RM COMP

A COMPETENCE BASED APPROACH FOR RESEARCH MANAGER CAREER DEVELOPMENT IN THE EUROPEAN RESEARCH AREA

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Executive Summary

The EU Policy narrative describes a clear evolution in **acknowledging the importance of various roles within the research and innovation ecosystems to clearly acknowledging the specialised role of Research Managers (RMs) in Europe**.[1] This acknowledgement reflects at EU level a commitment to defining, recognising, and supporting diverse talents providing professional support to research within the European Research Area, with Research Management (RM) highlighted as an essential part of the European Union research and innovation ecosystem.

To this end, the **European Competence Framework for Research Managers** called **RM Comp** is a competence framework designed to provide an interoperable career framework for Research Managers[2] in Europe and their employers at any research performing organisations. It will enable consistency and coherence across different organisational and national contexts and career levels as well as facilitate an understanding of Research Management competences. This framework is designed around competencies allowing for a user-friendly approach enabling Research Managers to easily identify and address specific skill set needs.

Establishing a common framework for research management competences is important for a shared understanding of RM career architecture "language" within the European Research Area (ERA). By providing a standardised reference point, the framework promotes consistency in the expectations and standards for Research Managers across research performing organisations based in the different member states, enhancing collaboration and communication within the research ecosystem. This framework, which aligns with other European Commission competence models, outlines seven core competence areas, across four proficiency levels from foundational to expert.

RM Comp facilitates professional development by offering clear learning outcomes and progression models, encouraging RMs to enhance their skills through diverse training methods. The framework aims to standardize RM competencies, enable career planning, and promote the recognition and value of RM roles across Europe. Such a comprehensive identification of competencies for Research Managers was achieved through a co-creation process involving surveys, expert discussions, and HR practitioner insights.

Given the fluid and flexible nature of the research management profession, with constantly emerging roles and fields, the RM Comp also accounts for several key aspects: entry into the profession can occur at various levels based on educational background and expertise, with recognition that higher-level entrants may need development in certain competency areas; professional development should be possible both vertically and across specializations, allowing movement between roles at the same or higher levels; leadership in research facilitation services should be recognized as a specialized expertise, and leadership skills should be acknowledged across all competency areas; and RM Comp should remain a dynamic document that evolves with the profession.

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[1] For all policy references See Appendix 1

[2] Throughout this document, any reference to 'Research Managers' specifically refers to 'Research Managers in Europe'

RM Comp: A Simple Guide

What is RM Comp?

RM Comp is a **competence-based framework** for Research Managers in the European Research Area (ERA).

It identifies key skills and competencies needed for effective research management and supports professional growth.

RM Comp provides consistency across roles and institutions, helping key stakeholders to enhance their career development and enabling organisations to align research management practices with European standards.

Who Does RM Comp Apply To?

- **Research Managers (Individuals):** Whether early-career or advanced, RM Comp helps identify career paths, skill gaps and training needs.

- **Institutions:** Public and private research performing organisations employing research managers, aiming to standardise practices and enable staff development.

- **Research Funding Bodies and Policy advisors**: Ensures consistency of funding policies, promotes capacity building and facilitates collaboration across sectors.

How to Use RM Comp?

For Individual Research Managers:
✓ **Self-Assessment**: Identify your current skills and areas for improvement using the RM Comp framework.
✓ **Professional Development**: Use the outlined competencies to plan training or mentorship opportunities.
✓ **Daily Application**: Align your work practices with RM Comp standards to improve efficiency and collaboration.
For Research Performing Organisations and Industry:
✓ **Integrate RM Comp into Policies**: Embed it in hiring processes (e.g., job specifications), training programs, and performance reviews.
✓ **Enable Staff Development**: Provide RM Comp-aligned resources, platforms, and budgets (where possible) for professional growth.
✓ **Monitor Impact**: Use RM Comp to track the effectiveness of research management practices and identify gaps.
For Funding Agencies and Policy Advisors:
✓ **Set Standards**: Use RM Comp competencies as criteria for funding applications and evaluations.
✓ **Promote Capacity Building**: Fund training programs and conferences focused on RM Comp skills.
✓ **Facilitate Collaboration**: Work with institutions to develop RM Comp-aligned policies and share best practices.

Introduction

Policy Context

The Treaty on the Functioning of the European Union and subsequent policy developments underscore the critical role of Research Managers in the EU's research landscape. The evolving policy narrative reflects a shift from broadly acknowledging various roles in the research and innovation ecosystems to explicitly recognizing research managers as essential. Of note are the policy developments from May 2021 to December 2023 which highlight a progression towards the explicit inclusion of research management as a distinct and vital role within the European Research Area (ERA).

In December 2021 the Council recognises the need for the inclusion of "science management" within EU policy. This marks an important step in acknowledging "science management roles" for successful science management, including digital skills for participation in collaboration networks. This policy inclusion of science management roles sets the stage for the recognition of research management as a distinct and essential role within the ERA Ecosystem.

Then in December 2023 the narrative takes an important leap with the Council Recommendation on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe. This document clearly identifies Research Management careers. It goes further to outline the specific measures required, including the importance of the definition of skills and competences, "development of relevant training, fostering comparability, and enabling effective management and support for research and innovation".

This policy journey reflects a commitment to defining, recognising, and supporting diverse talents within the European Research Area, with research management highlighted as an essential part of the European Union research and innovation ecosystem.

Definition of Research Manager

It is important to define what is meant by the term Research Manager. Research Manager is an "umbrella term" which encompasses a wide range of research management roles and specializations at the "interface of research"[3] under a single classification. It serves to group together multiple research management roles and specialised subject matter experts that share common role objectives and competencies. Research Managers are based in all types of research performing organisations, including public and private universities, research institutes, research funding organisations, medical institutions, NGOs, companies, public authorities, and so on.

This is our definition: ***Research Managers enable, facilitate and support the performance of research in all its applications. Research Managers hold generalist or specialized roles within the research and innovation ecosystem.***

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[3] Agostinho, M., Moniz Alves, C., Aresta, S., Borrego, F., Borlido-Santos, J., Cortez, J., … Vidal, S. (2018). The interface of science: the case for a broader definition of research management. Perspectives: Policy and Practice in Higher Education, 24(1), 19–27. https://doi.org/10.1080/13603108.2018.1543215

Based on the policy contexts, the results of recent investigations as well as a Europe-wide co-creation in the frame of ERA Action 17 and RM Roadmap, we initiate an inclusive and flexible approach enabling the reflection of constantly emerging fields and job profiles when defining Research Management. Thus, Research Managers can work as research policy advisers, pre-award and post-award officers, project managers, impact managers, science communicators, financial managers and advisors, legal advisors, contract and compliance managers, data stewards, open science officers, research infrastructure managers and operators, equality, diversity and inclusion advisors, research ethics advisors, knowledge and technology transfer officers, innovation managers and business developers, knowledge brokers, human resource managers in research, AI experts, and leaders of research facilitation offices, etc.

The profile of Research Managers based on survey data

Recent survey results show that Research Managers are a diverse group of professionals sharing several characteristics. The vast majority (over 70%) of Research Managers are female which is interesting to consider in light of equality, diversity and inclusion needs.

Both the CARDEA[4] and RM ROADMAP[5] surveys demonstrate that those professionals who responded to the surveys are highly educated, with over 90% of Research Managers having a postgraduate qualification. This may sound surprising, given that there is no EU level requirement for such a high level of education for research management roles. 73% do not possess certification related to Research Management despite world-wide efforts aiming for the standardisation of the qualification in the profession, as introduced by Ritchie et al (2023). The surveys also reveal that Research Managers work in a great diversity of fields, starting from pre-award, post-award, research policy and strategy, training and researcher development, just to name a few. Almost half of them (45%) work in at least 2, 3 or 4 different fields on a daily basis, which suggests that Research Managers require a vast range of expertise, skills and competencies to fulfil their roles.

Challenges related to Research Management Careers

Research Manager Career architecture is emerging at sector-specific, national and institutional level in an ad hoc fashion answering specific institutional and research needs. The lack of career path is generally lagging behind in most European countries. Without the proactiveness of individual research managers in creating new positions by merging or expanding the current ones, sometimes it is almost impossible to move forward within the institutional hierarchies.

Some Member States have started to develop national professional development mechanisms for their Researchers taking example from the EU R1 to R4 and the newly published ResearchComp. These organisations are in some instances including Research Support Professionals such as Research Assistants and Research Officers, for example the IUA Researcher Career Development Framework in Ireland. However, this is rare. As a result, very few research organisations have established their own frameworks and if they do, they are nearly always directly aligned to actual job descriptions within

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[4] Knowledge Space | University College Cork (ucc.ie)
[5] RM ROADMAP Survey dataset and codebook available at:
https://figshare.com/articles/dataset/RM_ROADMAP_survey_dataset/26503675

those institutions and organisations. The focus and terminology of the various contexts may differ, but there is a substantial overlap in content and purpose when hiring and retaining Research Managers.

The intertwined issues of professional development and the absence of progression frameworks make career advancement challenging, particularly for those on temporary contracts, leading to a sense of being stuck in their careers.

The European Competence Framework for Research Managers

Existing Competence Frameworks and Tool Kits

Competence frameworks[6] designed for research managers, if available, are varied, reflecting the diverse nature of the role and its responsibilities. These frameworks provide valuable guidance in describing the skill sets and competences of research managers and should be regarded as exemplars of good practice, leading the way in acknowledging the essential expertise, skills, and attributes for successful research managers. Some frameworks are specialised, and this specialisation can be beneficial for professionals in certain contexts, providing clear guidelines for the development of these roles. However, this also presents a challenge when considering the broad range of responsibilities that research managers often undertake across member states and in various contexts within the European Union.

Only a few professional development frameworks (PDF) or competence frameworks have been developed recently by associations of Research Managers.[7] The **ARMA (Association of Research Managers and Administrators, UK)[8] PDF** encompasses 21 different functions performed by administrators supporting research activities. The RM functions are divided into 7 headings and described from three perspectives: Operational, Management, and Leadership.

SARIMA (Southern African Research & Innovation Management Association) developed a **Professional Competency Framework (PCF)** consisting of nine competency areas at three levels within the Research Management environment: administrative/operational, management, and leadership/strategic (SARIMA, 2019) (Williamson et al., 2020).

ARMS (Australasian Association of Research Management Professionals) **Professional Development Framework** (PDF) identifies six core areas of knowledge and categorizes them into three levels of knowledge enhancement: Foundation, Management, and Leadership.

The **BESTPRAC Research Support Staff (RSS)** Framework is structured around the project lifecycle. Instead of defining professional levels, the framework identifies three types of staff based on the

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[6] The RItrain organisational competency profiles
The ESA Core behavioural Competencies
A Professional Development Framework for Research Managers ARMA UK
A Competencies Tool Kit for Research Managers and Administrators ARMA UK
Knowing, Doing and Being: Transferable Competencies for the Research Management Profession
A Framework for the Management of Research and Innovation Projects in Academic Settings

[7] More detailed introduction and assessment of these frameworks can be found in Romano et al (2023).
[8] See: https://arma.ac.uk/

research support provided: Research Administrator, Funding Advisor/Liaison Manager, and Project Manager.

The **diversity of roles within research management requires an adaptable competence framework** that can accommodate a multitude of profiles of research management professionals working in different institutional and national contexts. There is a need for a European competence framework that acknowledges the diverse and constantly emerging tasks and duties undertaken by research managers. Such a framework should allow for flexibility while providing a common foundation that ensures consistency and recognition of the role's significance across the ERA.

Aims of developing a European Competence Framework for Research Managers (RM Comp)

An interoperable and easy to understand Research Manager Competence Framework applicable across diverse RM career stages is essential for several reasons:

- provide consistency and coherence across different organisational and national contexts and career levels, facilitating an understanding of research management competences. This consistency is essential as Research Managers often work in various roles and organisations throughout their careers.
- Is user-friendly by clustering competencies into a manageable framework, allowing Research Managers to easily identify and address specific skill set needs based on their career stage.
- provide Research Managers and employers of research managers with a basis to enable career training and development.
- Establish a shared understanding of the RM career architecture "language" within the European Research Area. By providing a standardised reference point, the framework promotes consistency in the expectations and standards for Research Managers across member states, enhancing collaboration and communication within the research community.
- serve as a tool for encouraging the importance of research management careers, encouraging stakeholders to appreciate the diverse contributions Research Managers make to the success of research and innovation endeavours within the European context.

Scope of this Framework

This Framework presents the development of a European Competence Framework for Research Managers based on feedback gained from the surveys described above, desk-based research and Action 17 working groups. In collaboration with RM Roadmap, the co-creation exercise involving national and thematic RM communities have added to the body of knowledge. The European RM competence framework should be viewed in tandem with the Framework Profile for Research Managers in **Appendix 2**.

Key components of the European Competence Framework for Research Managers

Drawing inspiration from the structure of ResearchComp[9], The Digital Competence Framework for Citizens (DigComp)[10] and the Competence frameworks for policymakers and researchers[11] the European Competence Framework for Research Managers is designed to align with the overarching principles and structures articulated in these documents and frameworks.

The European Competence Framework for Research Manager has 3 main areas:

- **7 competence areas:**
    - Cognitive Abilities/Personal Attributes
    - Technical Proficiency
    - Research Project Oversight
    - Stakeholder Engagement
    - Line Management and Talent Development
    - Communication
    - Subject Matter Expertise/Specialised Knowledge

- **50 competencies**
- **800 learning outcomes along 4 proficiency levels** (foundational, intermediate, advanced, expert)

Each competency[12] includes learning outcomes for each proficiency level. It is not envisaged that Research Managers acquire the highest level of proficiency or have the same proficiency across all the 7 competency areas. However, Researcher Managers should develop their skills in all 7 competency areas where possible.

Examples of research manager competencies as per CARDEA[13] are **not intended to be exhaustive but serve as an indication of the types of competencies held by Research Managers** across all sectors. Research Managers should have the option to move horizontally also, and this framework enables that movement. Each competency level indicator reflects the variance in complexity, scope, and responsibility across the roles RM1 to RM4.[14]

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[9] ResearchComp: The European Competence Framework for Researchers - European Commission (europa.eu)
[10] DigComp 2.2 update: The Digital Competence Framework for Citizens | Digital Skills & Jobs Platform (europa.eu)
[11] Competence frameworks for policymakers and researchers | Knowledge for policy (europa.eu)
[12] Competence & Competency Frameworks | Factsheets | CIPD and Civil Service competency framework - GOV.UK (www.gov.uk)
[13] Cardea (zenodo.org)
[14] Appendix 2

Role Categorisation within Research Management

The complexity of research and innovation funding has led to an expansion and specialisation of research management roles. While research managers were once generalists, recent trends show a diversification into specialised roles with formalised professional paths. The RM ROADMAP project identified specific role categories within research management, based on literature reviews and stakeholder input, and outlined the most important skills and competencies for each category. A survey and co-creation exercise further refined these categories, highlighting essential skills such as communication, problem-solving, and time management, while also identifying the need for specialisation in areas like finances, legal issues, and emerging technologies. This comprehensive categorisation provides a solid foundation for the specific competencies and learning outcomes of RM Comp (see the table in Appendix 4).[15] The co-creation exercise resulted in a rich compilation of specialisation and role related skills and competences – added to the table in Appendix 3 and highlighted in red - providing a solid foundation for the specific competencies and learning outcomes of the RM Comp.

Research Manager Competence Areas

Core competencies are those capabilities that are important across all levels and within the framework RM1 to RM4. The importance of core competencies may vary according to individual RM job duties and requirements within sectors.

RM Comp

7 Main Competence Areas

European Research Manager Competency Framework

Cognitive Abilities/Personal Attributes	Subject Matter Expertise/Specialised Knowledge
Research Project Oversight	**Research Manager**	Technical Proficiency
Line Management and Talent Development	Communication	Stakeholder Engagement

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[15] More information about the RM Co-Creation exercise and its results is available at :
https://www.rmroadmap.eu/co-creation-results

How to view the European RM Competence Framework

Each proficiency level[16] of the competencies outlined has individual learning outcomes that suggest how an individual can demonstrate that competency. Indicators are designed to show the requirements for successful performance.[17][18] It is important to acknowledge that **competency proficiency levels may vary depending on the specific role**, **and it is not expected that every Research Manager possesses full expertise in all competencies**. **Direct entry through open competition can occur at any level**.

As with the Competences for Policymaking the RM Comp progression is made up of two aspects:

1. Developing increasing autonomy and responsibility within the role of research manager,

2. Developing the capacity to perform in the role from entry level to expert level whereby the research manager will be able to execute complex actions and tasks that require an expert perspective.

RM Comp is not intended to provide a linear sequence of steps that every Research Manager must complete to become competent. Instead, it highlights the Research Manager competences to be developed by the individual leading to more personal effectiveness in the role. RM Comp provides a reference for the development of proficiency starting at foundational and leading to expert.

As this conceptual model is in line with other competence frameworks developed by the European Commission particularly Research Comp it follows a similar structure, including four levels of proficiency for each of the 52 competences that specify where research managers can position themselves and what is required to progress to the next level:

- **Foundational**: developing expertise with guidance;

- **Intermediate**: building independence;

- **Advanced**: taking responsibility and guiding others;

- **Expert**: driving transformation, innovation and growth.

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[16] What is the CEFR? - cefr.eu
[17] competency_framework_en.pdf (oecd.org)
[18] Mep_interieur (oecd.org)

European Career Framework for Research Managers (RM 1 to RM 4- Progression Model)

Please note: The European Career Framework for Research Managers (RM 1 to RM 4) is a progression model framework and operates independently from the European Competency Framework RM Comp.

Europe currently faces challenges with its internal labour market for research managers. The absence of standardised career structures (*career architecture*) has led to a fragmented evolution of the role of Research Manager at the member state and institutional level and segregation between careers in academia, industry, and other sectors. While there is some cross-country and cross-sector mobility, significant obstacles still exist (including visibility of the role) making career transitions between sectors challenging. Research manager careers often lack clear and transparent pathways for both upward and lateral progression and mobility. As a result, early-career research managers may not be fully aware of the diverse opportunities available across various employment sectors. Employers are also not always aware of the skills that research managers hold and the benefits they could bring to their organisations.

To address this fragmentation, a European Career Framework for Research Managers (RM 1 to RM 4) is proposed herein. This framework describes the general aspects of the research manager career in commonly understood terms, helping to create comparable career structures across employment sectors and member states. This **voluntary instrument** aims to make research manager career structures more comparable. The framework will be periodically reviewed, its impact monitored, and it will be adapted as necessary in the appropriate time.

Importantly, the framework is not intended to create barriers to entry. Individuals can join the profession at any stage and are free to progress or transition between levels (upward and laterally) based on their skills, experiences, and career aspirations.

The link between the competency framework and the various phases in a research management career, (e.g. RM1 to RM4)[19], do exist, but it is not an absolute rule. Users have the flexibility to adapt the progression model RM 1 to RM 4 according to their organisation's policies and practice. It is within their discretion to determine the level deemed suitable for both early to mid-stage and leadership

Research Managers

RM1 — Research Manager 1: First Stage Research Manager

RM2 — Research Manager 2: Recognised Research Manager

RM3 — Research Manager 3: Established Research Manager

RM4 — Research Manager 4: Senior Stage Research Manager

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[19] See Appendix 2 for descriptions RM 1 to RM 4

level research managers based on their specific organisational needs. Direct entry through open competition can occur at any level.

For the purposes of the Framework, RM 1 and RM 2 profiles should be considered early to mid-stage research managers and RM 3 and RM 4 profiles should be considered senior and/or expert level research managers.

Progression across levels (although not necessarily automatic) may be the result of:
- dedicated training courses incl. certificate programmes
- on- the-job experience
- on-the-job-training and or job-shadowing
- peer-to-peer learning
- coaching
- mentoring

These levels provide a way for the user, e.g., research manager or an employer of a research manager, to plan training, establish organisational capacity building or other activities that would enable the role of research manager. So, for example the Research Managers can move from foundational where they are developing their expertise to driving transformation and growth. This framework and the accompanying competence framework are tools that can be adapted to individual organisational and member state needs.

Why introduce RM Comp?

This Framework serves as an empowering tool applicable at both organisational and individual levels, fulfilling various functions such as[20]:

1. **Recognising the essential competences** required in research management roles, both within and beyond academic settings.

2. **Emphasising the value of research manager experience** by highlighting activities that effectively address the competences outlined in the framework.

3. **Generating awareness** on both the employer (demand) and research manager (supply) sides.

4. **Creating job descriptions and assessing job applications** from a standardised perspective.

5. Assisting research managers in mapping their competencies **to establish personalised development and training plans** which will enable continuous monitoring of career progress.

6. **Mapping the collective competences within a team** to identify any gaps or redundancies, ensuring alignment with mission/organisational objectives.

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[20] ResearchComp: The European Competence Framework for Researchers - European Commission (europa.eu)

7. **Identifying skill needs and shortages** at regional, national, and European levels through ongoing monitoring.

8. **Supporting the planning and design of training programs, aligning with desired learning outcomes.**

9. **Tailoring career planning programs** to meet the specific needs of research managers.

Provision on the use of RM Comp

Given the fact that the profession of Research Management is not standardised, but fluid, flexible, there are constantly emerging roles and fields, and many of the professionals working in the profession proactively shape their roles, when introducing the RM Comp, it is important to take into consideration the following aspects:

- **entry point is possible at all levels,** depending not only on the educational background, but on the expertise – entering to a higher level does not necessary mean that the person has all the knowledge of that level in all competency areas, but is able to identify in which competency areas (s)he needs development;
- **professional development is possible not only vertically** by moving from foundational to intermediate level, **but across the different specialisation areas**. It might happen, that an advanced level post-award manager does not move to post-award expert level but to impact management or technology transfer at the same or higher level;
- RM Comp **includes** e**xplicitly the leadership of research facilitation services as subject matter expertise** covering the management and coordination of research management and/or facilitation offices. However, **leadership as such can be present in all other competency or specialisation areas,** which should be also recognised and awarded at institutional level,
- RM Comp aims to be a l**iving document able to incorporate the reflections on the future developments** of the profession and be adapted to the diverse institutional settings,
- the ultimate aim is not to provide strict categories and upper limitations but **potential and diverse pathways towards career development.**

RM Competencies

Cognitive Abilities/Personal Attributes[21]

Cognitive abilities generally refer to a set of skills that are relevant across various tasks and situations. These skills are often considered necessary for effective leadership, management, and collaboration in diverse organisational environments, including research. Personal attributes are essential for personal and professional growth, as they enable individuals to work effectively, build strong relationships, and achieve their goals in a rapidly changing world.

Examples of Cognitive Abilities/Personal Attributes included but are not limited to:

- Creativity
- Cultural Sensitivity
- Problem Solving
- Decision Making
- Prioritization, Time Management and Multitasking
- Conflict Management

- Critical Thinking
- Strategic Planning
- Stress Management
- Reliability and Trustfulness
- Professional Flexibility and Adaptability

Technical Proficiency[22]

Technical proficiency refers to the ability to use specialised tools, methods, and technologies relevant to the research field/area/organisation. Individuals with technical proficiency can successfully navigate and contribute to the resolution of complex problems within that technical context.

Examples of technical proficiency competencies included but are not limited to:

- Research Data Collection and Collation
- Data and Statistical Analysis
- Legal Skills
- IT Skills for Research Activities
- AI for Research Managers

Research Project Oversight[23]

Research project oversight refers to the planning, execution, monitoring, and general management of research activities to achieve specific research project results within pre-defined constraints such as time, budget, and research scope.

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[21] Transversal skills: what are they and why are they so important? : Skills and Education Group
[22] What Are Technical Skills? | Coursera
[23] Project Management: What It Is, 3 Types, and Examples (investopedia.com)

Examples of Research Project Oversight competencies included but not limited to:

- Research Project Management
- Managing Research Project Deliverables
- Designing Monitoring and Evaluation Frameworks and Indicators
- Establishing Research Project Plans

Stakeholder Engagement[24]

Stakeholder engagement refers to the strategic and organised approach to developing, nurturing, and maintaining positive and productive relationships with various stakeholders involved in or impacted by research initiatives. These stakeholders may include members of the research team, funding agencies, industry partners, public and private organisations, not for profit, research hospitals, collaborators, regulatory bodies, and the broader community. Examples of Stakeholder Engagement included but not limited to:

- Engagement with Key Stakeholders
- Building Trust within Relevant Research and Strategic Partnerships
- Diplomacy, Negotiation, and Mediation Skills
- Handling Difficult Conversations and Partnerships
- Business and Commercial Liaison Management
- Research Outreach
- Academic Community Relationship Collaboration
- Community Engagement with Research

Line Management and Talent Development[25]

Line management and talent development are two important factors both of which are critical within a research project, a research organisation, a research team and/or other specific team leadership activity.

Examples of Line Management and Talent Development included but not limited to:

- People Management and Managing Team Performance
- Team Building
- Change Management
- Coaching Skills
- Research Talent Identification and Development

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[24] Why, What and How of Community Outreach and Engagement | Extension (unh.edu)
[25] Talent and Talent Management (leadershipacademy.nhs.uk)

Communication[26]

Communication refers to the exchange of information, ideas, and feedback both within the research team and with external stakeholders.

Examples of Communication included but not limited to:

- Building and Maintaining Relationships with Research Funders, Partners or other Stakeholders
- Designing and Implementing Research Communication Plans
- Media Liaison and Associated Activities
- Preparing and Writing Reports (Including Evaluation Reports and Funder Reports)
- Social Media Engagement

Subject Matter Expertise/Specialised Knowledge[27]

Subject matter expertise/specialised knowledge refers to a thorough understanding of the specific specialised area or field associated with an organisation and/or individual roles within an organisation. As it has been discussed above, the professional development of Research Managers does not necessarily follow a vertical path, but can be horizontal as well enabling specialisation in one or more subfields of RM. These subfields require subject matter expertise that can be divided to the four levels of expertise, with the exception of research facilitation service delivery who are not in a position to lead research facilitation services. Examples of subject matter expertise/specialised knowledge competencies included but not limited to:

- Pre-Award
- Post-Award
- Managing Equality, Diversity and Inclusion (Including Gender, Disability and Racism)
- Data Stewardship
- Knowledge Valorisation (Technology Transfer)
- HR for Research – Employment, Training etc of research staff.
- Research Finance
- Research Infrastructure Management
- Clinical Research Management
- Research Ethics and Integrity
- Research, Strategy and Policy Development
- Managing the Research Grant/Support Office

For learning outcomes on Subject Matter Expertise please see Subject Matter Expertise/Specialised Knowledge Section of this document.

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[26] What Is Communication Competence? (Plus Benefits and Tips) | Indeed.com
[27] L-1B Visa: Specialized Knowledge Professional - Immihelp

Learning Outcomes 50 Competencies[28]

Learning outcomes are essential to make the competence framework usable for Research Managers and employers of Research Managers. The learning outcomes are designed as thresholds of achievement. They have been developed as references for different purposes as noted above. Though comprehensive, the list of learning outcomes is not exhaustive, and it is hoped that further competences and learning outcomes could be added in the future.

The learning outcomes for Research Managers consists of a set of integrated competencies, using foundational, intermediate, advanced and expert levels. Examples of research manager competencies are not intended to be exhaustive but serve as an indication of the types of competencies held by research managers across all sectors.

Please note when the term "research team" is mentioned in the learning outcomes it also implies all other teams that Research Managers work and collaborate wit

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[28] Numerous Internet websites, Researcher Comp, Research Managers, HR Professionals, and ESCO/ISCO were employed to aid in the refinement of the learning outcomes.

Cognitive Abilities/Personal Attributes Learning Outcomes[29]			
1. Creativity			
Foster innovative approaches and solutions to aid problem-solving, designing methodologies and/or procedures which encourage a dynamic research environment.			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Basic understanding of the importance of creativity in research and its critical role in problem solving	Ability to problem solve using methodologies and or procedures to enhance and nuance the solution	Cultivates a culture of solution-oriented thinking by fostering creativity within research teams and/or the organisation	Provides leadership and facilitates creative problem solving at team, organisational and national/international level
Shows promise in ability to generate and express new ideas coherently	Experiments with ideas and collaborates to provide solutions and ascertain risk	Introduces new or improved methodology, policy, or practice to enhance research progress and problem solve	Designs and executes comprehensive processes and strategies in various domains addressing challenging and complex issues creatively
Acknowledges the relationship between creativity and risk	Explores ideas from different discipline and domain perspectives demonstrating genuine curiosity	Uses cross-disciplinary collaborations and combined competence to address and solve organisational or systemic issues	Creates a long-lasting positive footprint in the organisation through the introduction of various policies and practice which create novel and long reaching positive impact
Can analyse information and identify key components to aid creativity	Challenges own personal and cognitive biases that would deter creativity	Considers ethical issues in creative solution decision-making	Consistently demonstrates creativity in evaluating complex problems and generating innovative solutions

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[29] For competence descriptions please see Appendix 3

2. Critical Thinking

Able to systematically analyse information, assess the validity of research methodologies and make informed decisions. Identify potential biases, evaluate evidence objectively, and strategically navigate complex research management challenges.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of critical thinking and its significance in decision making	Evaluates the credibility and relevance of information provided	Considers the long-term consequences of decisions made bearing in mind potential legacy issues	Provides expert level advice to senior management and organisational leadership to enable informed decision making
Can analyse information and identify key components and issues	Considers diverse perspectives when evaluating information to formulate decisions and consequences of these decisions	Collaboratively engages in brainstorming sessions with colleagues to investigate the unforeseen consequences of potential decisions	Designs and executes comprehensive strategies to inform organisational decision making
Is aware of challenges surrounding personal and cognitive biases in critical thinking	Challenges own personal and cognitive biases in critical thinking	Considers ethical issues at an advanced level in critical decision-making	Consistently demonstrates proficiency by systematically evaluating complex problems, synthesizing diverse information, and generating innovative solutions, thereby contributing to advanced decision-making processes
Demonstrates foundational proficiency in critical thinking by analyzing information, identifying logical connections, and making well-reasoned decisions	Identifies and evaluates connections between complex linked data/ information/ policy	Uses cross-disciplinary collaborations to identify potential systemic biases and evaluate issues objectively	Creates a long-lasting legacy in the organisation/nationally/internationally through improved policies and practice

3. Cultural Sensitivity

Awareness and respect for diverse cultural perspectives, values, and norms. Fostering an inclusive work environment, acknowledging the impact of cultural nuances on research design and implementation.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Basic understanding of the importance of cultural sensitivity in diverse research environments	Plans and delivers effective cross-cultural communication in all interactions with collaborators, partners, and team	Fosters a culturally diverse and inclusive environment within the research team and/or other teams	Provides expert level advice to senior management and organisational leadership to enhance research and organisational cultural sensitivity

Has a fundamental awareness of cultural differences, customs and traditions	Exhibits cultural intelligence and awareness whilst working with diverse research teams and/or other teams	Successfully interacts in cross-cultural research collaborations and partner consortiums	Develop and implement cultural sensitivity strategies at team, organisation, national and or international level
Communicates respectfully through all forms of communication	Recognises and addresses any issues through unintended behaviours	Empowers cultural differences via the establishment of procedures and strategies within the research team and/or other teams	Displays advanced skills in fostering cross-cultural understanding, resolving cultural conflicts, and serving as a catalyst for inclusive environments through insightful leadership and mentorship
Exhibits understanding towards individuals from different cultural backgrounds	Demonstrates the ability to navigate and communicate effectively in diverse cultural contexts, displaying awareness, respect, and adaptability towards varying cultural norms and practices	Exhibits the ability to seamlessly navigate diverse cultural environments, fostering inclusive interactions, and contributing positively to cross-cultural collaborations with a high degree of cultural awareness and empathy	Demonstrates exceptional proficiency in understanding, respecting, and navigating complex cultural dynamics

4. Problem Solving

Develop and implement solutions to practical, operational or conceptual problems which arise in the execution of work in a wide range of contexts.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the concept of problem-solving and its importance in various contexts	Following a review of the issue, is able to identify the root cause of a problem	Guide and facilitate teams through complex problem-solving processes	Provide expert-level thought leadership in designing and executing comprehensive problem-solving strategies at leadership and organisational level
Ability to recognise and define problems, also using analytical skills to break them down into their component parts	Assesses the effectiveness of any proposed solutions	Challenge existing resolutions to issues if no longer fit for purpose and propose alternative approaches	Develop and implement policy and practice that addresses and solves problems at the organisational, national and or international level
Understands the principle of collaborating to solve a problem	Uses networking contacts and colleagues to discuss, address and resolve problems	Address interconnected and complex organisational or (research) team challenges	Exhibits leadership in guiding others through intricate problem-solving processes, showcasing the ability to anticipate, navigate, and resolve multifaceted issues with a profound understanding of organisational, research, and international dynamics

Is open to learning new skills and approaches to identify and analyse issues clearly	Engages in training and professional development to enhance problem solving skills and navigate unexpected issues	Exhibits the capability to analyse intricate issues systematically, synthesize information from various sources, and devise innovative solutions	Ability to address highly complex challenges by employing advanced analytical techniques, synthesizing interdisciplinary knowledge, and innovatively devising solutions

5. Strategic Planning

The ability to envision and execute a comprehensive research plan aligned with agreed goals and broader organisational and or national/international strategies. Develop a vision to turn ideas into action. Obtain and synthesize information to identify and explore trends, opportunities, threats (also based on intuition and creativity) to achieve a long-term goal and to thrive in a competitive, changing environment. Identify alternative paths to turn ideas into action, select the most appropriate approach and adjust where necessary.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the fundamental principles of strategic planning and its contribution to the success of a research project	Is able to identify trends and threats within the research endeavour	Demonstrates the ability to formulate comprehensive and forward-thinking strategic initiatives	Demonstrates the capacity to integrate insight, analyse global trends, and anticipate emerging challenges, resulting in the creation of agile and adaptive strategic plans
Is able to conduct basic strategic planning analyses utilising tools such as SWOT analysis	Ensures that the research project is aligned to organisational strategy and goals	Utilises networks and expertise to connect in with national and or international research strategies	Recognised as a thought leader in the field, guiding organisations through complex strategic decision-making processes and consistently achieving positive outcomes
Understands how research project objectives align with organisational strategy	Effectively allocates approved resources to facilitate the strategy of the research	Exhibits proficiency in conducting thorough analysis, identifying key opportunities and challenges, and developing implementation plans that align with organisational goals	Develops and executes strategies that drive organisational success
Basic understanding of the strategic role of stakeholders both internal and external to the organisation	Implements strategies and procedure that increase research impact	Connects with internal and external stakeholders to devise strategies that increase the impact of the research	Works closely with stakeholders both internal and external to the organisation to advance the long-term value and strategic impact of the research

6.   Decision Making

Effective decision-making in this context is crucial for maintaining project momentum, achieving objectives, and navigating the complexities inherent in the research process.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Exhibits basic skills in gathering relevant information to inform decision-making	Demonstrates the ability to critically analyse complex situations and information	Employs innovative strategies to navigate ambiguous situations	Provides expert-level thought leadership to decision making strategies at leadership and organisational level
Understands fundamental risk assessment principles to consider potential outcomes of decisions	Analyses multiple scenarios prior to decision being made	Uses complex linked data and information to inform decision making	Introduces innovative models and methodologies for expert-level decision making
Understands the basic principle of monitoring decisions and their outcomes	Collaborates with others to ensure a unified approach to decision making process	Assesses the potential impact of the decision within the organisation	Works closely with stakeholders both internal and external to the organisation to assess the impact of critical decisions made at organisational, national and international level
Understands the basic principle of collaboration when coming to informed decisions	Understands risks attached to all potential scenarios prior to making the decision	Critically assesses the impact of critical decisions made within the organisation during a pre-defined period of time	Demonstrates astute judgment in order to consistently achieve positive results and strategic objectives for the organisation

7.   Stress Management[30]

Stress management involves developing coping mechanisms and strategies, prioritizing tasks, and maintaining a healthy work-life balance.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Handles unfamiliar and uncomfortable situations with limited facilitation and supervision.	Identifies signs of stress at an early stage	Develops strategies for dealing with uncertainty and adversity.	Is recognised as confident decision-maker in uncertain and adverse situations.
Perseveres and moves forward in stressful and pressed situations with limited assistance.	Endures setbacks and failures.	Develops proactive responses to stressful situations	Assists others in challenging and adverse situations.
Is aware of what stress is and how to access further supports and resources to manage own stress	Manages challenges and makes decisions under uncertainty.	Is aware of the importance of action planning and taking steps as soon as possible to reduce the risk of stress	Is able to create the right climate of psychological safety to encourage open discussion about stress

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[30] Based on Research Comp

Learning and applying relaxation techniques such as deep breathing, meditation, and mindfulness.	Applying principles of positive psychology to enhance well-being and resilience. Applying cognitive-behavioural strategies to manage stress-related thoughts and behaviours.	Teaching and implementing techniques for setting boundaries between work and personal life.	Implementing effective time management strategies to reduce stress.

8. Prioritisation, Time Management[31] and Multitasking

Involves identifying the most critical tasks and focusing on them first. This skill helps individuals focus on what is most crucial, manage their time and resources efficiently to achieve their goals.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Identifies tasks and prioritise them in order to develop an individual schedule and perform the work efficiently.	Establishes own time management system	Identifies synergies between projects to use own time efficiently and productively.	Integrating time management practices into all aspects of personal and professional life.
Works autonomously but actively seeks guidance when necessary.	Has the ability to break down projects into manageable tasks and create detailed project plans. Is forward thinking.	Aligning daily tasks and projects with long-term strategic goals and manages several complex projects to time.	Developing and using advanced metrics to measure productivity and efficiency.
Is able to assess personal strengths and weaknesses in time management.	Recognizing common distractions and learning strategies to minimize them.	Understanding and applying techniques to manage personal energy levels to match tasks with optimal times of day.	Functions as role model and a coach in questions about time management

9. Adaptability and Professional Flexibility

Involves adjusting to new situations, technologies, and workflows. Adaptable individuals can thrive in dynamic environments, handle unexpected challenges, and maintain a competitive edge.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Identifies potential risks associated with change and developing mitigation strategies and is able to ask for clarification during transitions	Develops a growth mindset to positively take on new challenges, find new opportunities during transition	Demonstrates readiness to embrace change and inspires others to do the same	Creates a safe and supportive environment for colleagues to share thoughts, concerns, and ideas

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[31] Based on Research Comp

or seek out additional information or resources			
Be aware of changes in your environment, accepts them and is ready to make adjustments	Understands the dynamics of change and transitions.	Request opportunities to work on tasks that may be new or offer to take on responsibilities that require creative approaches.	Discusses own learning experiences and is transparent about the journey and challenges experienced in adapting to change.
Is committed to continuous learning and professional development in the field of adaptability.	Is able to observe and analyse how to make adjustments or improvements in case of changes or during transition	Finds and develops new ways and approaches to adapt to new situations and challenges	Provides support through mentoring or coaching for individuals who may struggle with adapting to change

The practice of handling or resolving disputes and disagreements in a constructive manner. It involves identifying and addressing the underlying issues, employing strategies such as negotiation, mediation, and problem-solving to achieve mutually acceptable solutions.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Identifies positive and negative conflicts, learns and practices the skills necessary to uncover with conflict	Learns and practices the skills necessary to deal with conflict	Develops personal action plans for conflict situations back at work	Develops and uses different conflict management strategies
Understands the key questioning and listening skills needed to conduct high quality conversations with members of their team.	Utilises the key questioning and listening skills needed to conduct high quality conversations with members of their team.	Prepares and conducts difficult conversations, using a collaborative approach to move towards a positive outcome	Enable others to develop strategies for dealing with conflict when it happens
Assesses a range of responses to conflict situations and understand the importance of early intervention	Understands various theories and models of conflict, including structural, functional, and process theories.	Analyses the underlying causes, actors, and stages of conflict.	Assesses successfully the effectiveness of conflict management interventions.

11. Reliability and Trustfulness

Involves being dependable and trustworthy in one's work. Reliable individuals consistently deliver high-quality results, meet deadlines, and maintain a strong reputation. It involves demonstrating honesty, integrity, and transparency in actions and communications. Trustfulness is a foundational element in building and maintaining relationships, whether personal or professional.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the basic elements of building trust, such as reliability, openness, and consistency.	Identifies behaviours that build trust or mistrust.	Develop strategies for building or rebuilding trust	Creates a high-trust environment where people are more willing to accept change and work together toward successfully integrating the effects of change.
Examines the personal capacity to trust and to generate trust	Developing trustful relations with colleagues	Engaging with stakeholders to build trust and ensure transparency and accountability.	Developing constructive relationships with other stakeholders to ensure effective cooperation
Is familiar with ethical standards and guidelines in management, including honesty, integrity, and transparency.	Develops and adheres to standard operating procedures to maintain consistency and reliability.	Implementing continuous improvement processes to enhance reliability and trust in operations.	Establishing systems and processes that ensure the highest levels of reliability and trustworthiness in all aspects of operations.
Maintains consistent and thorough documentation of processes, decisions, and communications.	Producing detailed and comprehensive reports that provide a clear and accurate account of operations and decisions.	Effectively resolving conflicts in a manner that maintains and builds trust.	Developing and promoting innovative practices that enhance reliability and trustworthiness.

Technical Proficiency Learning Outcomes

1. Research Data Collection and Collation

Implement (and develop) robust data collection methodologies, coordinate data acquisition efforts among team members, and oversee the organised collation of diverse research datasets leading to evidence-based decision-making.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands and applies basic data collection techniques such as surveys, interviews, and observations	Develops structured instruments for data collection, such as surveys and questionnaires	Conducts advanced statistical analyses of complex linked data	Ability to apply advanced analytical techniques to large datasets, utilising tools like machine learning and artificial intelligence
Demonstrates proficiency in accurately entering data into spreadsheets or databases	Effectively manages and organises data using databases, ensuring data integrity and security	Integrates and analyses data from various sources, including qualitative and quantitative data	Establishes and leads data governance practices, ensuring ethical and responsible data management

Understands basic statistical concepts to describe and summarise data	Applies coding schemes and other tools to categorise and organise qualitative data	Uses cross-disciplinary collaborations and combined competence to address and solve organisational data or systemic issues	Creates a long-lasting positive footprint in the organisation through the introduction of policies and practices concerning the responsible use and management of research data
Recognises the importance of data quality and applies basic data validation and cleaning techniques	Is aware of data management policies at organisational, national and international level (i.e. GDPR)	Designs and implements databases tailored to specific research project needs, considering scalability and data relationships	Understands and addresses challenges related to interoperability and diverse data formats

2. Data and Statistical Analysis

Apply rigorous statistical methods to ensure the accuracy and reliability of data and its interpretation.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands basic concepts related to data, variables, and datasets	Conducts and interprets simple linear regression analysis	Applies advanced regression techniques, such as logistic regression or hierarchical linear modelling	Can apply advanced multivariate techniques like structural equation modelling or cluster analysis
Computes and interprets basic descriptive statistics, such as mean, median, mode, and standard deviation	Utilises statistical software (e.g., R, Python, SPSS) to perform analyses and generate reports	Conducts time series analysis to model and interpret temporal data patterns	Can apply Bayesian statistical methods to complex research questions
Able to create simple data visualizations, including bar charts, histograms, and scatter plots	Able to apply basic multivariate analysis techniques, such as multiple regression or factor analysis	Applies machine learning algorithms for predictive modelling and classification tasks	Designs and implements strategies for causal inference in observational studies
Is eager to learn and engage with methods of data and statistical analysis	Understands and designs basic experimental and observational study designs	Understands and conducts meta-analyses, synthesizing findings from multiple studies	Provides expert-level statistical consultation, including study design, data analysis planning, and interpretation

3. Legal Skills

A nuanced understanding of legal concepts, ethical considerations, and a keen awareness of the legal landscape as it pertains to the research ecosystem.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands foundational concepts of legal principles and their application	Analyses and drafts complex contracts	Identifies and manages legal risks within research project or at organisational level	Introduces innovative legal techniques and methodologies, contributing to advancements in the field

Develops knowledge of basic legal terminology	Conducts legal due diligence in various situations	Ability to draft legal pleadings or documents	Integrates legal processes and ethical considerations into the broader research landscape, collaborating with interdisciplinary teams
Understands the basic principles of contract analysis and interpretation	Uses negotiation within legal contexts	Manages multiple legal cases simultaneously, overseeing timelines, resources, and collaboration with research team and or all team members	Contributes to the publication of research findings, effectively communicating methodologies and results
Ability to draft basic legal documents	Communicates legal nuances clearly and precisely	Diagnoses and troubleshoots complex legal issues	Provides mentorship to junior researchers and research managers, guiding them in legal procedures and troubleshooting

4. IT for Research Activities

Leveraging Information Technology (IT) and overseeing the integration of advanced technologies to enhance data management, analysis, security and collaboration. Implementation of robust IT infrastructure, such as data storage solutions, analytical tools, AI and collaborative platforms, to optimise research processes.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates basic computer literacy, including proficiency in operating systems, file management, and software installation	Utilises specialised research software for data analysis, statistical calculations, and visualisation	Conducts complex data analyses using advanced statistical methods and machine learning techniques	Develops custom software applications tailored to specific research needs
Conducts basic internet research to gather information relevant to research topics	Designs and manages databases for organising and storing research data	Develops and implements scripts or workflows for automating repetitive research tasks	Applies advanced techniques for handling and analysing large datasets (big data)
Uses word processing software for basic document creation and formatting	Develops proficiency in a programming language (e.g., Python, R) for automation and data manipulation	Uses collaborative platforms and version control systems for team-based research projects	Manages and optimises IT infrastructure for large-scale research projects
Inputs and manages research data using spreadsheets or basic database applications	Uses bibliographic management tools for literature review and citation management	Demonstrates awareness of cybersecurity best practices to protect research data and systems	Stays abreast of and integrates emerging technologies, such as artificial intelligence or blockchain, into research workflows

5. Artificial Intelligence

Ability to leverage AI technologies and algorithms to optimize research processes, analyse complex datasets, and derive meaningful insights for informed decision-making.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands what AI is and its basic applications in research management.	Can assess different AI technologies for research tasks.	Can create customized AI solutions for complex research challenges.	Develops and enforces comprehensive policies and ethical guidelines for AI use, ensuring responsible and fair AI practices
Knows about basic AI tools and how they can be used in research.	Applies basic AI tools (e.g., data visualization, predictive analytics) to facilitate research management.	Critically evaluates AI solutions and vendors, making informed decisions about which tools and technologies to adopt.	Identifies and facilitates innovative AI solutions that can transform research practices and drive significant advancements.
Recognizes ethical concerns related to AI use in research.	Data Interpretation: Understands how to interpret AI-generated insights for decision-making.	Establishes rules for responsible AI use in research management.	Guides others in using AI effectively for research management.
Demonstrates a willingness to learn about AI and its integration into research workflows.	Can identify where AI can be helpful in research tasks.	Works with AI experts and teams to integrate AI effectively.	Shows how AI can make a real difference in research management. (Acts as a leader in the integration of AI in research management, sharing knowledge through industry forums, publications, and workshops)

Research Project Oversight Learning Outcomes

1. Research Project Management

Overseeing the entire lifecycle of research projects. Defining objectives, developing timelines, allocating resources including Human Resources, and ensuring the project stays on course. Coordinating diverse aspects of project execution, fostering collaboration, and adapting strategies to overcome challenges

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Grasps foundational concepts and principles of project management within a research context	Develops and refines project plans, including detailed task lists, resource allocation, and risk assessment	Identifies, assesses, and manages risks proactively, implementing strategies to mitigate potential issues	Contributes to strategic planning for multiple research projects, aligning them with organisational goals
Understands the basics of initiating a research project, including defining objectives, scope, and stakeholders	Administers project budgets, including tracking expenses, forecasting, and financial reporting	Navigates and manages changes in project scope, timeline, or objectives, ensuring minimal disruption	Provides leadership within project teams, fostering a collaborative and innovative project culture

Develops basic skills in creating project timelines and managing research project tasks	Engages with stakeholders effectively, including research teams, funders, and collaborators	Provide guidance to senior management on strategic opportunities, project and portfolio design, and risk management for large-scale projects and portfolios	Manages a portfolio of research projects, optimising resource allocation and project synergies
Demonstrates foundational communication skills for project updates, coordination and dissemination	Administers quality assurance processes to ensure the integrity and reliability of research project outcomes	Utilises advanced project management tools and software for collaborative project planning and tracking	Implements continuous improvement strategies, incorporating lessons learned from previous projects into current practices

2. Managing Research Project Deliverables

Ensure that project milestones and outcomes align with established goals. Establish clear deliverables, monitor progress, and address any deviations from the project plan promptly.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Basic understanding of the project's objectives and how they align with broader research goals	Coordinates and manages multiple tasks simultaneously, ensuring they align with project objectives	Ensures that project deliverables align strategically with the overarching research objectives	Provides leadership in the delivery of high-impact deliverables, guiding the team to excellence
Demonstrates basic skills in executing individual tasks according to project plans	Assists with the production of deliverables with a focus on quality, accuracy, and adherence to project requirements	Can identify and proactively address potential risks that could impact the achievement of deliverables	Contributes strategically to the development of deliverables, ensuring they contribute to broader research and organisational goals
Develops foundational documentation skills for recording progress and outcomes	Using a portfolio of competencies, develops problem-solving skills to address challenges that may arise during the project	Collaborates with cross-functional teams, integrating various perspectives and expertise into deliverable execution	Ensures that project deliverables have an impact beyond the immediate project, contributing to the broader scientific community or society
Understands and adheres to the project timeline for timely deliverable delivery	Communicates progress and challenges effectively with research team members and stakeholders	Using a portfolio of competencies, introduces innovative approaches or methods to enhance the quality or impact of project deliverables	Leads initiatives for continuous improvement in the processes and methodologies used to achieve research project deliverables

3. Monitoring and Evaluation Frameworks and Indicators

Administering systematic processes to assess the progress and impact of research projects and initiatives. Define key performance indicators, establish data collection methods, and implement evaluation frameworks to measure project success. Ensure the effective tracking of research outcomes, facilitating data-driven decision-making and continuous improvement in the research process.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the foundational concepts of M&E and their importance in research project results	Selects and refines indicators based on relevance, feasibility, and measurability	Implements results-based management approaches, aligning M&E with project outcomes and impact	Able to select and refine performance indicators and apply sophisticated methodologies to assess the effectiveness, efficiency, and impact of these indicators
Identifies and understands the key components of a monitoring and evaluation framework	Develops plans for systematic data collection, considering methods, frequency, and responsible parties	Administers advanced performance measurement frameworks to track progress and achievements	Engage stakeholders in the design and implementation of M&E frameworks, ensuring their perspectives are considered
Develops foundational skills in creating basic indicators that align with research project goals	Implements agreed quality assurance measures to ensure the reliability and validity of collected data	Implements evaluations, including impact assessments and formative evaluations	Lead complex evaluations involving multiple variables, methodologies, and data sources
Understands basic methods for data collection relevant to monitoring and evaluation	Participates in the implementation of M&E governance frameworks and policies	Demonstrates the ability to design, implement, and critically assess comprehensive monitoring and evaluation plans for complex research programs	Contribute to building the capacity of research teams and organisations through the implementation of advanced M&E practices and methodologies

4. Establishing Research Project Plans

Outline project objectives, timelines, and resource allocation. Collaborate with research team members to define clear goals, delineate tasks, and establish milestones. Develop comprehensive project plans to provide a roadmap for successful execution of the project. Facilitate effective coordination among research team members.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the foundational concepts of project planning, including its importance in research	Can develop a detailed and comprehensive project scope, considering all relevant aspects	Aligns the project plan with broader research and organisational strategies	Provides leadership in developing research project plans that contribute to organisational goals
Assists with defining the scope and objectives of a research project at a basic level	Can create a realistic project timeline, including milestones and deadlines	Engages with stakeholders to gather input and ensure their perspectives are considered in the project plan	Using a portfolio of competencies, introduces innovative approaches and methodologies into project planning to enhance efficiency and effectiveness

Develops a simple work breakdown structure to outline project tasks	Allocates resources effectively, considering personnel, equipment, travel and budget constraints	Utilises project management tools and methodologies to enhance planning and tracking	Manages complex resource allocations, including human, financial, and technical resources
Identifies basic resources required for a research project	Using a portfolio of competencies, identifies and documents potential risks that may impact the project	Assists with the development of a detailed and accurate budget, considering all project costs and funding sources	Facilitates collaboration among diverse teams and stakeholders in the establishment of project plans

Stakeholder Engagement Learning Outcomes

1. Research Outreach

Develop strategies to disseminate research findings and engage with diverse stakeholders. Create outreach plans that encompass effective communication channels, collaborations with external partners, and the dissemination of research outcomes to relevant audiences. Foster meaningful connections and promote the visibility of research initiatives thereby contributing to the broader impact and relevance of the research within the research community and beyond.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates knowledge of the foundational concepts of research outreach and its significance in dissemination	Develops skills in tailoring communication messages to different audiences, considering their interests, knowledge levels and backgrounds	Using a portfolio of competencies, including EDI and Ethical principles, develops and implements strategic plans for research outreach, aligning them with organisational goals	Provides thought leadership in the field through influencing trends and leading discussions on importance of outreach
Implements basic oral and written communication skills for engaging with diverse audiences	Plans and coordinates intermediate-level research outreach events, such as workshops, webinars, or seminars	Collaborates with external organisations and stakeholders for outreach initiatives	Develops and implements outreach strategies at the organisational level, considering cultural nuances and international contexts
Can identify and understand needs of target audiences for research outreach.	Engages with multiple media channels for dissemination of research findings	Implements metrics and assessment strategies to measure the impact of research outreach activities	Leads collaborative initiatives that bring together diverse stakeholders for impactful research outreach
Familiarises oneself with basic outreach channels, including social media, presentations, and written materials	Uses online platforms effectively for outreach, e.g. blogs, podcasts, and web content	Engages in policy outreach, influencing decision-makers and contributing to policy discussions	Using a portfolio of competencies, introduces innovative techniques and technologies for research outreach, whilst staying at the forefront of communication trends

2. Academic Community Relationship Collaboration

Building and maintaining strong relationships with academic institutions, scholars, and researchers. Facilitate partnerships, joint initiatives, and knowledge exchange, to enhance the research ecosystem. Contribute to a collaborative environment, fostering innovation, resource sharing, and the advancement of research agendas within and beyond the academic community.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of collaboration within academic and community contexts	Initiates collaborative programs that align with academic and community goals	Leads the development of strategic partnerships with the academic community	Establishes and leads collaborative networks involving academia, research associations and research communities

Exhibits communication skills for engaging with academic peers and community stakeholders	Engages with diverse stakeholders, including academic faculty, students, and community leaders, in collaborative projects	Measures and assesses the impact of collaborative initiatives	Develops and implements strategies for collaborations that address complex research and societal challenges
Establishes foundational relationships with academic and community partners, recognising mutual interests	Using a portfolio of competencies, develops a productive relationship with the academic community	Co-designs and/or collaborates to produce methods and practice that address academic community needs	Introduces innovative models and approaches to academic-community collaboration, contributing to the field's advancement
Develops an awareness of basic academic community needs and challenges through initial engagement	Liaises with relevant research associations, also attends conferences and networking events	Takes on representative roles within research associations, contributing to the development of research culture and communities	Demonstrates the ability to strategically cultivate and sustain robust collaborations, leveraging extensive networks to foster interdisciplinary research initiatives, secure grant funding, and facilitate knowledge exchange

3. Community Engagement with Research

Establish meaningful connections with diverse communities affected by or interested in the research. Develop strategies for inclusive communication, solicit community input, and ensure the research aligns with community needs and values. Foster open dialogue and collaboration, contribute to the ethical and socially impactful conduct of research, promote community participation and the translation of research outcomes into tangible benefits for the broader community.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the foundational concepts of community engagement in the context of research	Develops coherent plans for community engagement in research and research projects	Able to apply sophisticated participatory techniques that engage communities throughout the research process	Aligns community engagement frameworks with research strategy, contributing to the advancement of socially impactful research
Exhibits the communication skills for engaging with various communities about research	Identifies develops links, and engages with diverse stakeholders within communities for research collaboration	Using a portfolio of competencies, empowers communities through research partnerships	Engages stakeholders in the design and implementation of community engagement frameworks, ensuring all perspectives are considered
Employs and practices cultural sensitivity when engaging with diverse community groups	Establishes feedback mechanisms and channels for community input into research design and implementation	Is aware of policy trends and frameworks concerning community engagement and research impact more broadly	Leads complex engagements involving multiple variables, methodologies, and data sources
Understands the potential impact of research on communities and vice versa	Contributes to efforts to build community capacity for research participation	Fosters transparent and bidirectional communication, ensuring community input is integral to study design, implementation, and dissemination of findings	Uses ethical considerations, cultural sensitivity, and collaborative approaches, contributing to the establishment of sustainable, mutually beneficial relationships between researchers and the communities they serve

4. Engagement with Key Stakeholders

Build and sustain collaborative relationships with influential partners, including academic institutions, industry leaders, policymakers, funders, industry, and community representatives

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands fundamental concepts of stakeholder engagement and its importance to the research ecosystem	Develops skills in strategic stakeholder mapping, considering power dynamics and influence	Builds and sustains strategic relationships with key stakeholders	Provides leadership in designing and executing stakeholder engagement strategies that align with organisational goals
Develops skills in identifying and mapping key stakeholders	Works to foster collaborative decision-making processes involving key stakeholders	Facilitates cross-functional collaboration among diverse stakeholder groups	Introduces innovative models and approaches for expert-level stakeholder engagement
Understands basic principles of effective communication with stakeholders	Can negotiate with and address the interests of a multitude of stakeholders	Using a portfolio of competencies, utilises data and analytics for stakeholder engagement strategies	Ensures the sustainability of stakeholder engagement efforts and leaves a positive legacy in stakeholder relationships
Develops an awareness of the interests and concerns of different stakeholder groups	Applies conflict resolution skills to address issues that may arise during stakeholder engagement	Implements complex communication strategies tailored to diverse stakeholder needs	Drives transformative impact by leveraging extensive networks, facilitating dialogue, and fostering long-term relationships that advance the organisation's mission and objectives

5. Building Trust within Relevant Research and Strategic Partnerships

Build trust within relevant research and strategic partnerships for successful collaboration. Deliver on commitments, foster transparent communication, and prioritise the mutual interests of partners.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates a basic understanding of the importance of trust in professional relationships with key stakeholders in research, including strategic partners	Demonstrates the ability to identify strategic partnerships that align with organisational and research goals	Develops strategies for fostering strategic collaborations that enhance trust	Provides leadership and direct relationship management initiatives for enable trust within strategic partnerships
Shows promise in ability to network and build positive professional relationships	Cultivates meaningful partnerships with organisations and funders aligned with research goals and outcomes	Employs risk mitigation strategies to maintain trust in complex partnerships	Ensures the organisation delivers on commitments made in agreements with partners
Shows awareness of the importance of reliability and consistency in partnerships	Understands the importance of open and transparent communication to build trust	Resolves conflicts and challenges while preserving trust	Creates a long-lasting positive footprint in the organisation through the introduction of good practice which has a long reaching positive impact

Understands the research landscape and the importance of effective communication	Coherently conveys mutual benefits of a proposed partnership	Using a portfolio of competencies, utilises all forms of communication for informed trust building	Employs advanced interpersonal and negotiation skills to navigate complex dynamics, cultivating a culture of mutual respect and shared goals

Employ tactful communication, adept negotiation strategies, and effective mediation to reconcile differing perspectives and align interests among research team members or stakeholders.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Has foundational concepts of diplomacy, negotiation, and mediation	Is skilled in planning and executing tactful communication strategies within research teams	Aligns interests among research team members and stakeholders	Introduce innovative conflict resolution models and approaches.
Has foundational communication skills for effective interaction in diplomatic and negotiation settings	Utilises a variety of negotiation techniques with ability to compromise	Resolves through diplomacy and mediation unforeseen differing perspectives within the research team	Executes strategies at organisational level to mitigate the effect of differing perspectives within the research team, organisation or with stakeholders.
Has an awareness of conflicts and the need for mediation in various contexts	Uses mediation processes and techniques	Inspires others in the use of effective and organisation-compliant negotiation and mediation strategies	Exhibits a sophisticated understanding of cultural nuances, power dynamics, and psychological factors that influence negotiations
Understands basic principles of active listening as a skill in negotiations	Exhibits cultural sensitivity for effective diplomacy in diverse settings	Navigates complex negotiations, employing advanced tactics to achieve mutually beneficial outcomes	Demonstrates a track record of successfully resolving multifaceted disputes and negotiating agreements that advance organisational objectives

7. Handling Difficult Conversations and Partnerships

Navigate challenging discussions with tact, empathy, and problem-solving skills. Address conflicts, manage expectations, and seek resolutions to maintain positive relationships within the research team/ organisation and or external partners.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates a basic understanding of the importance of having structured difficult conversations and their importance to partnerships	Anticipates and prepares ahead of time for challenging discussions with members of the research team	Implements strategies to maintain trust and collaboration within the team and with external partners	Provides leadership in designing and executing comprehensive strategies for difficult partnerships
Adapts communication skills for navigating difficult conversations	Employs conflict resolution techniques to navigate challenges	Using a portfolio of competencies, manages expectations and seeks conflict resolution within the team	Introduces innovative conflict resolution models and approaches at the organisational level
Communicates respectfully and ethically through all forms of communication	Negotiates to find common ground in addressing conflict, managing expectations and seeking resolutions	Engages with diverse stakeholders and partners to address complex issues and resolve differences	Creates a long-lasting positive footprint through open and transparent practice and the maintenance of positive relationships
Demonstrates evidence of emotional intelligence when managing difficult conversations	Escalates to conflict resolution procedures and policy when needed	Demonstrates the ability to navigate challenging discussions with sensitivity, tact, and respect for others	Demonstrates an unparalleled ability to navigate highly complex and sensitive discussions with finesse and strategic acumen

8. Business and Commercial Liaison Management			
Facilitate collaborations between the research team and industry partners or commercial entities. Navigate the intersection of academia and business, identifying opportunities for knowledge valorisation, licensing, or joint ventures.			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Understands the importance of business and commercial liaison within the research agenda	Demonstrates proficiency in planning and structuring strategic business partnerships	Cultivates strategies to promote and nurture strategic commercial collaborations	Demonstrates leadership skills overseeing the design and execution of comprehensive business liaison strategies
Develops communication skills for effective collaboration with business partners	Engages in cross-functional collaboration to align business and research goals effectively	Executes partnership strategies with industry considering diverse and international perspectives	Pioneers' commercial collaboration models and approaches driving innovation and effectiveness in partnerships
Understands basic principles of negotiation for business-related interactions	Employs negotiation techniques for navigating complex business and research interactions	Introduces forward-thinking liaison models and approaches to elevate and enrich industry relationships within the context of research dissemination and output	Formulates and implement business liaison strategies considering the shifting landscape of global business and research trends
Gains proficiency in identifying and establishing initial connections with commercial partners, understanding basic contractual considerations, and participating in introductory discussions	Uses data and insights to guide decision-making with business and commercial partners	Demonstrates a nuanced understanding of complex business dynamics, market trends, and strategic partnership development	Able to navigate intricate business landscapes, formulate and execute highly sophisticated strategies for partnership development, and foster long-term commercial relationships

Line Management and Talent Development **Learning Outcomes**			
1. People Management and Managing Team Performance			
Effectively leading and coordinating a team, providing guidance, and fostering a collaborative work environment to ensure the successful execution of research projects. Includes setting clear expectations, monitoring progress, offering constructive feedback, and implementing strategies to enhance individual and collective productivity within the context of the research objectives.			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Understands the concepts of teams and their role in research success	Plans and executes team building activities	Anticipates and plans for future challenges within the team	Manages culturally diverse and geographically dispersed teams
Able to identify common sources of conflict within a team	Adapts communication styles to different team members and situations	Fosters adaptability and resilience within the team	Navigates complex global research environments
Able to set and communicate clear and achievable goals for the team	Proactively addresses and seeks to resolve conflict within the team	Uses organisational performance analytics tools and methodologies for tracking team and individual performance	Demonstrates resilience and adaptability in challenging team and or organisational circumstances
Ability to monitor and report on basic performance metrics	Implements organisational reward and recognition policies	Fosters a learning culture within the team or organisation	Pioneer and implement cutting-edge leadership practices inclusive of training initiatives
2. Team Building			
Cultivating a collaborative and high-performing research team by fostering a positive work culture, aligning team members with common goals, and recognising and utilising individual strengths.			
FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates knowledge of the foundational concepts of team building and its importance to the research agenda of the organisation	Understands and applies team development models e.g., Tuckman Team Development Model	Aligns team goals with that of the organisation	Develops and leads collaborative strategies for teams working across multi-partner projects within multinational contexts
Shows awareness of basic team dynamics	Clarifies roles and responsibilities within the research team for better coordination	Fosters cultural competence within the team, considering diverse perspectives	Develops and implements positive work culture strategies at the organisational level, considering cultural nuances and international contexts
Understands basic conflict resolution practices	Implements communication strategies to enable and foster	Able to address and resolve complex issues within the research team	Leads collaborative initiatives that bring together diverse stakeholders

	collaboration within the research team		for impactful research within common goals
Has basic communication skills for effective team interaction	Works to develop and encourage problem-solving skills within the research team	Empowers team members to take ownership of research tasks and contribute to decision-making	Using a portfolio of competencies, introduces innovative techniques for recognising and utilising individual strengths to enhance research team output

3. Change Management

Navigating and facilitating transitions within the research environment/organisation. Effectively communicate changes, address concerns, and facilitation the research team/organisation in adapting to new methodologies or project directions.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the context of change management and its potential impact on the research or the organisation	Develops plans for managing team and or organisational change	Leads cultural transformation efforts to embed change within the organisational culture	Introduces innovative change models and methodologies for senior level change management
Develops an awareness of basic change models and frameworks	Engages with diverse stakeholders to garner support for proposed change initiatives	Provides leadership in executing and overseeing change initiatives	Develops and implements strategies that address complex changes within the research ecosystem
Understands common concerns during change in the workplace or within the research team	Communicates proposed changes simply and effectively to the team or the organisation	Using a portfolio of competencies, utilises advanced data analysis to inform and enhance change management strategies	Introduces innovative models and approaches to change management contributing to the field's advancement
Able to identify key stakeholders and their roles in the change process	Able to identify potential obstacles, and develop strategies to mitigate resistance to change	Develops advanced strategies for mitigating resistance to change at individual and organisational levels	Exhibits advanced proficiency in analyzing complex organisational dynamics, identifying potential challenges, and designing tailored interventions to address resistance effectively

4. Coaching Skills

Guide and develop the professional capabilities of research team members and or research leadership.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the foundational concepts of coaching and its importance in researcher or team member development	Understands and applies coaching models and frameworks e.g., GROW model	Develops coaching plans aligned with organisational and individual goals	Introduces innovative coaching approaches and methodologies at team and organisational level
Provides constructive feedback to facilitate peer growth	Assists team members and/or employees in setting and achieving performance and development goals	Applies cultural sensitivity in coaching to accommodate diverse perspectives	Engages organisation and research leaders in the implementation of organisation wide coaching frameworks to build capabilities
Develops trust-building skills essential for effective coaching	Uses effective questioning techniques to guide employee reflection	Conducts in-depth assessments, providing nuanced feedback that inspires self-reflection and meaningful change	Navigates organisational complexities to facilitate researchers, research managers and teams effectively
Works towards a positive impact of coaching on the individual researcher and peers	Develops the ability to conduct insightful assessments of individuals' strengths and areas for growth, providing constructive feedback and guidance	Adapts coaching approaches to diverse individuals and complex situations	Contributes to the advancement of coaching as a discipline through the development of new methodologies, the publication of influential work, and the mentorship of other coaching professionals

5. Research Talent Identification and Development

Recognise and nurture the potential of individual researchers. Implement strategies for identifying key skills, provide targeted training, and create opportunities for professional growth within the team/organisation.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of talent identification, acquisition and development in the research context	Develops skills in strategic talent mapping for research teams and projects	Develops strategies for succession planning in research teams and within the organisation	Designs and executes talent management strategies for researchers and research managers within the organisation
Develops skills to assess the potential of individual researchers	Identifies and nurtures individuals with the potential for leadership	Develops and implements programs, including mentoring programs, that enable research talent and facilitate cross-disciplinary skill development	Using a portfolio of competencies introduces innovative models and

	roles in research and research management		approaches for talent development and professional growth in research
Shows awareness of various research career trajectories both within and beyond the research ecosystem	Contributes to mentoring programs to facilitate research talent	Provides leadership development opportunities for emerging research leaders	Contributes to building the overall research capacity of the organisation through the identification of key skills and targeted training initiatives
Understands basic principles of creating development plans for early-career researchers and peers	Assists researchers and research managers to create individual development plans based on career goals	Applies various metrics for evaluating the impact of talent development initiatives within the team or organisation	Demonstrates a sophisticated understanding of diverse research skill sets and potential at the individual and organisational level

Communication **Learning Outcomes**

1. Building and Maintaining Relationships with Research Funders, Partners, or other Stakeholders

Cultivate strong connections by ensuring clear communication, delivering on commitments, and understanding the needs of collaborators. Foster trust, secure ongoing support, and contribute to a collaborative research environment.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates basic understanding of the importance of key stakeholders in research, including funders and partners	Provides evidence of skills in strategically engaging with research funders, partners, and stakeholders	Aligns research goals with the building of strategic partnerships inclusive of funding opportunities	Provides leadership and direct relationship management initiatives for research success
Shows promise in ability to network and initiate and sustain professional relationships	Cultivates meaningful partnerships with organisations and funders aligned with research goals	Facilitates cross-sector collaboration, engaging with diverse stakeholders	Develops and implements strategies for managing relationships and collaborations on a national and international level
Is able to clearly convey research agendas and results	Discusses and negotiates agreements with stakeholders	Resolves conflicts and negotiates agreements with research partners and funders	Creates a long-lasting positive footprint in the organisation through the introduction of good practice which has a long reaching positive impact
Understands the research landscape inclusive of funding and collaborations	Coherently conveys complex and nuanced research policy/prioritisation/trends etc.	Using a portfolio of competencies, utilises data and analytics for informed relationship management and decision-making	Demonstrates an unparalleled ability to navigate complex dynamics and foster long-term collaborations

2. Designing and Implementing Research Communication Plans

Design and implement research communication plans by crafting strategies to effectively disseminate research findings. Identify target audiences, select appropriate communication channels, and tailor messaging to maximise impact. Create clear and engaging communication, to enhance the visibility of research outcomes, foster collaboration, and contribute to the broader understanding and application of research within academic, research, professional, and public/private spheres.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of communicating research	Crafts strategic communication plans aligned with research objectives	Develops integrated communication strategies that align with overall organisational goals	Designs and executes communication strategies that drive research impact

Can identify target audiences for research communication	Uses traditional and digital media to amplify research messages	Develops crisis communication plans for addressing unforeseen challenges	Introduces innovative communication models and approaches at an expert level
Shows awareness of basic communication channels, including traditional and digital media	Implements strategies to engage with a multitude of stakeholders	Innovates in the use of available communication strategies to maximise research impact	Develops and implements strategies for managing overall organisational research communication on a national and international level
Has an overall awareness of ethical considerations in research communication	Considers and uses data visualization techniques for effective communication of research findings	Fosters long-term relationships through open and transparent communication practices	Consistently demonstrates a sophisticated understanding of diverse communication strategies and channels

3. Media Liaison and Associated Activities

Establish and manage relationships with the media to promote research activities and results. Engage with journalists, facilitate interviews, and strategically communicate research findings to the public. Contribute to the dissemination of accurate information, enhance the visibility of research projects, and foster a positive public perception of the research group, institution, or organisation.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates a basic understanding of the importance of liaising with the media and its role in disseminating research results	Crafts strategic approaches for engaging with the media	Develops plans for crisis communication with the media	Provides leadership in designing and executing media engagement strategies that align with organisational needs and goals
Demonstrates an understanding and awareness of the online and offline media landscape	Creates and adapts key messages for effective communication with the media	Implements media training programs for researchers, research managers and others	Develops and implements media engagement strategies at team, organisation, national and or international level
Communicates respectfully and ethically through all forms of communication	Engages with a variety of media channels, including print, broadcast, and online	Using a portfolio of competencies utilises data and analytics for informed media engagement strategies	Creates a long-lasting positive footprint with the media through open and transparent practice
Has a good grasp of the basic principles of effective research communication with media representatives	Able to effectively and accurately respond to media inquiries and requests related to the research	Engages with diverse stakeholders at an advanced level through media channels	Excels in cultivating relationships with media outlets, positioning oneself as a trusted source for accurate and insightful information

4. Preparing and Writing Reports (Including Evaluation Reports and Funder Reports)			
Synthesize complex research findings into clear and compelling narratives. Ensure reports align with guidelines, effectively communicate project outcomes, and demonstrate the impact of research initiatives.			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Understands the importance of writing clear and compelling narratives to disseminate research to various audiences	Uses citation and referencing techniques for accuracy and credibility	Able to synthesize complex information clearly and accurately in reports	Provides expert-level thought leadership in designing and executing comprehensive narration techniques and strategies at leadership and organisational level
Can present research results effectively and coherently to funders and other stakeholders	Is able to plan and outline reports quickly and accurately	Uses visual elements for enhanced data communication in reports	Provides clear steps and guidelines to assist all researchers and research managers within the organisation to align reports and research outcome narratives with organisational goals
Has an awareness of guidelines and standards for various types of reports	Uses data analysis skills for meaningful data presentation within reports and narratives	Effectively incorporates stakeholder feedback into reports	Demonstrates skills in strategic report design, ensuring alignment with audience expectations and effectively communicating research outcomes, impact, and recommendations
Presents compelling research narratives to diverse audiences	Effectively presents complex research project outcomes and narratives to diverse audiences	Employs an ethical and quality assurance approach for all reports and narratives	Demonstrates the ability to distill intricate research findings into clear reports that not only meet the highest professional standards but also contribute to strategic decision-making

5. Social Media Engagement

Leverage digital platforms to disseminate research findings, engage with the public, and build a broader audience. Develop and implement strategies for effective communication on social media, including creating compelling content, participating in relevant discussions, and fostering connections with diverse stakeholders.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of utilising different social media platforms	Plans and schedules social media content strategically	Develops and executes social media campaigns aligned with organisational goals	Designs and executes comprehensive social media strategies at the organisational level
Creates and manages social media profiles for the research project	Implements strategies to engage and interact with audiences on social media	Collaborates with influencers and key stakeholders for enhanced social media reach	Develops and executes highly sophisticated and targeted social media campaigns that effectively communicate research findings to diverse audiences
Demonstrates ability to identify, understand and target specific audiences on social media	Uses analytical tools to measure and analyse social media performance	Implements crisis management strategies in handling challenging issues on social media	Defines and or creates codes of conduct and ethical guidelines for the use of social media by members of the organisation
Demonstrates basic understanding of creating and posting content on social media	Maximises social media impact through links and content references in multiple platforms	Uses advanced data and insights for informed decision-making in social media strategies	Demonstrates a deep understanding of evolving digital landscapes, algorithms, and audience behaviors

Subject Matter Expertise/Specialised Knowledge[32]

Following consultation[33] with the Research Manager community RM Comp has (for ease of use) separated out the roles associated with Subject Matter Expertise. Please note that all these roles also demand a broad suite of competencies inclusive of those indicated above. Individual roles and associated competencies are included just as they are included within the umbrella of roles within Research Management. A role refers to the specific position or job title within an organisation. It outlines the primary responsibilities, duties, and tasks that an individual is expected to perform. Subject Matter Expertise refers to a thorough understanding of the specific specialised area or field associated with an organisation and/or individual roles within an organisation. As previously mentioned, the professional development of Research Managers can progress not only vertically but also horizontally, allowing for specialisation in one or more subfields of Research Management. These subfields demand subject matter expertise. The competencies associated with these roles are included below. The competence framework includes the following roles with associated competencies under foundational, intermediate, advanced and expert:

Research Manager Roles

- Pre-Award
- Post-Award
- Managing Equality, Diversity and Inclusion (Including Gender, Disability and Racism)
- Data Stewardship
- Knowledge Valorisation (Technology Transfer)
- HR for Research – Employment, Training etc of research staff.
- Research Finance
- Research Infrastructure Management
- Clinical Research Management
- Research Ethics and Integrity
- Research, Strategy and Policy Development
- Managing the Research Grant/Support Office

Please note that as the roles associated with research management expand, additional areas and roles within subject matter expertise will be incorporated into the above.

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[32] L-1B Visa: Specialized Knowledge Professional - Immihelp
[33] Validation meetings EC April and November 2024 and other events.

Subject Matter Expertise/Specialised Knowledge Learning Outcomes			
1. Pre-Award			
Identify and disseminate funding opportunities; develop and implement funding optimisation strategies; facilitate the writing of funding proposals, including alignment with stakeholder requirements, budgeting and costing and review; coordination of approvals and submissions			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Demonstrates a basic understanding of the research landscape and ecosystem as well as understands the foundational aspects of regulatory and funder compliance related to research proposals and grant applications	Analysis regularly research funding opportunities, is aware of the current calls and disseminates information to relevant researchers and research groups	Aligns organisational research mission and priorities with funding opportunities, develops individual plans for researchers and research teams to enable applicant grant success	Contributes to the development of institutional research funding strategies, aligning them with organisational, national and international objectives
Comprehends the main components of the research proposal, i.e. including the research statement, objectives, and budget and is familiar with online and e-platforms used for the submission of research proposals	Has in-depth knowledge of the grant application, can advise on its own or knows, who should be contacted for specific expertise	Develops and facilitates consecutive proposals of individuals and team in a coordinated manner to maximise the absorbed funding, benchmarks funding mobilisation best practices	Leads the development and implementation of innovative approaches to proposal development, set standards and targets for grant proposal submission.
Handles efficiently the basic administrative tasks related to the development and submission of research proposal and maintains the documentation in an accurate manner	Facilitates and assesses the development of grant proposals which could include identifying research team members, preparing the budget, writing and reviewing text	Analyses competing proposals and funding trends to enhance the competitiveness of the proposal.	Design financial and other incentives/research income allocation models to promote excellence and delivery against strategies
Adheres basic communication skills for interacting with researchers, stakeholders and team members	Engages with stakeholders to gather necessary information and facilitate for the proposal.	Leads and/or represents the organisation in discussions with funding agencies, government bodies, industry partners and other relevant stakeholders	Builds and manages strategic partnerships with key stakeholders and organisations to facilitate proposal development and funding mobilisation.

Is familiar with the financial requirements of funding programmes, including the main budget lines and eligibility of costs	Is able to proactively facilitate the preparation of the budget of the grant proposal at partner levels and manages complex budgets	Is able to proactively facilitate the preparation of the budget of the grant proposal at consortium level and manages complex budgets	Secures a balanced and diversified funding portfolio in order to secure strategic, sustainable and predictable organisational funding inclusive of third stream income

2. Post-Award

Negotiate contracts, manages amendments, as well as the internal setup of the project, the consortium and communication within, liaises with funders, provides administrative facilitate, progress management, accounting, carries out project evaluation, funder reporting, legal advice.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates a basic understanding of the processes involved in research management, including planning, execution, monitoring and closing	Develops detailed research project plans, including tasks' timelines, milestones, and deliverables and manages resources efficiently to meet project objectives.	Ensures that research projects align with the strategic goals and priorities of the organisation, benchmarks and implements good practices in post-award	Provides expert guidance in research project management and leads the development and implementation of innovative project management practices and solutions.
Demonstrates a basic understanding of post-award processes and requirements, understands types of contracts, clauses and implications	Ensures compliance with applicable regulations and guidelines throughout the research lifecycle and prepares progress and final reports	Negotiates and finalises grant agreements with funding agencies, addressing terms, conditions, and budgetary considerations	Oversees multi-institutional or multi-disciplinary research projects with diverse funding sources, influences research policies and standards at institutional, national, or international levels.
Handles administrative tasks efficiently related to research project management and maintains accurate and organized documentation of project activities and milestones, is able to contribute to progress and final reporting	Uses information to generate organisational reports including progress updates on the research portfolio	Prepares and presents comprehensive research project reports to senior management and funding agencies	Initiates and implements processes to enhance research project outcomes and efficiency, articulates and rewards key performance indicators/metrics for managing funded research
Has basic communication skills for interacting with team members, consortium partners, stakeholders, and funding agencies.	Demonstrates ability to liaise with colleagues from other units in the management of research awards and interact efficiently with	Manages partner and consortium relationships effectively, including	Leads and/or represents the organisation in discussions with funding agencies, government bodies, industry partners and other relevant stakeholders

	team members, consortium partners, stakeholders	agreements, compliance, and reporting	
Understands the basics of budgeting and financial management for research projects and is able to document project costs	Ensures compliance with financial requirements of funding programmes and manages detailed project budgets, including forecasting and financial reporting.	Manages complex project budgets, conducts financial analysis to prepare decisions and improve financial performance.	Masters the allocation and management of resources to maximize efficiency and effectiveness in project management.

3. Managing Equality, Diversity and Inclusion (Including Gender, Disability and Racism)

Promote diversity in research teams, value varied perspectives, and ensure equal opportunities for all members. Champion EDI principles and contribute to a more inclusive research culture.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands foundational concepts related to equality, diversity, and inclusion (EDI), including key terms and definitions	Enhances cultural competence, understanding and appreciating differences in backgrounds, experiences, and perspectives	Develops inclusive leadership skills, actively promoting diversity and inclusion within teams and the organisation	Leads and drives organisational change initiatives to embed diversity, equality, and inclusion in the culture and practices of research within the organisation
Recognises and acknowledges personal biases and stereotypes and understands their potential impact on workplace dynamics	Able to apply comprehensive practices to foster a more inclusive and respectful workplace environment	Implements diverse and advanced strategies to mitigate biases in decision-making processes	Contributes to the development and implementation of comprehensive diversity and inclusion policies and practices
Gains awareness of relevant laws and policies related to equality, diversity, and inclusion in the workplace	Works exclusively in teams and collaboration partnerships that respect inclusiveness and diversity[34]	Assists with the delivery and organisation of training programs on diversity and inclusion for employees at various levels of the organisation	Engages with external communities and all research stakeholders to promote diversity, equality, and inclusion at national and international level
Develops basic communication skills that promote inclusivity and avoid unintentional biases	Exhibits the ability to analyze and assess diversity-related challenges and propose inclusive solutions	Advises less experienced colleagues about working with diversity[35]	Contributes to thought leadership in the field of diversity and inclusion, influencing practices and standards

[34] Research Competency Framework
[35] Research Competency Framework

4. Data Stewardship

Responsible and ethical handling of research data throughout its lifecycle. Robust data management practices, data security, compliance with privacy regulations, and transparent documentation.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Can define Research Data Management (RDM) and describe its relevant and benefits. Is familiar with data management plans.	Understands the research data lifecycle and what RDM measures are taken at different stages of research. Contribute to the development of a Data Management Plan.	Confident in applying RDM principles and practices to a project or unit	Can develop and implement a data management plan across a unit or project with reference to funder requirements and mandates, relevant legislation and polices nationally and internationally (GDPR, DPIA, Ethics, IP etc)
Is aware of the policy and legislative landscape in relation to research data. (data protection, HRR, FOI, FAIR, CARE, IP, copyright, licensing)	Applies or outlines compliance requirement with legislation and policy across a unit or project	Can identify and capture relevant metrics in relation to research data. Ability to advise on the responsible use of metrics	Can evaluate and analysis compliance and can solve them in consultation with relevant experts
Recognises basic principles of data quality and the impact of poor data quality on outcomes	Ability to run reports and capture metrics using available dashboards and data sources	Validates data models schemas and standards, with the ability to verify data quality and integrity	Provides leadership in establishing and leading organisational data governance initiatives and develops strategies to successfully embed data governance in an organisation
Understands basic data compliance requirements and their implications for stewardship	Able to describe how to identify data quality and how to implement quality control methods such as reproducible workflows	Recognises a DMP is a living document to be updated throughout a project	Introduces innovative approaches to data management, including the integration of emerging technologies machine readable data and metadata

5. Knowledge Valorisation (Technology Transfer)

Facilitate the successful transition of research innovations from the academic, research or laboratory setting to practical applications in the market. Identify commercialisation opportunities, establish collaborations with industry partners, and navigate the legal and regulatory aspects of transferring technologies leading to societal impact and the economic value of research outcomes.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Grasps foundational concepts and principles of knowledge	Evaluates the commercial potential of intellectual property assets and technologies	Develops and implements strategic plans for knowledge	Provides leadership in developing and executing comprehensive technology commercialisation strategies for the organisation

valorisation, including its role in research and innovation		valorisation within an organisation or institution	
Understands the basics of intellectual property (IP) rights, including patents, copyrights, and trademarks	Understands the process of negotiating and drafting licensing agreements for knowledge valorisation	Uses developed negotiation skills to address complex issues in knowledge valorisation agreements	Contributes to the development of institutional and national policies related to knowledge valorisation
Gains awareness of legal and regulatory frameworks related to knowledge valorisation activities	Advises on the implementation of market analysis to assess the feasibility and potential of transferring a technology to specific industries	Can identify and pursue new opportunities for technology commercialisation	Navigates and facilitates knowledge valorisation on an international scale, considering cultural and legal differences
Develops basic documentation skills for recording and managing knowledge valorisation processes	Interacts with industry stakeholders to understand their needs and facilitate successful knowledge valorisation	Able to implement risk management strategies for knowledge valorisation projects, addressing legal, financial, and technical risks	Contributes to building innovation ecosystems and policy that facilitate seamless knowledge valorisation and commercialisation

6. HR Research – Employment, Training and Terms & Conditions

Ensure the effective functioning of the HR aspects facilitating research teams groups and/or organisations. This may include contract administration, salary administration, talent acquisition, performance management, training and development and fostering a positive work environment through initiatives aligning with HR Excellence in Research and others. Align organisational and research goals, optimise individual and research team dynamics, and facilitate the professional development of researchers.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Grasps foundational concepts of human resources, including employment laws and organisational policies as they pertain to research staff	Issues contracts of employment and enables salary placement. Updates internal organisational HR IT systems accordingly	Using a portfolio of competences, works to resolve non-routine issues relating to the employment cycle of research staff in the organisation	Leads initiatives to shape and cultivate a positive organisational person culture within the research environment
Understands the basics of the recruitment process, including job postings, applicant screening, and interview coordination	Develops skills in resolving conflicts within research teams and or staff, promoting a positive work environment	Contributes to strategic workforce planning, aligning human resources with research goals and organisational strategy	Contributes to the development and refinement of HR policies tailored to the unique needs of research staff

Demonstrates basic skills in onboarding new research staff, including orientation and introduction to policies	Facilitates training and development opportunities for research staff to enhance their skills and career growth	Implements agreed strategies to enhance employee engagement and job satisfaction within the research context using initiatives such as HR Excellence in Research	Possesses expertise in navigating legal and ethical considerations in HR management, particularly within research contexts
Maintains personnel records and ensure compliance with HR and institutional regulations	Addresses routine and non-routine queries relating to the employment cycle of researchers in the organisation	Contributes to career development programs for researchers and research managers	Contributes to thought leadership in the field of HR Research nationally and internationally influencing policy, practices and standards

7. Research Finance

Oversee budgetary aspects, financial planning, and compliance within research projects and or at organisational level. Effective allocation of funds, monitor expenditure, and adhere to financial regulations, funding guidelines, having overall fiscal responsibility within research projects at local and or organisational level.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Grasps foundational concepts in finance, including budgeting, financial statements, and cost accounting	Manages research project budgets, considering both direct and indirect costs	Develops advanced financial forecasting models for research projects, considering long-term financial implications	Develops advanced financial forecasting models for the organisation, considering long-term financial implications
Understands basic types of research funding sources and their implications for financial management	Generates and interprets financial reports for research projects, ensuring accuracy and compliance	Implements advanced cost accounting methodologies to allocate costs accurately across research projects	Contributes to the development of financial policies tailored to the unique needs of research finance
Comprehends foundational financial compliance requirements related to research grants and projects	Contributes to budget development for grant proposals, aligning financial plans with project goals	Prepares for and participates in audits, ensuring compliance with financial regulations and funder requirements	Contributes to the finalising of complex financial agreements, including terms and conditions of research funders and collaborating partners and organisations
Develops basic skills in financial documentation and record-keeping for research projects	Understands the financial aspects of partners and collaborations within research projects	Assesses and advises on mitigation for financial risks associated with research projects	Provides organisational leadership in research finance, including mentoring and guiding junior research finance professionals

8. Clinical Research Management			
Oversee and coordinate clinical research activities within a healthcare or pharmaceutical setting. Ensure the successful implementation of research protocols, managing study budgets, and maintaining compliance with regulatory guidelines. Facilitate communication with stakeholders and contribute to the ethical and efficient execution of clinical trials.			
FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates basic knowledge in understanding clinical research protocols, including key components such as inclusion/exclusion criteria and study endpoints	Exhibits a nuanced understanding of regulatory requirements, ensuring that all aspects of clinical research adhere to relevant guidelines and standards	Develops advanced capabilities in designing and planning complex clinical research studies, considering scientific, regulatory, and logistical factors	Serves as an expert in regulatory affairs, developing and executing comprehensive strategies for obtaining approvals and ensuring ongoing compliance
Understands basic ethical considerations in clinical research, including the importance of informed consent and protecting participant confidentiality	Demonstrates proficiency in coordinating multiple aspects of clinical trials, including participant recruitment, data collection, and study timelines	Engages with key stakeholders, including principal investigators, sponsors, and regulatory authorities, contributing to strategic decision-making	Oversees multiple clinical studies and aligns them with broader organisational goals
Develops foundational skills in maintaining accurate and organised study documentation, such as participant records and regulatory submissions	Able to provide guidance in the day-to-day management of clinical studies	Oversees quality control measures, assists with thorough internal audits and ensures high standards of data integrity throughout the research process	Contributes to disseminating research findings through publication in reputable journals and/or presentations at conferences, contributing to the advancement of scientific knowledge
Able to collaborate effectively with research teams, learning to communicate study updates and addressing routine operational challenges	Gains skills in budget management, ensuring that clinical trials are conducted within financial constraints and policy whilst maintaining study quality	Contributes to the implementation of innovative research protocols, incorporating the latest methodologies and technologies into study design	Serves as a mentor to junior colleagues, actively contributing to the professional development of the team and influencing the broader clinical research community through educational initiatives

9. Research Ethics and Integrity

Ensure that all research activities adhere to ethical standards, protecting the rights and well-being of participants. Promote transparency, honesty and accountability whilst fostering a culture of integrity within the research team.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Upholds integrity in data collection and analysis, and adheres to established ethical guidelines in research practices	Can identify and manage conflicts of interest that may arise in the course of research activities	Ability to analyse and address complex ethical dilemmas that may arise during the course of the research	Exhibits leadership in promoting a culture of research integrity, including mentoring others, and contributes to the advancement of ethical standards in the broader research community
Understands the basic principles of research ethics and educates oneself to prevent forms of research misconduct, including plagiarism and fabrication of data	Implements practices for secure data management and storage, ensuring the confidentiality and integrity of research data	Develop expertise in managing research involving vulnerable populations, ensuring additional safeguards and considerations	Contribute to the development of institutional, national and or international polices and practice on research integrity and ethical matters
Grasps the importance of honesty, transparency, and confidentiality in research practices	Understand issues related to authorship, intellectual property, and publication ethics, including proper citation practices	Able to propose informed solutions that uphold integrity and compliance with ethical standards in a research context	Contribute to the advancement of ethical knowledge through scholarship, presentations, and leadership.
Fosters a commitment to responsible conduct throughout the research process	Can apply ethical principles to diverse research scenarios	Demonstrates a sophisticated understanding of the ethical implications of various research methodologies and apply this insight to design and conduct ethically robust studies	Exhibits a profound understanding of the ethical implications in interdisciplinary and cutting-edge research, influencing policy development and implementation

10. Research Infrastructure Management			
Responsible for security and risk management, plans research infrastructure & develops sustainable funding model, infrastructure, and resource management, as well as business development and innovation in research infrastructure.			
FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the fundamental concepts and importance of research infrastructures. Is familiar with different types of research infrastructures (physical, virtual, and data infrastructures).	Manages resources (human, financial, and material) efficiently within research infrastructures, as well, as develops and implements operational plans for the effective functioning of research infrastructures.	Approves resource allocations for funded research including research infrastructure, develops and implements strategic plans for the long-term development and sustainability of research infrastructures.	Leads the development and implementation of innovative practices in infrastructure management by applying European/global standards and best practices in the management of research infrastructures.
Identifies key components and functions of research infrastructures and understands basic maintenance and operational procedures for research infrastructures. Is familiar with basic safety protocols and procedures.	Implements quality control measures to ensure high standards in infrastructure operations and processes for continuous improvement of infrastructure management.	Develops and monitors the planning and oversight of research facilities and infrastructure	Initiates and implements strategic plans for evaluation of research infrastructure management services to ensure their continuous improvement and alignment with institutional and stakeholder needs.
Understands basic regulatory and compliance requirements relevant to research infrastructures and is familiar with the documentation and reporting requirements of research infrastructure and related activities.	Ensures compliance with regulatory requirements and industry standards, as well as identifies and manages risks associated with the operation of research infrastructures.	Develops and applies advanced metrics to measure and improve the performance of research infrastructures.	Develops and implements strategic plans to ensure the sustainability of research infrastructures.
Provides efficient support to the researchers, innovators and other users of research infrastructures.	Engages with stakeholders to understand their needs and ensure the infrastructure meets their requirements. Enhancing collaboration within the infrastructure management team.	Builds and manages strategic partnerships with key stakeholders and organisations.	Advocates for the importance of research infrastructures and influencing decision-making processes.

11. Research, Strategy and Policy Development			
Facilitate and facilitate the development, implementation, monitoring and evaluation of research and/or knowledge valorisation policies and strategies			
FOUNDATIONAL	**INTERMEDIATE**	**ADVANCED**	**EXPERT**
Understands the fundamental concepts and importance of institutional research and/or knowledge valorisation policies and strategies.	Collects and examines data for research management intelligence, conducts analysis to evaluate the effectiveness and impact of existing research and/or knowledge valorisation policies and strategies.	Scans the environment to assess the impact and trends, develops long-term research and/or knowledge valorisation policies and strategies by setting clear, measurable goals	Conducts benchmarks, evaluation and impact assessment of institutional research and/or knowledge valorisation policies and strategies to gather evidence and enable their further development
Is aware of the key indicators relevant for the monitoring and evaluation of the research and/or knowledge valorisation policy and strategy	Gather evidence enabling the monitoring and evaluation of the institutional research and/or knowledge valorisation policy and strategy.	Contributes to the assessment and development of indicators used for the monitoring and evaluation institutional research and/or knowledge valorisation policy and strategy.	Leads the assessment and development of indicators used for the monitoring and evaluation institutional research and/or knowledge valorisation policy and strategy.
Contributes the development and implementation of the institutional research and/or knowledge valorisation policy and strategy	Ensures that the institution is meeting its legal and quality assurance obligations	Gathers intelligence to help develop research and/or knowledge valorisation policy and strategy	Developing strategies and policies to maximise the organisation's research and knowledge valorisation portfolio and promote the institutional research agenda
Is aware of the key stakeholders relevant for the institutional research and/or knowledge valorisation policy and strategy.	Engages with stakeholders to gather input and build consensus on research and/or knowledge valorisation policies.	Builds and manages strategic partnerships with key stakeholders and organisations to facilitate research and/or knowledge valorisation policy development.	Responds to differentiated thematic and sectorial stakeholder interests, influences political institutions and public officials for the benefit of the organisation.
Understands the fundamental concepts and purposes of research assessment, including basic assessment methods and metrics.	Executes detailed research assessment plans, ensuring they align with organisational goals and utilize appropriate metrics and methodologies.	Performs in-depth analysis and interpretation of assessment data, using advanced techniques to derive meaningful insights and inform strategic decisions.	Demonstrates expertise in leading comprehensive, innovative research assessment initiatives that influence policy, drive continuous improvement, and adhere to global best practices.

12. Managing the Grant/Research Support Office			
Organise, structure, manage, monitor and review institutional Research Support service(s)			
FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
	Co-ordinates research support services, develops staff and resources to provide effective research support services	Develops innovative systems and processes to implement the research support service strategy, and monitors key performance indicators	Develops and implements evidence-based strategies to improve within the institution aligned with organisational goals. Influences research policies and standards at institutional, national, or international levels.
	Manages a research support service structure that is cost-effective, `joined up' and `fit for purpose'	Translates institutional and sectorial practices and policies, maps and reviews facilitation functions, mitigates risks and initiates adjustments, if necessary	Maintains an effective, efficient and well-respected service and masters the management of resources to maximize efficiency and effectiveness of services
	Enables effective collaboration within the research support team.	Develops leadership skills to guide and motivate the research support team including its professional development, identifies and develops talents	Develops and implement strategies enabling the continuous upskilling and capacity building of the research support team, mentors the research facilitation staff
	Gathers user feedback and implements quality control measures to ensure high standards in research support services.	Develops and implements continuous improvement processes to enhance the quality and efficiency of research support services, including benchmarking, the adoption of best practices, new working methods and technologies to improve research facilitation operations.	Masters the allocation and management of resources to maximize facilitation for research activities and ensures the sustainability of research support services through strategic planning and resource management.
	Engages with researchers and stakeholders to understand their needs and provide tailored support.	Builds and manages strategic partnerships with key stakeholders and organisations	Creates an organisational culture where research support service is respected and valued, and influences decision-making processes.

Bibliography and Reference Guides Reviewed

European Commission. (n.d.). DigComp. Retrieved from https://ec.europa.eu/jrc/en/digcomp

European Commission. (n.d.). EntreComp. Retrieved from https://ec.europa.eu/jrc/en/entrecomp

European Commission. (n.d.). GreenComp. Retrieved from https://ec.europa.eu/jrc/en/greencomp

European Commission. (n.d.). LifeComp. Retrieved from https://ec.europa.eu/jrc/en/lifecomp

European Commission. (n.d.). Competence Framework 'Science for Policy' for researchers. Retrieved from https://ec.europa.eu/jrc/en/science-for-policy

European Commission. (n.d.). ResearchComp: The European Competence Framework for Researchers. Retrieved from https://europa.eu

European Commission. (n.d.). Competence framework for 'innovative policymaking'. Retrieved from https://ec.europa.eu/jrc/en/innovative-policymaking

Chartered Institute of Personnel and Development (CIPD). (n.d.). Competence & Competency Frameworks | Factsheets. Retrieved from https://www.cipd.co.uk/knowledge/fundamentals/people/performance/competency-factsheet

UK Government. (n.d.). Civil Service competency framework. Retrieved from https://www.gov.uk

Professionalising data stewardship in the Netherlands. Competences, training and education. Dutch roadmap towards national implementation of FAIR data stewardship Professionalising data stewardship in the Netherlands. Competences, training and education. Dutch roadmap towards national implementation of FAIR data stewardship

Organisation for Economic Co-operation and Development (OECD). (n.d.). OECD-Core-Competency-Framework.pdf and competency_framework_en.pdf. Retrieved from https://www.oecd.org

Hoffmann, T. (1999). The meanings of competency. Journal of European Industrial Training, 23(6), 275-286. https://doi.org/10.1108/03090599910284650

Asame, M., & Wakrim, M. (2018). Towards a competency model: A review of the literature and the competency standards. Retrieved from Towards a competency model: A review of the literature and the competency standards | Education and Information Technologies (springer.com)

Agostinho, M., Moniz Alves, C., Aresta, S., Borrego, F., Borlido-Santos, J., Cortez, J., … Vidal, S. (2018). The interface of science: the case for a broader definition of research management. *Perspectives: Policy and Practice in Higher Education*, *24*(1), 19–27. https://doi.org/10.1080/13603108.2018.1543215

University of New Hampshire Extension. (n.d.). Why, What and How of Community Outreach and Engagement. Retrieved from Why, What and How of Community Outreach and Engagement | Extension (unh.edu)

NHS Leadership Academy. (n.d.). Talent and Talent Management. Retrieved from Talent management guides – Leadership Academy

Organisation for Economic Co-operation and Development (OECD). (n.d.). Retrieved from OECD-Core-Competency-Framework.pdf Human Resource Management

Han, S., & Zhu, Y. (2022). (Re)conceptualizing 'global competence' from the students' perspective. Asia Pacific Journal of Education, 0(0), 1-13.

Hartel, R. W., & Foegeding, E. A. (2004). Learning: Objectives, Competencies, or Outcomes? Retrieved from https://ift.onlinelibrary.wiley.com/doi/10.1111/j.1541-4329.2004.tb00047.x

D2L. (n.d.). Learning Competencies, Objectives and Outcomes. Retrieved from

Learning Competencies, Objectives and Outcomes | D2L

Carleton College. (n.d.). Competencies vs Learning Outcomes. Retrieved from Competencies vs Learning Outcomes (carleton.edu)

Valamis. (n.d.). Learning Outcomes: Types, Examples, Verbs | Outcomes vs Objectives. Retrieved from Learning Outcomes: Types, Examples, Verbs | Outcomes vs Objectives (valamis.com)

Centre for Teaching and Learning, University of Oxford. (n.d.). An introduction to writing effective learning outcomes. Retrieved from An introduction to writing effective learning outcomes | Centre for Teaching and Learning (ox.ac.uk)

Educationise. (n.d.). 30 Examples of Bloom's Taxonomy Learning Objectives For Teachers. Retrieved from 30 Examples of Bloom's Taxonomy Learning Objectives For Teachers - Educationise

Anderson, L., & Krathwohl, D. et al. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman. Retrieved from Review: [Untitled] on JSTOR

Australian Qualifications Framework. (n.d.). Retrieved from https://www.aqf.edu.au

Biggs, J., & Tang, C. (2011). Teaching for quality learning (4th ed.). SRHE and Open University Press.

Churchill, D. (2017). Digital resources for learning. Springer. Retrieved from https://link.springer.com

Higher Education Standards Framework. (n.d.). Retrieved from https://www.teqsa.gov.au/how-we-regulate/higher-education-standards-framework-2021

UNSW Integrated Curriculum Framework. (n.d.). Retrieved from https://teaching.unsw.edu.au/sites/default/files/u19/integrated-curriculum-framework-approved-sept2015.pdf

Tam, M. (2014). Outcomes-based approach to quality assessment and curriculum improvement in higher education. Quality Assurance in Education, 22(1), 158-168. Outcomes-based approach to quality assessment and curriculum improvement in higher education | Emerald Insight

IITMS. (n.d.). Learning Outcomes - Types, And Examples Of Learning Outcomes. Retrieved from Learning Outcomes - Types, And Examples Of Learning Outcomes (iitms.co.in)

Publicjobs.ie. (n.d.). PAS_CS_Competency_Models_2017.pdf. Retrieved from PAS_CS_Competency_Models_2017.pdf (publicjobs.ie)

IPA. (n.d.). CPMR_DP_19_Effective_Competencies_CS.pdf. Retrieved from CPMR_DP_19_Effective_Competencies_CS.pdf (ipa.ie)

UK Government. (n.d.). cscf_fulla4potrait_2013-2017_v2d.pdf. Retrieved from cscf_fulla4potrait_2013-2017_v2d.pdf (publishing.service.gov.uk)

UK Government. (n.d.). CS_Behaviours_2018.pdf. Retrieved from CS_Behaviours_2018.pdf (publishing.service.gov.uk)

Live.com. (n.d.). 2013-PMDS-Competency-Frameworks-1_1.doc. Retrieved from 2013-PMDS-Competency-Frameworks-1_1.doc (live.com)

IPA. (n.d.). CPMR_DP_19_Effective_Competencies_CS.pdf. Retrieved from CPMR_DP_19_Effective_Competencies_CS.pdf (ipa.ie)

Martin, J., Elg, M., Gremyr, I., & Wallo, A. (2021). Towards a quality management competence framework: exploring needed competencies in quality management. Total Quality Management & Business Excellence, 32(3-4), 359-378. https://doi.org/10.1080/14783363.2019.1576516

Bartram, D. (2005). The Great Eight Competencies: A Criterion-Centric Approach to Validation. Journal of Applied Psychology, 90(6), 1185–1203. https://doi.org/10.1037/0021-9010.90.6.1185

Lester, S. (2014). Professional competence standards and frameworks in the United Kingdom. Assessment & Evaluation in Higher Education, 39(1), 38-52. https://doi.org/10.1080/02602938.2013.792106

Mitchell, L., & Boak, G. (2009). Developing competence frameworks in UK healthcare: lessons from practice. Journal of European Industrial Training, 33(8/9), 701-717. https://doi.org/10.1108/03090590910993580

Strasser, S., London, L., & Kortenbout, E. (n.d.). Developing a Competence Framework and Evaluation Tool for Primary Care Nursing in South Africa. Department of Public Health and Primary Health Care, University of Cape Town, and Department of Nursing, University of the Western Cape, South Africa.

Ruth, D. (2006). Frameworks of managerial competence: limits, problems and suggestions. Journal of European Industrial Training, 30(3), 206-226. https://doi.org/10.1108/03090590610662959

Alldredge, M. A., & Nilan, K. J. (2000). 3M's leadership competency model: an internally developed solution. Human Resource Management, 39(2&3), 133-145.

Aram, R. (1988). Proposed National Framework for Management Development. MCI, London.

Bertoncelj, A. (2010). Managers' Competencies Framework: A Study of Conative Component. Economic Research-Ekonomska Istraživanja, 23(4), 91-101. https://doi.org/10.1080/1331677X.2010.11517435

Agostinho, M., Moniz Alves, C., Aresta, S., Borrego, F., Borlido-Santos, J., Cortez, J., Lima Costa, T., António Lopes, J., Moreira, S., Santos, J., Trindade, M., Varela, C., & Vidal, S. (2018). The interface of science: The case for a broader definition of research management. Perspectives: Policy and Practice in Higher Education, 24(1), 19–27. https://doi.org/10.1080/13603108.2018.1543215

Cimatti, B. (2016). Definition, Development, Assessment of Soft Skills and Their Role for the Quality of Organisations and Entreprises. International Journal for Quality Research, 10(1), 97–130. https://doi.org/10.18421/IJQR10.01-05

Romano, V., Del Bello, A. and Albanesi, A. (2023), "Professional Associations and Professional Development Frameworks", Kerridge, S., Poli, S. and Yang-Yoshihara, M. (Ed.) The Emerald Handbook

of Research Management and Administration Around the World, Emerald Publishing Limited, Leeds, pp. 355-372. https://doi.org/10.1108/978-1-80382-701-820231029

SARIMA. (2019). Annexure A: Professional Competency framework (PCF). https://www.sarima.co.za/wp-content/uploads/2019/02/pc_framework.pdf

Williamson, C., Dyason, K., & Jackson, J. (2020). Scaling up Professionalization of Research Management in Southern Africa. The Journal of Research Administration, 51(1), 46–72. ERIC - EJ1254043 - Scaling up Professionalization of Research Management in Southern Africa, Journal of Research Administration, 2020

Zsar, V., Koltai, L., Csite, B.; Oliveira, C., Trindade, M., Carrapato, A., Campbello, D. (2024). RM ROADMAP survey dataset and codebook. figshare. Dataset. https://doi.org/10.6084/m9.figshare.26503675.v3

Zsar, V., Koltai, L., (2024). RM ROADMAP survey – WP1 results. figshare. presentation. https://doi.org/10.6084/m9.figshare.26519527

Oxford English Dictionary Oxford English Dictionary (oed.com)

Cambridge Dictionary Cambridge Dictionary | English Dictionary, Translations & Thesaurus

Appendix 1 EU Policy References

The Treaty on the Functioning of the European Union[36] states in article 187: "*The Union may set up joint undertakings or any other structure necessary for the efficient execution of Union research, technological development and demonstration programmes.*" In May 2021, The Council of the European Commission on [Deepening the European Research Area](#) "*RECOGNISES that researchers and other research and development (R&D) personnel across the public and private sectors are at the heart of research and innovation (R&I) systems.*"

In December 2021, in the Council conclusions on the New European Research Area[37] the council recognises **"the growing need for the professionalization of science management at research performing and funding organisations, including through digital skills in order to improve their ability to participate in ERA-wide collaboration networks;"** It is now broadly recognised that Research Managers are an integral part of the Union research infrastructure and as per Article 187 the Union may set up "any other structure necessary for the efficient execution of Union research."

Furthermore, the Council of the European Commission "*NOTES the diverse and essential roles of highly skilled talents play in successful research and innovation systems across the ERA like data stewards, research (e-)infrastructure operators, research facilitators, knowledge brokers, innovation and technology transfer managers and coordinators, among others; NOTES **that these roles need to be acknowledged and supported via training and career development instruments to optimise job opportunities**; and INVITES Member States and the Commission to develop measures in support of career diversification and multiple career paths.*"[38]

In 2020, the European Commission published the plan for the New ERA, aiming to relaunch the ERA which can answer the current and future societal, ecological and economic challenges (A New ERA for Research and Innovation, 2020). The ERA Policy Agenda with 20 action points sets out voluntary ERA actions for the period 2022-2024 to achieve the ERA.

Action 17, under the title "Enhance the strategic capacity of Europe's public research-performing organisations", the so-called **Research Management Initiative aims to support specifically the RM community in Europe in four key areas:** upskilling, recognition, networking and capacity building. During 2023 and 2024, four workshops were held, each of them focusing on one of the key areas of the action providing a platform to gather information from Member State representatives and discuss the most crucial issues. Moreover, a process was also launched to create a consensus based definition for the profession of Research Managers which can ease the communication towards stakeholders inside and outside the profession, including policymakers, institution leaders, researchers, but research managers themselves.

In addition, the Commission demonstrated its commitment to supporting the recognition and professionalisation of RMAs in Europe by **issuing a call in 2021** "HORIZON-WIDERA-2021-ERA-01-20: Towards a Europe-wide training and networking scheme for research managers". **Two** Coordination and Support Action (CSA) **projects started in 2022**, RM ROADMAP (coordinated by EARMA) and its sister project CARDEA3 (coordinated by University College Cork). These two projects are involved in ERA Action 17 by channelling in their results and streamlining the actions taken in favour of the recognition of the profession.

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[36] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12012E/TXT:en:PDF
[37] [New European Research Area: Council adopts conclusions - Consilium (europa.eu)](#)
[38] https://www.era-learn.eu/news-events/news/new-pact-and-governance-structure-for-the-european-research-area-era

In December 2023, the **COUNCIL RECOMMENDATION on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe[39] (18.12.2023)** states

"Performing high-level research and innovation requires the support of other professionals. Amongst them, **research management** and research technician careers deserve proper recognition, including by way of further analysis and alignment at the level of the Union. Research management capacity should be strengthened by defining required skills and competences, developing relevant training, fostering comparability, and allowing their holders to effectively manage and support research and innovation."

It notes further that:

"Researchers, **research managers** and research technicians in the European Research Area"

Research management careers can be undertaken by researchers and other professionals to manage and support research and innovation activities. Research management careers should be adequately framed and recognised at the level of the Union, by defining relevant skills and competences, in order to strengthen research managers' professional capacity, to enable the development of relevant training, and to foster comparability.

Research managers can perform different tasks, for example:

(a) streamlining or facilitating the planning, development, management, FAIR data management, administration, monitoring, communication and valorisation of research and innovation;

(b) ensuring compliance with policy objectives, funding programme requirements, financial rules and legal regulations;

(c) improving the efficiency and effectiveness of research and innovation projects or systems;

(d) enhancing the impact of research and innovation on policy and society;

(e) supporting the design and implementation of research and innovation policies, programmes and projects."

"Employers and funders of researchers should ensure that the most stimulating research or research training environment is created which offers appropriate equipment, facilities and opportunities, including for remote collaboration over research networks, and the highest level of health and safety in line with Union, national and sectoral regulations. Funders should ensure that adequate resources are provided in support of the agreed work programme. In particular, it is important to have qualified support staff – e.g. **research managers** and administrators."

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[39] OJ:C_202301640:EN:TXT.pdf (europa.eu)

Appendix 2 The Framework Profile for Research Managers

Please note: The European Career Framework for Research Managers (RM 1 to RM 4) is a progression model framework and operates independently from the European Competency Framework RM Comp.

Profile Layout

As with the European Framework for Research Careers[40] in this framework there are four broad profiles for Research Managers, which are independent of any particular sector with the following working titles:

RM 1   First Stage Research Manager

RM 2   Recognised Research Manager

RM 3   Established Research Manager

RM 4   Senior Research Manager

This Profile Framework is "sector neutral." The descriptors apply to all Research Managers, independent of where they work in the private or public sector (i.e. companies, NGOs, research institutes, research universities, universities of applied sciences, university medical centres, local-, regional- or national authorities, funding organisations or consultancies). Regardless of any particular profession or specialisation, one can outline broad profiles that describe the different levels within the broad categorisation of Research Manager.

It is envisioned that direct entry through open competition (recruitment) can occur at any level. It is envisaged that qualifications will not be a barrier to entry into the profession.

Profile Descriptors

First Stage Research Manager (RM 1)

The term First Stage Research Manager refers to research managers in the first two years (full-time equivalent) of their research management activity whilst demonstrating the competencies and skills for successful performance in the role. The role requires a basic understanding of the research/business structures, operations, and includes responsibility for implementing and achieving results.

Recognised Research Manager (RM 2)

The term Recognised Research Manager refers to research managers with an intermediate level of experience in their research management activity whilst demonstrating competencies and skills for the successful performance in the role. The role requires a moderate understanding of overall research/business operations including responsibility for monitoring the implementation of research strategy. This has limited or informal responsibility for colleagues and / or needs to consider broader approaches or consequences through own actions rather than through others.

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[40] Towards a European Framework for Research Careers
towards_a_european_framework_for_research_careers_final.pdf (europa.eu)

Established Research Manager (RM 3)

The term Established Research Manager refers to research managers with an advanced level of experience in their research management activity whilst demonstrating competencies and skills for the successful performance in the role. The role requires strong understanding of the organisation's environment, operational plans, current strategic position and direction with strong analytical skills and the ability to advise on strategic options for the research/business. This may include formal responsibility for colleagues and their actions; and that their decisions have a wider impact.

Senior Research Manager (RM 4)

The term Senior Research Manager refers to research managers with an expert level of experience in their research management activity whilst demonstrating the competencies and skills for successful performance in the role. The role requires expert knowledge to develop strategic vision and provide unique insight to the overall direction and success of the research/organisation. This is formal responsibility for research/business areas and his / her actions and decisions have a high-level strategic impact.

For the purposes of the Framework, RM 1 and RM 2 profiles should be considered early to mid-stage research managers and RM 3 and RM 4 profiles should be considered leadership level research managers.

Benefits of this Profile Framework

A commonly understood European Profile Framework for Research Manager Careers will serve several practical purposes for different categories of users but is mainly intended to provide a reference for Research Managers and their employers. The framework could notably:

Help Research Managers

- identify job offers close to their individual profile in diverse employment sectors, including academia and industry.

- present themselves (some of their individual characteristics) in a commonly understood language.

- understand what - in general terms - is expected of them throughout their career.

- benchmark with other RM's and gain directions for self-development.

- networking and training.

Help Employers of Research Managers

- define job profiles, identify candidates close to the job profile on offer ensuring the best candidate for each position.

- identify candidates from different employment sectors (academia, industry etc.).

- set priorities for staff training.

- organise career guidance.

- inform their overall institutional human resources strategies, for instance as regards the portfolio management of research management staff.

In addition, the framework could serve to:

Help public authorities

- inform strategies to train research managers to meet their regional and national R&D targets and to promote attractive employment conditions.

- make international comparisons and benchmark their research manager population.

Help Society

- appreciate research manager capacities and their role.

Help the European Research Area

- promote more mobility across borders and employment sectors, by enhancing comparability and transparency on career opportunities, thus also helping to:

    - better attract highly skilled talent from third countries and, ultimately,

    - contribute to the establishment of a single market for knowledge, research, and innovation.

Actors using the Profile Framework.

The intention of having a Research Manager Profile Framework is to support the research community: research managers, researchers, their employers (universities, research institutes and companies), funders and public authorities. These actors can voluntarily use the framework as they see appropriate within their own institutional or national context. There is no central assessment mechanism for research managers and there are no central rules on how to apply profiles.

At European level there may be an exchange of good practice, resulting in non-binding guidance for interested parties. The Commission could introduce the Framework in the future as a helpful categorisation of research manager job opportunities. This would create an opportunity for employers and funders to start using the profile framework when publishing their job and funding adverts on a European scale. Commission programmes could start using the profile framework as a consistent categorisation for different funding instruments.

HR EXCELLENCE IN RESEARCH

Appendix 3 Competence Descriptions[41]

Competency Areas	Competences	Descriptions
Cognitive Abilities/Personal Attributes	Creativity	Develop several ideas and opportunities to create value, including better solutions to existing and new challenges. Explore and experiment with innovative approaches. Combine knowledge and resources to achieve valuable effects.
	Critical Thinking	Exercise critical judgement and thinking, develop own assumptions, and establish a way of working based on critical thinking.
	Cultural Sensitivity	Awareness and respect for diverse cultural perspectives, values, and norms. Fostering an inclusive work environment, acknowledging the impact of cultural nuances on research design and implementation.
	Problem Solving	Develop and implement solutions to practical, operational or conceptual problems which arise in the execution of work in a wide range of contexts.
	Strategic Planning	Develop a vision to turn ideas into action. Obtain and synthesize information to identify and explore trends, opportunities, threats (also based on intuition and creativity) to achieve a long-term goal and to thrive in a competitive, changing environment. Identify alternative paths to turn ideas into action, select the most appropriate approach and adjust where necessary.
	Decision Making	Effective decision-making in this context is crucial for maintaining project momentum, achieving objectives, and navigating the complexities inherent in the research process.

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[41] Numerous websites, Researcher Comp and ESCO/ISCO were employed to aid in the refinement of the competency descriptions

Competency Areas	Competences	Descriptions
Cognitive Abilities/Personal Attributes	Stress Management	Stress management involves developing coping mechanisms and strategies, prioritizing tasks, and maintaining a healthy work-life balance.
	Prioritisation, Time Management and Multitasking	Involves identifying the most critical tasks and focusing on them first. This skill helps individuals focus on what is most crucial, manage their time and resources efficiently to achieve their goals.
	Adaptability and Professional Flexibility	Involves adjusting to new situations, technologies, and workflows. Adaptable individuals can thrive in dynamic environments, handle unexpected challenges, and maintain a competitive edge.
	Conflict Management	The practice of handling or resolving disputes and disagreements in a constructive manner. It involves identifying and addressing the underlying issues, employing strategies such as negotiation, mediation, and problem-solving to achieve mutually acceptable solutions.
	Reliability and Trustfulness	Involves being dependable and trustworthy in one's work. Reliable individuals consistently deliver high-quality results, meet deadlines, and maintain a strong reputation. It involves demonstrating honesty, integrity, and transparency in actions and communications. Trustfulness is a foundational element in building and maintaining relationships, whether personal or professional.

Competency Areas	Competences	Descriptions
Technical Proficiency	Research Data Collection and Collation	Implement (and develop) robust data collection methodologies, coordinate data acquisition efforts among team members, and oversee the organised collation of diverse datasets leading to evidence-based decision-making.
	Data and Statistical Analysis	Apply rigorous statistical methods to ensure the accuracy and reliability of data and its interpretation.
	Legal Skills	A nuanced understanding of legal concepts, ethical considerations, and a keen awareness of the legal landscape as it pertains to the research ecosystem.
	IT for Research Activities	Leveraging Information Technology (IT) and overseeing the integration of advanced technologies to enhance data management, analysis, security and collaboration. Implementation of robust IT infrastructure, such as data storage solutions, analytical tools, AI and collaborative platforms, to optimise research processes.
	Artificial Intelligence	Ability to leverage AI technologies and algorithms to optimize research processes, analyze complex datasets, and derive meaningful insights for informed decision-making.
Subject Matter Expertise/Specialised Knowledge	Pre-Award	Identify and disseminate funding opportunities; develop and implement funding optimisation strategies; support the writing of funding proposals, including alignment with stakeholder requirements, budgeting and costing and review; coordination of approvals and submissions
	Post- Award	Negotiate contracts, manages amendments, as well as the internal setup of the project, the consortium and communication within, liaises with funders, provides administrative support, progress management, accounting, carries out project evaluation, funder reporting, legal advice.
	Managing Equality, Diversity and Inclusion	Promote diversity in research teams, value varied perspectives, and ensure equal opportunities for all members. Champion EDI

Competency Areas	Competences	Descriptions
	(Including Gender, Disability and Racism)	principles and contribute to a more inclusive research culture.
	Data Stewardship	Responsible and ethical handling of research data throughout its lifecycle. Robust data management practices, data security, compliance with privacy regulations, and transparent documentation.
	Technology Transfer	Facilitate the successful transition of research innovations from the academic, research or laboratory setting to practical applications in the market. Identify commercialisation opportunities, establish collaborations with industry partners, and navigate the legal and regulatory aspects of transferring technologies leading to societal impact and the economic value of research outcomes.
	HR Research – Employment, Training and Terms & Conditions.	Ensure the effective functioning of the HR aspects supporting research teams groups and/or organisations. This may include recruitment contract administration, salary administration, talent acquisition, performance management, training and development and fostering a positive work environment through initiatives aligning with HR Excellence in Research and others. Align organisational and research goals, optimise individual and research team dynamics, and support the professional development of researchers
Subject Matter Expertise/Specialised Knowledge	Research Finance	Oversee budgetary aspects, financial planning, and compliance within research projects and or at organisational level. Effective allocation of funds, monitor expenditure, and adhere to financial regulations, funding guidelines, having overall fiscal responsibility within research projects at local and or organisational level.
	Clinical Research Management	Oversee and coordinate clinical research activities within a healthcare or pharmaceutical setting. Ensure the successful implementation of research protocols, managing study budgets, and maintaining compliance with regulatory guidelines. Facilitate communication with stakeholders

Competency Areas	Competences	Descriptions
		and contribute to the ethical and efficient execution of clinical trials.
	Research Ethics and Integrity	Ensure that all research activities adhere to ethical standards, protecting the rights and well-being of participants. Promote transparency, honesty, and accountability, fostering a culture of integrity within the research team.
	Research Infrastructure Management	Responsible for security and risk management, plans research infrastructure & develops sustainable funding model, infrastructure and resource management, as well as business development and innovation in research infrastructure.
	Research Strategy and Policy Development	Facilitate and support the development, implementation, monitoring and evaluation of research and/or knowledge valorisation policies and strategies
	Research Support Service Delivery	Organise, structure, manage, monitor and review institutional research support service(s)
Research Project Oversight	Research Project Management	Manage and plan various resources, such as human resources, budget, deadline, results, and quality necessary for a specific project and for a project portfolio and monitor the progress in order to achieve a specific goal within a set time and budget using project management tools.
	Managing Research Project Deliverables	Ensure that project milestones and outcomes align with established goals. Establish clear deliverables, monitor progress, and address any deviations from the project plan promptly.
	Monitoring and Evaluation Frameworks and Indicators	Administering systematic processes to assess the progress and impact of research projects and initiatives. Define key performance indicators, establish data collection methods, and implement evaluation frameworks to measure project success. Ensure the effective tracking of research outcomes, facilitating

Competency Areas	Competences	Descriptions
		data-driven decision-making and continuous improvement in the research process.
	Establishing Research Project Plans	Outline project objectives, timelines, and resource allocation. Collaborate with research team members to define clear goals, delineate tasks, and establish milestones. Develop comprehensive project plans to provide a roadmap for successful execution of the project. Facilitate effective coordination among research team members.
Stakeholder Engagement	Engagement with Key Stakeholders	Build and sustain collaborative relationships with influential partners, including academic institutions, industry leaders, policymakers, funders, industry and community representatives.
	Building Trust within Relevant Research and Strategic Partnerships	Build trust within relevant research and strategic partnerships for successful collaboration. Deliver on commitments, foster transparent communication, and prioritise the mutual interests of partners.
	Diplomacy, Negotiation, and Mediation Skills	Exchange ideas while analysing issues and interests at stake, enabling opposing sides to resolve disputes and reach an agreement, or making decisions to resolve disputes. Employ tactful communication, adept negotiation strategies, and effective mediation to reconcile differing perspectives and align interests among research team members or stakeholders.
	Handling Difficult Conversations and Partnerships	Navigate challenging discussions with tact, empathy, and problem-solving skills. Address conflicts, manage expectations, and seek resolutions to maintain positive relationships within the research team/ organisation and or external partners.
	Business and Commercial Liaison Management	Facilitate collaborations between the research team and industry partners or commercial entities. Navigate the intersection of academia and business, identifying opportunities for technology transfer, licensing, or joint ventures.

Competency Areas	Competences	Descriptions
Stakeholder Engagement	Research Outreach	Develop strategies to disseminate research findings and engage with diverse stakeholders. Create outreach plans that encompass effective communication channels, collaborations with external partners, and the dissemination of research outcomes to relevant audiences. Foster meaningful connections and promote the visibility of research initiatives thereby contributing to the broader impact and relevance of the research within the research community and beyond.
	Academic Community Relationship Collaboration	Building and maintaining strong relationships with academic institutions, scholars, and researchers. Facilitate partnerships, joint initiatives, and knowledge exchange, to enhance the research ecosystem. Contribute to a collaborative environment, fostering innovation, resource sharing, and the advancement of research agendas within and beyond the academic community.
	Community Engagement with Research	Establish meaningful connections with diverse communities affected by or interested in the research. Develop strategies for inclusive communication, solicit community input, and ensure the research aligns with community needs and values. Foster open dialogue and collaboration, contribute to the ethical and socially impactful conduct of research, promote community participation and the translation of research outcomes into tangible benefits for the broader community

Competency Areas	Competences	Descriptions
Line Management and Talent Development	People Management and Managing Team Performance	Effectively leading and coordinating a team, providing guidance, and fostering a collaborative work environment to ensure the successful execution of research projects. Includes setting clear expectations, monitoring progress, offering constructive feedback, and implementing strategies to enhance individual and collective productivity within the context of the research objectives.
	Team Building	Cultivating a collaborative and high-performing research team by fostering a positive work culture, aligning team members with common goals, and recognising and utilising individual strengths.
	Change Management	Navigating and facilitating transitions within the research environment/organisation. Effectively communicate changes, address concerns, and support the research team/organisation in adapting to new methodologies or project directions.
	Coaching Skills	Guide and develop the professional capabilities of research team members and or research leadership.
	Research Talent Identification and Development	Recognise and nurture the potential of individual researchers. Implement strategies for identifying key skills, provide targeted training, and create opportunities for professional growth within the team/organisation.

Competency Areas	Competences	Descriptions
Communication	Building and Maintaining Relationships with Research Funders, Partners or Other Stakeholders	Cultivate strong connections by ensuring clear communication, delivering on commitments, and understanding the needs of collaborators. Foster trust, secure ongoing support, and contribute to a collaborative research environment.
	Designing and Implementing Research Communication Plans	Design and implement research communication plans by creating strategies to effectively disseminate research findings. Identify target audiences, select appropriate communication channels, and tailor messaging to maximize impact. Create clear and engaging communication, to enhance the visibility of research outcomes, foster collaboration, and contribute to the broader understanding and application of research within academic, research, professional, and public/private spheres.
	Media Liaison and Associated Activities	Establish and manage relationships with the media to promote research activities and results. Engage with journalists, facilitate interviews, and strategically communicate research findings to the public. Contribute to the dissemination of accurate information, enhance the visibility of research projects, and foster a positive public perception of the research group, institution, or organisation.
	Preparing and Writing Reports (including Evaluation Reports and Funder Reports)	Synthesize complex research findings into clear and compelling narratives. Ensure reports align with guidelines, effectively communicate project outcomes, and demonstrate the impact of research initiatives.
	Social Media Engagement	Leverage digital platforms to disseminate research findings, engage with the public, and build a broader audience. Develop and implement strategies for effective communication on social media, including creating compelling content, participating in relevant discussions, and fostering connections with diverse stakeholders.

Appendix 4 Role Categorisation within Research Management

	Cognitive skills relevant for RMs	RM related personal attributes	RM related hard skills, i.e. technical proficiency	Specialisation or role related skills, i.e. subject matter expertise
PRE-AWARD	• Written communication • Problem solving • Flexibility • Openness • Oral communication	• Prioritisation • Adaptability • Time management • Reliability • Trustfulness	• Knowledge of rules and regulations of funders • Language skills • IT skills • Ethics, integrity • Understand research and the R&I ecosystem	• Administrative skills • Appreciating values and understanding interests • Building and maintaining networks • Financial skills • Understanding politics and policy cycles • **Basic business and commercial knowledge** • **Understanding relevant field of science** • **Understand the impact and the value of projects** • **Legal skills**
POST-AWARD	• Written communication • Oral communication • Interpersonal skills • Intrapersonal skills • Flexibility	• Prioritisation • Time management • Information management • Efficiency and effectiveness • Reliability, trustfulness •	• IT skills • Ethics, integrity • Knowledge of rules and regulations of funders • Understand research and the R&I ecosystem • Managing resources	• Administrative skills • Financial skills • Appreciating values and understanding interests • Building and maintaining networks • Legal and regulatory skills • **Understand project management frameworks and practices** • **Communication, dissemination and exploitation of project results to relevant stakeholders**
RESEARCH DATA, RESEARCH INFORMATION, INTELLECTUAL PROPERTY MANAGEMENT INCL. DATA STEWARDSHIP	• Assertiveness • Openness • Flexibility • Interpersonal skills • Oral communication	• Adaptability • Negotiation • Time management • Conflict management • Reliability, trustfulness •	• Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Understanding institutional governance • Management skills • Ethics, integrity	• Administrative skills • Legal and regulatory skills • Building and maintaining networks • Understanding politics and policy cycles • Appreciating values and understanding interests • **IPR knowledge and management** • **Awareness of conflict of interest, data protection policies & ethics** • **Data management and open science**

	Cognitive skills relevant for RMs	RM related personal attributes	RM related hard skills, i.e. technical proficiency	Specialisation or role related skills, i.e. subject matter expertise
				• **Outreach and communication**
KNOWLEDGE VALORISATION/ TECHNOLOGY TRANSFER	• Oral communication • Problem solving • Interpersonal skills • Critical thinking • Assertiveness	• Prioritisation • Planning, strategic thinking • Time management • Information management • Adaptability	• Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Language skills • Management skills • Understanding institutional governance	• Building and maintaining networks • Administrative skills • Stakeholder engagement and management • Financial skills • Legal and regulatory skills • **Translate science to business and business to academics, knowledge valorisation** • **Understand TT models and channels, innovation management** • **Evaluating the economic value of research results and impact assessment** • **Data management, IPR management**
MANAGEMENT OF HR RESEARCH, INCL. TRAINING, RESEARCHER DEVELOPMENT, POSTGRADUATE RESEARCHERS	• Assertiveness • Oral communication • Written communication • Openness • Flexibility	• Adaptability • Time management • Reliability, trustfulness • Working in teams • Efficiency and effectiveness •	• Language skills • Knowledge of rules and regulations of funders • Ethics, integrity • Understand research and the R&I ecosystem • IT skills	• Administrative skills • Building and maintaining networks • Appreciating values and understanding interests • Understanding politics and policy cycles • Cross-cutting issues in HEU • **Teaching skills and learning techniques** • **Mentoring and coaching skills** • **Understanding the academic environment** • **Evaluation and assessment** • **Strategic foresight**
RESEARCH INFRASTRUCTURE MANAGEMENT	• Flexibility • Openness • Written communication skills • Multitasking • Cultural and diversity skills	• Teamwork • Stress management • Diplomatic skills • Conflict management • Time management	• Understand research and the R&I ecosystem • Understanding institutional governance • IT skills • Language skills • Ethics, integrity	• Stakeholder engagement and management • Building and maintaining networks • Administrative skills • Understanding politics and policy cycles • Legal and regulatory skills • **Financial skills** • **Facility management** • **Development of policies and procedures** • **Logistics and procurement management**

	Cognitive skills relevant for RMs	RM related personal attributes	RM related hard skills, i.e. technical proficiency	Specialisation or role related skills, i.e. subject matter expertise
				• **Data and resources management**
RESEARCH ETHICS AND INTEGRITY	• Written communication • Multitasking • Interpersonal skills • Cultural and diversity skills • Openness	• Reliability, trustfulness • Adaptability • Time management • Efficiency and effectiveness • Planning, strategic thinking	• Ethics, integrity • Language skills • Knowledge of rules and regulations of funders • Management skills • Understand research and the R&I ecosystem	• Administrative skills • Appreciating values and understanding interests • Building and maintaining networks • Stakeholder engagement and management • Legal and regulatory skills • **Understanding GDPR and data management, open science principles** • **IPR management** • **Ethics and integrity** • **Training skills**
RESEARCH STRATEGY AND POLICY DEVELOPMENT	• Written communication • Oral communication • Problem solving • Self-motivation, proactiveness, initiation • Critical thinking	• Prioritisation • Time management • Efficiency and effectiveness • Reliability, trustfulness • Planning, strategic thinking	• Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Understanding institutional governance • Ethics, integrity • Language skills	• Appreciating values and understanding interests • Understanding politics and policy cycles • Building and maintaining networks • Stakeholder engagement and management • Administrative skills • **Data analysis and interpretation** • **Financial skills** • **Strategy development, setting and monitoring KPIs** • **Lobbying** • **Strategic foresight**
RESEARCH SUPPORT DELIVERY	• Assertiveness • Written communication skills • Interpersonal skills • Intrapersonal skills • Oral communication skills	• Time management • Prioritisation • Adaptability • Reliability, trustfulness • Efficiency and effectiveness	• Knowledge of rules and regulations of funders • Language skills • IT skills • Understanding institutional governance • Managing resources	• Administrative skills • Appreciating values and understanding interests • Financial skills • Understanding politics and policy cycles • Building and maintaining networks • **Knowledge of research methodologies**

	Cognitive skills relevant for RMs	RM related personal attributes	RM related hard skills, i.e. technical proficiency	Specialisation or role related skills, i.e. subject matter expertise
INTERNATIONAL COLLABORATION, INSTITUTION BRANDING	• Intrapersonal skills • Flexibility • Assertiveness • Openness • Critical thinking	• Reliability, trustfulness • Stress management • Time management • Resilience • Adaptability	• IT skills • Knowledge of rules and regulations of funders • Understand research and the R&I ecosystem • Understanding institutional governance • Ethics, integrity	• Appreciating values and understanding interests • Lobbying • Building and maintaining networks • Administrative skills • Understanding politics and policy cycles • **Legal and regulatory skills** • **Marketing skills** • **Understanding GDPR and data management** • **Strategy and business insight**
COLLABORATION WITH INDUSTRY	• Cultural and diversity skills • Problem solving • Oral communication • Assertiveness • Openness	• Time management • Prioritisation • Planning, strategic thinking • Stress management • Working in teams	• Understanding institutional governance • Knowledge of rules and regulations of funders • Management skills • Language skills • Managing resources	• Building and maintaining networks • Administrative skills • Appreciating values and understanding interests • Nurturing innovation • Stakeholder engagement and management • **Understand TT models and channels** • **Evaluating the economic value of research results and knowledge valorisation** • **Legal and regulatory skills** • **IPR knowledge**
SCIENCE COMMUNICATION & IMPACT	• Flexibility • Oral communication • Interpersonal skills • Self-motivation, proactiveness, initiation • Problem solving	• Adaptability • Prioritisation • Time management • Reliability, trustfulness • Efficiency and effectiveness	• Language skills • IT skills • Understand research and the R&I ecosystem • Knowledge of rules and regulations of funders • Ethics, integrity •	• Building and maintaining networks • Appreciating values and understanding interests • Understanding politics and policy cycles • Stakeholder engagement and management • Administrative skills • **Understanding citizens & science** • **Strategic and business** • **Publishing and open access skills** • **Communication of the project results to relevant stakeholders and the public** • **Interdisciplinary approach**