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RM COMP

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



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Introduction

Policy Context

In the Treaty on the Functioning of the European Union and the policy developments that followed (as indicated below), a strong argument is posed in support of acknowledging and developing the role of research managers as essential to European Union research. The evolving policy narrative indicates a progression in EU policy from acknowledging the importance of various roles within the research and innovation ecosystems to clearly acknowledging the specialised role of research managers. The policy development clearly acknowledges a commitment to defining, recognising, and supporting these diverse roles within the European Research Area, with a specific focus on research management as a key factor for successful research and innovation activities.

It all begins with the Treaty on the Functioning of the European Union, specifically Article 187. This forward-looking article of the treaty enables the European Union to create structures necessary for the efficient implementation of research and subsequent developments, and the programs that accompany this development. The inclusion of the term "any other structure" provides the possibility to acknowledge and develop specialised roles, including that of research manager, to facilitate the effective implementation of European Union research initiatives.

The narrative takes a leap forward in May 2021 with a pronounced recognition that highlights the significance of researchers and R&D personnel working within the ERA research and innovation context. While this underlines the significance of personnel within the research ecosystem, it does not explicitly identify the unique role played by research managers.

A notable shift takes place in December 2021, when 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.

The Council further develops this policy by noting the "diverse and essential roles of highly skilled talents in research and innovation systems" and roles such as data stewards, research infrastructure operators, and, innovation and technology transfer managers and coordinators, are included amongst others. The call to Member States to support these roles through training and career development instruments reflects an acknowledgement of the contributions made by different "science management" professionals within the European Research Area.

Then in December 2023 the narrative takes an important leap with the Council Recommendation on a European framework. 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 recommendation serves as a significant indicator which is explicitly focused on acknowledging and developing the role of research manager. The recommendation not only recognises the importance of research management but also provides a broad description of the tasks that research managers can perform. These tasks encompass "streamlining, planning, ensuring compliance with various requirements, improving project efficiency, enhancing the impact of research on policy and society, and supporting the design and implementation of research and innovation policies, programmes and projects". This definition confirms the role of

research managers within EU policy and describes them as versatile enablers to the success of research and innovation within the European Research Area.

In conclusion, the policy narrative describes a clear evolution in EU policy, progressing from a general acknowledgment of the importance of research personnel to its actual recognition. 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.

EU Policy

The Treaty on the Functioning of the European Union¹ 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 Area² 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.”³*

In December 2023, the **COUNCIL RECOMMENDATION on a European framework to attract and retain research, innovation and entrepreneurial talents in Europe⁴ (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:

¹ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:12012E/TXT:en:PDF>

² [New European Research Area: Council adopts conclusions - Consilium \(europa.eu\)](#)

³ <https://www.era-learn.eu/news-events/news/new-pact-and-governance-structure-for-the-european-research-area-era>

⁴ [OJ:C_202301640:EN:TXT.pdf \(europa.eu\)](#)

“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.”

Challenges related to Research Management Careers

Currently there are no European Union structures for Research Managers and Europe lacks an acknowledged Research Manager Career profile with accompanying competency, accreditation and training architecture. Even though there are professionals performing this role throughout Europe it is only since 2023 that the role has been named in EU policy. According to a recent survey ([CARDEA](#)) the vast majority of Research Managers are female which is interesting to consider in light of equality, diversity and inclusion needs. It is noted that “the researchers’ labour market is fragmented” and “that it can be very difficult to move between sectors.” Evidence suggests (inclusive of the CARDEA Survey both qualitative and quantitative) that Research Managers transition from Post-Doctoral (Researcher) Roles to Research Manager Roles within the European Research Area enhancing Europe’s Research Agenda. Further evidence of this type of career mobility is provided by the RAAAP-3 Survey⁵ results which suggest that 44.5% of respondents in the EU indicated that they moved from a research career to a Research Manager career.⁶ The importance of Research Managers in the institutional and policy knowledge space plus continuity of expertise cannot be overestimated within the current context of

⁵ <https://inorms.net/activities/raaap-taskforce/raaap-survey-2022/>

⁶ Based on responses 4 or 5 on the 5-point Likert type scale

the “suboptimal balance between institutional and project-based funding led to short-term, project-based contracts that do not give a long-term perspective for researchers.”⁷

Research Manager Career architecture is emerging at sector-specific, national and institutional level in an ad hoc fashion answering specific institutional and research needs. 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 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 entry of highly educated professionals and researchers into research management careers has resulted in positive synergies, showcasing the flexibility of research managers to navigate interdisciplinary boundaries. They play a crucial role in connecting researchers, funding agencies, policymakers, and the private sector. However, challenges such as a lack of promotional opportunities, career progression architecture, uncompetitive salaries, busy work schedules, and a lack of professional esteem persist. Research managers often feel like outsiders⁸ within their organisations, with limited involvement in decision-making processes. The absence of formal recognition and professional development opportunities impacts their job satisfaction and long-term career outlook. The lack of commitment from organisations to provide training exacerbates the situation, with many research managers seeking (but unable to find) accessible and free accreditation for shorter programs. The intertwined issues of professional development and the absence of promotional schemes make career progression challenging, particularly for those on temporary contracts, leading to a sense of being stuck in their careers.

CARDEA revealed that one of the main challenges for Research Managers within their work environments is the lack of a definition of the role. Research management as a role does not correspond to a defined job title in many countries, especially EU member states, and is not recognised by most national legislation or funded by national funding agencies. Research management is an umbrella term that describes a wide range of roles and levels of responsibility, with some overlapping with research activities. Most Research Managers surveyed by CARDEA would describe their job as the provision of specialised professional services to a range of projects. In conclusion, the absence of a clear definition for the role of Research Manager poses a significant challenge, as the profession lacks standardised recognition across countries, particularly within EU member states, and is not established in national legislation or funding structures.

Current Context

The results of the CARDEA Survey [[Knowledge Space | University College Cork \(ucc.ie\)](#)] show that Research Managers are a diverse group of professionals sharing several characteristics. With an average age of 43 years, Research Managers are mostly women, speak two languages and live and work in the country they were born in. Research Managers are a very experienced cohort of professionals, with half of them having at least six or ten years of work experience. These professionals

⁷ <https://www.era-learn.eu/news-events/news/new-pact-and-governance-structure-for-the-european-research-area-era>

⁸ CARDEA Survey DOI [Knowledge Space | University College Cork \(ucc.ie\)](#)

are also 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 high level of education for research management roles. Moreover, most of these professionals do not have a specific research management qualification, meaning that their educational background is not strictly related to their job. These results should be contextualised in the increasingly shrinking options available for Researchers in the academic job market.⁹ As permanent jobs in academia have become the exception rather than the norm, or increasingly less secure, PhDs and post-doctoral Researchers have been looking for an alternative career path. They found it in Research Management.

Most Research Managers are employed full-time and are required to complete involuntary overtime hours with no extra compensation. The average salary amounts to €37,600, with more than half earning less than €40,000 per annum. The average salary for Research Managers is lower than the average salary in many European member states.¹⁰ Moreover, comparisons with researcher salary scales reveal that Research Managers do not earn what they should according to their educational level and work experience. The lack of bespoke salary scales for many Research Managers is a further issue. Where these scales do exist, they are mostly linked to administrative scales that, do not reflect the highly skilled profiles of Research Managers within the ERA.

Scope of this Framework

This Framework presents the development of a European Competence Framework for Research Managers as identified by the CARDEA survey to develop Research Manager skills, desk-based research and Action 17 working groups. It also represents feedback from an online session dated 2/06/2022 entitled ***The Role of Research Manager in ERA - challenges and issues faced*** and the [CARDEA Academy Event](#) on Monday 25th September 2023 that had over 160 participants from all over the ERA. It is anticipated that in collaboration with RM Roadmap that feedback from the Ambassador programme participants will add to the body of knowledge. The competence framework should be viewed in tandem with the [CARDEA RM Framework RM 1 to RM 4](#) at this link.



⁹ [Knowledge ecosystems in the new ERA - Publications Office of the EU \(europa.eu\)](#)

¹⁰ [Cardea Report Summary FINAL Discl.pdf \(ucc.ie\)](#)

Competences for Research Managers in Competence Frameworks

This Competence Framework results from the work of the Horizon Europe funded project CARDEA. The project was funded under Action 17 of the new ERA. Action 17¹¹ “ENHANCE THE STRATEGIC CAPACITY OF EUROPE’S PUBLIC RESEARCH PERFORMING ORGANISATIONS” which notes that “Science management can take many shapes: research policy advisers, research managers, financial support staff, data stewards, data analysts, specialised research infrastructure operators, knowledge transfer officers or knowledge brokers, business developers, innovation managers, etc. The Science Management Initiative aims at improving training and skills development of science management staff. It also aims to develop better R&I management capacity and guidance for researchers and innovators across the entire ERA, including laggard regions and research organisations, as well as pave the way towards institutional acknowledgement of the R&I management profession.” It is through this action that a competence framework has been developed for Europe’s Research Managers.

Existing Competence Frameworks and Tool Kits

Competence frameworks¹² designed for research managers are varied, reflecting the diverse nature of the role and its responsibilities. These frameworks provide valuable guidance in describing the skill sets and competences 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.

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 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.

¹¹ [ec_rtd_era-policy-agenda-2021.pdf \(europa.eu\)](#)

¹² [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](#)

Aims of developing a European Competence Framework for Research Managers

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

- An interoperable career framework will 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.
- Clustering competencies into a manageable framework makes the framework user-friendly, allowing Research Managers to easily identify and address specific skill set needs based on their career stage.
- An adaptable Competence Framework will provide Research Managers and employers of research managers with a basis to enable career training and development.
- 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 member states, enhancing collaboration and communication within the research community.
- A well-defined Competence Framework serves 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.

Key components of the CARDEA Research Manager Competency Framework

Drawing inspiration from the structure of ResearchComp¹³, The Digital Competence Framework for Citizens (DigComp)¹⁴ and the Competence frameworks for policymakers and researchers¹⁵ the Research Manager Competency Framework is designed to align with the overarching principles and structures articulated in these documents and frameworks. Many other competency frameworks were reviewed, and a list of these will be included in the bibliography.

The CARDEA Research Manager Competency Framework has 3 main areas:

- 8 competence areas:
 - i. Cognitive Abilities/Transversal Skills
 - ii. Technical Proficiency
 - iii. Subject Matter Expertise/Specialised Knowledge
 - iv. Research Project Oversight
 - v. Community Engagement
 - vi. Line Management and Talent Development
 - vii. Communication
 - viii. Relationship Management
- 42 competencies

¹³ [ResearchComp: The European Competence Framework for Researchers - European Commission \(europa.eu\)](#)

¹⁴ [DigComp 2.2 update: The Digital Competence Framework for Citizens | Digital Skills & Jobs Platform \(europa.eu\)](#)

¹⁵ [Competence frameworks for policymakers and researchers | Knowledge for policy \(europa.eu\)](#)

- 672 learning outcomes along 4 proficiency levels (foundational, intermediate, advanced, expert)

Each competency¹⁶ 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 8 competency areas. However, Researcher Managers should develop their skills in all 8 competency areas where possible.

Examples of research manager competencies as per CARDEA¹⁷ are not intended to be exhaustive but serve as an indication of the types of competencies held by Research Managers across all sectors. Each competency level indicator reflects the variance in complexity, scope, and responsibility across the roles RM1 to RM4.

¹⁶ [Competence & Competency Frameworks | Factsheets | CIPD](#) and [Civil Service competency framework - GOV.UK \(www.gov.uk\)](#)

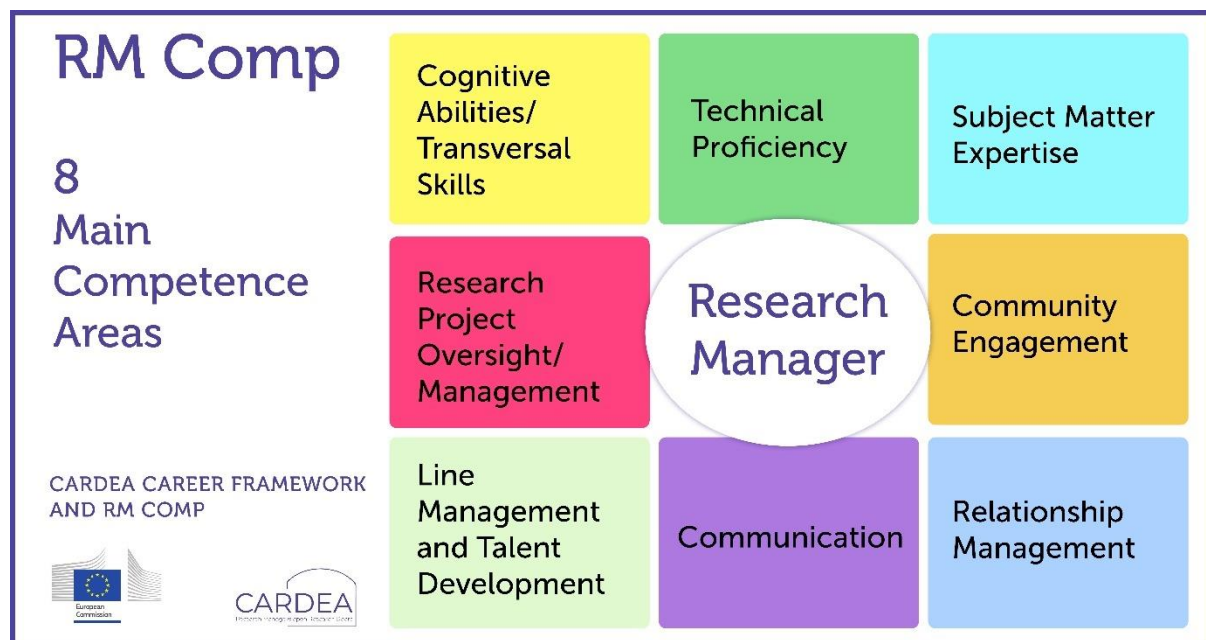
¹⁷ [Cardea \(zenodo.org\)](#)

Research Manager Competence Areas¹⁸

Core competencies are those capabilities that are important across all levels and within the areas of RM1 to RM4 roles. The importance of core competencies may vary according to individual RM job duties and requirements within sectors. The core competencies for RM1 to RM4 as identified by the CARDEA Survey are indicated below.

The following competence areas for Research Manager Roles have been identified through the CARDEA Survey and the Ad hoc Action 17 Working Group in Budapest plus other events mentioned above under Scope of this Report.

1. Cognitive Abilities/Transversal Skills
2. Technical Proficiency
3. Subject Matter Expertise/Specialised Knowledge
4. Research Project Management/Oversight
5. Community Engagement
6. Line Management and Talent Development
7. Communication
8. Relationship Management



¹⁸ CARDEA Data Set [Cardea \(zenodo.org\)](https://zenodo.org)

Competency Diagram



The diagram depicted above describes the competences encompassed within each core competency area. While the competences are numbered, it's crucial to note that each holds equal significance. This diagram serves as a foundational reference for Research Managers and stakeholders, providing a starting point to tailor their approaches according to their specific needs.

How to use the RM Competency Framework

As the framework is inspired by ResearchComp¹⁹, The Digital Competence Framework for Citizens (DigComp)²⁰ and the Competence frameworks for policymakers and researchers²¹ the Research Manager Competency Framework is using a similar structure for the four proficiency levels. 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. Each proficiency level²² 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.^{23,24}

Foundational

Foundational level represents the starting point or the basic level of proficiency in a competency. At this level, individuals possess fundamental knowledge and skills related to the competency but may require guidance and supervision to perform tasks effectively. They are likely to have limited practical experience in applying the competency and may still be developing their abilities.

¹⁹ [ResearchComp: The European Competence Framework for Researchers - European Commission \(europa.eu\)](https://ec.europa.eu/research-comb/)

²⁰ [DigComp 2.2 update: The Digital Competence Framework for Citizens | Digital Skills & Jobs Platform \(europa.eu\)](https://ec.europa.eu/digital-skills/)

²¹ [Competence frameworks for policymakers and researchers | Knowledge for policy \(europa.eu\)](https://ec.europa.eu/knowledge4policy/)

²² [How to List Proficiency on Your Resume \(With Tips\) | Indeed.com Canada](https://www.indeed.com/canada/how-to-list-proficiency-on-your-resume/)

²³ [competency_framework_en.pdf \(oecd.org\)](https://www.oecd.org/competency-framework-en.pdf)

²⁴ [Mep_interieur \(oecd.org\)](https://www.oecd.org/mep-interieur/)

Intermediate

Intermediate level denotes a moderate level of proficiency in a competency. At this stage, individuals have acquired a more comprehensive understanding and practical experience in applying the competency. They can work independently and handle tasks of moderate complexity but may still seek guidance or support for more challenging aspects.

Advanced

Advanced level represents a high level of proficiency and expertise in a competency. Individuals at this stage have demonstrated significant mastery of the competency, possessing a deep understanding and substantial experience. They can handle complex tasks with confidence and may also be capable of guiding and mentoring others in the competency area.

Expert

Expert level represents the highest level of proficiency in a competency. Individuals at this stage are considered masters in the field and possess exceptional knowledge, skills, and experience. They can handle the most intricate and challenging tasks with ease and are often sought after for their expertise and leadership in the competency area. Additionally, experts can innovate, develop new approaches, and contribute significantly to advancing the field.

Context

The link between the four proficiency levels and the various phases in a research management career, (e.g. RM1 to RM4), do exist, but it is not an absolute rule. Users have the flexibility to adapt the progression model according to their organisation's policies and practice. It is within their discretion to determine the proficiency level deemed suitable for both early to mid-stage and leadership level research managers based on their specific organisational needs. Direct entry through open competition can occur at any level. Each proficiency level 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.²⁵²⁶

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.

Progression across levels for the various competences may be the result of:

- dedicated training courses
- on-the-job-training
- peer-to-peer learning
- coaching
- mentoring

²⁵ [competency_framework_en.pdf \(oecd.org\)](#)

²⁶ [Mep_interieur \(oecd.org\)](#)

This Framework serves as an empowering tool applicable at both organisational and individual levels, fulfilling various functions such as²⁷:

1. Recognising the essential competences required in research manager 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.
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.

Competencies as per CARDEA

Cognitive Abilities/Transversal Skills²⁸

In the context of the role of research manager, cognitive abilities generally refer to a set of transferable skills that are relevant across various tasks and situations. These skills are often considered essential for effective leadership, management, and collaboration in diverse and dynamic environments, including research. Also known as transversal skills, they contribute to overall professional success and adaptability.

Examples of Cognitive Abilities included but not limited to:

- Creativity
- Critical thinking
- Cultural Sensitivity
- Professional Flexibility
- Problem Solving
- Strategic Planning
- Decision Making

²⁷ [ResearchComp: The European Competence Framework for Researchers - European Commission \(europa.eu\)](#)

²⁸ [Transversal skills: what are they and why are they so important? : Skills and Education Group](#)

Technical Proficiency²⁹

In the context of the role of research manager, technical proficiency refers to the proficiency and expertise in utilising specialised tools, methods, and technologies relevant to the research field/area/organisation. Individuals with technical proficiency can effectively solve complex problems within that technical context.

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

- Research data collection and collation
- Data and statistical analysis
- Legal Skills
- IT skills for research activities

Subject Matter Expertise³⁰

In the context of the role of research manager, subject matter expertise refers to a deep and comprehensive understanding of the specific specialised area or field associated with organisational and/or individual research endeavors.

Examples of subject matter expertise competencies included but not limited to:

- Pre-Award/Post Award
- Managing equality, diversity and inclusion (including gender, disability and racism)
- Data Stewardship
- Technology Transfer
- HR Research – Employment, training etc.
- Research Finance
- Clinical Research Management
- Research Ethics and Integrity

Research Project Oversight/Management³¹

In the context of the role of research manager, research project oversight refers to the systematic planning, execution, monitoring, and general management of research activities to achieve specific objectives within defined constraints such as time, budget, and scope.

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

- Research Project Management
- Managing research project deliverables
- Designing monitoring and evaluation frameworks and indicators
- Establishing research project plans

²⁹ [What Are Technical Skills? | Coursera](#)

³⁰ [L-1B Visa: Specialized Knowledge Professional - Immihelp](#)

³¹ [Project Management: What It Is, 3 Types, and Examples \(investopedia.com\)](#)

Community Engagement³²

In the context of the role of research manager, community engagement refers to activities and initiatives designed to connect the research endeavor with external audiences, stakeholders, and the broader community.

Examples of Community Engagement included but not limited to:

- Research Outreach
- Academic community relationship collaboration
- Community Engagement with Research
- Provision of training for outreach engagement
- Engagement with key stakeholders

Line Management and Talent Development³³

In the context of the role of research manager, line management and talent development are two important aspects related to engagement with a research project, engagement within a research organisation, a research team and/or other specific team leadership activities.

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

Communication³⁴

In the context of the role of a research manager, 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

³² [Why, What and How of Community Outreach and Engagement | Extension \(unh.edu\)](#)

³³ [Talent and Talent Management \(leadershipacademy.nhs.uk\)](#)

³⁴ [What Is Communication Competence? \(Plus Benefits and Tips\) | Indeed.com](#)

Relationship Management³⁵

In the context of the role of research manager, relationship management refers to the strategic and systematic 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 Relationship Management included but not limited to:

- Building trust within relevant research and strategic partnerships
- Diplomacy, negotiation, and mediation skills
- Handling difficult conversations and partnerships
- Business and commercial liaison management

³⁵ [Relationship Management Skills: Definition and Examples | Indeed.com Australia](#)

CARDEA Learning Outcomes 42 Competencies³⁶

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

[\[Link to CARDEA Survey Results\]](#)

COGNITIVE ABILITIES			
Learning Outcomes			
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
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	Collaboratively engages in brainstorming sessions with colleagues to	Designs and executes comprehensive strategies to inform organisational decision making

³⁶ A multitude of Internet websites and AI were employed to aid in the refinement of the learning outcomes.

	formulate decisions and consequences of these decisions	investigate the unforeseen consequences of potential decisions	
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	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	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	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. Professional Flexibility

The ability to adapt to evolving circumstances, methodologies, and research project requirements. Navigate unexpected challenges, adjust research strategies as needed, and guide the team through dynamic situations.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the importance of flexibility in dynamic research work environments	Implements plans that support the delivery of adjusted research strategies	Fosters a culture of adapting to change within teams and organisations	Provides expert-level thought leadership in designing and executing comprehensive change strategies at leadership and organisational level
Ability to adapt to changes in research project timelines, deliverables, and consortium partners	Adjusts timelines and methodologies, communicating clearly and reporting any extraordinary circumstances to all stakeholders involved (i.e. team members, partners, funders)	Implements strategies for managing change within the project or organisation	Provides clear steps and policy guidelines to navigate the organisation or research team through periods of change
Exhibits resilience and ability to adapt to change in all aspects of research manager role	Exhibits well developed resilience combined with the confidence to adapt to change in research projects	Inspires resilience in others at team and organisational level	Exhibits a profound understanding of complex research environments and consistently contributes to organisational success through agile decision-making and strategic flexibility.
Is open to learning new skills and approaches to methodologies and changes to research project requirements	Engages in training and professional development to enhance flexibility and navigate unexpected challenges	Demonstrates a high degree of agility, resilience, and strategic thinking in responding to evolving professional challenges	Showcases an unparalleled ability to lead and inspire teams through change, leveraging deep insights into emerging trends, technologies, and policy shifts to drive sustained innovation and excellence

5. Problem Solving

Identify, analyse, and resolve complex challenges that may arise during the research process. Employ strategic problem-solving skills to address issues ensuring the smooth progression of research projects. Combine analytical thinking, creativity, and leadership to optimise outcomes and maintain the overall integrity of the research.

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 interconnected and complex organisational	Exhibits leadership in guiding others through intricate problem-solving processes, showcasing the ability to anticipate, navigate, and resolve

	address and resolve problems	or research team challenges	multifaceted issues with a profound understanding of organizational, research, and international dynamics
Is open to learning new skills and approaches to identify and analyze issues clearly	Engages in training and professional development to enhance problem solving skills and navigate unexpected issues	Exhibits the capability to analyze 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

6. Strategic Planning

The ability to envision and execute a comprehensive research plan aligned with agreed goals and broader organisational and or national/international strategies

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, analyze 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 support 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

7. 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



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 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

SUBJECT MATTER EXPERTISE/SPECIALISED KNOWLEDGE			
Learning Outcomes			
1. Pre-Award Post-Award			
Pre-award responsibilities involve (but are not limited to) crafting compelling grant proposals, budgeting, and ensuring compliance with funding guidelines. Post-award activities involve (but are not limited to) efficient financial and administrative management, tracking project milestones, involvement with funders and facilitating effective communication between research project stakeholders.			
FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Demonstrates a basic understanding of the research landscape and ecosystem	Supports and assesses the development of grant proposals	Develops and implements organisational strategies to enable applicant grant success aligned with institutional and research goals	Develops and leads institutional research funding strategies, aligning them with organisational, national and international objectives
Demonstrates a basic understanding of the processes involved in research grant administration	Ensures compliance with applicable regulations and guidelines throughout the research lifecycle	Negotiates and finalises grant agreements with funding agencies, addressing terms, conditions, and budgetary considerations	Provides expert guidance (for example on legal and ethical considerations) in research grant applications and project management

Comprehends the basic components of a grant proposal, including the research statement, objectives, and budget	Uses organisational data and information to generate intermediate-level organisational reports including progress updates on the research portfolio	Manages partner and consortium relationships effectively, including agreements, compliance, and reporting	Oversees multi-institutional or multi-disciplinary research projects with diverse funding sources
Understands the foundational aspects of regulatory and funder compliance related to grant applications and post-award activities	Demonstrates ability to liaise with colleagues from other units in the management of research awards	Demonstrates a nuanced understanding of both pre-award and post-award processes in grant management	Leads and/or represents the organisation in discussions with funding agencies, government bodies, industry partners and other relevant stakeholders

2. 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 ³⁷	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 ³⁸	Contributes to thought leadership in the field of diversity and inclusion, influencing practices and standards

³⁷ Research Competency Framework

³⁸ Research Competency Framework

3. 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
Understands the importance of research data as an organisational asset and its role in decision-making	Conducts data profiling to assess data quality and identifies areas for improvement	Implements data management strategies for critical data elements	Provides leadership in establishing and leading organisational data governance initiatives
Recognises basic principles of data quality and the impact of poor data quality on outcomes	Able to apply metadata management practices to enhance data discoverability and traceability	Demonstrates advanced understanding of data privacy and security principles and implements measures to protect sensitive data	Introduces innovative approaches to data management, including the integration of emerging technologies
Grasps foundational concepts of data governance, including roles and responsibilities	Ability to classify data based on sensitivity and usage requirements to ensure proper handling	Collaborates with stakeholders across the organisation to align data stewardship practices with research objectives	Possesses expertise in navigating and ensuring compliance with evolving data regulations and standards
Understands basic data compliance requirements and their implications for stewardship	Participates in the implementation of data governance frameworks and policies (i.e. GDPR, FOI)	Develops and implements data lifecycle management strategies, including archiving and purging	Contributes to the development of an overarching data strategy aligned with organisational, national and international research goals
4. 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 technology transfer, including its role in research and innovation	Evaluates the commercial potential of intellectual property assets and technologies	Develops and implements strategic plans for technology transfer within an organisation or institution	Provides leadership in developing and executing comprehensive technology commercialisation strategies for the organisation
Understands the basics of intellectual property (IP) rights, including patents, copyrights, and trademarks	Understands the process of negotiating and drafting licensing agreements for technology transfer	Uses developed negotiation skills to address complex issues in technology transfer agreements	Contributes to the development of institutional and national policies related to technology transfer
Gains awareness of legal and regulatory frameworks related to technology transfer activities	Advises on the implementation of market analysis to assess the feasibility and potential of transferring a	Can identify and pursue new opportunities for technology commercialisation	Navigates and facilitates technology transfer on an international scale, considering cultural and legal differences

	technology to specific industries		
Develops basic documentation skills for recording and managing technology transfer processes	Interacts with industry stakeholders to understand their needs and facilitate successful technology transfer	Able to implement risk management strategies for technology transfer projects, addressing legal, financial, and technical risks	Contributes to building innovation ecosystems and policy that support seamless technology transfer and commercialisation

5. HR Research

Ensure the effective functioning of the HR aspects supporting 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 support 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 researchers 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

6. 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,	Manages research project budgets,	Develops advanced financial forecasting	Develops advanced financial forecasting models for the

financial statements, and cost accounting	considering both direct and indirect costs	models for research projects, considering long-term financial implications	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

7. 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	Contributes to disseminating research findings through publication in reputable journals and/or presentations at conferences, contributing to the

		integrity throughout the research process	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

8. 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 policies 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

RESEARCH PROJECT OVERSIGHT/MANAGEMENT

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	Using a portfolio of competencies, including EDI and Ethical principles, develops and implements advanced communication strategies for diverse stakeholders, adapting to their needs	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

COMMUNITY 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	Collaborates with external organisations	Develops and implements outreach strategies at the organisational level, considering

	events, such as workshops, webinars, or seminars	and stakeholders for outreach initiatives	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	Develops coherent plans for community	Able to apply sophisticated	Aligns community engagement frameworks with research strategy,

engagement in the context of research	engagement in research and research projects	participatory techniques that engage communities throughout the research process	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. Provision of training for outreach engagement

Provide training for outreach engagement. Develop and implement programs to enhance the skills of researchers in effectively communicating and engaging with various stakeholders. Empower researchers to bridge the gap between academia and the public, maximizing the impact and dissemination of research within wider communities.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Grasps foundational concepts of training for outreach engagement and its role in effective communication	Develops skills in tailoring training content to diverse audience needs and interests	Develops plans for outreach training initiatives, aligning them with organisational goals	Provides leadership in designing and delivering training initiatives that set organisational or industry standards
Develops initial skills in delivering training sessions for outreach, ensuring clarity and engagement	Utilises interactive methods in training delivery to enhance participant engagement and understanding	Collaborates with internal and external stakeholders for training initiatives	Using a portfolio of competencies, introduces innovative training models and approaches that advance the field of outreach engagement
Understands basic principles of effective communication in the context of outreach	Develops communication skills, including active listening and responding to audience feedback	Utilises advanced training technologies and methodologies for outreach, including e-learning platforms	Contributes to building the capacity of organisations and communities through outreach training initiatives

Develops an awareness of the diverse audiences that may be engaged through outreach initiatives	Implements assessment and feedback mechanisms to evaluate the effectiveness of outreach training	Implements advanced-level strategies for measuring the impact of outreach training on participant knowledge and behaviour	Develops advanced methodologies for assessing the unique needs of diverse audiences, tailoring training content to address specific challenges in outreach and engagement
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5. 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

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 collaboration within the research team	Able to address and resolve complex issues within the research team	Leads collaborative initiatives that bring together diverse stakeholders 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 support 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 support 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 support 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	Develops and implements programs, including mentoring	Using a portfolio of competencies introduces innovative models and approaches for talent

	leadership roles in research and research management	programs, that support research talent and facilitate cross-disciplinary skill development	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 support 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

RELATIONSHIP MANAGEMENT
Learning Outcomes

1. 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

2. Diplomacy, negotiation, and mediation skills

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 organizational objectives

3. 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

4. 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.			
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

Annex 1 Competence Descriptions³⁹

Competency Areas	Competences	Descriptions
Cognitive Abilities	Creativity	Foster innovative approaches and solutions to aid problem-solving, designing methodologies and/or procedures which encourage a dynamic and open-minded research environment.
	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.
	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.
	Professional Flexibility	The ability to adapt to evolving circumstances, methodologies, and research project requirements. Navigate unexpected challenges, adjust research strategies as needed, and guide the team through dynamic situations.
	Problem Solving	Identify, analyse, and resolve complex challenges that may arise during the research process. Employ strategic problem-solving skills to address issues ensuring the smooth progression of research projects. Combine analytical thinking, creativity, and leadership to optimise outcomes and maintain the overall integrity of the research.
	Strategic Planning	The ability to envision and execute a comprehensive research plan aligned with agreed goals and broader organisational and or national/international strategies.
	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.

³⁹ A multitude of Internet websites and AI were employed to aid in the refinement of these competency descriptions

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 Statical 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.
Subject Matter Expertise	Pre-Award/Post Award	Pre-award responsibilities involve (but are not limited to) crafting compelling grant proposals, budgeting, and ensuring compliance with funding guidelines. Post-award activities involve (but are not limited to) efficient financial and administrative management, tracking project milestones, involvement with funders and facilitating effective communication between research project stakeholders.
	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.
	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	Ensure the effective functioning of the HR aspects supporting 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 support the professional development of researchers

Competency Areas	Competences	Descriptions
	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 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 Project Oversight /Management	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.
	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 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.

Competency Areas	Competences	Descriptions
Community 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.
	Provision of training for outreach engagement	Provide training for outreach engagement and develop and implement programs to enhance the skills of researchers in effectively communicating and engaging with various stakeholders. Empower researchers to bridge the gap between academia and the public, maximizing the impact and dissemination of research within wider communities.
	Engagement with key stakeholders	Build and sustain collaborative relationships with influential partners, including academic institutions, industry leaders, policymakers, funders, industry and community representatives.

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.
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 crafting 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.

Competency Areas	Competences	Descriptions
	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.
Relationship Management	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	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.

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