

Lesson 4 - RMAs as Professionals at the Interface of Science

Keywords

- Research & Innovation
- RMA skills and competences
- RMA level of action
- Professional Development Framework
- RMAs in the research lifecycle
- Debates around RMA professional recognition

Learning Objectives

④ ⑦ ⑩ ⑪

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<https://www.youtube.com/watch?v=lgjP3z7Roq8&t=3>

[The scientific revolution](#) has brought to humanity a fantastic venture that now relies on millions of researchers all over the world, building on each other's discoveries (and denials!) to **advance knowledge and technology**. **Science is now a societal endeavour** that brings together different actors and resources, places and relations, combined in what we can call the **Research and Innovation (R&I) ecosystem**.

There is not an official and unique definition of the R&I ecosystem, as they are complex systems which need various elements to perform optimally. In that sense, a common overview was suggested by Agostinho et.al:

“R&I ecosystem is understood as the set of infrastructures and human, financial, institutional and information resources, projects and activities organised for scientific and innovation production. It includes scientific discoveries, the creation of policy frameworks, production and management of knowledge, as well as, transfer and promotion of its application and dissemination of science and promotion of scientific culture.”

We can then conclude that to 'do' science, we need highly trained individuals, state-of-the-art infrastructures, competent institutions and informational resources, as well as funding systems able to provide agile ethical and legal frameworks. Nevertheless, to make all this process work, and to be able to reach scientific discoveries, **we need more than just researchers**: there is a whole group of other professionals who work and contribute to maintaining the R&I ecosystem.

The Education and Research ecosystem has been in rapid evolution during the past two decades, critically influenced by 'demands of contemporary environments' such as (i) **globalisation** and **increased mobility**; (ii) **global financial crisis**; (iii) **technology advancement**; and (iv) **knowledge-based economy** (Chan et al, 2017). In response, education and research institutions (ERI) have been implementing structural changes and **enhancing the professionalisation of their managing structures** (Whitchurch, 2008), aiming at better adapting to these new challenges in an increasingly complex research ecosystem.

Moreover, R&I needs not only excellent researchers, but also **highly-skilled professionals working in research administration, research management, knowledge transfer and exploitation, science communication, research governance and research policy**, in order to release the full potential of R&I at institutional, national and international levels. Although these professionals do not perform direct research tasks, they support researchers in common working ecosystems. These professionals have a name: **Research Managers and Administrators (RMAs)**.

Research Managers and Administrators: diversity and definition

Collinson (2006) highlighted several common features between professionals working in research management in British Higher-Education Institutions (HEIs), such as i) the wide range of roles; ii) the cross-boundary interaction with academics, and iii) their 'occupational identity issues'. These thin boundaries between academics and non-academics and new identities within HEIs were also evidenced by Whitchurch (2008), who proposes the term **third space professionals** to refer to individuals who perform managing roles, with a diversified background and a non-academic contract, and who undertake activities between the professional and academic spheres.

On a similar note, the second type of space is defined by Shelly (2010) as the **shifting area**, highlighting the shared space where research management crosses into the academic domain. Santiago et al. (2006) had previously defined the increasingly specialised role of these professionals as *"being able to define missions, objectives and strategies; having capacity to manage financial and human resources and to assume strong management leadership, in contrast to traditional academic styles of negotiation and consensus building"*.

More recently, Agostinho et al. (2020) proposed the term *Professionals at the Interface of Science (PloS)* as an **umbrella identity that encompasses all these professional roles and profiles**.

Despite the different terminology and conceptual framework proposed to define these professionals, all authors acknowledge that **Research Managers and Administrators operate at different levels/ stages of research development**:

- **upstream of research** - to attract/ advocate for/define a strategy for research funding projects and partnerships (with both academia and industry);
- **during the research** - to support research activity itself (e.g. post-award management, technological platform management, ethical compliance management, intellectual property management);
- **downstream of research** - broadening the impact of research (e.g. outreach, science communication, facilitating the impact on understanding, learning & participation; creativity, culture and society; social welfare; commerce & economy; public policy, law & services; health, wellbeing & animal welfare; production; the environment; practitioners & professional services).
- **transversal areas** - RMAs also develop their work in cross-cutting issues that are transversal to upstream and downstream phases of research, such as **responsible research and innovation, gender, ethics and several broader areas of researcher development**.



Figure 8 - Level of action where RMA's operate

Research Managers and Administrators: why they demand professional recognition

The recognition of **Research Management and Administration as a Profession** has been growing, empowered by the Professional Associations that provide capacity-building in topics related to the daily activities of these professionals. Their most relevant daily tasks include the **definition of the Professional Development Framework** created by several associations and instrumental to then identify the knowledge and skills needed per functional area by the professionals in their activities.

Two main Professional Development Framework should be acknowledged:

1. [ARMA Professional Development Framework](#): comprises 21 different functions undertaken by RMAs, grouped under seven broader headings:
 - a. Developing Proposals
 - b. Project Lifetime
 - c. Translation
 - d. Postgraduate Researchers
 - e. Policy and Governance
 - f. Management Information and Related Functions
 - g. Service Organisation and Delivery

Each of these functions are described from three different perspectives – Operational, Management and Leadership.

2. [BESTPRAC's Research Support Staff \(RSS\) - Framework](#): identifies the various roles, tasks and skills performed by an RMA in the frame of the project lifecycle. It also considers four stages i) before the proposal; ii) proposal; iii) grant preparation and, iv) project. In this professional framework three other perspectives are considered: Research Administrator, Funding Advisor/ Liaison Manager and Project Manager.

RMA's within the research lifecycle

Both frameworks above acknowledge the important role played by RMA's in the development of research. Casting an eye at the **overall Research Lifecycle (RL)**, we can see that RMA's are called to participate from the development of the research idea, to its implementation and from facilitating the broad impact of research, to acting as brokers in the stakeholders' involvement. If we relate the Research Lifecycle with the RMA's main roles, the result will be the following figure:

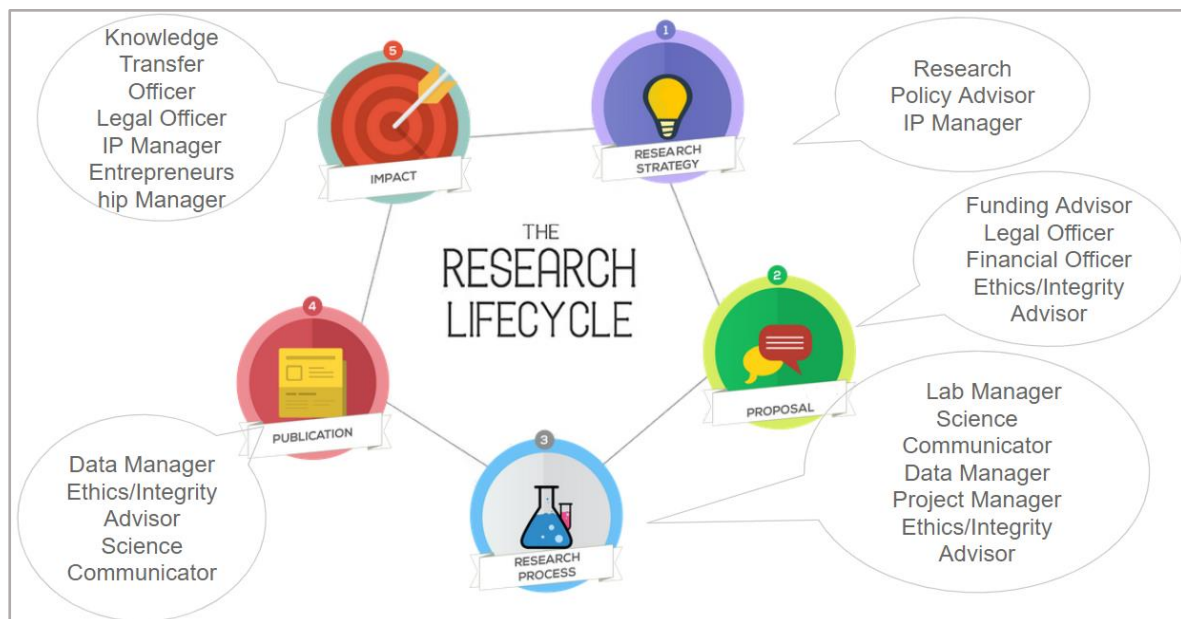


Figure 9 - RMA's within the research lifecycle (adapted from Bournemouth University
(Source: <https://blogs.bournemouth.ac.uk/research/2015/07/20/have-you-checked-out-the-interactive-research-lifecycle-diagram-yet-4/>))

Looking closely at the different tasks involved in the research lifecycle, we can explore the four stages proposed in the [BESTPRAC RSS Framework](#):

Research lifecycle stage	RMA tasks and roles
Before the proposal	<ul style="list-style-type: none"> Identifying/ finding funding opportunities Disseminating funding Advising Training Gathering non-public information Promoting quantitative and qualitative analysis of EU funding and

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	organisational participation
Proposal	<ul style="list-style-type: none"> ● Providing general information and support regarding proposal submission ● Facilitating and setting up of internal approval and signature process ● Providing budget notes, explaining and enforcing internal budget rules ● Advising on the execution of the writing process and consortium formation and management ● Advising on the content to be written (vs writing process) ● Generally advising on legal aspects and providing organisational legal documents ● Linking to information or advising on IP, ethics, open access and open data ● Featuring statistics and analysis
Grant preparation	<ul style="list-style-type: none"> ● Facilitating the signature of the grant agreement ● Facilitating the internal setup of the project ● Elaborating internal and external communication strategies ● Reviewing and discussing the GA and the grant preparation with the PI ● Facilitating the consortium agreement and handling related issues ● Communicating the project success (internal and external)
Project	<ul style="list-style-type: none"> ● Supporting financial and technical reporting ● Managing the consortium ● Communicating internal procedures ● Functioning as a helpdesk and providing administrative support ● Managing and archiving contracts ● Supporting amendments of the Grant Agreement and Consortium Agreement ● Project Management ● Defining the project's communication and dissemination strategy ● Liaising between the coordinator, the funding agency and the consortium (when a RMA institution is coordinating)

RMA's beyond the project

Research Managers and Administrators are also involved in other tasks which are not strictly related to the proposal or project implementation. As such, it is important to 'complete' the

list above with the list below, taking into consideration the [ARMA Professional Development Framework](#).

Beyond the research lifecycle	RMA tasks and roles
Postgraduate Researchers	<ul style="list-style-type: none"> Supporting and guiding postgraduate researchers (with close relation with the support for research career development)
Policy and Governance	<ul style="list-style-type: none"> Contributing to Research Policy and Strategy Contributing to the process for assessing research excellence Supporting Research Ethics and Governance
Management Information and Related Functions	<ul style="list-style-type: none"> Working with Information Systems Making Statutory Returns
Service Organisation and Delivery	<ul style="list-style-type: none"> Managing a Research Support Service Organising and Structuring a Research Support Service Mapping and Reviewing Research Support Service Functions

RMA skills and competences

Most importantly, to be able to perform in such different areas, **Research Managers and Administrators need to have a broad range of knowledge, skills, and attitudes**. Tauginiene (2009), identifies 3 main qualities and skills that an RMA should develop:

- 1) **generation, interpretation and dissemination of information**: being aware of the newest information, understanding and forwarding the information in all phases of grant preparation and management;
- 2) **communication at many levels**: between researchers, researchers and RMAs, between RMAs, as well as other stakeholders;
- 3) **problem-solving** with a high level of honesty, integrity and ethics.

Recently, Susi Poli's (2020) NARMA 2020 presentation identified the following skills and aspects which RMAs should build on:

- Networking; navigating complex, multiple relationships; social capital
- Cross-cultural capability and team building in multicultural/sectoral groups
- Creativity and super-creativity
- Coaching, emotional intelligence and positive psychology
- Happiness at work is all about how to make others around you thrive
- Diversity and inclusion at work and in all groups
- Ethics and integrity but also academic freedom as a core of today's research
- Public engagement and a bit of activism
- Conceptual skills are not to be let out

The same author also concluded that although we can find a **common set of compulsory/recommended skills** regarded as needed in today's RMA scene, these skills are regarded differently in various EU countries or organisations, meaning that they are **also culturally driven. Research Management and Administration is a professional field evolving at a fast speed**, as it reflects the necessity to mature and adapt to the R&I ecosystem. As such, new roles are emerging in RMA, in order to respond to the demand for new and more specialised tasks.

Testimonials of RMAs and their entrance into the profession:

- An Alternative Career Path: Research Management:
<https://www.psychologicalscience.org/observer/an-alternative-career-path-research-management>
- The Unexpected Career Path to Research Administration:
<https://cayuse.com/blog/career-path/>
- What do research staff do next? Career stories:
<https://www.vitae.ac.uk/researcher-careers/researcher-career-stories/what-do-research-staff-do-next-career-stories/siobhan-jordan>

Research on Research Managers and Administrators

The broad scope of tasks and roles played by RMAs are intrinsically linked to the characteristics and maturity of the R&I ecosystem they are integrated with. As such, variations in R&I development, national R&I policies, funding schemes, and R&I governance, can define the roles, tasks and professional recognition of RMAs. Within institutions, levels of commitment to R&I and scientific areas, are also important variables in the definition of RMA's organisational structures, tasks and responsibilities. For that reason, these different aspects have been translated into research studies in the area we can call **RMA studies**. Up

to now, relevant contributions to the profession in terms of RMA training mapping and definition, have been mainly conducted by the existing associations and groups of individual RMAs (either within the framework of larger projects or as individual projects). The [Research Administration as a Profession \(RAAAP\), for example](#), is a project aiming at identifying key skills, attitudes and behaviours of successful research administration leaders through a longitudinal survey.

Finally, another relevant debate is around the **RMAs' lack of professional recognition**. Several challenges have been identified:

- 1.) the recognition of a thin boundary between research but not the research itself, making a delimitation of RMA tasks an ongoing debate;
- 2.) the diverse contexts of national R&D ecosystems are linked with RMA performance and recognition, thus calling for further research on this interdependence;
- 3.) the unique profile represented by some RMAs (PhDs, former researchers, etc.) place RMA studies inside an emergent research area developed by RMAs for RMAs.

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