

Lesson 5 - Institutional proposals, research strategy and governance

Keywords

- Research Performing Organisations (RPOs)
- Performance indicators
- Funding pressure
- Assessment frameworks
- RMAs in RPOs' evaluations

Learning Objectives

5 8 10 12 16 17 18 19 20

Scan for complete LOs



Go to the exercise

https://learningapps.org/watc h?v=pppx5joo522

This lesson explores the framework for the institutional funding proposals that **research performing institutions** must prepare to retrieve funds for the development of their funding and impact strategies or and/or to finance their assessment of research productivity and enhance the ranking of their institution. To prepare this type of funding proposal one requires extensive knowledge about institutional research organizations, a clear idea of the existing infrastructure supporting research, and awareness of how the work carried out at research performing institution is assessed and funded.

Thus, this lesson focuses on the governance of the research ecosystem.

What type of research performing institutions can the student identify?

This question could be used to guide students in searching for and mapping the scientific institutional ecosystem, based both on pre-existing knowledge and on information retrieved online.

Examples of Research Performing Organizations (RPOs) include:

Module 2 - Research Funding, Policy and Governance

- research universities,
- research centres (public and private),
- national governmental bodies/public administration,
- Research Councils (e.g. <u>UK Medical Research Council</u>),
- European governmental bodies/public administration (e.g. DG <u>Research Joint</u>
 <u>Research Centre</u> or the <u>European Monitoring Centre for Drugs and Drug Addiction</u>
 (EMCDDA),
- research laboratories (e.g. <u>USA Health & Human Services Laboratories</u>),
- scientific societies (e.g. <u>Max Planck Society</u>),
- R&I companies and SMEs,
- innovation centres,
- technology centres,
- NGOs

In many countries, the public research system is divided into several different institutions. Thus, national contexts can provide a good starting point to perform this mapping. In Portugal, for example, there are Research Units, Associate Labs, Collaborative Labs, State Labs, etc., each having its own specific institutional funding programme.

Research performing institutions need funding to function correctly and to provide good conditions for research and innovation to flourish. There are many very different ways in which research performing institutions can be funded. Some institutions receive non-competitive core funds, which, for public institutions, is generally coming directly from the national state's budget.

Other institutions rely heavily on open competition, to be awarded what is known as an **institutional research project**. To obtain this type of funding a grant proposal must be prepared, submitted and approved for funding.

In addition, there are international funding programmes (e. g. European) devoted to institutional capacity building that can partially fund the operation of a research performing institution. However, most RPOs generally rely substantially on national assessments and evaluation schemes for their funding.

Independently from the source of the funding (competitive or non-competitive), any fund distribution to research performing institutions should be based on a system to assess the quality of research performed at a given institution.

Why do we need to evaluate Research Performing Organizations?

- **1. To advocate**: to demonstrate the benefits of supporting research, enhance understanding of research and its processes among policymakers and the public, and make the case for policy and practice change;
- **2. For accountability**: to show that money and other resources have been used efficiently and effectively, and to account for researchers' work;
- **3. To analyse**: to understand how and why research is effective and how it can be better supported, feeding into research strategy and decision-making by providing a stronger evidence base;
- **4. To better allocate funds**: to determine where it is preferable to allocate funds in the future, making the best use possible of a limited funding pot.

What indicators are used to evaluate the performance of an RPO?

Multiple **performance indicators** are relevant when assessing the quality of a Research Performing Organization, namely (but not limited to):

- Publications: number, impact, citations. Some references for institutional bibliometric indicators are:
 - Scimago indicators (https://www.scimagoir.com/methodology.php): Output,
 International Collaboration, Normalized impact, % Q1, Specialization Index,
 Excellence Rate, % Scientific Leadership, % Excellence with Scientific Leadership.
 - Publications databases that can provide bibliometric indicators: ISIWoS,
 Scopus, Scielo, Latinger, Google Scholar Individual publication profiles with
 bibliometric indicators: Researcher ID (Thomson Reuters), ORCID ID (open)
- Open science practices
- Projects
- Funding sources: private or public
- Staff: number, qualifications, expertise
- Subjects (diversity)
- Facilities and equipment available



Figure 18- Research at Exeter short video
An example of performance indicators for an RPO
(source: https://www.youtube.com/watch?v=6JyK-48F_3I)

RPOs' research assessment

There is wide diversity in quality assessment systems applied to research performing institutions across Europe. Any assessment system has a reason to exist due to the competition scenario in place. Given that resources are scarce, research performing institutions compete to be able to:

- attract the best talents (researchers, students, RMAs), and
- offer the best conditions (infrastructure, equipment, services, environment) to be able to produce relevant discoveries, with the greatest impact on science, society, or the economy.

Hence, it is safe to say that external drivers, such as the **funding pressure competition**, are guiding the strategy of research performing institutions. However, internal drivers, such as those that make an institution competitive in its specific field of action. also play a major role in an RPO's performance strategy.

Among the methodologies that can be used to assess the performance of an RPO are:

- bibliometrics: a range of techniques for assessing quantity, dissemination and content of publications and patents;
- case studies: can provide the full context around a piece of research, a researcher or their impact
- **peer review**: review of research outputs by peers, typically other academics from the same or a similar field,

Module 2 - Research Funding, Policy and Governance

- **site visits**: on-site visit of an evaluating committee to a given department or institution;
- document review: a review of existing documentation and reports on a research topic.

According to the mixed methods approach, different models of assessment can be differentiated. Some of the most recognized assessment frameworks are:

- Performance-based research funding systems multiple realities within Europe
- Research Excellence Framework (REF), in the UK
- STAR METRICS, in the US
- Canadian Academy of Health Science (CAHS) Payback Framework
- Excellence in Research for Australia (ERA)
- Evaluation Agency for Research and Higher Education (AERES), in France

	REF	ERA	Productive Interactions	NIHR	CAHS	STAR METRICS
Bibliometrics	1	/		1	1	
Case studies	/					
Interviews			1			
Document review			1			
Data mining			1	1		/
Data visualisation						1
Peer review	/	/				
Economic analysis					/	1
Surveys						
Logic models				1	/	
Site visits			/			

Figure 19 - Methods used in different research assessment frameworks (source: https://doi.org/10.1057/palcomms.2017.78)

The institutional proposal

Research assessment evaluation exercises that determine how much funding an institution will secure for several years demand considerable efforts of time and resources in assembling an institutional proposal and in coordinating its submission.

During the assembly of the institutional proposal, a concrete action plan for a given period must be set. Hence, a strategic action plan must be designed, discussed and produced. RMAs

Module 2 - Research Funding, Policy and Governance

can have key roles in supporting institutional evaluation exercises, which are often very demanding and represent crucial steps in the life of research performing institutions.

RMAs can intervene in different ways and moments: from the preparatory phases of evidence collecting, providing the policy review and proposal planning to the building of the proposal and the support through all evaluation steps, which can involve site visits at the external expert evaluators. Also, RMAs working on pre-award can have a role in assembling institutional strategic proposals.

The <u>KU LEUVEN presentation</u> is an example of an RMA working on a policy that can help Leuven university to prepare better for Research assessment exercises.

The student can be asked to brainstorm on the areas needing RMA support to put institutional proposals together and to support the full cycle of institutional assessment exercises at research performing organizations.

Bibliographic references

- England, H. F. C. of. (n.d.). Home REF 2021. Higher Education Funding Council for England. Retrieved 11 January 2021, from https://www.ref.ac.uk/
- European Commission. Directorate-General for Research. (2010). Assessing Europe's university-based research: expert group on assessment of university-based research.
 Publications Office. https://data.europa.eu/doi/10.2777/80193
- Guthrie, S., Wamae, W., Diepeveen, S., Wooding, S., & Grant, J. (2013). Measuring research: A guide to research evaluation frameworks and tools. RAND Corporation. https://www.rand.org/pubs/monographs/MG1217.html
- lesel Van der Plancken. (2019, May 13). *KU leuven research policy and support structure*. https://www.kuleuven.be/english/research/EU/f/extra/event-internal/rma-visit-5-2019/presentation/presentations-13-may-2019/01-ku-leuven-research-policy-and-support-structure.pdf
- Research at Exeter. (n.d.). Retrieved May 27, 2022, from https://www.youtube.com/watch?v=6JyK-48F_3I
- Sivertsen, G. (2017). Unique, but still best practice? The Research Excellence
 Framework (REF) from an international perspective. Palgrave Communications, 3(1),
 17078. https://doi.org/10.1057/palcomms.2017.78
- Zacharewicz, T., Lepori, B., Reale, E., & Jonkers, K. (2019). Performance-based research funding in EU Member States—a comparative assessment. *Science and Public Policy*, 46(1), 105–115. https://doi.org/10.1093/scipol/scy041