

Lesson 4: RMAs as Professionals at the Interface of Science

Learning outcomes:

LO#4 - The student should understand the research project lifecycle and the role of RMAs within the research cycle.

LO#7 - The student is able to recognise and integrate the motivations, expectations and role of a researcher, and of other professions linked to the research activity.

LO#10 - The student can predict the needs for research interface activities along the research project lifecycle and identify key RMA roles (e.g. Funding Advisory, Project Manager, Science Communicator).

LO#11 - The student is committed to find a balance between assertiveness and cooperation in the course of teamwork in research as a leader and as team member.

[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, in what we can call a Research and Innovation (R&I) ecosystem.

There is not an official and unique definition of R&I ecosystem, as they are complex systems which need various elements to perform optimally. Nevertheless, 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, in order to do science, we need highly trained individuals, state of the art infrastructures, competent institutions and informational resources, as well as on funding systems that provide and on agile ethical and legal frameworks. To make all this to work, and to be able to produce scientific discovery, we need more than researchers - there is a whole group of other professionals that work and contribute to maintain the R&I ecosystem working.

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) globalization 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 professionalization of their managing structures (Whitchurch, 2008), aiming at better adapting to these new challenges in an increasingly complex research ecosystem. In fact, 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 to release the full potential of R&I at institutional, national and international levels. Even

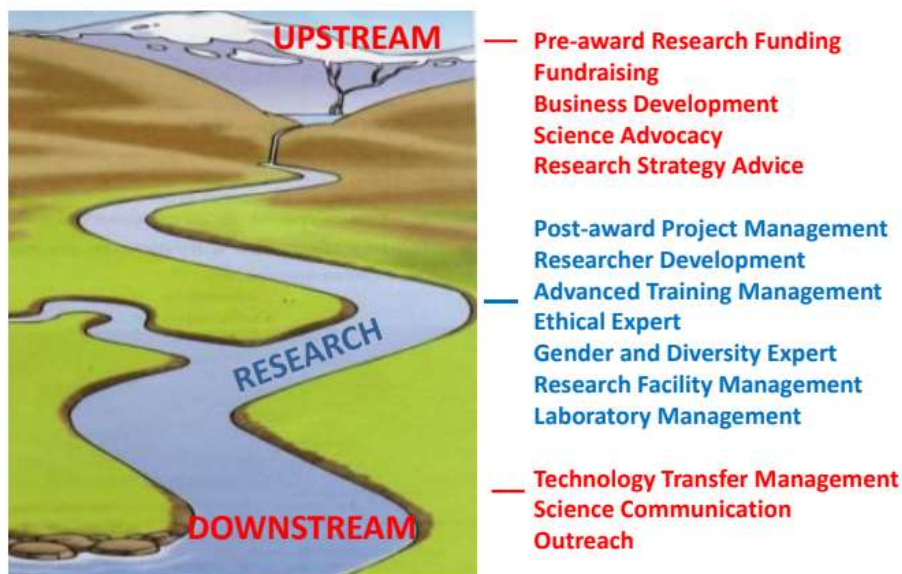
though these professionals do not perform direct research tasks, they support researchers in common working ecosystems. These professionals are the **Research Managers and Administrators (RMAs)**.

Research Managers and Administrators: diversity and definition

Collinson (2006) highlighted the several common features of the professionals working in research management in British Higher-Education Institutions (HEIs), such as: the i) the wide range of roles; ii) the cross-boundary interaction with academics, and iii) “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 individuals that perform managing roles, with a diversified background and a non-academic contract, that undertake activities between the professional and academic spheres. A second type of space is defined by Shelly (2010) as the “shifting area”, *highlighting* the shared space where the research management field crosses into the academic domain. Santiago et al (2006) had previously defined the increasingly specialized 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) propose the term “Professionals at the Interface of Science” (PloS) as an umbrella identity that encompasses all these roles and profiles of professionals.

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

- *upstream of research* – to attract/advocate for/ define strategy for research funding, projects and partnerships (with both academia and industry);
- *during the research* – to support the 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.



Research Managers and Administrators: 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. Relevant activities include the definition of Professional Development Framework created by several associations that identify the knowledge and skills needed per functional area by the Professionals in their activities. Two main Professional Development Framework must be acknowledged:

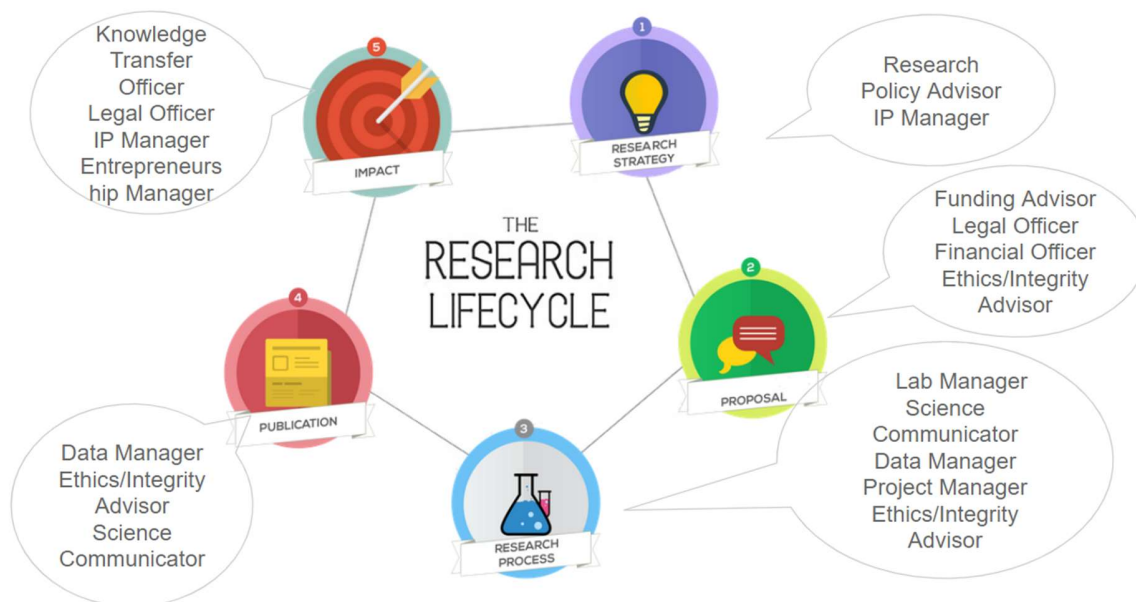
1. [ARMA Professional Development Framework](#): it comprises 21 different functions undertaken by RMAs that are grouped under seven broader headings:
 - a. Developing Proposals
 - b. Project Lifetime
 - c. Translation
 - d. Postgraduate Researchers
 - e. Policy and Governance
 - f. Management Information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

Each of these seven broad 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 considers four stages as i) before the proposal; ii) proposal; iii) grant preparation and, iv) project. In this professional framework three other perspectives are proposed: Research Administrator, Funding Advisor / Liaison Manager and Project Manager.

The RMA's within the research lifecycle

Both frameworks above acknowledge that the RMAs play an important role in the development of research. If we look at the overall Research Lifecycle (RL), we can see that RMAs are called to participate in since the development of the research idea, to its implementation, from facilitating the broad impact of research to acting as brokers in the stakeholders involvement. If we associate the Research Lifecycle with the RMAs main roles, we have the follow figure:



Source: Adapted from Bournemouth University

To look closely to 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 funding opportunities (finding) - Disseminating funding - Advising - Training - Gathering non-public information - Quantitative and qualitative analysis of EU funding and 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 and explaining + enforcing internal budget rules - Advise on the execution of the writing process and consortium formation and management - Advise on the content to be written (vs writing process) - General advising on legal aspects and providing organisational legal documents - Linking to information or advising on IP, ethics, open access and open data - 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 - 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 project success (internal and external)
Project	<ul style="list-style-type: none"> - Supporting financial and technical reporting - Consortium management - Communicating internal procedures - Functioning as a helpdesk and providing administrative support - Contracts management and archiving - Support for amendments of the Grant Agreement and Consortium Agreement - Project Management - Project Communication and Dissemination - Liaison between the coordinator and the European Commission and the consortium (when RMA institution is the coordinating institution)

The RMA's beyond the project

Research Managers and Administrators are also involved in other tasks not strictly related to the proposal or project implementation. As such it is important to complete the list above taking in consideration the [ARMA Professional Development Framework](#).

Beyond the research lifecycle	RMA tasks and roles
Postgraduate Researchers	- Support and provide direction to Postgraduate Researchers (with close relation with the support for research career development)
Policy and Governance	- Contribute to Research Policy and Strategy - Contributing to the exercises for assessing research excellence - Supporting Research Ethics and Governance
Management Information and Related Functions	- Working with Information Systems - Making Statutory Returns
Service Organisation and Delivery	- Managing a Research Support Service - Organising and Structuring a Research Support Service - Mapping and Reviewing Research Support Service Functions

Skills and competences

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) categorises 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.

More currently, Susi Poli (2020) NARMA 2020 presentation identify the following ones:

- Networking; navigating complex, multiple relationships; social capital (or men and or women)
- Cross-cultural capability and team building in multicultural/sectoral groups
- Creativity and super-creativity
- Coaching, emotional intelligence and positive psychology

- Happiness at work, 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 not to be let out

The same author has also concluded that although we can find a common set of compulsory/recommended skills regarded as needed in today's RMA, these skills are regarded differently in different EU countries or organisations, so they are also culturally driven. Research Management and Administration is a profession field evolving at a fast speed, as it reflects the necessity to evolve and adapt to the R&I ecosystem. As such, new roles are emerging in RMA answering to the demand of new and more specialized tasks.

Testimonials of RMAs and their entrance in 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 RMA plays are intrinsically linked with the characteristics and maturity of R&I ecosystem they are integrated. As such, differences in R&I development, national R&I policies and funding schemes, as well as R&I governance can define the roles, tasks as well as professional recognition of the RMAs. Within institutions, its levels of commitment to R&I as well as scientific area, are also important variables to the definition of the RMAs organizational structures, tasks and responsibilities. These different aspects have been translated into research studies in the area we can call RMAs studies. Relevant contributions to the profession in terms of training and mapping the roles have been mainly conducted by the existing formal associations and groups of individual RMAs (either within the framework of large projects or individual projects). The [Research Administration as a Profession \(RAAAP\)](#) is a project aiming at finding out the key skills, attitudes and behaviours of successful research administration leaders, by making use of a longitudinal survey.

Another relevant debate is regarding the RMAs lack of recognition, since several challenges were identified by past authors: 1) there is thin boundary between research but not research itself, so a delimitation of RMA tasks is an ongoing debate; 2) the diverse contexts of national R&D ecosystems are linked with the RMA performance and recognition, so this interdependence needs further research; 3) the uniqueness profile some of these RMAs represent (with PhD,

former researchers...) place RMA studies into an emergent research area developed to RMAs by RMAs.

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