х	Х		Х	Х	Х		Х			х				Х	
Historical		x	х	Х	X	x	x			Х	Х	x	х						Х	x				x						х		х
Bibliometrics	Publications	X X					x										Х	Х	X	x	Х	Х	X	X	Х	Х	Х	х	х	x	х	
	Journal impact based	х							Х								х		х	х	х	х		х	х		7		х	х		
	Citation	x					Х										х	Х					Х	x		x		х	x			
Other	PhD graduates						х	Х	Х					Х		Х	х			Х	Х	X	х	х	Х		Х		х			
formula	Patents								x										Х	x	x				х		\mathbf{x}		х	Х		
elements	Project funding							х							Х			Х	Х	х	х	Х	Х	Х			х	х	х			
	Business funding							х	Х												х	\mathbf{X}	х		Х	х	_		х	Х		
	Gender/diversity														X X		Х	Х														
	Internationalisation														Х							х	Х	Х			х	х	х	х		
Peer review																												\mathbf{X}	х	х	Х	Х
Performance Contracts														х		Х				х	х	х										

Tales from the frontline

Panelists discuss the following aspects of their case

Round 1

- a. National context
- b. Reform process

Round 2

- a. Challenges
- b. Lessons learned

National context: Leiden University (Sarah de Rijcke)

Position paper 'Room for everyone's talent'

Association of Dutch Universities (UNL) & NFU

- New framework for assessment, development and promotion
- Principles RRA in Strategy Evaluation Protocol (SEP)
- Concrete implementation of a new balance in RRA

Funders: NWO and ZonMw

- More diversity in funding instruments
- · More emphasis on Team Science
- Application forms of a more narrative nature



Academia in Motion framework

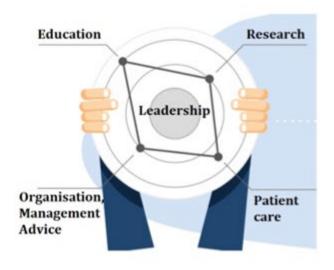
Leadership as core competence in Academia in Motion model

Core domains:

- Education
- Research
- Organisation, management, advice
- Patient care (LUMC)

Drivers:

- Innovating knowledge and methods
- Sharing knowledge
- Building a connecting knowledge community



National context: University of Turku (Laura Niemi)

- The Finnish higher education system consists of 13 universities and 22 universities of applied sciences
 - Currently 12 universities and 17 universities of applied sciences are CoARA signatories
- The Ministry of Education and Culture coordinates the activities of higher education institutions, science agencies and research institutes and acts as their main financial source
 - In the funding model of the Ministry of Education and Culture the Publication Forum classification is used
- The Federation of Finnish Learned Societies (TSV) is responsible of national level coordination of open science and responsible assessment in Finland
 - > TSV will be coordinating CoARA's Finnish National Chapter

Reform process: University of Turku (Laura Niemi)

Year	202	21				2022												2023											
Month	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1																													
PHASE 2																													
PHASE 3																													
PHASE 4																													
PHASE 5																													

PHASE 1: Identification and evaluation of assessment processes and practices PHASE 2: Preparing and drafting the Policy for Responsible Assessment of Research and Researcher PHASE 3: Commentary round and approval of the Policy PHASE 4: Introducing and implementing the Policy and CoARA actions to the university community PHASE 5: Training and monitoring the implementation of the Policy and CoARA actions

The Policy is openly available:

https://www.utu.fi/en/research/open-science/responsible-assessment-of-research-and-researcher

National context: University of Aalborg (Birger Larsen)

- The national "Danish Bibliometric Research Indicator" was suddenly and without warning discontinued on Dec 3rd 2021
 - All work on the indicator stopped over night...
- Based on the Norwegian model and similar to the Finish indicator, a portion of the DK national basic research funding had been distributed 10+ years in competition between the 8 DK universities
- The indicator statistics made it possible e.g. to compare universities directly across all fields
- Local implementation varied between DK universities AAU used it internally to distribute funding all the way down to research groups(!)

Reform process: University of Aalborg (Birger Larsen)

• Fast working committee tasked with constructing a new indicator indicator that can both further the research quality of AAU + form part of budget model

New AAU indicator now in implementation:

- 70% of funds distributed based on **1**) publications in verified publication channels (similar to old model), and modified by **2**) citations (FWCI)
- 30% of funds distributed based on contracts with the faculties based on collaboration, impact and openness in accordance with DORA and ARRA
 - Allows flexibility and adaptation to the profiles of each department
 - Based on ambitious and measurable goals

The new AAU indicator will presented in detail on Friday in Grote zaal 14:30 – 15:45



The (National) Context: CNR

The National Research Council of Italy is the largest Italian multidisciplinary RPO, with over 8.000 employees. It is a **public institution.**

The CNR has legal personality under public law and is endowed with an autonomous organization. It has to conform to **domestic law** (+ **sovra-national** and **internal** ones)

- Constitution (for example: recruitments)
- Legislation and administrative acts and regulations (for example: performance assessment – dlgs 150/2009, VQR Decrees)
- **EU legal instruments** (for example budget)
- ----> CCNL (area ricerca) CCNI cnr
- ----> CNR bylaw (for example mission/ statuto-regolamenti, calls)

Italy has a very complex and intertwined legal framework

Actors

MUR

ANVUR (National

agency established

by MUR): National benchmarking

Nazionale per la

valutazione della

ricerca (nominated

by MUR): national

research projects

assessment

Comitato

Assessment levels

Overall performance National Benchmarking (VQR)

Research projects

Individuals (at CNR: researchers and technologists): hiring and 2 career progressions



Reform process: CNR

CNR Reorganization and relaunch plan, and RA

external evaluators

Approved on Nov. 22, it establish an internal reform plan for 2022-2025

CoARA

Direct involvement in the core group, signature on Nov. 2022

Implementation

Milestones 2023

- 2023 calls (procedure on-going): New rules for career advancement defining/testing new criteria: valuing all activities; narrative CV and qualitative criteria prevailing on quantitative ones.
- coordination and mutual-learning at national and international levels (MUR, ANVUR, G6, CoARA)
 - Italian National chapter of COARA: co-chair with Unibo
- investments in Research on research through national and international projects: see PRIN 2017 "Gli effetti della valutazione sulla ricerca accademica: produzione della conoscenza e problemi metodologici"; GraspOS Eu project; ...

Recognize, value and assess several research activities which constitute CNR's mission (eg. Scientific outputs, Patents, Technology Transfer, Tangible and intangible assets, Infrastructures, "Third mission",Other)
New recruitment policies, new professionalism and skills
Peer evaluation
Continuous monitoring
Assessment system of institutes and units with

ARRA commitment #10

Challenges: Leiden University (Sarah de Rijcke)

Alignment and integration

Polarization and unrest

Uncertainties among early career *and* established researchers

Bureaucratic change instead of culture change



Fokke & Sukke are the management. *"I am bored."*

"OK, well, shall we propose another culture change?"

Lessons learned: Leiden University (Sarah de Rijcke)

Be very patient

Do not work from the top down, but also not completely bottom-up

Find ambassadors on the ground

Dedicate time and resources to communication

Do not assume everyone is familiar with research on research assessment ;-)

Challenges: University of Turku (Laura Niemi)

- Changing an existing culture
 - ➤ "we are already doing everything right"
- Aiming to a moving target
- Securing sufficient resources

Lessons learned: University of Turku (Laura Niemi)

- It's good to be persistent
- It's important to recognise weak signals
- It's good to remember that no one can do the required reform of responsible assessment alone

Challenges: University of Aalborg (Birger Larsen)

- Sudden, ill-conceived and narrow-minded bureaucratic decisions have great impact and unforeseen consequences on universities and the ability to reform research assessment nationally
- Going from a transparent, nationwide and interdisciplinary indicator that could have formed the core of research assessment reform, Denmark is left with a fragmented patchwork of ad hoc local solutions
- Direct comparability between Danish universities has been lost, as has comparability internally between departments and faculties
- A lot of effort can be spent on local basic solutions
 - instead of high-level reform

Lessons learned: University of Aalborg (Birger Larsen)

- With dedication, and being at the right place at the right time, it is sometimes possible to rise stronger from the ashes
- AAU now has complex, but transparent, indicator which:
 - incorporates elements from DORA and ARRA (before even signing ARRA(!) that allows incorporating a much broader set of aspects into research assessment
 - has publication and citation indicator neatly tied together in a way that cannot be easily untangled, still allowing facultary differences, and only awarding citations with over expected impact
 - fits directly and naturally into the work with the university's vision, mission and strategy



(1) A complex national system: low autonomy degree for single institutions

(2) "If a factory is torn down but the rationality which produced it is left standing, then that rationality will simply produce another factory. If a revolution destroys a government, but the systematic patterns of thought that produced that government are left intact, then those patterns will repeat themselves." Robert M. Pirsig, 1974.

Evaluation practices are based on established and conservative behaviour and praxis. We can change the rules, but if we don't change the way of thinking and the culture of evaluation, we won't have consistent results. How to address a culture change?

Lessons learned: CNR



- (1) Premise: it's a bit early for sharing lessons-learned: we are in the process
- (1) "Human life is not at all a struggle, where competitors compete for prizes; it is a journey that is undertaken together as brothers, and where each one, using his strengths for the good of all, is compensated by the sweetness of mutual benevolence, by the pleasure combined with the feeling of having deserved recognition or esteem." J.-A. C. de Condorcet, Mémoires sur l'instruction publique, 1791

Need to **focus on commitments #5 and #7:** investing time and resources for engagement, awareness, training at different levels:

CoARA NC is strategic for mutual learning among (different) institutions (the national context affects each institutions). How to go deeper?

- RPOs peculiarity
- and CNR's one
- disciplines: Involve scholarly communities (scientific societies)
- kids!!!

Questions & Answers

Online and onsite participants are invited to present questions and comments to the panelists (raise hand), or write in our session's chat box

Closing the session

Thank you for participation!

If you have any comments and questions to organisers or the panelists, please send email to:

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