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CARDEA COMPETENCY FRAMEWORK¹

Introduction

This document accompanies and should be viewed in conjunction with the CARDEA Framework for Research Manager Careers RM 1 to RM 4

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

- DigComp
- EntreComp
- <u>GreenComp</u>
- LifeComp
- Competence Framework 'Science for Policy' for researchers
- Competence framework for 'innovative policymaking'

¹ Other EU Competence Frameworks

Each competency² 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.

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

- dedicated training courses
- on-the-job-training
- peer-to-peer learning
- coaching
- mentoring
- open transparent and merit-based recruitment

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.

Each competency level indicator reflects the variance in complexity, scope, and responsibility across the roles RM1 to RM4.

² <u>Competence & Competency Frameworks | Factsheets | CIPD</u> and <u>Civil Service competency framework - GOV.UK (www.gov.uk)</u>

CARDEA Research Manager Competency Framework³

Research Manager Competence Areas⁴⁵

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:

- 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

³ OECD-Core-Competency-Framework.pdf and competency framework en.pdf (oecd.org)

⁴ Hoffmann, T. (1999), "The meanings of competency", <u>Journal of European Industrial Training</u>, Vol. 23 No. 6, pp. 275-286. https://doi.org/10.1108/03090599910284650

⁵ El Asame, Maryam Wakrim, Mohamed 2018

Towards a competency model: A review of the literature and the competency standards

Competency Diagram

Cognitive Abilities

- 1. Creativity
- 2. Critical Thinking
- 3. Cultural Sensitivity
- 4. Professional Flexibility
- 5. Problem Solving
- 6. Strategic Planning
- 7. Decision Making

Technical Proficiency

- 1. Research data collection and collation
- 2. Data and statistical analysis
- 3. Legal Skills
- 4. IT skills for research activities

Subject Matter Expertise/Specialised

Knowledge

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

Research Project

Oversight/Management

- 1. Research Project Managemen
- 2. Managing research project deliverables
- Monitoring and evaluation frameworks and indicators
- 4. Establishing research project plans

Research Manager



Communication

- Building and maintaining relationships with research funders, partners or other stakeholders
- 2. Designing and implementing research communication plans
- 3. Media Liaison and associated activities
- Preparing and writing reports (including evaluation reports and funder reports)
- 5. Social Media engagement

Community Engagement

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

Relationship Management

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

Line Management and Talent

Development

- People Management and managing team performance
- 2. Team Building
- 3. Change Management
- 4. Coaching skills
- Research talent identification and development

Competency Definitions as per CARDEA⁶

Cognitive Abilities/Transversal Skills⁷

In the context of the role of research manager, cognitive abilities generally refers to a set of cross-cutting or transferable skills that are applicable across various disciplines, 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

Technical Proficiency⁸

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.

⁶ performance-guide.pdf (emory.edu)

⁷ Transversal skills: what are they and why are they so important?: Skills and Education Group

⁸ What Are Technical Skills? | Coursera

- Data and statistical analysis
- Legal Skills
- IT skills for research activities

Subject Matter Expertise⁹

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/Management¹⁰

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

⁹ L-1B Visa: Specialized Knowledge Professional - Immihelp

¹⁰ Project Management: What It Is, 3 Types, and Examples (investopedia.com)

Establishing research project plans

Community Engagement¹¹

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 Development¹²

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

¹¹ Why, What and How of Community Outreach and Engagement | Extension (unh.edu)

¹² Talent and Talent Management (leadershipacademy.nhs.uk)

Communication¹³

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

Relationship Management¹⁴

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

¹³ What Is Communication Competence? (Plus Benefits and Tips) | Indeed.com

¹⁴ Relationship Management Skills: Definition and Examples | Indeed.com Australia

Competency Proficiency Levels Key¹⁵

These levels identify the competency proficiency required for RM 1 to RM 4. 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 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. 1617

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.

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.

¹⁵ SHRM Survey Findings:

¹⁶ competency framework en.pdf (oecd.org)

¹⁷ Mep interieur (oecd.org)

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.

CARDEA Learning Outcomes 42 Competencies¹⁸

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 ABILITIES¹⁹ 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	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

¹⁸ ResearchComp: The European Competence Framework for Researchers (europa.eu)

¹⁹ A multitude of Internet websites and AI were employed to aid in the refinement of the learning outcomes.

		organisational or	
		systemic issues	
Can analyse	Challenges own	Considers ethical issues	Consistently demonstrates creativity in
information and	personal and cognitive	in creative solution	evaluating complex problems and
identify key	biases that would	decision-making	generating innovative solutions
components to aid	deter creativity		
creativity			

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

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	Plans and delivers	Fosters a culturally	Provides expert level advice to senior
the importance of	effective cross-cultural	diverse and inclusive	management and organisational
cultural sensitivity in	communication in all	environment within the	leadership to enhance research and
	interactions with	research team	organisational cultural sensitivity

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

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	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
environments 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	Engages in training	Demonstrates a high	Showcases an unparalleled ability to
new skills and	and professional	degree of agility,	lead and inspire teams through change,
approaches to	development to	resilience, and strategic	leveraging deep insights into emerging
methodologies and	enhance flexibility and	thinking in responding	trends, technologies, and policy shifts to
changes to research	navigate unexpected	to evolving professional	drive sustained innovation and
project requirements	challenges	challenges	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 problemsolving and its importance in various contexts	Following a review of the issue, is able to identify the root cause of a problem	Guide and facilitate teams through complex problem-solving processes	Provide expert-level thought leadership in designing and executing comprehensive problem-solving strategies at leadership and organisational level
Ability to recognise and define problems, also using analytical skills to break them down into their component parts	Assesses the effectiveness of any proposed solutions	Challenge existing resolutions to issues if no longer fit for purpose and propose alternative approaches	Develop and implement policy and practice that addresses and solves problems at the organisational, national and or international level
Understands the principle of collaborating to solve a problem	Uses networking contacts and colleagues to discuss, address and resolve problems	Address interconnected and complex organisational or research team challenges	Exhibits leadership in guiding others through intricate problem-solving processes, showcasing the ability to anticipate, navigate, and resolve multifaceted issues with a profound understanding of 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	Is able to identify	Demonstrates the	Demonstrates the capacity to integrate
fundamental	trends and threats	ability to formulate	insight, analyze global trends, and
principles of strategic	within the research	comprehensive and	anticipate emerging challenges,
planning and its	endeavour		

contribution to the		forward-thinking	resulting in the creation of agile and
success of a research		strategic initiatives	adaptive strategic plans
project			
Is able to conduct	Ensures that the	Utilises networks and	Recognised as a thought leader in the
basic strategic	research project is	expertise to connect in	field, guiding organisations through
planning analyses	aligned to	with national and or	complex strategic decision-making
utilising tools such as	organisational strategy	international research	processes and consistently achieving
SWOT analysis	and goals	strategies	positive outcomes
Understands how	Effectively allocates	Exhibits proficiency in	Develops and executes strategies that
research project	approved resources to	conducting thorough	drive organisational success
objectives align with	support the strategy of	analysis, identifying key	
organisational strategy	the research	opportunities and	
		challenges, and	
		developing	
		implementation plans	
		that align with	
		organisational goals	
Basic understanding of	Implements strategies	Connects with internal	Works closely with stakeholders both
the strategic role of	and procedure that	and external	internal and external to the organisation
stakeholders both	increase research	stakeholders to devise	to advance the long-term value and
internal and external	impact	strategies that increase	strategic impact of the research
to the organisation		the 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	Demonstrates the	Employs innovative	Provides expert-level thought leadership
gathering relevant	ability to critically	strategies to navigate	to decision making strategies at
information to inform	analyse complex	ambiguous situations	leadership and organisational level
decision-making	situations and		
	information		
Understands	Analyses multiple	Uses complex linked	Introduces innovative models and
fundamental risk	scenarios prior to	data and information to	methodologies for expert-level decision
assessment principles	decision being made	inform decision making	making
to consider potential			
outcomes of decisions			
Understands the basic	Collaborates with	Assesses the potential	Works closely with stakeholders both
principle of	others to ensure a	impact of the decision	internal and external to the organisation
monitoring decisions	unified approach to	within the organisation	to assess the impact of critical decisions
and their outcomes	decision making		made at organisational, national and
	process		international level
Understands the basic	Understands risks	Critically assesses the	Demonstrates astute judgment in order
principle of	attached to all	impact of critical	to consistently achieve positive results
collaboration when	potential scenarios	decisions made within	and strategic objectives for the
coming to informed	prior to making the	the organisation during	organisation
decisions	decision	a pre-defined period of	
		time	

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 Statical 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	Uses negotiation within legal contexts	Manages multiple legal cases simultaneously, overseeing timelines, resources, and	Contributes to the publication of research findings, effectively

analysis and interpretation		collaboration with research team members	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 postaward 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 ²⁰	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 ²¹	Contributes to thought leadership in the field of diversity and inclusion, influencing practices and standards

²⁰ Research Competency Framework

²¹ 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	Evaluates the	Develops and	Provides leadership in developing and
concepts and	commercial potential	implements strategic	executing comprehensive technology

principles of technology transfer, including its role in research and innovation	of intellectual property assets and technologies	plans for technology transfer within an organisation or institution	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 technology to specific industries	Can identify and pursue new opportunities for technology commercialisation	Navigates and facilitates technology transfer on an international scale, considering cultural and legal differences
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 employment an enables salary placement. Upon internal organisational policies accordingly	competences, work resolve non-roulates issues relating to	positive organisational person culture within the research environment the

Understands the	Develops skills in	Contributes to strategic	Contributes to the development and
basics of the	resolving conflicts	workforce planning,	refinement of HR policies tailored to the
recruitment process,	within research teams	aligning human	unique needs of research staff
including job postings,	and or staff, promoting	resources with research	
applicant screening,	a positive work	goals and organisational	
and interview	environment	strategy	
coordination			
Demonstrates basic	Facilitates training and	Implements agreed	Possesses expertise in navigating legal
skills in onboarding	development	strategies to enhance	and ethical considerations in HR
new research staff,	opportunities for	employee engagement	management, particularly within
including orientation	research staff to	and job satisfaction	research contexts
and introduction to	enhance their skills	within the research	
policies	and career growth	context using initiatives	
		such as HR Excellence in	
		Research	
Maintains personnel	Addresses routine and	Contributes to career	Contributes to thought leadership in the
records and ensure	non-routine queries	development programs	field of HR Research nationally and
compliance with HR	relating to the	for researchers and	internationally influencing policy,
and institutional	employment cycle of	research managers	practices and standards
regulations	researchers in the		
	organisation		

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, financial statements, and cost accounting	Manages research project budgets, considering both direct and indirect costs	Develops advanced financial forecasting models for research projects, considering long-term financial implications	Develops advanced financial forecasting models for the organisation, considering long-term financial implications
Understands basic types of research funding sources and their implications for financial management	Generates and interprets financial reports for research projects, ensuring accuracy and compliance	Implements advanced cost accounting methodologies to allocate costs accurately across research projects	Contributes to the development of financial policies tailored to the unique needs of research finance

Comprehends	Contributes to budget	Prepares for and	Contributes to the finalising of complex
foundational financial	development for grant	participates in audits,	financial agreements, including terms
compliance	proposals, aligning	ensuring compliance	and conditions of research funders and
requirements related	financial plans with	with financial	collaborating partners and organisations
to research grants and	project goals	regulations and funder	
projects		requirements	
Develops basic skills in	Understands the	Assesses and advises on	Provides organisational leadership in
Develops basic skills in financial	Understands the financial aspects of	Assesses and advises on mitigation for financial	Provides organisational leadership in research finance, including mentoring
•			
financial	financial aspects of	mitigation for financial	research finance, including mentoring
financial documentation and	financial aspects of partners and	mitigation for financial risks associated with	research finance, including mentoring and guiding junior research finance
financial documentation and record-keeping for	financial aspects of partners and collaborations within	mitigation for financial risks associated with	research finance, including mentoring and guiding junior research finance

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	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

as participant records and regulatory submissions		integrity throughout the research process	at conferences, contributing to the advancement of scientific knowledge
Able to collaborate effectively with research teams, learning to communicate study updates and addressing routine operational challenges	Gains skills in budget management, ensuring that clinical trials are conducted within financial constraints and policy whilst maintaining study quality	Contributes to the implementation of innovative research protocols, incorporating the latest methodologies and technologies into study design	Serves as a mentor to junior colleagues, actively contributing to the professional development of the team and influencing the broader clinical research community through educational initiatives

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 polices and practice on research integrity and ethical matters
Grasps the importance of honesty, transparency, and confidentiality in research practices	Understand issues related to authorship, intellectual property, and publication ethics, including proper citation practices	Able to propose informed solutions that uphold integrity and compliance with ethical standards in a research context	Contribute to the advancement of ethical knowledge through scholarship, presentations, and leadership.

Fosters a commitment	Can apply ethical	Demonstrates a	Exhibits a profound understanding of
to responsible conduct	principles to diverse	sophisticated	the ethical implications in
throughout the	research scenarios	understanding of the	interdisciplinary and cutting-edge
research process		ethical implications of	research, influencing policy
		various research	development and implementation
		methodologies and	
		apply this insight to	
		design and conduct	
		ethically robust studies	

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	Administers quality	Utilises advanced	Implements continuous improvement
foundational	assurance processes to	project management	strategies, incorporating lessons learned
communication skills	ensure the integrity	tools and software for	from previous projects into current
for project updates,	and reliability of	collaborative project	practices
coordination and	research project	planning and tracking	
dissemination	outcomes		

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 problemsolving 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	Develops skills in	Using a portfolio of	Provides thought leadership in the field
knowledge of the	tailoring	competencies,	through influencing trends and leading
foundational concepts	communication	including EDI and	discussions on importance of outreach
of research outreach	messages to different	Ethical principles,	
	audiences,	develops and	
	considering their	implements strategic	

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

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	Using a portfolio of	Co-designs and/or	Introduces innovative models and
foundational	competencies,	collaborates to produce	approaches to academic-community
relationships with	develops a productive	methods and practice	collaboration, contributing to the field's
academic and	relationship with the	that address academic	advancement
community partners,	academic community	community needs	
recognising mutual			
interests			
	11.1		5
Develops an	Liaises with relevant	Takes on representative	Demonstrates the ability to strategically
awareness of basic	research associations,	roles within research	cultivate and sustain robust
academic community	also attends	associations,	collaborations, leveraging extensive
needs and challenges	conferences and	contributing to the	networks to foster interdisciplinary
through initial	networking events	development of	research initiatives, secure grant
engagement		research culture and	funding, and facilitate knowledge
		communities	exchange

3. Community engagement with research

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

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
Understands the foundational concepts of community engagement in the context of research	Develops coherent plans for community engagement in research and research projects	Able to apply sophisticated participatory techniques that engage communities throughout the research process	Aligns community engagement frameworks with research strategy, contributing to the advancement of socially impactful research
Exhibits the communication skills for engaging with various communities about research	Identifies develops links, and engages with diverse stakeholders within communities for research collaboration	Using a portfolio of competencies, empowers communities through research partnerships	Engages stakeholders in the design and implementation of community engagement frameworks, ensuring all perspectives are considered
Employs and practices cultural sensitivity when engaging with diverse community groups	Establishes feedback mechanisms and channels for community input into	Is aware of policy trends and frameworks concerning community engagement and	Leads complex engagements involving multiple variables, methodologies, and data sources

	research design and implementation	research impact more broadly	
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 elearning platforms	Contributes to building the capacity of organisations and communities through outreach training initiatives
Develops an awareness of the	Implements assessment and	Implements advanced- level strategies for	Develops advanced methodologies for assessing the unique needs of diverse

diverse audiences that	feedback mechanisms	measuring the impact	audiences, tailoring training content to
may be engaged	to evaluate the	of outreach training on	address specific challenges in outreach
through outreach	effectiveness of	participant knowledge	and engagement
initiatives	outreach training	and behaviour	
	_		

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	Plans and executes	Anticipates and plans for	Manages culturally diverse and
concepts of teams and	team building	future challenges within	geographically dispersed teams
their role in research	activities	the team	
success			
Able to identify	Adapts	Fosters adaptability and	Navigates complex global research
common sources of	communication	resilience within the team	environments
conflict within a team	styles to different		
	team members and		
	situations		
Able to set and	Proactively addresses	Uses organisational	Demonstrates resilience and
communicate clear	and seeks to resolve	performance analytics	adaptability in challenging team and or
and achievable goals	conflict within the	tools and methodologies	organisational circumstances
for the team	team	for tracking team and	
		individual performance	
Ability to monitor and	Implements	Fosters a learning culture	Pioneer and implement cutting-edge
report on basic	organisational	within the team or	leadership practices inclusive of
performance metrics	reward and	organisation	training initiatives
	recognition policies		

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	Implements	Able to address and	Leads collaborative initiatives that
conflict resolution	communication	resolve complex issues	bring together diverse stakeholders for
practices	strategies to enable	within the research team	impactful research within common
	and foster		goals
	collaboration within		
	the research team		
Has basic	Works to develop and	Empowers team	Using a portfolio of competencies,
communication skills	encourage problem-	members to take	introduces innovative techniques for
for effective team	solving skills within	ownership of research	recognising and utilising individual
interaction	the research team	tasks and contribute to	strengths to enhance research team
		decision-making	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						
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	Develops skills in	Develops strategies for	Designs and executes talent
importance of talent	strategic talent	succession planning in	management strategies for researchers
identification,	mapping for research	research teams and	and research managers within the
acquisition and	teams and projects	within the organisation	organisation

development in the research context			
Develops skills to assess the potential of individual researchers	Identifies and nurtures individuals with the potential for leadership roles in research and research management	Develops and implements programs, including mentoring programs, that support research talent and facilitate crossdisciplinary skill development	Using a portfolio of competencies introduces innovative models and approaches for talent development and professional growth in research
Shows awareness of various research career trajectories both within and beyond the research ecosystem	Contributes to mentoring programs to 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	Cultivates meaningful	Facilitates cross-sector	Develops and implements strategies
ability to network and	partnerships with	collaboration, engaging	for managing relationships and

initiate and sustain	organisations and funders	with diverse	collaborations on a national and
professional	aligned with research	stakeholders	international level
relationships	goals		
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	Considers and uses data visualization techniques for effective	Fosters long-term relationships through open and transparent	Consistently demonstrates a sophisticated understanding of

research	communication of	communication	diverse communication strategies
communication	research findings	practices	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	Understands the importance of open and transparent	Resolves conflicts and challenges while preserving trust	Creates a long-lasting positive footprint in the organisation through the introduction of good practice

consistency in	communication to build		which has a long reaching positive
partnerships	trust		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
FOUNDATIONAL	INTERIVIEDIALE	ADVANCED	EAFERI
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 Descriptions²²

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 openminded 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.

 $^{^{22}}$ A multitude of Internet websites and AI were employed to aid in the refinement of these competency descriptions.

Competency	Competences	Descriptions
Areas		
	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.
iency	Data and Statical Analysis	Apply rigorous statistical methods to ensure the accuracy and reliability of data and its interpretation.
Technical Proficiency	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.
Techni	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. Postaward 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) Data Stewardship	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. 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

Competency	Competences	Descriptions
Areas		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
	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.
THE STATE OF THE S	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.
Vlanagement	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.
Research Project Oversight /Man	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.
Resi	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.

Competences	Descriptions
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.
	Research Outreach Academic community relationship collaboration Community engagement with research Provision of training for outreach engagement Engagement with key

Competency Areas	Competences	Descriptions
	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.
Line Management and Talent Development	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.
anagement an	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.
Line N	Coaching Skills	Guide and develop the professional capabilities of research team members and or research leadership.
1	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 Designing and	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. Design and implement research communication plans
	implementing 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) Social Media engagement	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. 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 Diplomacy, negotiation, and mediation skills	Build trust within relevant research and strategic partnerships for successful collaboration. Deliver on commitments, foster transparent communication, and prioritise the mutual interests of partners. Employ tactful communication, adept negotiation strategies, and effective mediation to reconcile
	Handling difficult conversations and partnerships	differing perspectives and align interests among research team members or stakeholders. 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.

Annex 2 Generic RM Job Descriptions

Note: These are generic job descriptions, and specific responsibilities and requirements may vary based on the requirements of the role and its location e.g., industry, academia, and other contextual factors.

RM 1 Job Description

First Stage Research Manager (RM 1) Job Description - Generic

Position: First Stage Research Manager (RM 1)

Location: [Specify Location]

Department: [Specify Department]

Reports to: [Specify Reporting Line, e.g., Senior Research Manager, Director of Research

etc.]

Summary: First Stage Research Manager (RM 1)

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

Key Accountabilities:

- 1. Research Management:
 - Assist senior research managers and other senior research/academic staff in implementing and coordinating research projects and programs.
 - Ensure timely and accurate completion of research tasks within the assigned portfolio.
 - Monitor and report on the progress of research activities to ensure adherence to set timelines and objectives.

- Provide specific research management skills to support the on-going development of the research team and to contribute to the transfer of knowledge in the specific research area.
- To coordinate lab activity to support the research area/project (where required).
- Co-ordinate day-to-day work to support the research project.
- Liaise with Principal Investigator(s) and colleagues on matters relating to the management of the research.
- Develop knowledge and understanding of the operation of the research project and related work.
- Ensure compliance with Health and Safety procedures.
- Perform other duties related to the work described herein.

2. Stakeholder Collaboration:

- Collaborate with research teams, business units, and external stakeholders to ensure seamless execution of research projects.
- Attend and participate in meetings, workshops, and seminars as a representative of the research group/unit/organisation.
- Facilitate collaboration by liaising with other research groups within the organisation and externally including industry projects.
- Develop and maintain a good working relationship with service departments in the organisation.

3. Learning and Development:

- Continuously develop skills and competencies required for successful research management.
- Attend training programs, seminars, and workshops to stay updated with the latest research methodologies and trends.

4. Operational Understanding:

 Gain a basic understanding of the research/business structures and operations. Assist in integrating research outcomes into operational practices and business strategies.

5. Documentation and Reporting:

- Assist in preparing project reports, documentation, and presentations.
- Ensure accurate and up-to-date record keeping for all research activities under the purview.

Please note:

- The role might require occasional travel for research meetings and seminars.
- Flexibility in working hours may be needed based on research requirements.

Essential Criteria:

- A bachelor's degree in [Relevant Field, e.g., Science, Business, Arts],
 Master's degree preferred or equivalent professional experience.
- Basic understanding of research/business structures and operations.
- Excellent interpersonal and communication skills.
- Demonstrated ability to work in a team-oriented environment.
- Strong organisational and time management skills.
- Demonstrable achievements in delivering results.
- Ability to interact with stakeholders from a range of disciplines.
- Attention to detail.
- Report writing and presentation skills.
- Capability of working effectively within a team to achieve results.
- Organisational and communication skills.
- Initiative.

Desirable Criteria:

- Proficiency in relevant research tools and software.
- Ability to multitask and prioritize responsibilities.

- Critical thinking and problem-solving capabilities.
- Previous experience in research management or a related field.

RM 2 Job Description

Recognised Research Manager (RM 2) Job Description - Generic

Position: Recognised Research Manager (RM 2)

Location: [Specify Location]

Department: [Specify Department]

Reports to: [Specify Reporting Line, e.g., Senior Research Manager, Director of Research

etc.]

Summary: Recognised Research Manager (RM 2)

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

Key Accountabilities:

1. Research Management:

- Assist senior research managers and other senior research/academic staff in implementing and coordinating research projects and programs.
- Ensure timely and accurate completion of research tasks within the assigned portfolio.
- Monitor and report on the progress of research activities to ensure adherence to set timelines and objectives.

- Provide specific research management skills to support the on-going development of the research team and to contribute to the transfer of knowledge in the specific research area.
- To coordinate lab activity to support the research area/project (where required).
- Co-ordinate day-to-day work to support the research project.
- Liaise with Principal Investigator(s) and colleagues on matters relating to the management of the research.
- Develop knowledge and understanding of the operation of the research project and related work.
- Ensure compliance with Health and Safety procedures.
- Perform other duties related to the work described herein.

2. Strategic Research Management:

- Engage with senior leadership to communicate research findings, recommendations, and insights.
- Contribute to the development and execution of research strategies in line with organisational goals.
- Oversee and monitor the implementation of research projects, ensuring they align with the broader research strategy.

3. Stakeholder Engagement:

- Collaborate with research teams, business units, and external stakeholders to ensure seamless execution of research projects.
- Attend and actively participate in meetings, workshops, and seminars as a representative of the research group/unit/organisation.
- Facilitate collaboration by liaising with other research groups within the organisation and externally including industry projects.
- Develop and maintain a good working relationship with service departments in the organisation.

4. Learning and Development:

- Continuously develop skills and competencies required for successful research management.
- Attend training programs, seminars, and workshops to stay updated with the latest research methodologies and trends.

5. Operational Excellence:

- Utilise a moderate understanding of research/business operations to optimise processes and methodologies.
- Monitor and ensure the quality and integrity of research activities and data.

6. Team Leadership and Collaboration

- Provide guidance and mentorship to junior research team members, although formal managerial responsibilities may be limited.
- Foster a collaborative environment that encourages knowledge sharing and best practice implementation.

7. Documentation and Analysis:

- Oversee the preparation of comprehensive reports, presentations, and other research-related materials.
- Summarise the results of research data to draw actionable insights, write reports etc.
- Ensure accurate and up-to-date record keeping for all research activities under the purview.

Please note:

- The role might require occasional travel for research meetings and seminars.
- Flexibility in working hours may be needed based on research requirements.

Essential Criteria:

- A master's degree in the relevant field preferred or equivalent professional experience.
- Proven experience in research management or a related field, showcasing intermediate expertise.
- Moderate understanding of research/business structures and operations.
- Excellent communication and stakeholder management skills.
- Ability to consider broader approaches or consequences of actions.
- Excellent interpersonal and communication skills.
- Demonstrated ability to work in a team-oriented environment.
- Demonstrable achievements in delivering results.
- Ability to interact with stakeholders from a range of disciplines.
- Excellent attention to detail.
- Excellent report writing and presentation skills.
- Capability of working effectively within a team to achieve results.
- Excellent organisational and communication skills.
- Strong level of Initiative.

Desirable Criteria:

- Proficiency in advanced research tools and software.
- Demonstrated analytical and critical thinking abilities.
- Ability to handle complex research projects with minimal supervision.

RM 3 Job Description

Established Research Manager (RM 3) Job Description - Generic

Position: Established Research Manager (RM 3)

Location: [Specify Location]

Department: [Specify Department]

Reports to: [Specify Reporting Line, e.g., Senior Research Director, Head of Research.]

Summary: Established Research Manager (RM 3)

The term Established Research Manager refers to research managers with an advanced level of experience in their research management activity whilst demonstrating competencies and skills for the successful performance in the role. The role requires strong understanding of the organisation's environment, operational plans, current strategic position and direction with strong analytical skills and the ability to advise on strategic options for the research/business. This role necessitates a comprehensive grasp of the organisation's landscape, strategic positioning, and operational plans. Individuals in this position drive the organization's research strategy and demonstrate robust analytical abilities, playing an essential part in charting the strategic direction for research and business objectives. The role includes formal responsibility for colleagues and their actions; and the knowledge that their decisions have a wider impact.

Key Accountabilities:

- 1. Research Management and Operational Oversight:
 - Take responsibility for the ongoing development and implementation of the Unit's operational research management systems, policies, procedures, and best practices.
 - Identify and implement efficiencies and improvements within the unit/organisation operational processes and procedures.
 - Oversee the daily operational management of the [include e.g., Human Resources or Clinical Trials etc] aspects of the unit/organisation including [please list], and other aspects of administration and ensuring all such activities are in compliance with organisational policy in this regard.
 - Help to coordinate recruitment processes, including cost analysis of posts to be advertised and liaison with HR, as well as other relevant Offices.
 - Maintain and develop the Quality Management System for the unit, including oversight and preparation of Unit's applications.

- Work with the lab manager to manage [please include] and to continuously improve the suite of SOPs relating to lab procedures as well as health and safety, ensuring full compliance across the unit/organisation.
- Lead and coordinate the preparation and submission of annual and other reports to [funders], and other stakeholders as appropriate, ensuring timely and accurate receipt of required information from units' researchers across all partner institutions.
- Assist with the tracking of unit's metrics / KPIs and the development and deployment of an impact assessment framework to track the unit's impact across various domains.
- Manage the preparation of the unit's reporting materials for internal and external accountability processes, specifically the management of the units internal biannual reporting and input of data to [Funders] bespoke grants management system (please name).
- Facilitate the development of the units funding proposals and the growth of national and international research partnerships.
- Work with the organisations Funding Manager (s) to support the development and tracking of research grant proposals by all organisation research active staff.
- Work in partnership with other groups in the organisation and beyond, and other key partners, to realise opportunities for the unit.
- Lead the preparation and dissemination of project information and promotional material for stakeholders, including newsletters and annual reports etc.
- Work with the organisations Business Development team to develop relationships with industry and assist in the management of existing industry partnerships.
- Monitor, evaluate, and enhance research methodologies to ensure relevancy and efficiency.
- Monitor and ensure the quality and integrity of research activities and data.
- Deputise for the [please name the role] as required.

2. Strategic Research Management:

- Spearhead the formulation and implementation of research strategies in harmony with organisational goals and objectives.
- Advise senior leadership/research leadership on research-based strategic options that align with the organisation's overall strategy.
- Contribute to and lead the development and execution of research strategies in line with organisational and national goals.

3. Stakeholder Engagement:

- Lead and actively participate in meetings, workshops, and seminars as a representative of the research group/unit/organisation.
- Facilitate collaboration by liaising with other research groups within the organisation and externally including industry projects.
- Develop and maintain a good working relationship with service departments in the organisation.

4. Learning and Development:

- Continuously develop skills and competencies required for successful research management.
- Attend training programs, seminars, and workshops to stay updated with the latest research methodologies and trends.

5. Team Management and Development

- Assume formal responsibility for a team of research professionals, providing mentorship, training, and performance feedback.
- Foster an environment of collaboration, innovation, and continuous learning within the research team.

6. Analysis and Reporting:

- Leverage strong analytical skills to interpret complex data, translating findings into actionable strategic recommendations and reports.
- Oversee the creation and presentation of comprehensive research reports, communicating insights and recommendations to senior leadership.

Please note:

- The role might require frequent travel for industry conferences, research collaborations, and stakeholder meetings.
- Expected to lead and participate in high-level meetings, workshops, and strategy sessions.

Essential Criteria:

- A master's degree or PhD in the relevant field preferred or equivalent professional experience.
- Proven advanced [number of years] experience in research management or a related field, showcasing senior-level expertise.
- Strong understanding of organisational structures, operational plans, and strategic direction.
- Demonstrated ability in strategic thinking and analytical problem-solving.
- Proven experience in team leadership and management.
- Exceptional communication and interpersonal skills.
- Ability to make decisions with wide-reaching impacts, considering both immediate and long-term implications.
- Experience of working in a multidisciplinary research team environment and working with people from a wide range of cultures.
- Capacity to manage and prioritise a high workload, with a track record of delivering results under pressure and on time.
- Experience of budget management and managing industry collaborations in a research environment.
- A good understanding of the research funding environment in [Member State], Europe and further afield.
- Familiarity with the process of translating scientific research into application via commercialisation, policy formation, public engagement etc.
- Knowledge of IP protection, academic publication and other established methods of disseminating and commercialising research outputs.

Desirable Criteria:

- Proficiency in advanced research tools and software.
- Ability to lead the management of complex research projects.
- Track record in raising/managing research grant income from National and European funding bodies.
- A broad understanding of the area of research and related fields including an appreciation for the needs, priorities and associated challenges for organisations within this sector.
- Experience in the generation of newsletters, annual reports and outreach materials

RM 4 Job Description

Senior Research Manager (RM 4) Job Description - Generic

Position: Senior Research Manager (RM 4)

Location: [Specify Location]

Department: [Specify Department]

Reports to: [Specify Reporting Line, e.g., Chief Research Officer, Head of Research.]

Summary: Senior Research Manager (RM 4)

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

organisation. Individuals in this position hold formal responsibility for significant research and/or business areas, and their decisions carry considerable strategic weight, shaping the future direction of the organisation.

Key Accountabilities:

1. Strategic Vision and Leadership:

- Develop and lead the implementation of the long-term strategic vision for research, ensuring alignment with the organization's goals and objectives.
- Provide unparalleled insights based on expert knowledge, shaping the overall direction and success of the research and organization.

2. Operational Excellence and Oversight:

- Oversee research operations, ensuring that projects and initiatives are executed with precision and in accordance with the highest standards.
- Innovate and optimize research methodologies and practices, maintaining the organization's leadership in its domain.

3. Team Management, Mentorship & Development:

- Lead, mentor, and develop a team of research professionals, fostering a culture of excellence, innovation, and continuous learning.
- Establish performance metrics and ensure that the team consistently meets or exceeds them.

4. High-Level Stakeholder Engagement:

- Engage and collaborate with top-tier stakeholders, both internal and external, to ensure the alignment and integration of research outcomes into broader organisational strategies.
- Represent the research department/unit/organisation at the highest levels, both within the organisation and in external forums.

5. Strategic Analysis & Decision Making:

- Use expert knowledge to critically analyse research findings, providing unique insights that guide strategic decision-making processes.
- Ensure that research initiatives not only meet immediate objectives but also support the long-term strategic goals of the organisation.

Please note:

- The role may involve extensive travel for industry conferences, strategic collaborations, and stakeholder meetings.
- Expected to lead high-stakes meetings and strategy sessions, shaping the trajectory of the organization.

Essential Criteria:

- A master's degree or PhD in the relevant field preferred or equivalent professional experience.
- Expert level [number of years] experience in research management or a related field, showcasing senior-level expertise.
- Comprehensive understanding of organisational structures, operational plans, and strategic direction.
- Comprehensive ability in strategic thinking and analytical problem-solving.
- Proven track record in team leadership and management.
- Exceptional communication and interpersonal skills.
- Ability to make decisions with wide-reaching impacts, considering both immediate and long-term implications.
- Comprehensive experience of working in a multidisciplinary research team environment and leading people from a wide range of cultures.
- Capacity to lead a diverse team and workload, with a track record of delivering results under pressure and on time.
- Experience of budget management and managing industry collaborations in a research environment.

- A comprehensive understanding of the research funding environment in [Member State], Europe and further afield.
- A comprehensive understanding of the process of translating scientific research into application via commercialisation, policy formation, public engagement etc.
- A comprehensive understanding of IP protection, academic publication and other established methods of disseminating and commercialising research outputs.

Desirable Criteria:

- Proficiency in advanced research tools and software.
- Proven track record in raising/managing research grant income from National and European funding bodies.
- A comprehensive understanding of the area of research and related fields including an appreciation for the needs, priorities and associated challenges for organisations within this sector.